



# Closing the Gap on Dental HPSAs:

## Louisiana Oral Health Workforce Assessment

August 2018

Grant # T12HP30537

The purpose of this funding is to support States in developing and implementing innovative programs to address the oral health workforce needs of designated Dental HPSAs. Funds must be used to develop and implement a workforce program(s) designed to support innovative oral health service delivery models that will increase access to high quality oral health services for underserved populations located in Dental HPSAs or in other areas specifically designated as having a dental health professional shortage by the State.

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## Executive Summary

In 2016, the Bureau of Primary Care and Rural Health, Office of Public Health (BPCRHR) was awarded a Health Resources and Services Administration (HRSA) state grant to support the Louisiana Oral Health Workforce Expansion Program. Specified goals of the program included:

Establish a Dental Rural  
Scholars Track Program (RST)

Establish an Oral Health  
Recruitment Project

Conduct a Dental Needs  
Assessment

In order to understand the challenges and successes related to oral health in Louisiana and trying to identify how the entire health care community can more effectively address oral health needs, the BPCRHR undertook a comprehensive assessment of the oral health system in Louisiana. BPCRHR engaged state oral health providers in an assessment process in June 2018 and collected data by way of dental needs assessment. We concluded that data from this assessment will be critical to identifying dental care workforce shortages and access to care issues. The data collected will serve as a verification of issues that may impact the delivery of oral health services to vulnerable populations in the state. The quantitative and qualitative data presented in this report provides an overview of the key findings, highlights assessment limitations, and concludes with recommendations.

The assessment utilized a collaborative approach looking broadly at oral health in Louisiana. The process included:

- Synthesis of existing data on social, economic, and health indicators
- Scan of existing oral health services and programs
- Analysis of information from a survey of oral health stakeholders and providers (N=365)
- Interviews with oral health and medical providers, school nurses, dental hygienists, and public health administrators (n=17).

## Key Findings

- From the perspective of participants, there is no shortage of dentists serving those seeking access to oral health care.
- Many people choose not to go to the dentist or feel they cannot afford it, especially preventative care.
- At both the patient and the provider level, Medicaid reimbursements, both the rate and the paperwork, act as barriers to accessing care, as well as lack of providers accepting Medicaid.
- Children's oral health has been improving and the number of children seeing a dentist is increasing, but Louisiana children are still below the national averages.
- Most providers defend the benefits of fluoridated water. There is a lot of misinformation about fluoridation shared with the public.
- There is need for better education about the need for and importance of preventative dental care, particularly in adults.
- Providing underserved populations access to appropriate dental care is a complex problem. From the limited findings, training more dentists alone to address a "shortage" in HPSA zones will not be effective in improving access to oral health services.

## Background and Purpose

The Louisiana Oral Health Coalition, initiated in 2009, created a network of successful partnerships to advocate for and improve oral health in Louisiana. A main project of the coalition was to develop the 2013-2018 Oral Health State Action Plan for improving the oral health of Louisiana residents. Included in the plan was a Workforce Workgroup that supports efforts to ensure the preparation of, and the recruitment and retention of, an oral health workforce that is adequate and skilled, so that it may better service the state's population group. The coalition continues to connect oral health agencies, improve upon their work, establish collaborations, and increase oral health reach across all 9 OPH administrative Regions (See Appendix A).

Health Resources and Services Administration (HRSA) awarded the Louisiana Department of health (LDH), Office of Public Health (OPH), Bureau of Primary Care and Rural Health (BPCRHR) a state grant to support the Louisiana Oral Health Workforce Expansion Program granted in 2016. Goals of the Program include:

1. Establish a Dental Rural Scholars Track Program (RST)
2. Establish an Oral Health Recruitment Project
3. Conduct a dental needs assessment

The purpose of *Closing the Gap on Dental HPSAs: Louisiana Oral Health Workforce Assessment* is to assist Louisiana in preparing for future oral health needs, with a focus on identifying and verifying issues that may affect the delivery of oral health services to vulnerable populations. The Bureau of Performance Improvement of the Office of Public Health is providing oversight of the assessment with the assistance of the Louisiana Public Health Institute (LPHI).

## Oral Health

Health of the mouth, teeth, and gums

Critical challenge for both adults and children

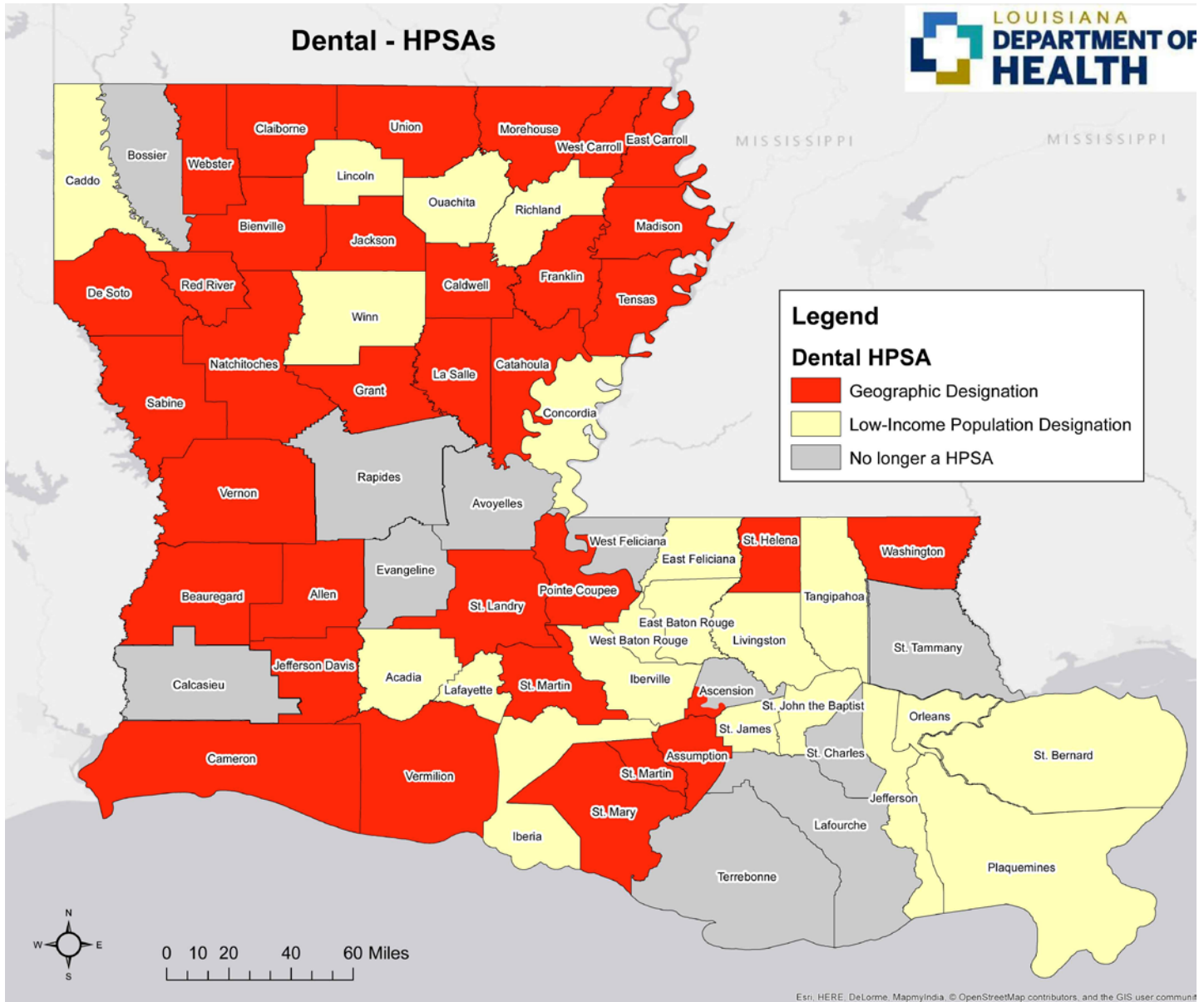
A person's oral health affects their overall health and quality of life

Essential for healthy development and aging

## Dental Health Professional Shortage Areas

Health Professional shortage Area (HPSA) is a designation that indicates health care provider shortages in primary care, **dental health**, or mental health. These shortages may be geographic, population, or facility based.

Louisiana is a mid-sized state, located in the southeast region of the nation, with a population of 4.6 million. The BPCRHR serves Louisiana citizens residing in HPSAs, medically underserved areas (MUAs), and medically underserved populations (MUPs). In 2018, of 64 Louisiana parishes, 63 have federally designated primary care, mental health, and/or Dental Health Professional Shortage Areas (HPSAs).



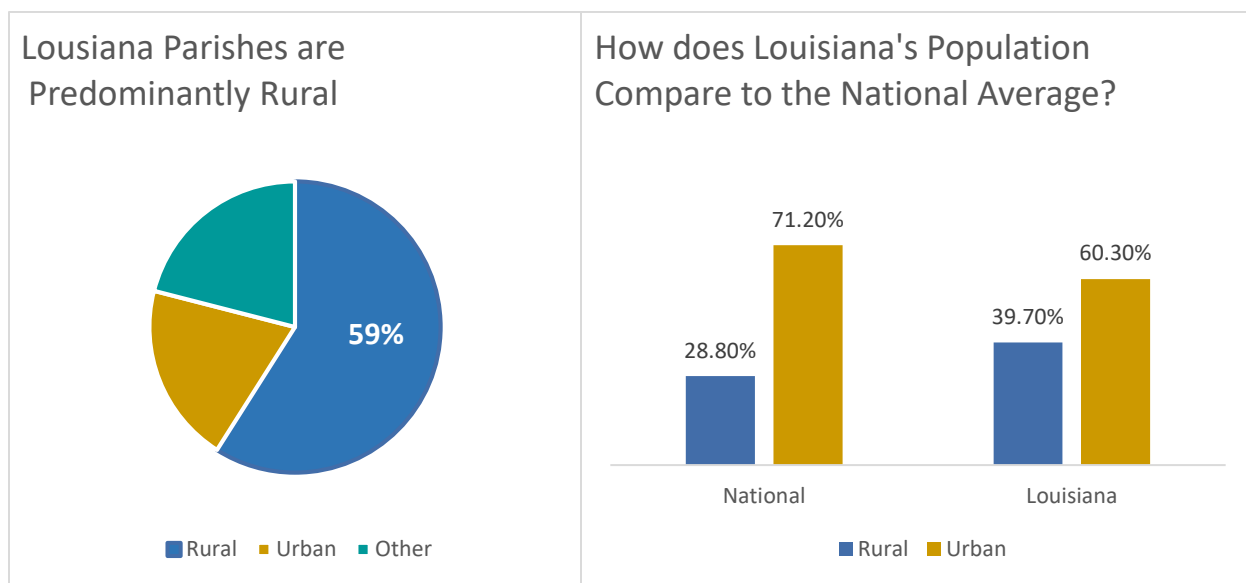
Bureau of Primary Care and Rural Health HRSA Data Warehouse HPSA Map. 2018.

Over 84% of Louisiana is designated a Dental HPSA (See Appendix A for Dental HPSA Definition). Thirty parishes are designated as geographic and high need. Twenty-one are designated low-income population Dental HPSAs according to The U.S. Health Resources and Service Administration (HRSA). The most current HPSA dental assessment identified a statewide shortage of 201 dentists to serve a population of over 1.8 million.



## Urban versus rural parishes

A Louisiana State Board of Dentistry 2009 report reveals that the state suffers from an unevenly distributed oral health workforce between predominately urban and predominately rural parishes. Not surprisingly, metropolitan areas boast ample numbers of dentists while smaller rural towns have fewer dentists. In February 2015, HRSA did national and state level projections of dentists and dental hygienists for 2012-2025 and forecasted a need for 338 more dentists to treat the state's population. This was the 6<sup>th</sup> highest demand state of the 17 states included in the South region.



Thirty-eight of these parishes (59%) are designated as rural and an additional 13 parishes (20%) contain rural census tracts. Combined, these two areas account for roughly 79% of all parishes being wholly or partially rural (Refer to Map in Appendix B). According to the 2012 Census, Louisiana had 1,752,966 of its total 4,410,798 residents living in rural areas and small cities for a Louisiana rural population of 39.7%. The national average rural population is 28.8% of Americans. Louisiana's rural population is larger than the average of the United States (U.S. Department of Commerce, 2012).



