Bobby Jindal
GOVERNOR

Bruce D. Greenstein
SECRETARY

State of Louisiana

Department of Health and Hospitals

Office of the Secretary

March 5, 2011

The Honorable Joel T. Chaisson, II, President
Louisiana State Senate
P.O. Box 94183, Capitol Station
Baton Rouge, LA 70804-9183

The Honorable Jim Tucker, Speaker
Louisiana State House of Representatives
P.O. Box 94062, Capitol Station
Baton Rouge, LA 70804-9062

The Honorable Kay Katz, Chairwoman
House Health and Welfare Committee
Louisiana State House of Representatives
P.O. Box 44486, Capitol Station
Baton Rouge, LA 70804-4486

The Honorable Willie L. Mount, Chairwoman
Senate Health and Welfare Committee
Louisiana State Senate
P.O. Box 94183, Capitol Station
Baton Rouge, LA 70804-9183

Dear President Chaisson, Speaker Tucker, and Honorable Chairs:

In response to House Concurrent Resolution No. 202 (HCR 202) of the 2010 Regular Session, the Louisiana Department of Health and Hospitals (DHH) submits the enclosed report. The resolution creates the Health care-Acquired Infections Advisory Group within DHH and asks the group to identify the most health-compromising and costly health care-acquired infections in Louisiana, to rank them in order of severity and prevalence, to provide health care providers with strategies to combat health care-acquired infections, to determine a cost-effective method to use infection information currently reported to the Centers for Disease Control and Prevention (CDC) and Centers for Medicare and Medicaid Services (CMS) and to provide this information in a manner that allows the public access to this data, and to compile these findings in a written report to be submitted to the House and Senate committees on health and welfare. R.S. 24:772 also requires that the report be submitted to the President of the Senate and the Speaker of the House.

DHH is available to discuss the enclosed report and recommendations with you at your convenience. Please contact Lucas M. Tramontozzi with the DHH Bureau of Policy Research and Health Systems Analysis at 225-342-5126 with any questions or comments you may have.

Sincerely,

Bruce D. Greenstein
Secretary

Enclosures

Cc: The Honorable Members of the House Health and Welfare Committee
The Honorable Members of the Senate Health and Welfare Committee
David R. Poynter Legislative Research Library

DEPARTMENT OF HEALTH AND HOSPITALS

HEALTH CARE-ASSOCIATED INFECTIONS

REPORT PREPARED IN RESPONSE TO HCR 202 OF THE 2010 REGULAR SESSION

FEBRUARY 2011

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EXECUTIVE SUMMARY

Over the past decade, there has been increasing awareness of the significant cost associated with medical errors, both in terms of financial resources and more importantly, human life and suffering. Health care-associated infections (HAIs), which are common, serious, and costly adverse outcomes of medical care, were identified in the Institute of Medicine's (IOM) report, *To Err is Human – Building a Safer Health System,* as among the most pressing problems in the health care field. Health care-associated infections are the most common adverse events encountered by hospitalized patients.

In response to the significant impact HAIs have had on both patients and the health care system, a large number of states have already passed or are considering legislation regarding mandatory public reporting of HAIs. In the State of Louisiana, House Concurrent Resolution 202 of the 2010 Regular Legislative Session requires that the Department of Health and Hospitals, through the work of a multidisciplinary advisory committee, provide a report and recommendations for developing a system for collecting and publicly reporting data on health care-associated infections in Louisiana.

This document provides information, analysis, and guidance on implementing requirements and strengthening public reporting of HAIs. This reflects the currently published research and expert advice on public reporting and HAIs. The report outlines fourteen recommendations regarding steps that the Legislature should take over the three-year period, 2011-2013. The findings and recommendations are summarized as:

1. The most common health care-associated infections across providers in Louisiana are *catheter-associated urinary tract infections*, *surgical site infections*, *central line-associated bloodstream infections, ventilator associated pneumonia* and *invasive Methicillin-resistant Staphylococcus aureus* (MRSA) which are estimated to result annually in more than 2,000 deaths and increased costs of over $360 million.
2. Reporting requirements should be incrementally phased in by provider and infection type.
3. Any state mandated reporting requirements should align with existing federal requirements.
4. The Centers for Disease Control and Prevention's *National Healthcare Safety Network* (NHSN) should be the vehicle for collecting data on HAIs outcome measures for those provider types supported by this program. For those provider types, such as nursing homes, who are not able to participate in NHSN, the State's *Infectious Disease Reporting Information System* (IDRIS) can be used as the reporting vehicle until a nationally adopted surveillance system is in place.
5. Results should be disseminated quarterly to the public through the *Louisiana Health Finder* website. A portal should also be created for providers to review and evaluate detailed reports prior to public release.
6. A statewide validation program must be created prior to any public reporting to ensure the accuracy and reliability of data.
7. A permanent standing health care-associated infection committee should be created to advise and make recommendations related to the future methods of collecting, reporting and eliminating health-care associated infections.

