

Tulane Medical Center



2016 Community Health Needs Assessment

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**Tripp
Umbach**

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Executive Summary

Communities throughout the United States seek initiatives to improve the overall health of residents and the social environment, striving to provide an adequate level of services and resources for all. Many communities, however, face socioeconomic and environmental factors that create disparities and health issues among its residents. The Greater New Orleans region is no exception. Over the past decade, New Orleans has made major strides in creating stronger communities post-Hurricane Katrina, but the region still has steps to take. Financial disparities, education levels, insufficient public transportation, and a lack of services in areas have allowed for barriers that prevent the development of healthy communities in which all residents benefit. Increased barriers and struggles have generated a rise in behavioral health problems, most notably the opioid epidemic in the New Orleans region. With limited resources and a sense of limited opportunity, residents are turning to unhealthy behaviors.

The following community health needs assessment (CHNA) for the Tulane Medical Center serves to provide an overview of these top issues that are affecting residents throughout the medical center's service area, particularly those who are underserved.¹ The goal of the CHNA report is not to merely present the health issues, but to give leadership at the medical center and the community the ability to understand steps that must be taken in order to address concerns and allow for realization of an overall healthier region.

Introduction

Founded in 1834, Tulane Medical Center is a 362-bed medical and surgical hospital that also serves as the primary teaching hospital for the Tulane University School of Medicine. Tulane Medical Center is dedicated to caring for residents in the Greater New Orleans area and defining the practice of medicine along the way. Tulane Medical Center contracted with Tripp Umbach in October 2016 to conduct a community health needs assessment that will aid the medical center in continuing to serve residents, particularly those most in need of health services.

With the enactment of the Patient Protection and Affordable Care Act (PPACA) on March 23, 2010, tax-exempt hospitals require community health needs assessments (CHNA) to actively improve the health of communities served by health systems. These strategies provide hospitals with the necessary information to address the specific health needs of their communities.

¹ Tulane Medical Center's primary service area encompasses 103 ZIP codes in six parishes: Jefferson, Orleans, St. Bernard, St. Charles, St. John the Baptist, and St. Tammany. See Page 7 for more information on the primary service area.

Coordination and management of strategies based upon the outcomes of a CHNA can improve the impact of hospital community benefits.

To adhere to the requirements imposed by the IRS, tax-exempt hospitals and health systems must:

- Conduct a CHNA every three years.
- Adopt an implementation strategy to meet the community health needs identified through the assessment.
- Report how they are addressing the needs identified in the CHNA.

Community Health Needs

This CHNA report fulfills the requirements of the Internal Revenue Code 501(r)(3), a statute established within the Patient Protection and Affordable Care Act requiring that nonprofit hospitals conduct CHNAs every three years. The CHNA process undertaken by Tulane Medical Center, with project management and consultation by Tripp Umbach, included input from persons who represent the broad interests of the community served by the medical center, including those with special knowledge of public health issues, data related to underserved, hard-to-reach, vulnerable populations and representatives of vulnerable populations served by the hospital. Tripp Umbach worked closely with members representing Tulane Medical Center and the Metropolitan Hospital Council of New Orleans (MHCNO) to oversee and accomplish the assessment and its goals.

Tripp Umbach completed a community health needs assessment for MHCNO in 2015. The MHCNO CHNA served as the foundation for Tulane Medical Center's 2016 assessment. Tripp Umbach utilized data collected from the 2015 MHCNO CHNA, including community leader interview and hand-survey results, as well additional primary data through a public commentary survey. In addition to primary data, Tripp Umbach also utilized updated secondary data findings to inform the CHNA process and prioritization of needs.

The following list identifies prioritized key community health needs based upon primary and secondary data findings and input from leadership at Tulane. Tulane Medical Center will look for ways to address the prioritized community needs over the next three years. The key need areas from the 2016 CHNA are depicted in following chart.