## Assessment Methods

OPH guided the oral assessment development using the MAPP (Mobilizing for Action through Planning and Partnerships) Forces of Change framework. A Forces of Change assessment helps answer, “What is occurring or might occur that affects the [oral] health of our community or health system?” and “What specific threats or opportunities are generated by these occurrences?” (NACCHO, 2015). BPCRH engaged state oral health providers in the assessment process in June 2018 and collected data by way of dental needs assessment. The assessment utilized a collaborative approach looking broadly at oral health in Louisiana. Target participants oral health providers in high need HPSA parishes and rural areas (See Appendix C). The process included:

- Synthesis of existing data on social, economic, and health indicators to demonstrate the current burden
- Scan of existing oral health infrastructure including workforce, services and programs
- An analysis of data gathered from surveys of oral health stakeholders and providers (N=365)
- Interviews with oral health and medical providers, school nurses, dental hygienists, and public health administrators (n=17)

### Quantitative Assessment

Quantitative data was collected through two Statewide Oral Health Assessment online surveys. BPCRH developed the first pre-assessment survey with input from the Fluoridation Committee and administered the survey online via Survey Monkey exclusively to dentists. 180 dentists responded with a response rate of 12%. A more robust second online survey, administered via RedCap, was then created to increase the sample size of dentists and add additional questions of interest for other health providers (e.g. dental hygienists, school nurses, emergency room physicians etc.). The second survey contained the original questions from the first survey for dentists. The second survey had an additional 185 participants comprised of 91 other (non-dentist) health providers and 89 dentists. Overall, **365 participants** completed the survey and the total number of dentist participants was 282 for a 19% response rate.

### Qualitative Assessment

To collect qualitative data, LPHI created two interview guides: one guide was used for direct oral health providers (i.e., dentists, orthodontists, hygienists) and the second guide was used for other healthcare providers (i.e., medical doctors, nurses, nurse practitioners). Recorded phone interviews were 30-45 minutes, during which researchers questioned providers on their perceptions of oral healthcare, access to care and the oral health workforce in Louisiana. An email version of the interview questions was sent to providers who could not participate in a phone call due to time constraints, however still interested in participating.

Survey respondents indicated their interest in providing additional feedback and willingness to be contacted for a phone interview. Incentives were offered to increase participation. A total of 45 participants were recruited (36 survey respondents; 9 LDA component presidents). Over a 2-week period, researchers attempted to contact all potential participants at least once by phone and at least once by email, to set up interview times. 17 interviews were successfully completed. Three participants requested an email format of the interview due to time constraints. Six dentists were interviewed, eight dental hygienists, and three other health providers..

Researchers used basic coding techniques to organize the data collected from the interviews and identify major themes discussed among the respondents.

# Louisiana Oral Health Status

## Burden of Disease

Oral health is related to well-being and quality of life as measured along functional, psychosocial and economic dimensions. Diet, nutrition, sleep, psychological status, social interaction, school, and work are affected by impaired oral and craniofacial health.

Oral health has been found to interact with co-morbid chronic conditions. Healthy behaviors that play a role in the prevention and management of most chronic disease can also improve oral health. Maintaining a healthy diet, reducing stress, limiting alcohol, and abstaining from tobacco use help prevent both common chronic diseases, as well as oral health issues (U.S. Department of Health and Human Services, 2000). For example, among Louisiana adults who reported having smoked at least 100 cigarettes in their lifetime, 55.4% reported that at least 1 of their permanent teeth was removed because of tooth decay or gum disease compared to 42.3% of those who have not smoked 100 cigarettes in their lifetime.

Cost in lost productivity each year due to chronic disease

**\$153 billion**

The integration of oral health and chronic disease programs, such as tobacco control, offers a unique opportunity to increase capacity and impact of dental providers and improve the access to dental health care by populations with the highest burden of oral disease. (U.S. Department of Health and Human Services, 2000). Screening for chronic diseases in the dental office could minimize loss of productivity and result in cost savings for the health system. There is a \$153 billion loss in productivity due to chronic diseases and 27 million people who visit a dentist and not a physician each year. Screening for chronic diseases in dental offices could reduce U. S. health care costs by \$102.6 million per year or \$32.72 per person screened (Health Policy Institute-American Dental Association, 2014).<sup>1</sup>

## Prevalence of Disease

### Children

Results from the 2016-17 Bright Smiles for Bright Futures: Basic Screening Survey (BSS) show that overall, **oral health among children is improving** since the last BSS was conducted from 2007- 2009. For the past 3 decades, Healthy People has established 10-year national objectives for improving health of all Americans. Louisiana children are close to meeting a couple Healthy People 2020 benchmarks for oral health

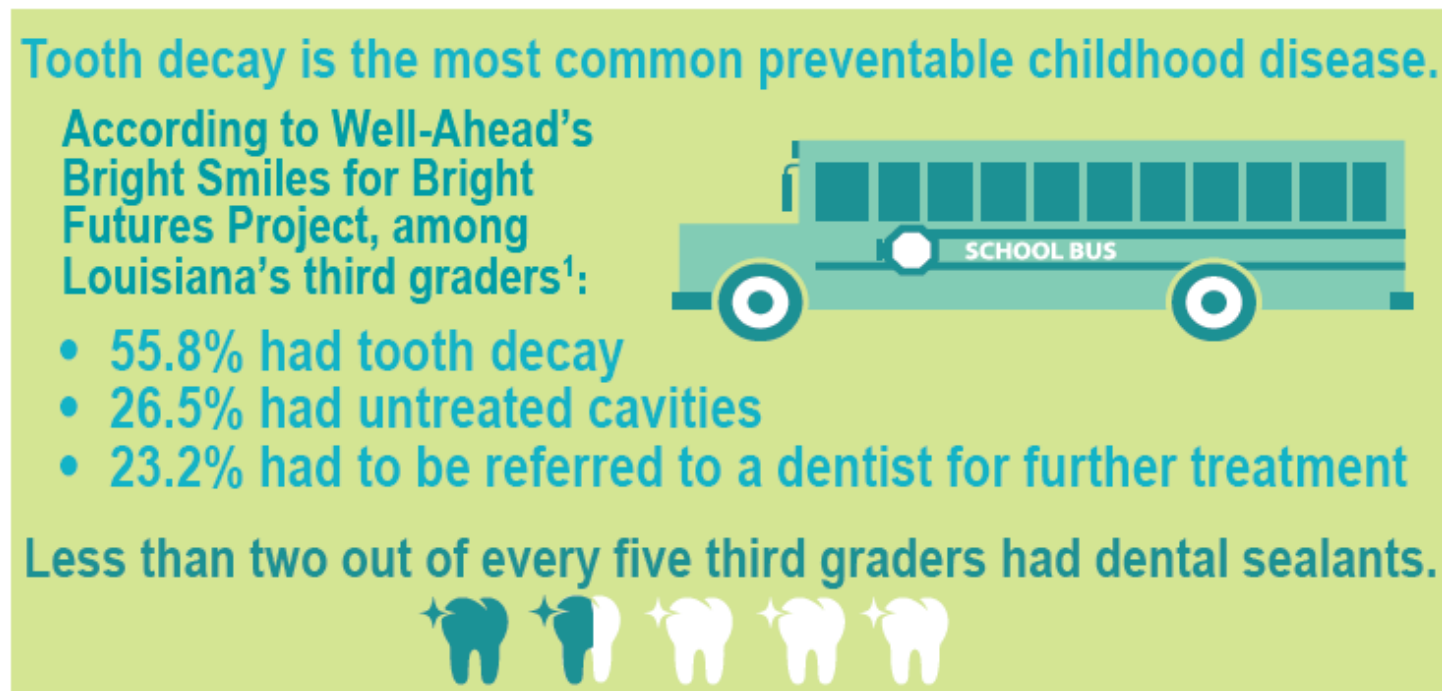
↓ **Goal:** 25.9% of children aged 6 to 9 years with untreated dental decay. According to the 2016-17 BSS, 26.4% had untreated tooth decay, a dramatic improvement from 41.9% in the 2007-09 BSS sample.

↑ **Goal:** 28.1% of children aged 6 to 9 years have received dental sealants on one or more of their permanent first molar teeth. The 2016-2017 BSS reported that 27.8% of children ages 6 to 9 had one or more sealants on their permanent teeth.

There is still improvement needed for children's oral health around prevention. According to BSS 2016-2017, 20.3% of children ages 6 to 9 needed early dental care and 2.4% needed urgent care. Louisiana has not met the Healthy People 2020 oral health goal (49.0%) to reduce the proportion of children and adolescents who have

<sup>1</sup> [https://www.ada.org/~media/ADA/Science%20and%20Research/HPI/Files/ADA\\_HPI\\_DentalOfcScreening.pdf?la=en](https://www.ada.org/~media/ADA/Science%20and%20Research/HPI/Files/ADA_HPI_DentalOfcScreening.pdf?la=en)

dental caries in their primary or permanent teeth. Although the 2016-17 data shows an improvement from 2007-09, (60.0% compared to 65.7%), the prevalence of dental caries remains high among 6 to 9 year olds.



## Adults

The Healthy People 2020 goal to reduce the proportion of adults aged 65 to 74 years who have lost all of their natural teeth is set at 21.6%. **Louisiana has met this target** with 16.7% of adults aged 65 to 74 who reported having all their natural teeth extracted (BRFSS, 2016).

Dental Outcomes	National	Louisiana
Adult Tooth Removal	43.1%	<b>48.9%</b>
Adult Dental Visit	66.4%	<b>56.6%</b>

Among Louisiana adults, 48.9% reported that at least one of their permanent teeth was removed because of tooth decay or gum disease (BRFSS, 2016). This is not far from the national average of 43.1%. Among those adults who were insured by Medicaid, 60.9% reported having at least one tooth removed compared to 50.0% among non-Medicaid insured individuals. Similarly, 56.6% of Louisiana

adults reported they had visited a dentist within the past year. This is well below the national average of 66.4%. Among those adults who were insured by Medicaid, 40.0% reported having visited a dentist in the past year compared to 62.3% among those who are not insured by Medicaid.

These statistics indicate that 1) Louisiana remains below the national average in oral health indicators among adults and 2) there are significant oral health disparities in Louisiana that need to be addressed.

## Pregnancy

The Louisiana Pregnancy Risk Assessment Monitoring System (LaPRAMS) is an ongoing, population-based risk factor surveillance system designed to describe selected maternal behaviors and experiences that occur before and during pregnancy as well as during a child's early infancy. Poor oral health is linked to premature births and low birth weights.

During pregnancy: La PRAMS Outcomes	2014		2015
Dental Problem During Pregnancy	23.6%	↓	18.6%
Dental Care Knowledge	85.7%	↑	88.6%
Communication with Oral Health Provider	38.1%	↑	43.2%

According to LaPRAMS 2015, the number of women that reported needing to see a dentist for a problem was 18.6%, which decreased from 23.6% in 2014. In 2015, 88.6% of women reported they knew the importance of dental care during pregnancy compared to 85.7% in 2014. The number of women who talked about oral care with a health care provider, increased from 38.1% to 43.2% from 2014 to 2015 (CDC, 2014,2015).

## Fluoridation

Fluoride is a naturally occurring mineral on earth. All water contains some fluoride, but usually not enough to prevent tooth decay. Community Water Fluoridation (CWF) is the process of adjusting the amount of fluoride in public water supplies to prevent tooth decay.

Currently, 44% of Louisiana residents are served by community water systems with optimally fluoridated water, which is far below the national average of 72.4% from 2008 and the Healthy People 2020 target of 79.6% (CDC, 2017).



## Disparities in Access to Oral Health

**Access to Care (nature of the patient population)**, can be defined as one's efficacy (knowledge, attitude, and behavior) towards finding, selecting, and paying for providers and/or services associated with assessing and addressing their health care need. "Access to dental care" refers to more than access to oral health professionals, quality oral health care, and patient financial/insurance status. Access is also determined by factors internal to patient, such as perceived need for care, cultural preferences, language and willingness to seek care (Guay, 2004).

Significant oral health disparities persist because of a web of factors including cultural and social processes. Many populations with the highest disease burden, such as low-income, minority and rural, remain with inadequate access to preventive services and unmet need (Patrick et al., 2006).

### **43% Louisiana adults reported they did not visit the dentist or dental clinic within the past year**

- Age: adults aged 25-34 had the highest prevalence (45.5%) followed by adults aged 55-64 (45.1%).
- Race: 52.1% of non-Hispanic African Americans and 38.8% of non-Hispanic Whites reported not visiting the dentist or dental clinic in the past year.
- Household income: 66.9% of Louisiana adults that reported a household income of less than \$15,000 didn't visit the dentist or dental clinic within the past year compared to 29.0% of adults reporting a household income of \$50,000 or more (BRFSS, 2016).