INTRODUCTION

HOUSE CONCURRENT RESOLUTION 202

HCR202 of the 2010 Regular Legislative Session urges and requests the Health care-Associated Infections (HAI) Advisory Group to provide guidance and direction in its role in developing HAI related policy by identifying the burden of disease for the most health-compromising and costly health care-associated infections in the state, offering health care providers strategies to collect, report and combat health care-associated infections, providing infection information in a manner that allows the public access to this data, and determining the financial impact to implement a state-wide system.

HEALTH CARE-ASSOCIATED INFECTION ADVISORY COMMITTEE

The advisory committee was formed as a part of the HAI Grant received from the Centers for Disease Control and Prevention (CDC) in August 2009 in order to properly monitor, detect, and prevent HAI events in Louisiana. The committee, chaired by Dr. Raoult Ratard, State Epidemiologist, is composed of members representing infection prevention and control professionals, infectious disease epidemiologists, researchers, the state quality improvement organization, the state hospital association, and the state nursing home association. A list of committee members can be found in Appendix 2.

The Committee has reviewed guidelines from the CDC and professional associations, evidence from the scientific literature regarding appropriate measures for analyzing and reporting data on HAIs, and the work of other states in implementing legislative mandates to collect and publicly report data on infections.

CONSUMERS' RIGHT TO KNOW ACT

The Consumers' Right to Know Act, created by Senate Bill 287 of the 2008 Regular Legislative Session, authorizes the Department to collect and publish a broad range of health care information that provides Louisiana health care consumers expanded, web-based access to reliable information on the cost, quality and performance of their health plans and health care providers, including but not limited to hospitals, nursing homes, dialysis centers, ambulatory surgical centers, and physicians. The Health Data Panel is a statutorily created advisory panel to guide the Department in successfully implementing the provisions of this Act.

BURDEN OF DISEASE

A National Glance

There has been increased awareness of the costs associated with medical errors in the United States. Health care-associated infections are common, serious, and costly adverse outcomes of medical care, and are identified as among the most pressing problems in the health care field, contributing to substantial morbidity, mortality, and cost. The CDC estimates between five to 10 percent of hospitalized patients experience at least one HAI each year, resulting in an estimated 1.7 million infections and 99,000 deaths in 2002 at a cost of nearly $33 billion. According to the CDC, the most common HAIs are catheter-associated urinary tract infection (CAUTI), surgical site infection (SSI), pneumonia, bloodstream infection (BSI), ventilator-associated pneumonia (VAP), and bacterial infections due to an antimicrobial drug resistant infection.

In an effort to reduce infections, encourage hospitals and clinicians to improve the quality, and control costs, the Centers for Medicare and Medicaid Services (CMS) included in their Inpatient Prospective Payment System (IPPS) rule of 2011 that all acute care facilities report select nosocomial infections as part of the Hospital Inpatient Quality Reporting Program. Beginning with January 1, 2011 discharges, all acute care hospitals participating in Medicare must report data through the CDC's National Healthcare Safety Network (NHSN) or face a 2.0% reduction in their Medicare reimbursement. Since 2005, the number of states with laws requiring health care facilities to report HAIs has grown from six to 27.

STATE OF LOUISIANA

Not unlike the national experience, Louisiana is impacted by health care-associated infections. Although there is no single source of data for HAIs, one can estimate the HAI burden for the State through extrapolating estimates provided by the Centers for Disease Control and Prevention and combining with existing data sources, such as hospital discharges and current infection surveillance reports. Appendix 3 displays the rank order of infection prevalence and cost for three (3) major institutional provider types: acute care hospitals, long-term care facilities, and renal care facilities. Catheter-associated urinary tract infections are estimated to be the most prevalent health care-associated infection in hospitals affecting more than 8,000 patients at a cost of $8 million dollars while central line blood stream infections affect 3,553 patients accounting for $129 million. *Clostridium difficile* alone accounts for an additional cost of $31 million in the nursing home setting. Health care-associated infections are estimated to add more than $300 million cost into the health care system.