Chart 1. 2016 CHNA Key Community Needs

Access to Health Care

- Socioeconomic Barriers
- Availability of Providers
- Transportation

Chronic Conditions

- Social Determinants of Health
- Health Behaviors

Behavioral Health

- Mental Health and Substance Abuse Issues
- Access to Full-Spectrum Services

Methodology

The CHNA process undertaken by Tulane Medical Center, with project management and consultation by Tripp Umbach, included input from persons who represent the broad interests of the community served by the hospital facility, including those with special knowledge of public health issues and representatives of vulnerable populations served by the hospital. Tulane Medical Center will make use of CHNA findings to address local health care concerns, as well as to function as a collaborator, working with regional agencies to help provide medical solutions to broader socioeconomic issues in the service area.

The comprehensive CHNA identified and prioritized community health needs. The project component pieces involved to determine the community health needs included²:

- **Public commentary on the 2013 CHNA.** Tripp Umbach received a total of 43 responses to an online public commentary survey. The survey was utilized to receive feedback from medical center personnel, community leaders, and others on findings and data presented in the 2013 Tulane Medical Center CHNA. Information received from the public commentary helped to inform key findings in the 2016 CHNA, as feedback on the previous CHNA was utilized to improve upon the current assessment.
- **Secondary data analysis of health status and socioeconomic environmental factors related to health and well-being of residents.** Tripp Umbach applied a number of public health and demographic/population data sources in order to determine top community health need areas. Examples of data sources include, but are not limited to, Truven Health Analytics for population and demographic data, Community Need Index, Centers for Disease Control and Prevention, and the New Orleans Health Department – Mental Health Dashboard.
- **Relevant community leader interview findings from the 2015 MHCNO CHNA.** Tripp Umbach conducted interviews with over 50 key stakeholders in the Greater New Orleans region as part of the 2015 MHCNO CHNA. For Tulane’s CHNA, Tripp Umbach made use of results from interviews with 26 MHCNO key stakeholders who work and/or reside in the Tulane Medical Center service area, including public health professionals and those with a deep understanding of the needs of underserved populations.³ The stakeholder

² The CHNA process did not include an evaluation of the 2013 implementation plan as Tulane did not create an implementation plan in the previous assessment phase.

³ The Tulane Medical Center primary service area is comprised of 103 ZIP codes located in the following parishes: Jefferson, Orleans, St. Bernard, St. Charles, St. John the Baptist, and St. Tammany.