### **18.8% Louisiana children reported they did not visit the dentist or dental clinic within the past year**

- Age: 40.9% of children ages 1-5 had the highest prevalence of not having a visit in the past year followed by 10.4% of children ages 12-17.
- Race: 17.2% of non-Hispanic White children and 19.8% of non-Hispanic African American children had not visited the dentist or other oral health care provider.
- Household income: Louisiana children ages 1 to 17 who didn't have a visit in the past year and household income level was 0-99% federal poverty level was 23.1% and 13.9% of children with a household income at 400% federal poverty level or higher (BRFSS, 2016).

According to the 2016 National Survey of Children's Health,

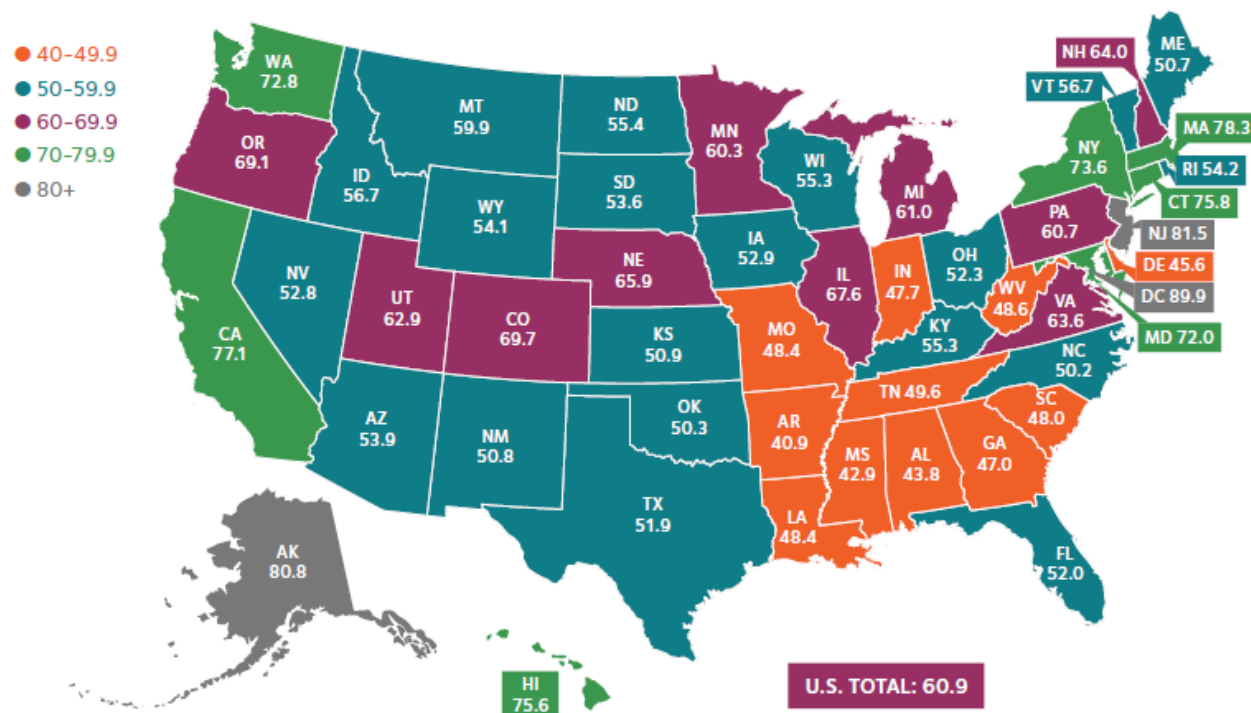
- 82.7% of White, non-Hispanic children age 1-17 reported their teeth were in excellent or very good condition compared to 71.4% of African American, non-Hispanic children in Louisiana.
- 11.6% of White, non-Hispanic children age 1-17 years reported having one or more oral health problems compared to 17.6% of African American, non-Hispanic children in Louisiana.
- Children from low-income households experience higher rates of and more advanced caries than children who are not from low-income households.

During 2014 in Louisiana, 28% of children under 18 lived below the poverty level; alarmingly, in New Orleans this is almost 44%, in contrast to the overall United States rate of 22%. (ACS 2014). One of the major factors contributing to the heavy burden of dental disease among Louisiana children, especially children from low-income households, is the limited availability of oral health providers.

# Oral Health Environment and Infrastructure

## Dental workforce and capacity

The number of dentists per 100,000 population in the United States was 60.9 in 2015 and varied across states. The District of Columbia (89.9), New Jersey (81.5) and Alaska (80.8) had the highest ratios in the nation (American Dental Association, Health Policy Institute). Louisiana had a ratio of 48.8 dentists per 100,000 population in 2015, a 10.4% increase from 2005.<sup>2</sup>

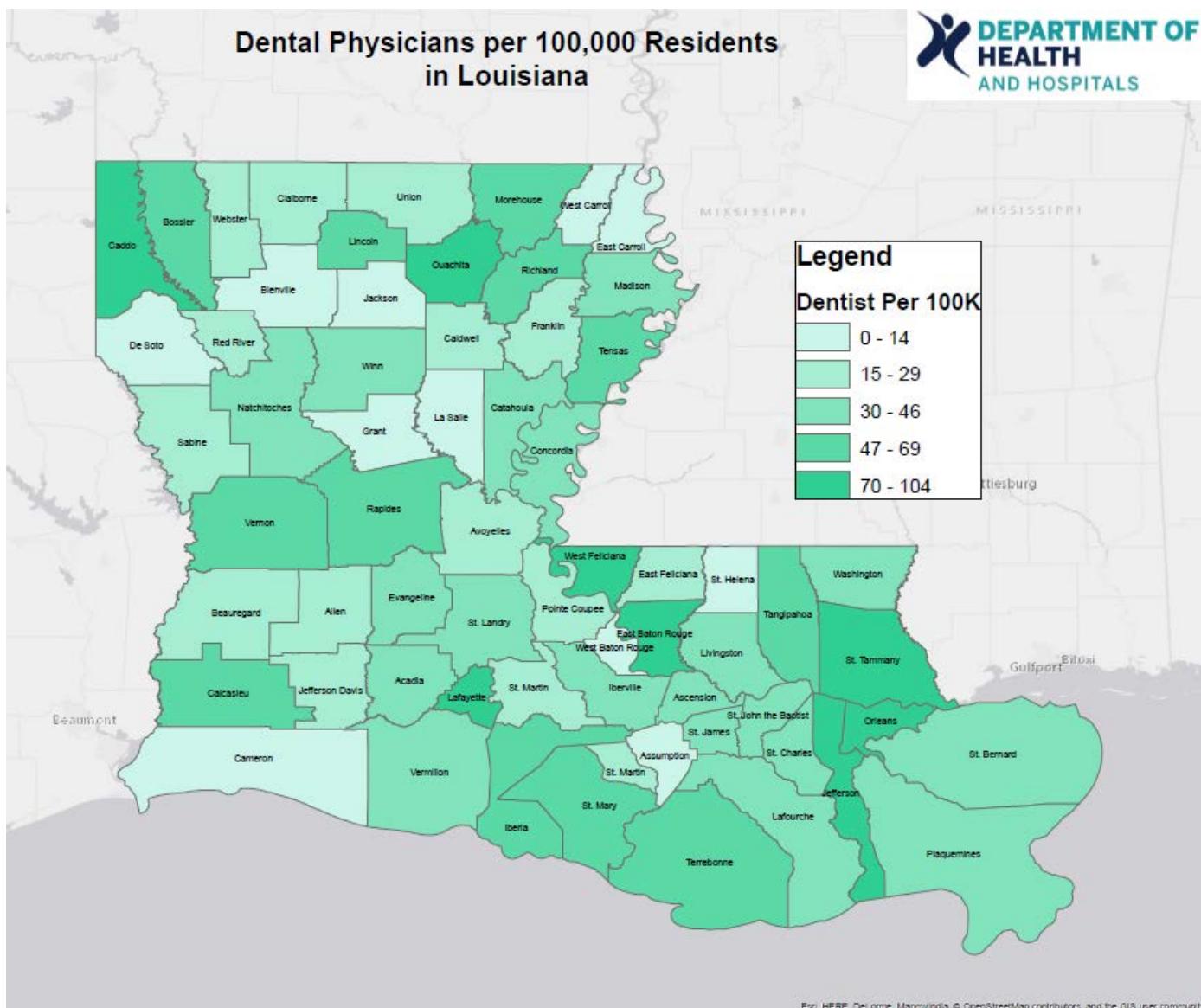


Among Louisiana's 64 parishes, the following geographic information system (GIS) map depicts rates for the supply of dentists per 100,000 population of Louisiana residents.<sup>3</sup> Notable, is the dearth of dentists practicing in rural parishes with low population density as contrasted to the abundance of dentists practicing in primarily urban parishes with high population density. Many of the parishes with the lighter shading are health professional shortage areas (HPSAs).

<sup>2</sup> [https://www.ada.org/~media/ADA/Science%20and%20Research/HPI/Files/HPIgraphic\\_0716\\_1.pdf?la=en](https://www.ada.org/~media/ADA/Science%20and%20Research/HPI/Files/HPIgraphic_0716_1.pdf?la=en)

<sup>3</sup> [http://ldh.la.gov/assets/oph/Center-PHI/maps/DentalPhysicians\\_per100K.pdf](http://ldh.la.gov/assets/oph/Center-PHI/maps/DentalPhysicians_per100K.pdf)





Louisiana Department of Health, Center for Population Health Informatics. Taxonomy Data and Census Data, 2015.

## Diversity

There are national trends in the dentist workforce occurring over the past decade, and Louisiana seems to be following a similar trajectory. The average age of dentists has increased, more dentists are female, and dentists are waiting longer to retire.<sup>4</sup>

National Dental Workforce	2005	2015
Average age of dentists is increasing	48.5	50
Average age of dentists at retirement is increasing	66.1	68.8
Higher share of dentists are female	20%	29%
Proportion of female dental school graduates is growing	43.8%	48.0%

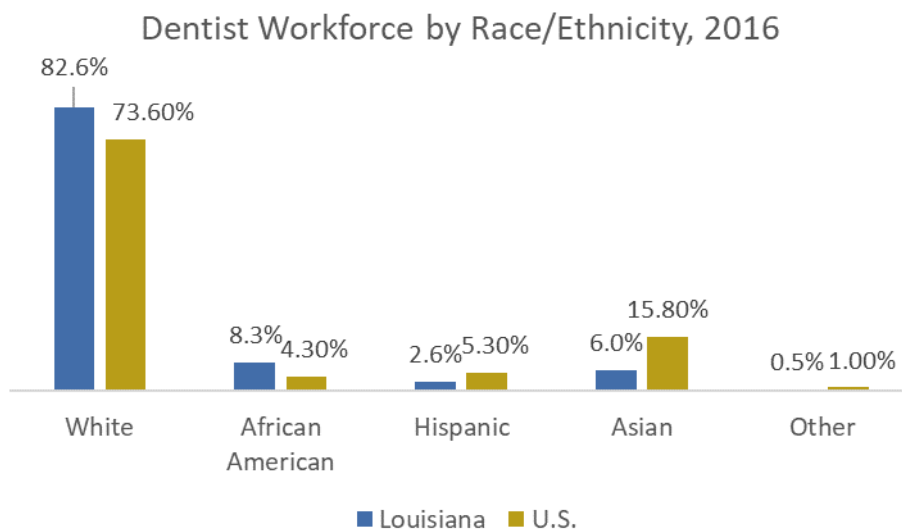
<sup>4</sup> [https://www.ada.org/~media/ADA/Science%20and%20Research/HPI/Files/HPIgraphic\\_0716\\_1.pdf?la=en](https://www.ada.org/~media/ADA/Science%20and%20Research/HPI/Files/HPIgraphic_0716_1.pdf?la=en)



Ethnic and racial diversity among dentists is not representative of the U.S. population. White and Asian dentists are proportionally more represented in the profession when compared to the U.S. population. Hispanic and black dentists, as well as dentists who identify themselves as another race or ethnicity, are proportionally less represented in the profession when compared to the U.S. population (American Dental Association, Health Policy Institute, 2018).