Due to the transient nature of care at ambulatory surgical centers, physician offices, and home health providers, it is difficult to determine the impact of health care-associated infections when they manifest days after the visit. Most times, these infections are identified at institutionalized facilities such as hospitals. As such, there are no current estimates for the impact of HAIs for these providers; however, it is recognized that they do occur in these settings.

With strategic planning, investment in the correct reporting system, education, establishment of surveillance methods, and appropriate feedback and collaboration, stakeholders can work together to eliminate unnecessary cost and services through the elimination of health care-associated infections in Louisiana.

DATA COLLECTION AND REPORTING

Multiple programs collect data on HAIs, but limitations in the scope of information and lack of integration across systems constrain the utility of data. Although not all HAIs are preventable, public and private organizations have established standards and other activities aimed at controlling and preventing them.

National Healthcare Safety Network

According to the US Department of Health and Human Services (HHS), the most detailed source of information on HAIs is the National Healthcare Safety Network (NHSN) database. This was established in 2005 through the merging of several other projects, and was designated as a voluntary program to assist acute care hospitals, long term acute care hospitals, psychiatric hospitals, rehabilitation hospitals, outpatient dialysis centers, ambulatory surgery centers, and long-term care facilities monitor infection rates. It is a free, voluntary, secure, internet-based surveillance system developed by the CDC. Participation requires active, patient-based prospective surveillance of events and patients at risk by

trained Infection Preventionists (IP) at each facility. The program has developed detailed definitions and protocols for many infections.

States have chosen to work with CDC to implement mandatory reporting for HAIs using NHSN as the submission mechanism. The NHSN program provides states and providers with substantial flexibility to determine the scope of their HAI data collection efforts. Because NHSN is a voluntary endeavor, each reporting facility must confer rights to the State Health Department in order for the State to receive the data from the CDC.

Recommendation 1. The Advisory Committee recommends that NHSN reporting facilities confer rights to the State Health Department with identifiers (sex, date of birth, and patient ID number). Other information that should be conferred is as follows: monthly reporting plan, data analysis, and facility information. For each measure, rights from all inpatient locations required to report should be conferred. Through the conferring rights mechanism, Department of Health and Hospitals' Infectious Disease Epidemiology Section will produce an annual report on HAI data.

Infectious Disease Reporting Information System

The Infectious Disease Reporting Information System (IDRIS) is Louisiana's web-based tool for local and statewide infectious disease surveillance. The ability of the Infectious Disease Epidemiology Section to respond quickly and proactively to changes in disease patterns in the State is dependent upon timely collection and analysis of diseases that are reportable in Louisiana. With IDRIS we have an improved web-based reporting tool that greatly enhances our ability to quickly generate reports and analysis useful in detecting changes in the patterns of disease occurrence in Louisiana. IDRIS consists of two linked modules: the Health Care Facility (HCF) module used by hospitals and the Disease Surveillance Management System (DSMS) module used by the Department of Health and Hospitals' Disease Surveillance Specialists and Epidemiology staff.

While disease reporting is required by state law as outlined by Chapter 2 of the Louisiana State Sanitary Code, patient confidentiality must be maintained. IDRIS uses a secure data network that assures the privacy of transmitted data. It is important for those entering data to maintain the privacy of their password as well as closing/logging out of the database when the computer is unattended. It is the responsibility of the user to assure confidentiality of disease data and prohibit unauthorized use of the database information. This means that all data transactions occurring under the use of an individuals' user identification will be legally their responsibility. IDRIS is malleable and can be upgraded to support reporting efforts of different providers, such as nursing homes.

Reporting Requirements

Acute Care Facilities

Recommendation 2. The Advisory Committee recommends that public reporting of data on health care-associated infections, following the Federal requirements as stipulated in the IPPS of 2010, be initiated with Central Line-Associated Bloodstream infections (CLABSI) in all intensive care units (ICU) beginning with January 1, 2011 discharges.

Recommendation 3. The Advisory Committee recommends that the second phase of the public reporting system add further HAI outcomes beginning with January 1, 2012 discharges including, but not limited to, invasive Methicillin-Resistant *Staphylococcus Aureus* (MRSA), and both inpatient and outpatient Surgical Site

Infections (SSI) within the following operative procedures: coronary artery bypass graft; other cardiac surgery; hip arthroplasty; knee arthroplasty; colon surgery; vaginal and abdominal hysterectomy; and vascular surgery.

Recommendation 4. The Advisory Committee recommends that the third phase of the public reporting system add the following HAI outcome measures beginning with January 1, 2013 discharges: Catheter-Associated Urinary Tract Infections (CAUTI), Ventilator-Associated Pneumonia (VAP), and *Clostridium difficile*-associated disease (CDAD). The inclusion of VAP infections will be pending until clarification of the CDC case definitions.