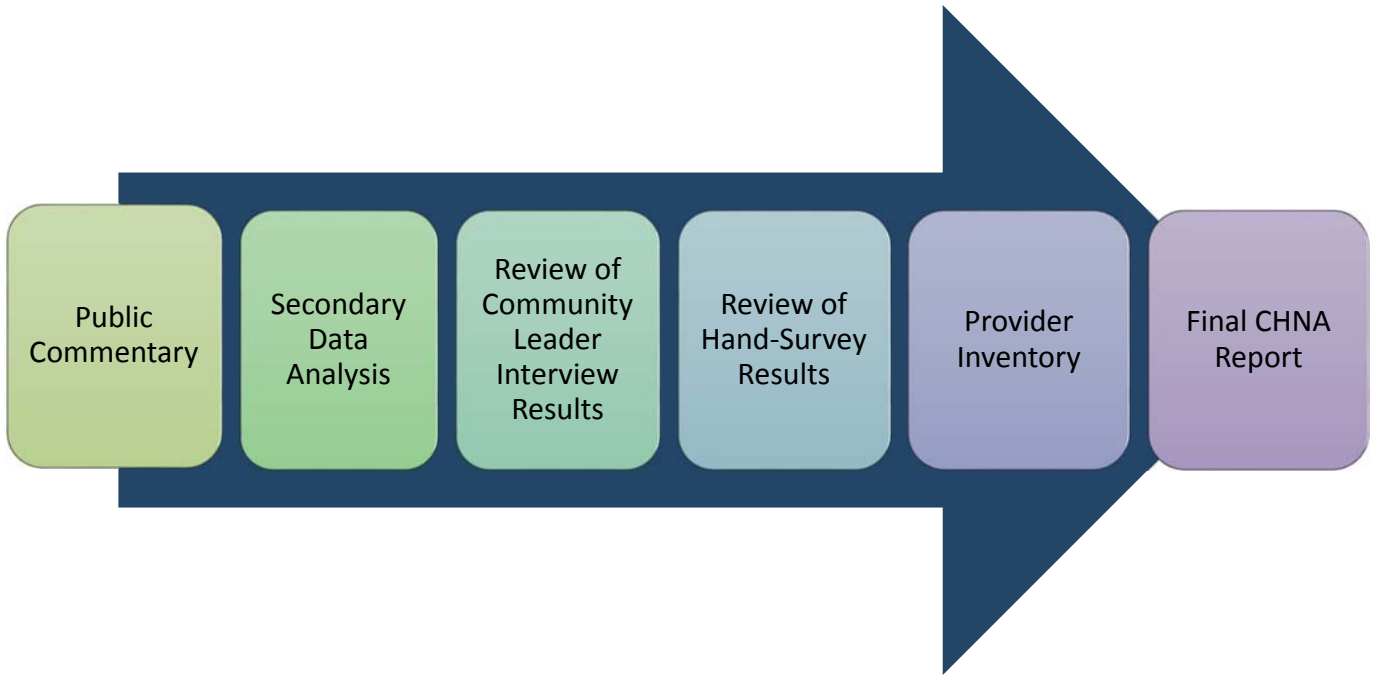
interviews provided the perspective of those who work in public health organizations and with the region's most vulnerable populations.

- **Survey of vulnerable populations from 2015 MHCNO CHNA.** As part of the 2015 MHCNO CHNA, Tripp Umbach collected a total of 1,150 surveys from a number of community based organizations in the New Orleans region that serve vulnerable populations. Tripp Umbach applied survey results from respondents who reside within the Tulane Medical Center primary service area for this CHNA.⁴ The survey data allowed for a deeper understanding of the health issues of those in the region who are most in need of health and social services.
- **Identification and prioritization of CHNA needs.** Upon the collection and analysis of all primary and secondary data, Tripp Umbach, in conjunction with members from Tulane Medical Center, identified the top issues for the study area. Feedback from stakeholder interviews, hand-surveys, public commentary, and secondary data sources were applied to the selection and prioritization of the needs.
- **Provider inventory of programs and services related to key prioritized needs.** Tripp Umbach completed an inventory of community resources available in the Tulane Medical Center service area using resources identified in the 2015 MHCNO CHNA, internet research and United Way's 211 First Call for Help community resource database. Close to 400 community resources were identified with the capacity to meet the three community health needs identified in the Tulane CHNA. The provider inventory will be posted on Tulane Medical Center's website, along with the CHNA, and will serve as a resource for residents to know which services are available to them in the identified community need areas.

The data collection findings and prioritization of community health needs are detailed in this final CHNA report. Additional information regarding each component of the project are found in the Appendices section of this report (See Chart 2 for CHNA Process Steps).

⁴ Ibid.

Chart 2: CHNA Process



Community Definition

A total of 103 ZIP code areas comprise the primary service area (PSA) for Tulane Medical Center. The PSA ZIP codes represent the community served by Tulane Medical Center, or where approximately 80 percent of the medical center’s inpatient population resides. The 103 ZIP codes fall into six parishes in the Greater New Orleans area: Jefferson, Orleans, St. Bernard, St. Charles, St. John the Baptist, and St. Tammany.