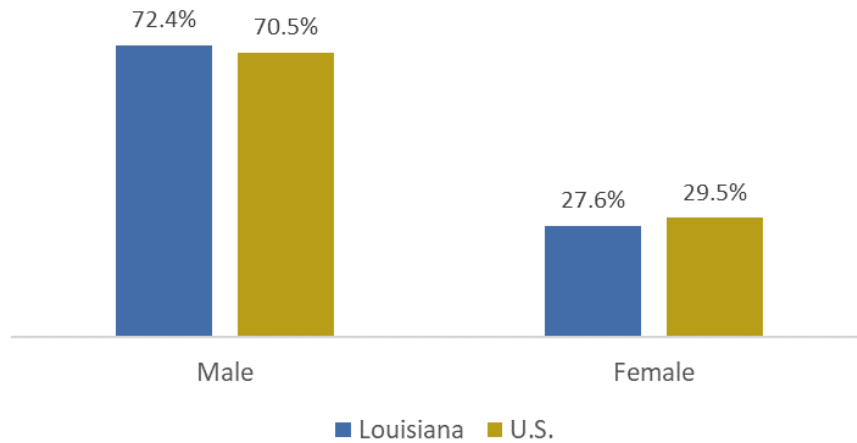
To address racial diversity among dental graduates in Louisiana, Louisiana State University School of Dentistry (LSUSD) began implementing the LSUSD Summer Enrichment Program in 2008 to increase the number of underrepresented minority students applying and being accepted into dental school. As of 2014, of the 79 participants who attended, 32 enrolled or were accepted into dental schools. All but three of the participants were Louisiana residents. It is anticipated that the vast majority will remain or return to practice dentistry in the state. This program demonstrates that LSUSD has a commitment to address racial disparities in Louisiana.

According to U.S. Census 2014 data, 63.4% of the Louisiana population is white, 32.5% are African American, and the remainder is comprised of other minorities. According to the American Dental Association, Health Policy Institute in 2016, 17% of the licensed dentists in Louisiana are minorities. Of those, 8% are African Americans according to the American Dental Association *Recruitment and Retention Report for Active Licensed Dentists*.



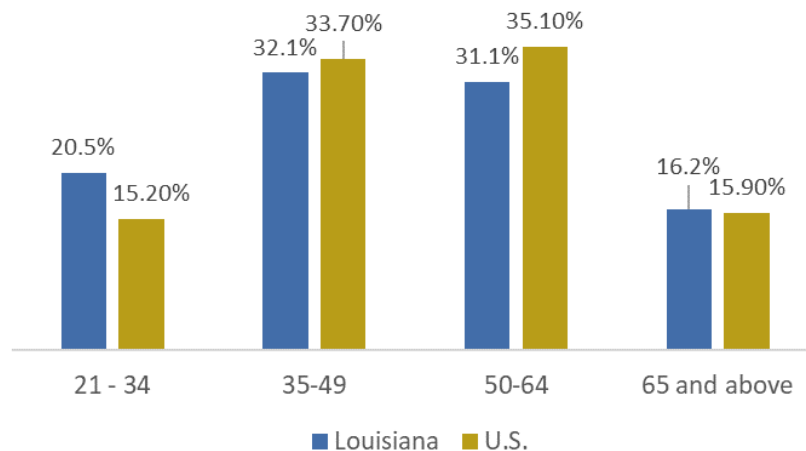
Female dental practitioners comprise approximately 25% of the practicing dentists in Louisiana. In Louisiana, 51% of the population is female. An increasing number of female dental students are applying and being accepted into LSUSD. In the last four years, 43% of LSUSD dental graduates were female and currently, 53% of students enrolled at LSUSD are female. LSUSD has demonstrated the ability to improve enrollment of women in the D.D.S. program.

Dentist Workforce by Gender, 2016



The average age of practicing dentists in Louisiana is 49.2, slightly under the national average of 50.1. Although Louisiana does have higher percentage of dentists under 35 compared to the U.S., it also has a higher percentage of dentists over 65 year of age (American Dental Association, Health Policy Institute, 2018).

Dentist Workforce by Age Group, 2016



## Dental Educational Institutions

The Louisiana State University School of Dentistry (LSUSD) is the sole training institution for dentists and dental specialties in Louisiana. Three out of every four dentists and dental hygienists practicing in Louisiana are graduates of the school.

LSUSD is unique among the more than 65 dental schools in the United States because it offers degrees in dentistry, dental hygiene, and dental laboratory technology. The LSUSD enrollment totals 384 and graduates 60-65 dental students each year. From 1972 to 2017, the LSU School of Dentistry has graduated over 6,000 dental health professionals. This means that 75% of the dental health care professionals in Louisiana have been trained at LSUSD.

Students, residents, and faculty provide care in 11 locations statewide with an average of 100,000 patient visits annually. Each year, LSUSD students also participates in community outreach events to reach the underserved

and impoverished. Dental screenings, sealant placement, oral health education and direct care were among the services offered. Students and faculty are affiliated with numerous health related institutions across the state. Institutional affiliations include:

- Children's Hospital, New Orleans
- University Medical Center, New Orleans
- Southern Regional Research Medical Center, Houma
- Pinecrest Services and Supports Center, Pineville
- Veteran's Affairs Hospital, New Orleans
- Veteran's Affairs Hospital, Baton Rouge
- Our Lady of the Lake Medical Center
- Our Lady of Lourdes Medical Center
- Baton Rouge General Hospital
- Carolina Center for Oral and Facial Surgery
- LSU Health Dental and Medical Primary Care Clinic, New Orleans

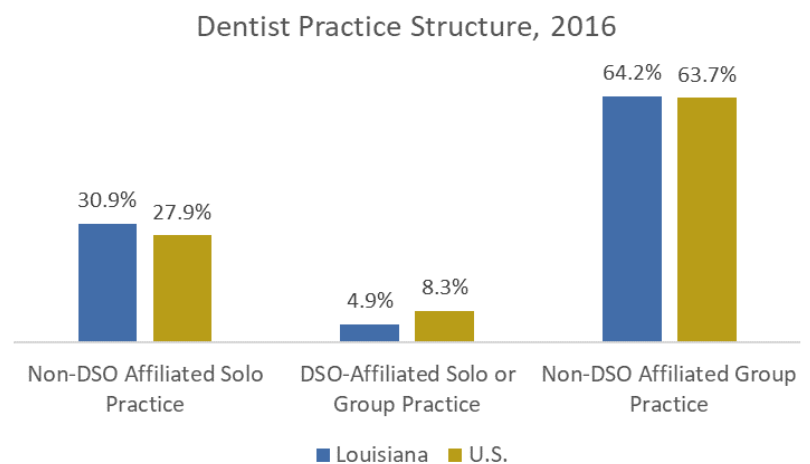


Dental Hygienists are licensed oral health professionals who focus on preventing and treating oral diseases and promoting overall health. Four state universities and colleges provide dental hygienist training in Louisiana:

- LSU School of Dentistry at New Orleans
- University of Louisiana at Monroe
- Southern University at Shreveport
- University of Louisiana at Lafayette

### Dental Practice Structures

Most Louisiana Dentists practice in traditional solo or group practices. Dental Service Organizations (DSOs) are independent business support centers that contract with dental practices in the United States and provide business management and support to dental practices (Association of Dental Support Organizations, 2016). The increasing prevalence of Dental Service Organizations (DSOs) represents an emerging workforce model on the dental landscape. A majority of the dental groups that participate in DSOs are female and adults between 21-34 years of age. According to comments from one of the largest DSOs in the U.S., DSOs address multifaceted challenges faced by dentists, including the following: keeping up with technology, increased costs, government regulation, and legal issues. The support DSOs offer is designed to alleviate administrative burden to dentists. For young dentists just entering the profession, the DSO model can provide access to invaluable educational opportunities. For experienced dentists, DSO support helps alleviate the non-clinical tasks of running a dental office, so they can focus strictly on patient care (Elsenpeter, 2016).



Although DSOs are growing in Louisiana, the 4.9% participation rate is lower than the national average of 8.3% (American Dental Association, Health Policy Institute, 2016).<sup>5</sup>

## Louisiana's Medicaid Dental Plan

Dental care for children is one of the “ten essential benefits” included in health plans under the Affordable Care Act, but mandated dental coverage is limited for adults. MCNA Dental (MCNA Insurance Company and Managed Care of North America, Inc.) is a benefits administrator based in Florida that administers Medicaid benefits for children in Louisiana and certain adults are eligible for dentures. The Early and Preventative Screening, Diagnosis and Treatment (EPSDT) Dental Program is designated for enrollees under the age of 21. The EPSDT Dental Program, administered by MCNA, covers certain diagnostic, endodontic, periodontics, removable prosthodontic, maxillofacial prosthetic, oral and maxillofacial surgery, orthodontic, adjunctive general services, preventive, and maintenance and restoration services such as fillings, fluoride treatments and cleanings. In State Fiscal Year 2017, MCNA covered 901,379 Medicaid enrollees under the age of 21. Of those, 422,601 members (46.9%) saw a dentist for at least one service (National Survey of Children's Health, 2016).

Table. Utilization rates for procedures performed on those patients under age 21 who saw a dentist through the Dental Benefit Program, State Fiscal Year 2017

	Total members received procedure	Rate of members who saw a dentist
Adult oral prophylaxis (12-20 years of age)	118,312	28.00%
Child oral prophylaxis (under 12 years of age)	282,830	66.93%
Dental sealants	52,065	12.32%
Fluoride varnish	81,048	19.18%
Amalgam fillings	44,948	10.64%
Composite fillings	88,533	20.95%
Stainless steel crowns	36,496	8.64%
Extraction of primary teeth	33,062	7.82%
Extractions of permanent teeth	14,028	3.32%
Pulpotomies performed on primary teeth	17,529	4.15%
Root canals performed on permanent teeth	6,654	1.55%

Source: MARS Data Warehouse, compiled by ULM School of Pharmacy, Office of Outcomes Research

According to the American Dental Association Health Policy Institute, when Louisiana State University School of Dentistry **graduates enter the workforce, 42.6% tend to participate in Medicaid**, a greater extent than their counterparts on a national level at 37.9% Medicaid participation (American Dental Association, Health Policy Institute).<sup>6</sup> Louisiana Medicaid fee-for-service reimbursement was 61% of private dental benefit plan charges for child dental services, compared to the U.S, which averages 49% of private dental benefit plans. It is important to note that between 2003 and 2013 reimbursement rates for child dental services in Medicaid increased 21.3% in Louisiana, according to the American Dental Association.<sup>7</sup>

<sup>5</sup> [https://www.ada.org/~media/ADA/Science%20and%20Research/HPI/Files/HPIGraphic\\_1117\\_5.pdf?la=en](https://www.ada.org/~media/ADA/Science%20and%20Research/HPI/Files/HPIGraphic_1117_5.pdf?la=en)

<sup>6</sup> [https://www.ada.org/~media/ADA/Science%20and%20Research/HPI/Files/HPIGraphic\\_0317\\_2.pdf?la=en](https://www.ada.org/~media/ADA/Science%20and%20Research/HPI/Files/HPIGraphic_0317_2.pdf?la=en)

<sup>7</sup> <http://www.ada.org/~media/ADA/Science%20and%20Research/HPI/OralHealthCare-StateFacts/Oral-Health-Care-System-Full-Report.pdf>

## Low-to-No Cost dental care

Louisiana has a number of dental clinics providing free or discounted service fee arrangements to the local uninsured and underinsured citizens. Access to free services is predominantly in larger cities. Services provided are generally through volunteer dentists and dental staff, and range from screenings and referrals to on-site treatments.

## Federally Qualified Health Centers

A **Federally Qualified Health Center (FQHC)** is a reimbursement designation from the Bureau of Primary Health Care and the Centers for Medicare and Medicaid Services of the United States Department of Health and Human Services. This designation is significant for several health programs funded under the Health Center Consolidation Act (Section 330 of the Public Health Service Act). FQHC is a community-based organization that provides comprehensive primary care and preventive care, including health, oral, and mental health/substance abuse services to persons of all ages, regardless of their ability to pay or health insurance status. Thus, they are a critical component of the health care safety net. FQHCs are automatically designated as health professional shortage facilities.

According to HRSA in 2017, Louisiana FQHCs consisted of 34 grantees with 224 clinical sites in communities and schools. They employed and engaged 256 dental professionals, providing 194,430 dental visits.

## Louisiana State University School of Dentistry (LSUSD)

Under faculty supervision at the LSU Health New Orleans School of Dentistry main campus and New Orleans clinical sites, dental students and dental residents can provide dental care to local residents. The school also has satellite clinics in Baton Rouge, Lafayette, Houma and Pineville. The LSUSD clinic care is not provided free of charge, but fees are reduced from the cost of private dental care usually about 50%.

## Louisiana Charitable Community Clinics

Louisiana participates in the Donated Dental Services (DDS) program, where dental professionals reach out to the elderly and individuals with special needs. Volunteer dentists and labs provide the program services. In fiscal year, July 1, 2014, to June 30, 2015, the program provided 169 patients with disabilities, older adults, or medically at-risk individuals, \$461,777 in treatment, and \$39,829 in lab costs. Since 1987, almost 5,000 patients have received approximately \$9.6 million in donated treatment.