Long-Term Acute Care Hospitals (LTACHs)

Recommendation 5. The Advisory Committee recommends that public reporting for LTACHs to NHSN be required beginning with January 1, 2013 discharges according to the following measures: MRSA, CDAD, and CLABSI. The inclusion of VAP infections will be pending until clarification of the CDC case definitions.

Nursing Homes

Recommendation 6. The Advisory Committee recommends that public reporting for nursing homes be required beginning with January 1, 2013 discharges according to the following measures: MRSA, CDAD, and CAUTI. Nursing homes with skilled units should report CLABSI in addition to MRSA, CDAD, and CAUTI. The Infectious Disease Reporting Information System (IDRIS) will be the network of use for reporting for nursing homes.

Dialysis Centers

Recommendation 7. The Advisory Committee recommends that public reporting for outpatient dialysis facilities be required beginning with January 1, 2013 discharges according to the following measures: Hepatitis B, Hepatitis C, and CLABSIs (local access infections, access-associated bacteremia, and vascular-access infections). NHSN will be the reporting mechanism for dialysis facilities for the following infections: local access, access-associated bacteremia, and vascular-access infections. IDRIS will be the reporting mechanism for Hepatitis B and Hepatitis C infections for outpatient dialysis facilities.

Other Provider Types

Due to a lack of any standard means or protocols to collect HAI for transient care such as ambulatory surgical centers, home health agencies, or physician offices, there are no recommendations to include these provider types. The committee will continue to explore opportunities to add reporting recommendations in the future.

Recommendation 8. The Advisory Committee recommends that the NHSN be the vehicle for collecting data on CLABSI, SSI, and future HAI outcome measures as appropriate, and that hospitals, LTACHs, and dialysis facilities receive training in the NHSN system. Appropriately trained infection control professionals should be designated to perform surveillance involved in the documentation of HAI to ensure infections are identified similarly among institutions. IDRIS will be the reporting vehicle for nursing homes until a nationally adopted surveillance system is in place, such as NSHN for these providers.

Table 1 summarizes the reporting recommendations of the Advisory Committee.

Table 1. Reporting timelines by provider type, surveillance system, and HAI outcome

Reporting Date	Acute Care Hospitals (NHSN)	Dialysis Centers (NHSN and IDRIS)	LTACHs (NHSN)	Nursing Homes (IDRIS)
January 1, 2011	CLABSI			
January 1, 2012	SSI, MRSA			
January 1, 2013	CAUTI, CDAD, *VAP	HepB, HepC, †CLABSI	MRSA, CDAD, CLABSI, VAP	MRSA, CDAD, CAUTI, *CLABSI

*Reporting contingent upon appropriate definition and surveillance measures released by CDC

† Specific CLABSIs for outpatient dialysis centers: local access infections, access-associated bacteremia, and vascular-access infections

STRATEGIES TO COMBAT INFECTION

It is important to note that reporting, in itself, is only an intermediary step towards prevention. Health care professionals must ensure the implementation of prevention guidelines and strategies in order to eliminate health care-associated infections. Vigilance through education, outreach, and training are essential components of a successful policy.

Health care-Associated Infection Prevention Grant

The Prevention and Wellness Fund section of the American Recovery and Reinvestment Act (ARRA) provides funding related to activities that reduce HAIs. The Department of Health and Hospitals was awarded grant money by the CDC to (1) integrate, collaborate and build capacity of infection prevention efforts (2) detect and report events and (3) implement prevention guidelines and strategies. The money is being used for education, training, incentives, improving technology, and auditing hospital reporting. The Infectious Disease Epidemiology Section of the Department of Health and Hospitals has created the *Healthcare-Associated Infection Resource Center* website which provides information, tools, and resources about preventing and treating health care-associated infections. Information is also provided regarding state quality improvement initiatives related to health care-associated infections.

Central Line-Associated Bloodstream Infections Prevention Collaborative

The two aims of the CDC Health care-Associated Infections Grant were to reduce infection incidence through increased surveillance, as addressed through the use of National Healthcare Safety Network (NHSN), as well as collaboration, which is the educational portion of the grant. Prevention collaboratives take an evidence-based approach to infection reduction by having infection preventionists exchange ideas and best practices in a non-competitive model for the shared goal of infection reduction. To date, there are two state-led CLABSI prevention collaboratives: Greater New Orleans and River Region. These collaborative efforts spawned from the existing APIC chapters in the respective locations, and participating hospitals contribute on a volunteer basis to share data with DHH confidentially through NHSN. The CLABSI collaboratives will be in effect for one year, and it is anticipated that the groups' efforts will continue through a second year with a focus on surgical site infections.