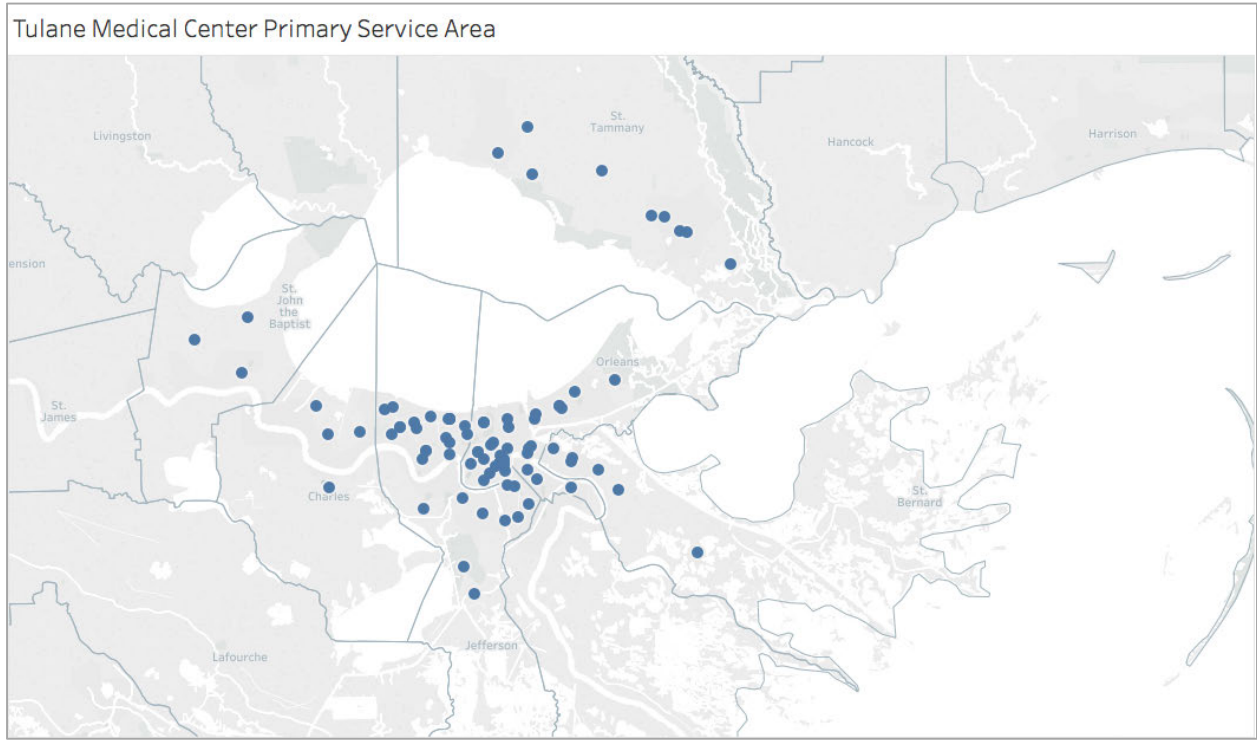
Table 1. Tulane Medical Center Primary Service ZIP Codes

Zip Code	Parish	Zip Code	Parish
70001	Jefferson	70079	St. Charles
70002	Jefferson	70084	St. John Baptist
70003	Jefferson	70085	St. Bernard
70004	Jefferson	70087	St. Charles
70005	Jefferson	70092	St. Bernard
70006	Jefferson	70094	Jefferson
70009	Jefferson	70096	Jefferson
70010	Jefferson	70097	Jefferson
70011	Jefferson	70112	Orleans
70032	St. Bernard	70113	Orleans
70033	Jefferson	70114	Orleans
70043	St. Bernard	70115	Orleans
70044	St. Bernard	70116	Orleans
70047	St. Charles	70117	Orleans
70053	Jefferson	70118	Orleans
70054	Jefferson	70119	Orleans
70055	Jefferson	70121	Jefferson
70056	Jefferson	70122	Orleans
70058	Jefferson	70123	Jefferson
70059	Jefferson	70124	Orleans
70060	Jefferson	70125	Orleans
70062	Jefferson	70126	Orleans
70063	Jefferson	70127	Orleans
70064	Jefferson	70128	Orleans
70065	Jefferson	70129	Orleans
70068	St. John Baptist/St. Charles	70130	Orleans
70069	St. John Baptist	70131	Orleans
70072	Jefferson	70139	Orleans