There are programs and organizations throughout the state aimed at serving the un/underinsured and underserved populations. Some have eligibility requirements and others are open to anyone.

Program: Underserved Population	Location
Donated Dental Program of Acadiana	Acadia, Avoyelles, Evangeline, Iberia, Lafayette, St. Landry, St. Martin, St. Mary, Terrebonne and Vermilion parishes
St. Bernadette Community Clinic	Lafayette
Community Health Worx	Alexandria
Huey P. Long Outpatient Clinic	Alexandria
Calcasieu Community Clinic	Lake Charles
Good Samaritans Ministry	Slidell
New Orleans Dream Center/HealthREACH	New Orleans
The New Orleans Council on Aging	New Orleans
All Saints Free Community Medical and Dental Center	Covington
Program: Special Population Clinics	Location
Veterans Affairs Clinic (Outpatient Clinic)	Baton Rouge and Mandeville
United Cerebral Palsy of Greater N.O.	Jefferson Parish
Southwest Louisiana Education and Referral Center	Lafayette

### Other charitable oral health initiatives

There are more initiatives that strive to close the gaps in access to care, such as school-based settings or mobile units to provide care. Another example is Louisiana Seals Smiles. The Louisiana Oral Health Program collaborated with Eat, Move, Grow! to host school based dental sealants clinics during the 2017-2018 school year. They seek out volunteer dentists to screen children prior to state contracted hygienists placing sealants and fluoride varnish applications. The project seeks to build synergy in schools around oral health, nutrition, and obesity in underserved populations.

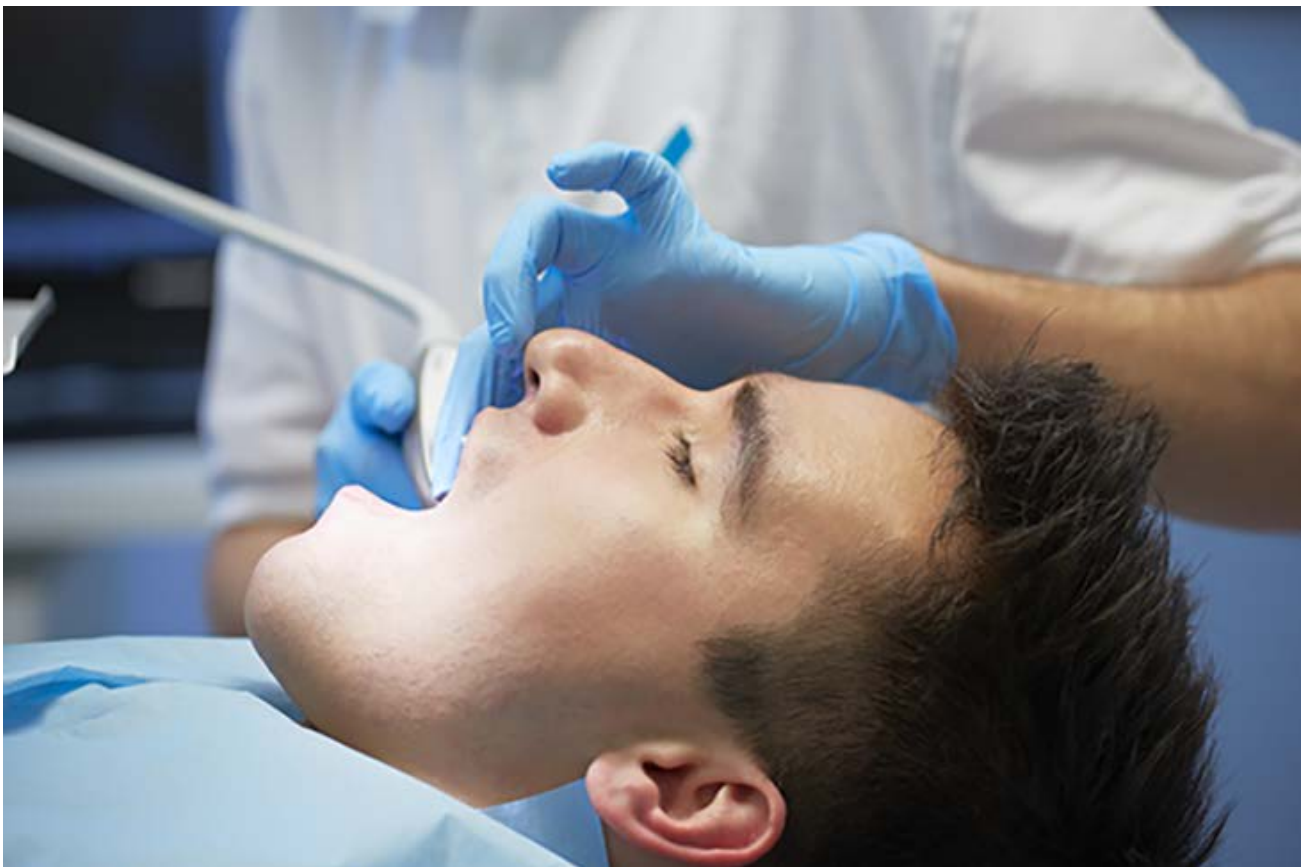
Annual LaMOM event: The LDA Foundation (a 501(c)(3) charitable organization), together with partners such as the Louisiana Dental Association (LDA), the LSU School of Dentistry and America's Dentists Care Foundation, hosts Mission of Mercy (MOM) programs. A location is transformed into a large-scale dental clinic with the purpose of treating adults and children who have limited financial resources. Over multiple days in 2016, volunteer dentists, hygienists, assistants, students and community workers from across the state of Louisiana provided 8,724 procedures including exams, X-rays, cleanings, fillings, anterior root canals, extractions and front teeth transitional partials. "LaMOM" serves anyone willing to attend and participate.

### Innovative Workforce Models

The major workforce programs instrumental in attracting dental providers to HPSAs have been the Louisiana **State Loan Repayment Program (SLRP)** and the **National Health Services Corp (NHSC)**. The SLRP currently funds loan repayment to seven (7) dentists serving in HPSAs and the NHSC has 12 providers serving in 10 locations. In return for repayment of educational student loan debt, providers agree to treat all patients regardless of their ability to pay and provide a sliding fee scale for patients under 200% of the federal poverty level. While there are currently 19 providers, an overall need for providers that are willing and trained to work in medically underserved facilities or HPSAs remains.

Louisiana State University School of Dentistry (LSUSD), supported by the Oral Health Coalition, implemented the **Dental Rural Scholars Track**. The purpose of the Rural Track Program is to encourage service in Louisiana's rural

and underserved areas and ultimately overcome the state's problem of a substantial lack of dentists available to vulnerable populations through rural training rotation in rural community clinics. Students train under the LSUSD prepared community dentist. In the first implementation year (2017), LSUSD selected one D3 student in the DRST program. The Louisiana portion of the D3 and D4 school years is waived for the scholar. The scholar also completed a clinical rotation at a rural federally qualified health center (FQHC). So far in year 2 (2018), one D2 student was awarded the DRST scholarship and will receive a tuition waiver for D3 and D4 years. This scholar will complete her clinical location at a rural FQHC after her D3 year. Both scholars are committed to serve a minimum of two years at a qualified dental site upon graduation.

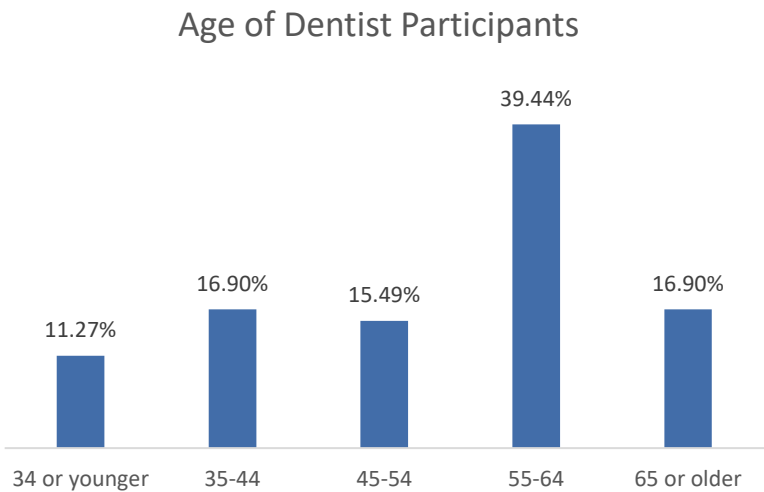


# Assessment Results: Provider Interviews and Survey Results

The Louisiana Public Health Institute supported and analyzed results of a workforce assessment survey and individual phone interviews. The target participants was the oral health work force including both dentists and other health providers that may encounter patients with oral health issues.

## Demographics (Dentists)

For this assessment, 282 dentists participated in surveys. 57 of the 64 parishes are represented in this sample. 78% of the sample received their DDS, DMD, or equivalent in Louisiana.