In addition to the state CLABSI prevention collaboratives, Louisiana Hospital Association and eQHealth Solutions (the State quality improvement organization) teamed to launch the *On the CUSP: Stop BSI*

initiative in Louisiana. Thirteen private, public, and LSU hospitals are participating in this unit-based safety program that incorporates hospital leadership, nursing staff, physicians, and other hospital leaders in sharing the responsibility of education and infection reduction. The duration of the *CUSP* project will be two years. Providers will be encouraged to explore resources currently available.

Continuation of the HAI Advisory Committee

Evidence has shown that multi-stakeholder collaboration creates the sustainable implementation science needed for medical communities to not only embrace change but also to accelerate it.

Recommendation 9. The Advisory Committee recommends that the Louisiana Department of Health and Hospitals establish a permanent standing committee consisting of representatives from acute care hospitals, long-term care facilities, ambulatory surgical centers, and freestanding hemodialysis centers. The committee should consist of at least one of the following: infection prevention and control professional, the State epidemiologist, a public health epidemiologist, the State quality improvement/ patient safety expert, and pertinent trade associations.

Provider Portal

In order to use data to improve the safety of care in the health care setting, a means is needed to promote an open exchange of ideas and lessons among health care providers and improvement practitioners, such as a library of performance improvement advice, best practices, and a knowledge network for sharing and interacting with specialists and health system peers.

Recommendation 10. The Advisory Committee recommends that the Louisiana Department of Health and Hospitals create a secure information portal whereby providers can view their results prior to public release, have access to the latest information, tools, and resources for infection prevention, and be able to collaborate with other providers across the state to devise best prevention practices.

PUBLIC ACCESS TO RESULTS

Louisiana Health Finder

The Louisiana Department of Health and Hospitals launched the Louisiana Health Finder website (www.HealthFinderLA.gov) in February 2010, as directed by the Consumers' Right to Know Act, to provide Louisiana's health care consumers with reliable, web-based information on the cost, quality and performance of health care providers and plans. The Health Data Panel makes recommendations to the Department on the content and depiction of information on the website.

Conveying Results

This CDC has released initial reports presenting composite statistics summarizing health care-associated infections at the state and national level using a Standardized Infection Ratio (SIR). The SIR is a risk adjusted measure that compares the actual infection rate for one or more facilities of differing sizes to reference rates, such as state or national averages. This data is intended for action – to assess the progress in decreasing national infection rates and to assess the impact of location infection prevention efforts.

Recommendation 11. The Advisory Committee recommends that infection data be displayed using the SIR. The Advisory Committee will collaborate with the Health Data Panel to determine the most appropriate representation of this data.

Validation

The primary goal of health care-associated infection reporting is to identify and measure progress towards achieving the irreducible minimum number of infections. Assessing the accuracy of reporting data using independent validation is critical to this goal. A recent validation study of all 30 acute care hospitals in Connecticut mandated to report to central-line infections to NHSN showed that more than 50% of hospitals underreported CLABSI rates due to misinterpretation of components of the NHSN definition. The development and success of an HAI data reporting system is contingent upon accurate and comparable data across facilities, uniform definitions followed by those reporting, and that the results are validated as accurate and complete. Continued validation and training will be needed to improve completeness of reported health care-associated infection data and to assure that publicly reported data are valid.

Recommendation 12. The Advisory Committee strongly recommends the development of strategies for validating publicly reported HAI measures prior to the initiation of public reporting. Any validation system that is developed for Louisiana should not duplicate efforts that will be put in place by the Federal government. After appropriate validation is placed, the Department of Health and Hospitals will update HAI data via www.HealthFinderLA.gov quarterly.

Evaluation

Recommendation 13. The Advisory Committee recommends the following provisions for HAI reporting:

- An opportunity for providers to preview the data prior to public release;
- Periodic reevaluation and reassessment of Louisiana's HAI public reporting process with opportunities to alter recommended measures/methods of reporting if new data becomes available or significant difficulties with regards to implementation arise.

FINANCIAL NEED

One of the most important issues for public reporting of health care-associated infection rates is ensuring that the data are reliable and accurate. It is essential that proper methods and resources are available to validate the data for not only ensuring the successful implementation of state-wide reporting, but also increasing public confidence in the data. At this time, the Federal government has not instituted a national validation program and has left the onus on state and regional agencies. The committee consulted other states and national associations to determine what cost needs would be for this implementation to work with hospitals, nursing homes, and dialysis centers. Table 2 depicts the costs associated with staffing, travel, continuing education expenses, and operating costs.