70073	Jefferson	70140	Orleans
70075	St. Bernard	70141	Jefferson
70078	St. Charles	70146	Orleans
70006	Jefferson	70176	Orleans
70009	Jefferson	70177	Orleans
70010	Jefferson	70178	Orleans
70148	Orleans	70179	Orleans
70149	Orleans	70181	Jefferson
70150	Orleans	70182	Orleans
70151	Orleans	70183	Jefferson
70152	Orleans	70184	Orleans
70153	Orleans	70185	Orleans
70154	Orleans	70186	Orleans
70156	Orleans	70187	Orleans
70157	Orleans	70189	Orleans
70158	Orleans	70190	Orleans
70160	Orleans	70445	St. Tammany
70161	Orleans	70448	St. Tammany
70162	Orleans	70458	St. Tammany
70163	Orleans	70459	St. Tammany
70165	Orleans	70460	St. Tammany
70166	Orleans	70461	St. Tammany
70170	Orleans	70469	St. Tammany
70172	Orleans	70470	St. Tammany
70174	Orleans	70471	St. Tammany
70175	Orleans		

The following map depicts the primary service area and the locations of the 103 ZIP codes as described in Table 1.

Map 1: Tulane Medical Center Primary Service Area



Tripp Umbach collected parish-level demographic, population, and public health data. The six parishes comprise the Tulane Medical Center study area for this CHNA report.⁵

⁵ The “Tulane Medical Center Study Area” refers to the six parishes included in Tulane’s primary service area: Jefferson, Orleans, St. Bernard, St. Charles, St. John the Baptist, and St. Tammany.

Key Community Health Needs

The health status of a community depends on many factors, including quality of health care, social and economic determinants, environmental conditions, individual behaviors, heredity, and education. Communities across the United States face numerous challenges and barriers that negatively affect the overall health and well-being of residents. In the Tulane Medical Center study area, three community health issues and needs were identified:

- Access to Health Care
- Chronic Conditions
- Behavioral Health

Within each of the community health need areas, multiple factors must be considered. The community health needs and specific factors that contribute to each health issue are critical for health providers to understand in order to work toward health improvement.

Access to Health Care

Underlying factors identified by secondary data and primary input from community leaders, community stakeholders, and resident survey respondents:

1. Socioeconomic Barriers
2. Availability of Providers/Services

Access to health care typically refers to the ability and ease in which people can obtain health care; it can also refer to utilizing or having health care coverage. Health services should be effective and pertinent if the population is able to obtain them. Disparities in health service access can significantly affect an individual's and a community's quality of life in a negative way. Socioeconomic barriers, such as a lack of insurance, income, or transportation, and the availability of health providers, can serve as some of the top barriers to accessing health care services.

Findings supported by study data:

Socioeconomics are important to one's ability to receive health care and understand health needs. Residents dealing with poverty do not always prioritize health care over basic necessities like food and housing. Medicaid has been expanded in the state of Louisiana. Medicaid expansion

has allowed for residents who previously did not have health care coverage to obtain it; however, not all residents struggling to make ends meet are eligible for Medicaid insurance.⁶ For those who are able to obtain health coverage through expanded Medicaid, not all providers will accept this insurance. The inability to afford health insurance or out-of-pocket costs for health services plays a major role in residents choosing not to schedule appointments or take preventive care measures. It is important for Tulane Medical Center to understand the socioeconomic barriers that residents in the study area face and which residents are most affected by these conditions.