282 Dentists Participated

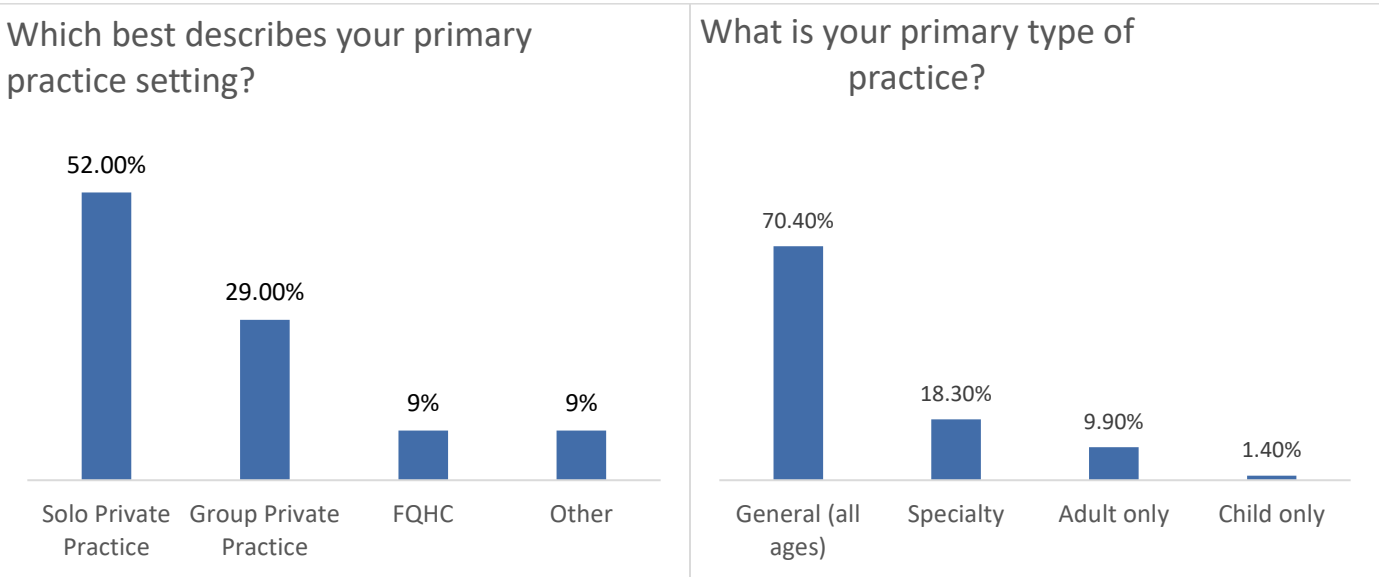
39 in HPSA high need parishes

164 in HPSA low-income

79 in parishes without shortage

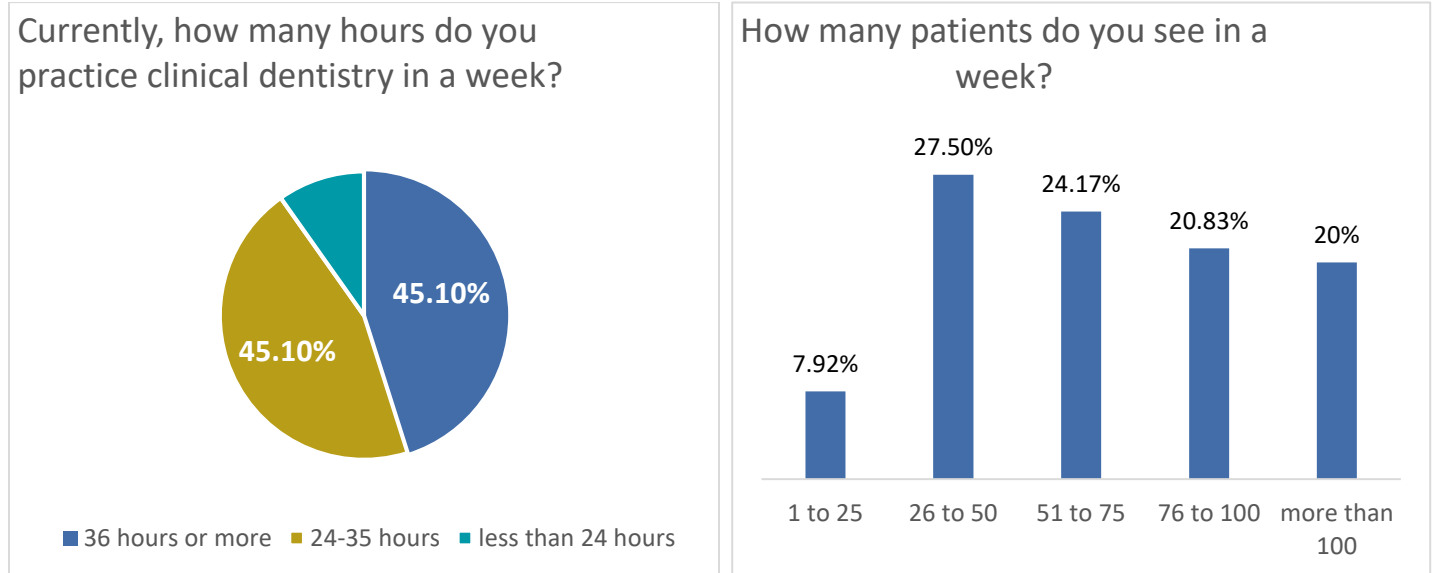
6 Dentists interviewed

The above graph shows that older dentists represent a somewhat disproportionate number of respondents. In fact, 54% of all respondents reported that they intended to leave dentistry in the next 5-10 years. The sample also well represented participants from income based HPSA designation, but under-represented dentists from geographically designated HPSA parishes. However, 34% of respondents described their practice as primarily rural.





The clear majority (81%) of dentists surveyed were part of private practice and non-specialists, as expected. In addition, most practices see patients of all ages.



Of the dentists surveyed, just over half (55%) worked less than 36 hours a week, which was a personal preference for the majority (65.8%) of respondents. Many are also planning to reduce their hours in the next 5-10 years, primarily due personal preference.

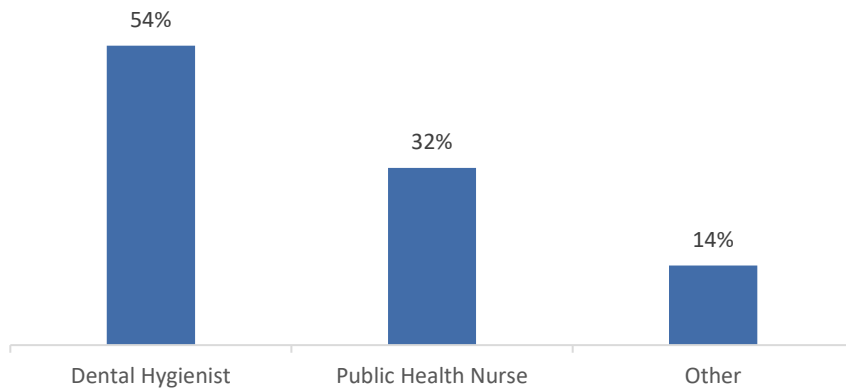
Six dentists also participated in interviews.

- 5 of the 6 owned a private practice located in urban areas, serving patients in the immediate area as well as the surrounding rural areas, including out of state.
- 4 general dentists, 2 pediatric dentists, and an orthodontist.
- 2 of the 6 were women
- 2 of the 6 provided dental service to the special needs population.

## Demographics (Non-Dentists)

There were 137 non-dentist participants representing all but 17 parishes. Proportionally non- HPSA Parishes were a smaller percentage of the participants than for dentists. In addition, 46% of respondents described their practice as primarily rural.

What type of other providers participated in the survey?



**137** Non-Dentists Participated

**40** in HPSA high need parishes

**79** in HPSA low-income

**18** in parishes without shortage

**11** Non-Dentists interviewed

Overall, most interview respondents identified that they worked in HPSA low-income areas, and only 2 respondents stated working *in* a HPSA-geographic parish. Of the providers interviewed, most served patients across multiple parishes (including patients that traveled from 9 HPSA high need parishes). Some providers (4) reported out of state patients as well.

The assessments targeted dental hygienists, public health nurses, and several other types of providers including ER doctors and school nurses.

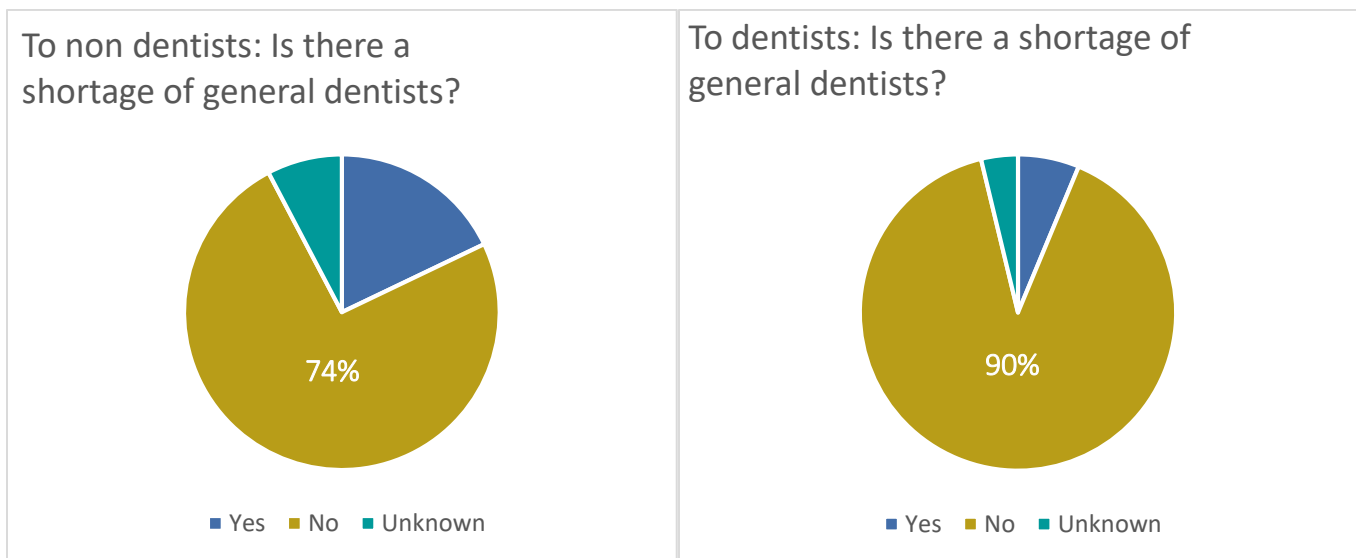
- 8 hygienists were interviewed. These respondents were all female and highly mobile, working for various clinics and health care systems in southern or central Louisiana.
- 3 “Other Healthcare providers” were interviewed from southern Louisiana, and they represented very diverse backgrounds. One was an MD and Regional Medical Director for OPH; One an NP and school nurse, and the last an RN for a Parish Health Unit. One provider serves small, very rural communities, one serves both urban and rural populations, and the third serving an urban population.

## Assessment Findings

### Current Workforce “Shortage”

The large majority of both dentists and non-dentists felt that there is **no shortage** of dentists in Louisiana. When conducting interviews with dentists, all respondents maintained this sentiment, one adding,

*“It’s not a shortage issue; it’s a geographic spread issue.” Another stated, “There’s no shortage. There are enough dentists per capita...(or at least a) sufficient number...the worst Louisiana could do is pump out a bunch of dentists that are potentially poor quality like they did in the 70s”.*

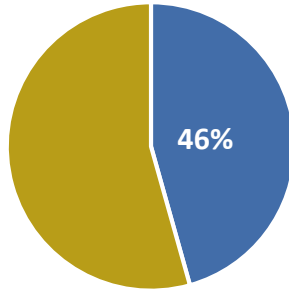


This perception may be true if limited to patients who are currently accessing care. However, as described above, 43% of adults and 19% of children reported not seeing a dentist in the past 12 months<sup>9</sup>. It is important to consider factors that are driving these statistics.

Some are also concerned about dentists leaving the workforce and the provision of care for special populations.

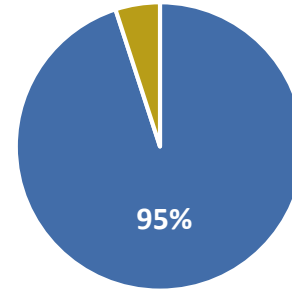
*“There’s a lag in providers of the ‘special needs’ population because typically older guys about to retire, are the ones trained because it used to be part of the dental school training...it’s expensive and not a lot of pay from serving this population”. –a dentist*

Do you plan to leave dentistry in the next 5-10 years?



■ Yes ■ No

Why do you plan on leaving clinical dentistry?



■ Retirement ■ Personal Preference

The survey asked dentists if they planned to leave dentistry in the next 5-10 years. While the survey sample does skew older than the general dentist population, there is a significant number of dentists who do plan to leave the field in the next 5-10 years and this is overwhelmingly due to retirement.

#### *Interview summary: Workforce “Shortage”*

- Dentists and dental hygienists both overwhelmingly expressed that there is no shortage in the workforce.
- Other healthcare providers all specified that there is no shortage in urban areas
- Both hygienists and dentists reported a shortage in Endodontists in LA
- Hygienists reported a hiring shortage. Many hygienists stated practices were not hiring certified hygienists and dental assistants.
- Barrier example from 2 dentists: Too expensive for dentists to set up a private practice in a rural community, where members are already traveling elsewhere for oral health care.

#### Access to Care

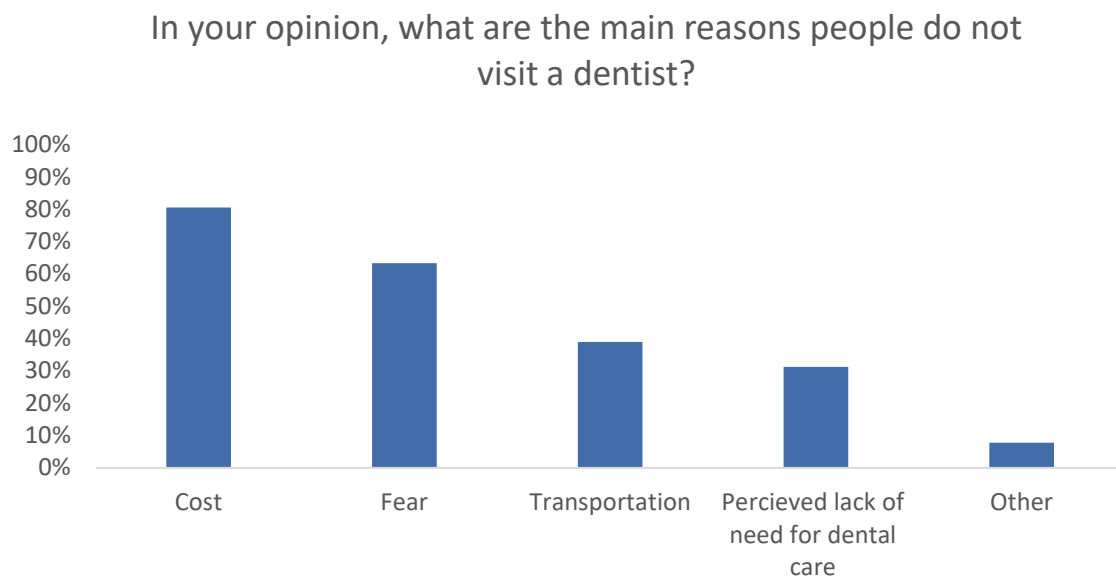
Interview respondents reported fear, oral health knowledge, and cost as the contributing factors for not seeking oral health care. Some providers stated that patients often did not seek dental care due to fear, except in cases when oral pain becomes excessive. Dental health providers reported that their patients’ fear often stemmed from limited education and understanding surrounding the importance and value of *preventative* dental care, commonly referred to as a “low dental IQ”.