Table 2. Projected Annual Cost of a State-wide Validation Program

	Unit	Cost Per Unit	Total
Infection Preventionist (Full-time)	4	$80,000	$320,000
Travel Expenses	4	$6,500	$25,000
Continuing Education	4	$4,000	$16,000
Operating Services	4	$2,000	$8,000
Total			**$370,000**

The Department of Health and Hospitals will look for opportunities to apply for federal and private grant dollars that could assist with supporting a state program. In the absence of such funds, the State would

need to appropriate the monies to begin and sustain this program until a federal validation program is established. This fund could either be used to contract services with state partners or could require an expansion of the responsibilities of the Department of Health and Hospitals' Infectious Disease Epidemiology Section. Within a year of the programs creation, the projected return on the State's investment would include accurate results that would allow providers to impartially compare performance which will then drive improvement and instill confidence for policy makers and state citizens in the results with upmost certainty.

Recommendation 14. The Advisory Committee recommends a source of funding be secured for DHH to manage an infection control validation program. The committee estimates that $370,000 is needed annually for the implementation of the program. This money can be used to contract the services with strategic state partners in lieu of increasing state positions. As the federal government continues to expand mandated HAI reporting, the State will not duplicate any efforts if the Federal government institutes a national validation program.

Ultimately, initiating programs and processes that will reduce and eventually eliminate HAIs will take a significant investment in provider time and resources. Developing effective reporting systems will also take a significant investment of resources for both the health care provider and the public health professionals overseeing and monitoring care delivery and state health outcomes. Although infection control is part of standard medical practice involving sound surveillance, identification of infections using standard definitions, and calculating meaningful rates as required for accreditation, there are initial costs associated with reporting through a standard mechanism including provider type, staffing requirements, implementation of electronic medical records, surgery volume, training and education. In particular, the burden of reporting differs for those hospitals who use electronic reporting systems as opposed to those who do not. As such, it is important to strategically implement reporting requirements to allow for the mobilization of the required resources to fulfill any mandates by providers.

The committee feels strongly that the legislature will need to prioritize infection reduction and elimination in their health care funding appropriation decisions in order for Louisiana to realize substantive progress and change. Our dedicated health care providers and public health professionals are committed to improving the quality of life and deserve the resources necessary to realize that goal.

CONCLUSION

Health care-associated infections take a significant toll on human life. HAIs affect patients, health care systems and society by increasing the cost of treating infections and causing greater disability and death. At the heart of public reporting is the belief that promoting transparency will improve quality of care, expand and improve infection prevention measures, reduce the morbidity and mortality associated with HAIs and cut costs. Setting up a reporting program is complex and time-consuming, and a successful program must have skilled staff and adequate, sustainable financing.

In order to develop meaningful, effective reporting initiatives, this report has presented the advantages of incrementally phasing in reporting requirements; the benefits of establishing a multi-disciplinary, multi-stakeholder advisory committee to help develop the reporting program; the importance of providing enough funding to carry out reporting initiatives; and the significance of not duplicating any Federal efforts or funding to ensure that resources are used most effectively to implement reporting laws. The specific findings and recommendations respectfully provided in this report reflect the judgment and experience of the multi-disciplinary HAI advisory Committee listed in Appendix 2.

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APPENDIX 1: ABBREVIATIONS

APIC	Association for Professionals in Infection Control and Epidemiology
CABG	Coronary Artery Bypass Graft
CAUTI	Catheter-associated Urinary Tract Infection
CDAD	*Clostridium difficile*-associated disease
CDC	Centers for Disease Control and Prevention
CLABSI	Central Line-associated Bloodstream Infections
CMS	Centers for Medicare and Medicaid Services
DHH	Department of Health and Hospitals (Louisiana)
DHQP	Division of Healthcare Quality Promotion (CDC)
DVT	Deep Vein Thrombosis
HAI	Health care-Associated Infections
HAI-MAC	Health care-Associated Infections Multidisciplinary Advisory Committee
HCF	Health Care Facility
HCR	House Concurrent Resolution
HepB	Hepatitis B
HepC	Hepatitis C
HHS	United States Department of Health and Human Services
HQA	Hospital Quality Alliance
ICP	Infection Prevention and Control Professional
ICU	Intensive Care Unit
IDRIS	Infectious Disease Reporting Information System
IHI	Institute for Healthcare Improvement
IOM	Institute of Medicine
IPPS	Inpatient Prospective Payment System
MDRO	Multi-drug Resistant Organism
MRSA	Methicillin-resistant *Staphylococcus aureus*
NHSN	National Healthcare Safety Network
NICU	Neonatal Intensive Care Unit
NQF	National Quality Forum
OPH	Office of Public Health, Department of Health and Hospitals
QIO	Quality Improvement Organization
SCIP	Surgical Care Improvement Project
SHEA	Society for Healthcare Epidemiology of America
SSI	Surgical Site Infection
VAP	Ventilator-associated Pneumonia