- Community Need Index (CNI) scores obtained by Truven Health Analytics provide insight into socioeconomic conditions in relation to health care in the study area. Five prominent socioeconomic barriers to community health are quantified to determine the overall CNI score for an area; the five socioeconomic barriers are: income, culture/language, education, insurance, and housing. CNI scores are ranked on a scale from 1.0 to 5.0, with a score of 1.0 indicating the least number of barriers and a score of 5.0 demonstrating the most barriers to accessing health care. The CNI provides greater ability to diagnose community needs as it explores areas with significant barriers to health care access.

The CNI score for the Tulane Medical Center study area in 2016 is 3.3, which demonstrates a moderate number of socioeconomic barriers to accessing health care. All of the study area parishes saw improvement in their CNI scores from 2015 to 2016, which shows that positive steps have been taken in these regions to reduce socioeconomic barriers to receiving health care. While CNI scores have improved in all study area parishes, Jefferson, Orleans, St. Bernard and St. John the Baptist parishes all face moderate to significant barriers to accessing health care services in 2016 (all have CNI scores above the median of 3.0) (See Table 2).

⁶ Louisiana Medicaid. <https://www.healthinsurance.org/louisiana-medicaid/>. July 2016. Note: Medicaid expansion occurred in Louisiana in July 2016 and may not be reflected in all insurance data presented in the CHNA report.

Table 2: MPMC Study Area CNI Summary

Parish	2016 CNI Score	2015 CNI Score	Change in CNI Score
St. Tammany Parish	2.6	2.8	0.2
St. Charles Parish	2.8	3.1	0.3
St. John the Baptist	3.1	3.5	0.4
Jefferson Parish	3.5	4.0	0.5
St. Bernard Parish	3.6	3.9	0.3
Orleans Parish	4.0	4.5	0.5
Tulane Medical Center Study Area - Overall	3.3	3.6	0.3

Source: Truven Health Analytics 2016

- Orleans Parish should be of particular focus in terms of socioeconomic barriers. In 2015, Orleans Parish had the highest CNI score of all parishes included in the study area for the MHCNO CHNA.⁷ While the CNI score in Orleans Parish improved from 4.5 to 4.0 between 2015 and 2016, a score of 4.0 shows that there are still a significant number of socioeconomic barriers to health care in the Parish. There are disparities in terms of socioeconomic in Orleans Parish. The Parish has the highest percentage of residents who have a bachelor’s degree or higher (33.3 percent) in the study area.⁸ At the same time, Orleans Parish also has the highest percentage of residents who make \$15,000 or less a year (25.8 percent) and the highest percentage of residents living below the 200 percent Federal Poverty Level (48.2 percent) in the study area.^{9,10,11}

⁷ 16 parishes were analyzed in terms of CNI scores in the 2015 MHCNO CHNA: Ascension, East Baton Rouge, Iberville, Jefferson, Lafourche, Livingston, Orleans, Plaquemines, St. Bernard, St. Charles, St. John the Baptist, St. Tammany, Tangipahoa, Terrebone, Washington, and Pearl River (MS).

⁸ Truven Health Analytics 2015.

⁹ Ibid.

¹⁰ US Census Bureau. American Community Survey. 2010-2014.

¹¹ The 200 percent Federal Poverty Level household income for a family of four is \$48,500.

- 2015 survey results from residents in the study area reveal that lack of insurance and income have served as major factors that prevent underserved residents from accessing health care services.
 - 21.6 percent of survey respondents cited that they did not have health insurance, and the main reason for lack of insurance is that they could not afford it.¹²
 - 28.5 percent of survey respondents have not seen a doctor when they needed to because they could not afford it. At the same time, 24.1 percent of survey takers did not get a prescription when they needed it due to cost.
- Community stakeholders also cited cost of care and acceptance of insurance when discussing the accessibility of health care services in the study area. Stakeholders mentioned that the opportunity for employment that offers financial stability or health insurance is not readily available for many residents, particularly those with lower educational attainment.