Dental providers also cited cost (i.e., financial or insurance status) as an important deterrent for patients seeking dental care. Providers reported patients would often visit a dentist when their dental healthcare kicked in, or were financially able to afford dental procedures. According to some respondents, financial status may also play a role in transportation. Low-income patients may not have reliable transportation, and those insured through Medicaid often report unreliable transportation services to their providers. Some providers reported

financial status did not pose a barrier to accessing dental services, that possibly dental care was simply not a priority when considering financial spending.

*A Nurse Practitioner in a rural school district affirmed transportation is a barrier to care, “after the (last hurricane) nobody came back so dental services are about 40 miles away...I have 254 kids I see at my school and probably about half or less go to their 6 month screening...they only go if there’s a tooth breaking or something else.”*

*On the other hand, a Dentist stated, “the idea of ‘I can’t get there, but can always get to the boats...or can ‘visit Aunties’ - 5 states away all the time or are going out to eat, but can’t seem to make it to the dentist - is not a transportation issue, it’s not a priority.”*



An additional barrier for patients is the ability to take time off work for a dental appointment. Survey respondents (84%) overwhelmingly did not provide appointments outside of regular working hours.

#### *Summary: Perceived Motivators of Seeking Care*

- Dentists, hygienists, and other health providers all agree that adults come in because “things hurt”; there’s a problem; pain
- Dental hygienists stressed that people do not visit dentist mainly because of fear, cost, and limited knowledge on preventative care.
- Dentists and hygienists also reported that patients typically don’t think of preventive care unless insurance has just kicked in and will cover cleanings etc., maximizing benefits or they perceive that they cannot afford a yearly checkup without insurance coverage
- Many dentists added that patients will travel to a provider due to an established relationship ( even across state lines) & will pass dentists who are closer in proximity

- Dentists reported children are seen more regularly for maintenance. Dentists reported engaging in various efforts to increase dental knowledge (and the importance of preventative care) among parents.
- Dentists also reported a need for better support from the dental workforce for the special needs population (i.e., hospitals/coordinated care and policy change to increase age of service coverage)

*“Many patients don’t even know they need to visit the dentist before there is a problem”*

-dental hygienist

#### *Summary: Perceived Barriers to Seeking Care*

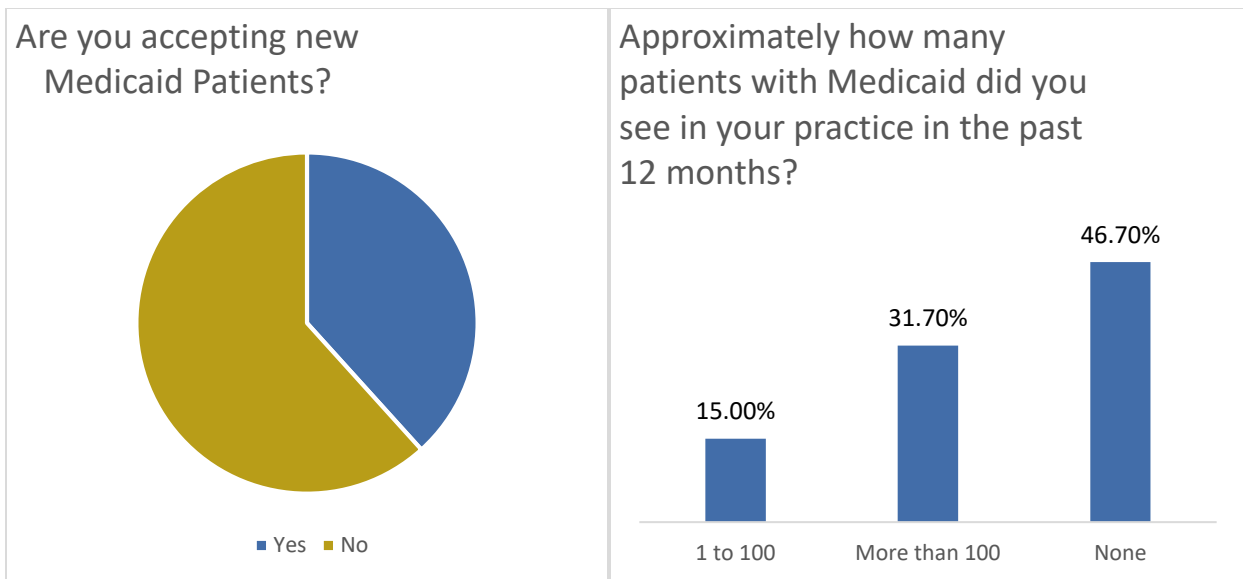
- Other Healthcare providers shared that barriers include few providers in rural communities, dental care costs, fear, and transportation.
- Dentists and hygienists both reported low dental IQ; adult patients have limited knowledge/education on the importance of receiving preventative services.
- Providers reported fear as a barrier for patients seeking oral health services. However, for most patients, pain typically overcomes fear (i.e., when the pain becomes unbearable, patients will seek oral health services).
- Some hygienists reported transportation is a barrier for low-income, uninsured, or Medicaid insured individuals. However, dentists reported no transportation barriers, and instead cited motivation in acquiring transportation.
- Hygienists reported cost (financial status) as a barrier. However, some dentists reported cost is not a barrier, but instead that dental care is not a priority during financial decisions.

#### *Summary: Community Partnerships*

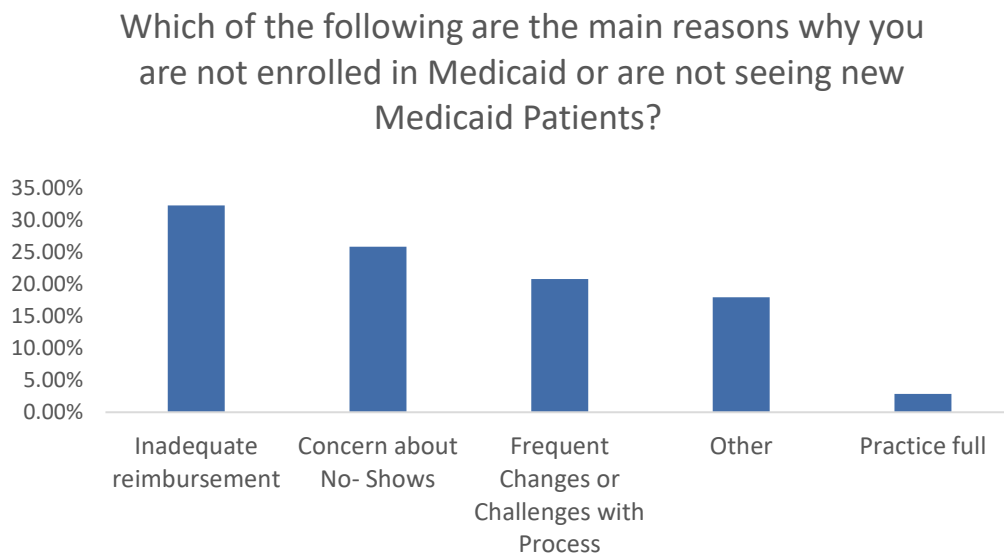
- Dentists and hygienists reported that patients predominantly access dental care by word of mouth, Pediatricians, and the internet.
- Most dentists similarly added that a trusted relationship was a positive indicator of regular visits, long-term patient standing (despite distance), and referrals to new patients.
- Providers did not report collaboration with community partners as a key for receiving referrals. Only a few dentists reported isolated referrals from other health care providers (ER doctors, schools).

## Medicaid

One of the most important factors in both patient access and cost for un/underinsured is Medicaid policies. Medicaid can be critical for many patients to be able to afford care, but can present challenges for dental practices. Many practices choose not to accept Medicaid patients or see very few.

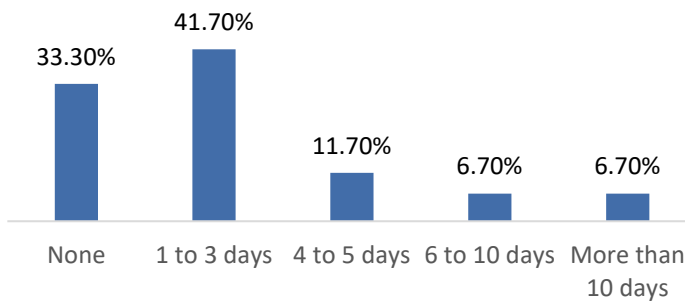


Dentists were asked to list the main reasons why they either were not enrolled in Medicaid or did not accept Medicaid patients. Dentists cited inadequate reimbursement as the most common reason for not servicing Medicaid patients. In addition, concerns about no-shows is also directly related to revenue. The next most common reason was frequent changes with the Medicaid process, which is also a challenge for patients.



*A dentist shared, “I have a colleague that said (they) scheduled 6 hygiene patients in one hour because people don’t show up - which is unrealistic but forced to do that to maintain business and serve the people in need... Medicaid needs to be better addressed... ½ the system is taking advantage and ½ are genuinely trying to help but burned by the process of non-payment...there are a ridiculous number of rules – you basically have to hire a whole other person to translate”.*

How many days of clinical volunteer dental service did you provide in the last 12 months?



Approximately 67% of participating dentists did provide volunteer clinical dental services in the past 12 months. As discussed earlier, there are many avenues to provide services to the underserved. Charitable dental care reduces the cost of care, but other barriers remain.

#### *Summary: Perceptions of the Un/Underinsured*

- Not a good system for patients or providers; steps not clear & simple for either party
- Negative perception of those receiving Medicaid benefits
- Insurance covers less than high-quality service
- No consequence for no-shows/no pay required
- Only one respondent mentioned “ineligible” population accessing FQHCs for alternative care to private dentists
- Hygienist shared that there is a shortage in providers accepting Medicaid and poor insurance coverage is a barrier to patients seeking care

## Fluoridation Findings

Of the eight hygienists interviewed, 7 reported the communities they service fluoridate. Perceptions surrounding fluoridation were mixed.

*“By educating parents, they are more willing to allow fluoride treatment for their children.”*

—dental hygienist

#### *Summary: Oral Health Education, Promotion and Fluoridation*

- Hygienists stated public perceptions surrounding fluoridation were mixed. Dentists and hygienists similarly cited pushback on fluoridation was due to misinformed patients; dentists adding the assumption that people read incorrect information on the internet
- Hygienists stated provisions of fluoride treatment during regular checkups but that patients refuse fluoride treatment due to what they have read online
- Dentists and hygienists reported that hygienists often provide one-on-one education surrounding fluoridation treatment and the value of preventative dental care
- One dentist, located in the southern half of Louisiana, claimed that water in the local communities is fluoridated and the perception seems positive overall
- Dentists in the northern half of LA state that water is not fluoridated despite the push for it



## Summary Recommendations: Enhancing Workforce and Alternative Programs

### *Summary: Recommendations, Suggestions and Alternative Services*

- Overall, dentists do not like alternative dental care programs not supervised by a dentist. Dentists believe the programs do not provide comprehensive care and no supervision of quality care.
- Other health providers like FQHCs provide mobile units, medical home model, and dental home type
- Other health providers sharing mobile/temp units would be good for very rural areas and to incentivize rural workforce coverage tied to loan repayment
- Other Healthcare providers and hygienists similarly suggested dental check-up days at health units
- One health care provider suggested providing basic training to health unit teams and have mobile set up for very rural communities
- Recommend more loan repayment programs (like Nat'l service Corps) for new dentists to work temporarily in rural areas
- Focus on women in the dental profession
- Reach out to high schools, before choosing college path; internship type programs
- Focus on enhancing training for special needs/behavioral needs specialty

## Discussion

### Workforce Shortage

Most respondents reported no shortage of dentists, particularly in urban areas. Although HRSA states Louisiana is short hundreds of dentists, the demand is currently being met for people seeking dental care according to participants. The demand for dentists could increase if people sought routine/ preventative dental care as a priority.

Dentists added that there is an uneven distribution of dentists across high need parishes and that with more dentists there is lack of incentive for them to work in rural areas. Oversaturation is making it difficult for hygienists to find full time work as well. Dentists did express a workforce training need, to work with patients who have mental health needs.

Therefore, we can presume that training more dentists alone to address a “shortage” in HPSA zones will not be effective. A trusted patient-provider relationship is a strong factor in improving patients seeking preventative care, as well as patients making preventative oral health a priority.

### Access to Care

Across the board, providers seemed to identify similar factors related to accessing oral healthcare. That is, dentists, hygienists, and other healthcare providers tend to agree that preventative dental care is a low priority in adult populations across the different communities they serve. This can be due to primarily fear, knowledge, and dental care cost. Providers reported that patients who were fearful of dental visits often waited to receive services, until pain became unbearable. Additionally, limited knowledge (low dental IQ) surrounding the importance of preventative care may be another barrier for patients seeking preventative dental care. Unfortunately, poor preventative care (waiting until there is pain to visit dentist), results in poor oral health, which may contribute to more oral health problems. Relatedly, the costs associated with dental care, especially for low-income and uninsured individuals, may explain variations in financial priorities. While most dentists did

not report financial or insurance status as a barrier, many hygienists and other healthcare providers cited transportation due to financial/insurance status as a barrier for seeking dental care. Additionally, dentists perceive that long-term, well-established patients are those that personally find preventative health to be a priority.