APPENDIX 2: HAI ADVISORY COMMITTEE MEMBERS

Kenneth Alexander, MSA, RRT	Louisiana Hospital Association
Malcolm Broussard, RPh	Louisiana Board of Pharmacy
Gerrelda Davis	Department of Health and Hospitals
Pierre Dejace, MD	Tulane University
Connie DeLeo, MT CIC	Baton Rouge General Medical Center
Lori Guillory, BSN, BS, RNC	Department of Health and Hospitals
Jimmy Guidry, MD	Department of Health and Hospitals
Jodi Guidry	Louisiana Nursing Home Association
David Holcombe, MD, MSA	Department of Health and Hospitals
Robert Johannessen	eQHealth Solutions
Fred Lopez, MD	Louisiana State University Health Sciences Center
Linda Polo, RN, CIC	St. Tammany Parish Hospital
Raoult Ratard, MD, MS, MPH	Department of Health and Hospitals
Deione Reed, PhD	Ochsner Health System
Ron Ritchey, MD	eQHealth Solutions
Debra Rushing, RN, MBA, CPE	eQHealth Solutions
Theresa Sokol, MPH	Department of Health and Hospitals
Tina Stefanski, MD	Department of Health and Hospitals
Susanne Straif-Bourgeois, PhD MPH	Department of Health and Hospitals
Amita Toprani, MD	Tulane University
Lucas Tramontozzi	Department of Health and Hospitals
Erica Washington, MPH	Department of Health and Hospitals

APPENDIX 3: LOUSIANA HAI ESTIMATE, 2008

Disease	Acute Care Hospitals Locations			
	Rank	Prevalence	Deaths per year	Total Annual Cost (in millions)
Catheter-Associated Urinary Tract Infections	1	8,024	117	$8
Surgical Site Infections	2	4,150	187	$106
Central Line-Associated Bloodstream Infections	3	3,553	438	$129
Ventilator-associated pneumonia	4	2,186	-	$87
Invasive MRSA	5	1,158	266	$3
Total		**19,070**	**1,414**	**$334**
Disease	**Long-Term Care Facilities**			
	Rank	Prevalence	Deaths per year	Total Annual Cost (in millions)
Ventilator-associated pneumonia	1	0.3-2.5 per 1000 pt-days	-	-
Catheter-Associated Urinary Tract Infections	2	7-10% of patients	-	-
Clostridium difficile	3	3,757	236	$31
Invasive MRSA	4	-	-	-
Total		**1.6-3.8 million**	**0.04 to 0.71 per 1000 resident-days**	**$9-$28**
Disease	**Renal Care Facilities**			
	Rank	Prevalence	Deaths per year	Total Annual Cost (in millions)
Central line-associated bloodstream infections	1	31%	-	-
Viral Hepatitis C	2	7.8%	-	-
Invasive MRSA	3	4.5%	-	-
Viral Hepatitis B	4	0.9%	0.5-1%	-
Total		**76 per 1000 pt-days**	**-**	**-**

APPENDIX 4

HCR 202, 2010 Regular Session

ENROLLED

Regular Session, 2010

HOUSE CONCURRENT RESOLUTION NO. 202

BY REPRESENTATIVE WILLMOTT

A CONCURRENT RESOLUTION

To urge and request the Healthcare-Acquired Infections Advisory Group to identify the most health-compromising and costly healthcare-acquired infections in Louisiana, to rank them in order of severity and prevalence, to provide health care providers with strategies to combat healthcare-acquired infections, to determine a cost-effective method to use infection information currently reported to the Centers for Disease Control and Prevention (CDC) and Centers for Medicare and Medicaid Services (CMS) and to provide this information in a manner that allows the public access to this data, and to compile these findings in a written report to be submitted to the House and Senate committees on health and welfare no later than February 1, 2011.