Specifically, Medicaid plays an important role for patients to access and afford dental care. While many patients may rely on Medicaid to afford dental care, many practices choose not to accept Medicaid patients, due to cumbersome administrative policies and regulations. Providing dental care to vulnerable and medically underserved populations is a complex problem. Following the passing of the Affordable Care Act, access to care and dental education through school programs have increased for children. Among children in Louisiana, oral health care has been improving over the past decade, but is not at an optimal goal, according to Healthy People 2020. Additionally, addressing population's motivations, as well as financial and insurance barriers are more important than ever. According to the American Dental Association, three essential elements must be adequately addressed to improve access: 1) demand for dental care, 2) the dental workforce, and 3) the economic environment. One alone will not fix the problem.

### Limitations of assessment

A major limitation of the assessment was the sample. Participants included only dental care providers and other healthcare providers' perceptions on oral health care. There was also a low response from dentists (19%), especially from high need HPSA parishes particularly in northern parts of Louisiana. This sample did not include community and utilizer perceptions. A broader assessment, with a larger sample size consisting of oral health care providers, other health care providers, and general patients/community members may yield a more comprehensive depiction of the oral health landscape. While some healthcare providers did report oral screening as part of their protocol, additional training to better support patient referrals to a dentist is still recommended, leading to strategic planning to address improved outcomes.

### For more information

If you have questions or are interested in further information regarding *Closing the Gap on Dental HPSAs: Louisiana Oral Health Workforce Assessment*, please contact:

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## Appendix A: Dental Health Professional Shortage Area (HPSA)

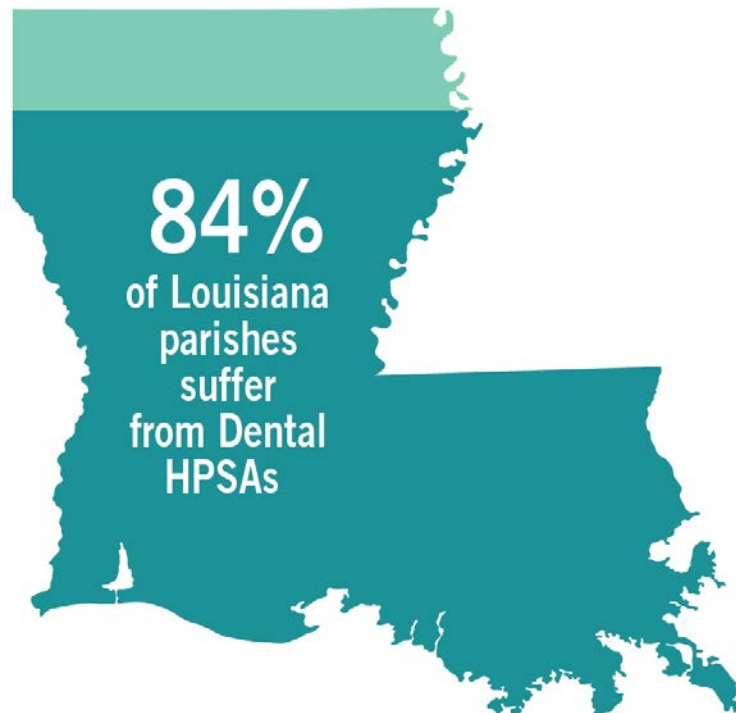
Dental Health Professional Shortage Area (HPSA) designation pertains to an area's access to dentists that practice principally in one of the following dental specialties: general, adult, and pediatric dentistry. Designation provider data is prepared by the State Primary Care Office through an area needs assessment and submitted to the Division of Policy and Shortage Designation, Bureau of Health Workforce, HRSA for approval.

Dental full-time equivalents (FTEs) are calculated by starting with the number of hours of patient care worked per week provided by the dentist. The FTE is then weighted according to the dentist's age and number of in-house assistants the dentist employs.

A ratio of  $\geq 5,000$  possible patients to one (1) dentist FTE is required. For High Needs areas this is  $\geq 4,000:1$ .

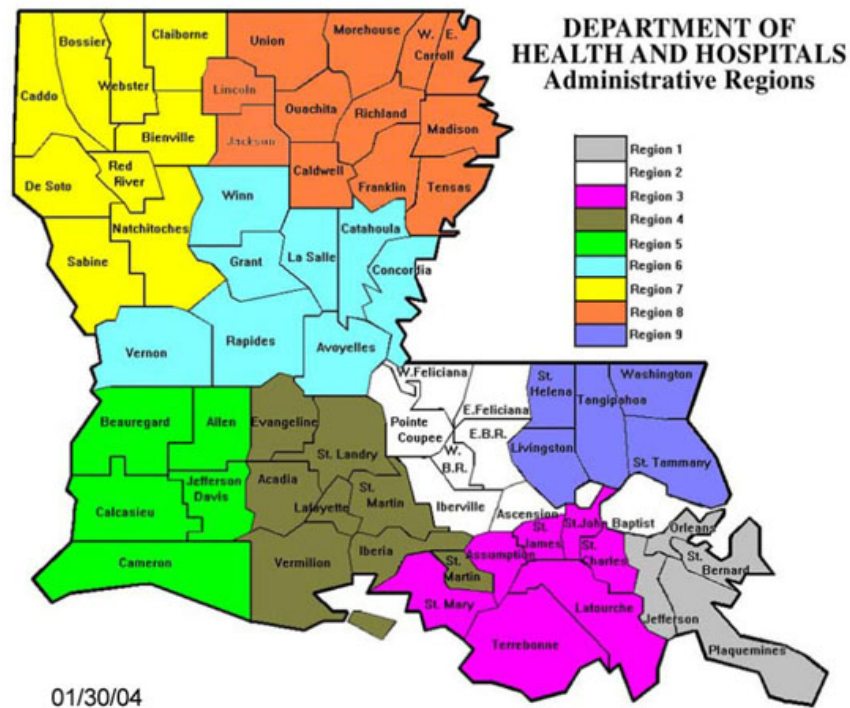
HPSA Designation types, have subcategories, which include:

- Geographic designations—these take into account the entire population of the requested area to all available dentists.
- Population Group designations—these are special groups. The most common of these are Low Income Population designations. Low income uses a ratio built upon the low income population of the area at 200% below the Federal Poverty Level and the dentists providing services to this population.



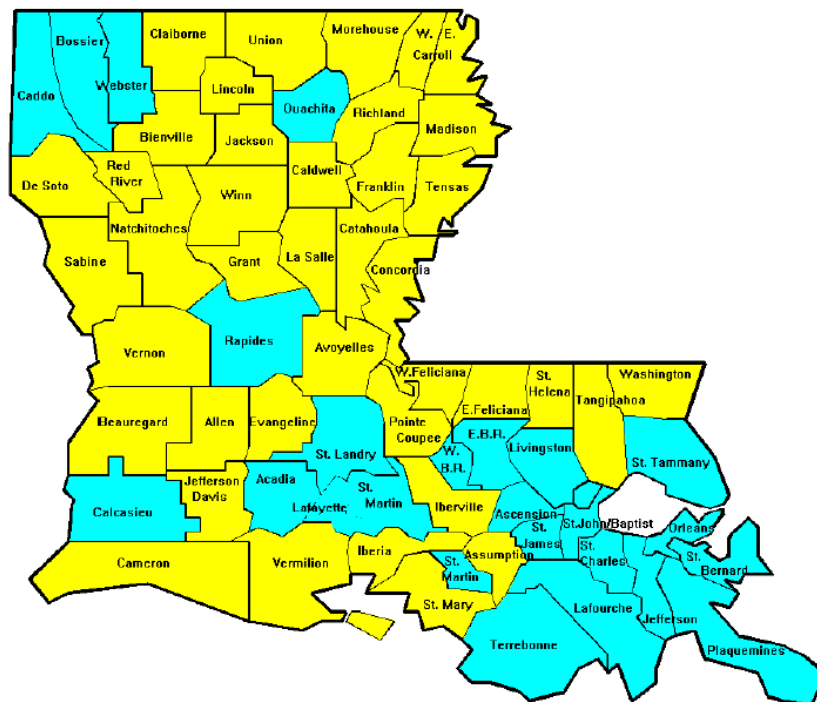
## Appendix B: Additional Maps

### Louisiana Administrative Regions



The Louisiana Dental Association also has 9 similar components areas to administrative regions above.

### Rural and Urban Parishes



Rural Parishes (Yellow) and Urban (Turquoise Blue) are designated by the Federal Office of Management and Budget.

## Appendix C: Target- HPSA, High Need Parishes

DENTAL DESIGNATION NAME	DESIGNATION TYPE	HPSA SCORE	# FTE SHORTAGE
ACADIA	Low Income Population HPSA	18	4.7
ALLEN	Geographic HPSA	12	1.2
ASCENSION - Donaldsonville	High Needs Geographic HPSA	16	0.9
ASSUMPTION	Geographic HPSA	17	2.9
BEAUREGARD	High Needs Geographic HPSA	5	1.3
BIENVILLE	High Needs Geographic HPSA	20	2.1
CADDO	Low Income Population HPSA	19	21.5
CALDWELL	High Needs Geographic HPSA	7	0.2
CAMERON	High Needs Geographic HPSA	14	1.7
CATAHOULA	High Needs Geographic HPSA	11	0.4
CLAIBORNE	High Needs Geographic HPSA	16	1.3
CONCORDIA	Low Income Population HPSA	17	1.1
DESOTO	High Needs Geographic HPSA	20	4.7
EAST BATON ROUGE	Low Income Population HPSA	14	13.9
EAST CARROLL	High Needs Geographic HPSA	23	1
EAST FELICIANA	Low Income Population HPSA	16	1
FRANKLIN	High Needs Geographic HPSA	22	3.3
GRANT	High Needs Geographic HPSA	8	2.4
IBERIA	Low Income Population HPSA	16	3.4
IBERVILLE	Low Income Population HPSA	18	2.3
JACKSON	High Needs Geographic HPSA	20	3
JEFFERSON DAVIS	High Needs Geographic HPSA	13	3.6
JEFFERSON	Low Income Population HPSA	15	21.4
LAFAYETTE	Low Income Population HPSA	14	8.1
LASALLE	High Needs Geographic HPSA	18	2.4
LINCOLN	Low Income Population HPSA	22	3.8
LIVINGSTON	Low Income Population HPSA	16	6.8
MADISON	High Needs Geographic HPSA	20	1.6
MOREHOUSE	High Needs Geographic HPSA	16	2.4
NATCHITOCHES	High Needs Geographic HPSA	13	2.5
ORLEANS	Low Income Population HPSA	13	9.5
OUACHITA	Low Income Population HPSA	20	11.2
PLAQUEMINES	Low Income Population HPSA	15	1.9
POINTE COUPEE	High Needs Geographic HPSA	7	0.5
RED RIVER	High Needs Geographic HPSA	20	1.9
RICHLAND	Low Income Population HPSA	16	1.1
SABINE	High Needs Geographic HPSA	20	3.7
ST BERNARD	Low Income Population HPSA	18	2.8
ST HELENA	High Needs Geographic HPSA	20	1.7
ST JAMES	Low Income Population HPSA	18	1.2

ST JOHN THE BAPTIST	Low Income Population HPSA	17	3.3
ST LANDRY	High Needs Geographic HPSA	14	4.6
ST MARTIN	High Needs Geographic HPSA	9	6.1
ST MARY	High Needs Geographic HPSA	12	0.3
TANGIPAHOA	Low Income Population HPSA	18	7.7
TENSAS	High Needs Geographic HPSA	22	1.2
UNION	High Needs Geographic HPSA	20	3.7
VERMILION	High Needs Geographic HPSA	4	0.5
VERNON	Geographic HPSA	9	2.4
WASHINGTON	High Needs Geographic HPSA	12	0.7
WEBSTER	High Needs Geographic HPSA	16	3.8
WEST BATON ROUGE	Low Income Population HPSA	18	2
WEST CARROLL	High Needs Geographic HPSA	18	1.5
WINN	Low Income Population HPSA	16	0.7
<b>TOTAL Shortage by FTE</b>			<b>200.9</b>

Source: 2017 HRSA Data Warehouse