WHEREAS, healthcare-acquired infections, also known as nosocomial infections, are serious public health concerns throughout the United States, with an estimated one million seven hundred thousand cases occurring each year; and

WHEREAS, according to the United States Department of Health and Human Services, the treatment of nosocomial infections adds more than twenty billion dollars to health care spending each year, costing on average, eight thousand, eight hundred and thirty-two dollars per patient per admission; and;

WHEREAS, in 2006 alone, forty-eight thousand patients died from nosocomial infections nationwide; and

WHEREAS, the Centers for Medicare and Medicaid (CMS), the Centers for Disease Control and Prevention (CDC), and the Institute for Healthcare Improvement have made it a top priority to reduce the incidence of nosocomial infections; and

WHEREAS, in 2008, the legislature passed the Louisiana Health Care Consumers' Right to Know Act (R.S. 40:1300.111 through 1300.114) to provide consumers access to health care cost, quality, and performance data on health care facilities, so that consumers

may make "meaningful comparison of costs for specific health care services and specific quality of care measures between and among medical facilities, health care providers, and health plans"; and

WHEREAS, it has been established that nosocomial infections contribute to a significant number of undesirable health outcomes, and it is a critical goal for the Department of Health and Hospitals (DHH) to decrease these undesirable events by providing health care providers with infection reduction strategies and making available useful, relevant statistical data to the public so that Louisiana's patients will have the ability to make informed, effective health care decisions; and

WHEREAS, the Healthcare-Acquired Infections Advisory Group created by DHH is comprised of a variety of key stakeholders in the health care provider community, with representatives from the Louisiana Hospital Association, Louisiana Board of Pharmacy, Louisiana State University Health Sciences Center, Tulane University School of Medicine, the Department of Health and Hospitals, and other health care providers, making this established group of stakeholders particularly well-qualified to achieve the goals described herein.

THEREFORE, BE IT RESOLVED that the Legislature of Louisiana does hereby urge and request the Healthcare-Acquired Infections Advisory Group to identify the most health-compromising and costly healthcare-acquired infections in Louisiana, to rank them in order of severity and prevalence, to provide health care providers with strategies to combat healthcare-acquired infections, to determine a cost-effective method to use infection information currently reported to the Centers for Disease Control and Prevention (CDC) and Centers for Medicare and Medicaid Services (CMS) and to provide this information in a manner that allows the public access to this data, and to compile these findings in a written report to be submitted to the House and Senate committees on health and welfare.

BE IT FURTHER RESOLVED that the report by the Healthcare-Acquired Infections Advisory Group shall:

(1) According to statistical data, rank the most health-compromising and costly healthcare-acquired infections in those licensed health care facilities included in the Louisiana Health Care Consumers' Right to Know Act in order of severity and prevalence.

(2) Determine the most cost-effective method for Louisiana health care providers to report the prevalence of nosocomial infections in their respective facilities from the list established by the Healthcare-Acquired Infections Advisory Group.

(3) Determine which information on nosocomial infections should be reported by each licensed health care provider included in the Louisiana Health Care Consumers' Right to Know Act, including but not limited to the number and type of diagnosed nosocomial infections identified by those licensed health care providers.

(4) Determine how frequently the information on nosocomial infections should be reported by each licensed health care provider. In its determination, the Healthcare-Acquired Infections Advisory Group shall balance public safety with the operational and financial burden to licensed health care providers.

(5) Assess whether the CDC National Healthcare Safety Network should be incorporated into the new reporting system and, if so, how it should be incorporated.

(6) Determine which reported information on nosocomial infections DHH should be required to post on a designated website for public review and use. In its determination, the Healthcare-Acquired Infections Advisory Group shall balance legal restrictions and privacy concerns with the goal for the public to have access to the essential information which facilitates consumer choice among health care providers based on quality outcomes.

BE IT FURTHER RESOLVED that the list of healthcare-acquired infections deemed to be the most health-compromising and costly may include but not be limited to those infections currently being reported by hospitals and other health care providers to CMS and the CDC and will also include:

(1) Methicillin-resistant Staphylococcus aureus infections (MRSA)

(2) Multiple Drug Resistant Organisms (MDRO)

(3) Clostridium difficile-associated diarrhea (CDAD)

(4) Central line associated bloodstream infections (CLABSI)

(5) Catheter associated urinary tract infections (CAUTI)

(6) Ventilator-associated pneumonia (VAP)

(7) Mediastinitis following Coronary Artery Bypass Graft (CABG)

BE IT FURTHER RESOLVED that the report of the Healthcare-Acquired Advisory Group's findings shall be submitted to the House and Senate committees on health and welfare no later than February 1, 2011.

SPEAKER OF THE HOUSE OF REPRESENTATIVES

PRESIDENT OF THE SENATE