38 percent of residents in the study area live below the 200 percent Federal Poverty Level.¹³ Medicaid Expansion in Louisiana in July 2016 has allowed residents living in poverty or facing financial struggles to obtain health insurance coverage and will help residents in accessing health services. Despite Medicaid expansion, though, high deductibles, out-of-pockets costs, and providers accepting only certain types of insurance will impact the frequency of residents obtaining services. The populations most affected by such limitations are low income/economically challenged individuals and the vulnerable populations.

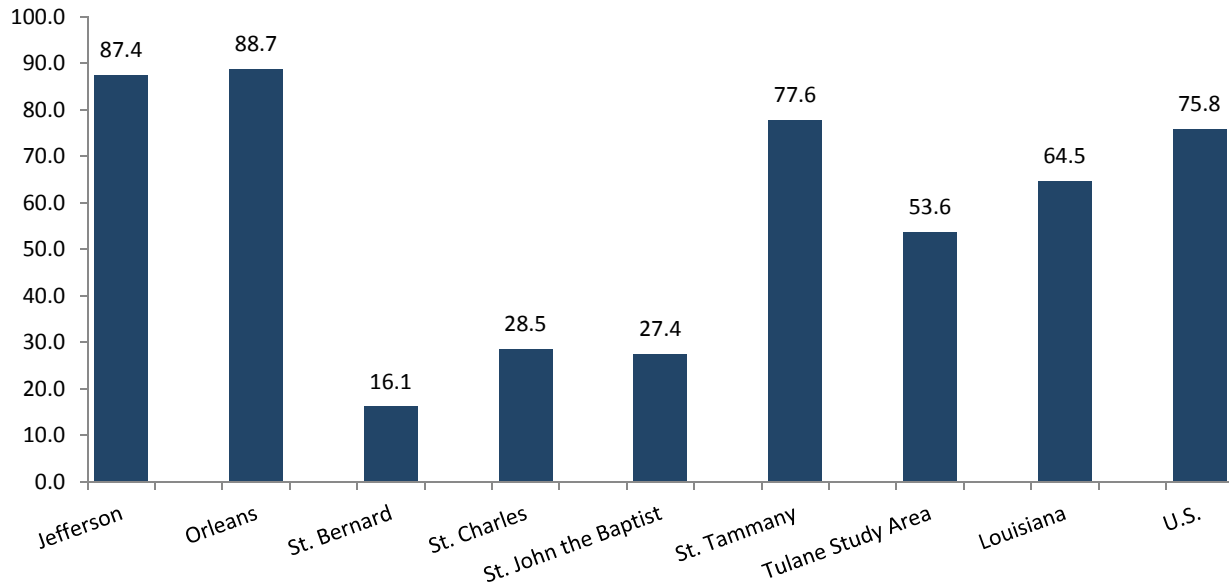
As socioeconomic factors play a role in an individual's ability to access health care resources, the availability and location of providers also affect the ease of accessing health services. Across the Tulane Medical Center study area, there are disparities in the availability of health care providers.

- The overall study area has a supply of providers that is comparable to or exceeds the state and national averages. St. Bernard Parish, St. Charles Parish, and St. John the Baptist Parish do not have an adequate supply of physicians, as the three parishes have significantly fewer physicians per 100,000 population in comparison to the other study area parishes, the state, and the nation (See Chart 3).

¹² Survey responses were collected in 2015 prior to Medicaid expansion in Louisiana.

¹³ US Census Bureau. American Community Survey. 2010-2014.

Chart 3. Primary Care Physician (PCP) Rate per 100,000 Population¹⁴



- The PCP provider rates in St. Bernard, St. Charles, and St. John the Baptist parishes are significantly lower than rates in the rest of the study area and state and national rates. St. Bernard Parish has the lowest PCP rate with 16.1 PCPs per 100,000 population. While provider rates are high in Orleans Parish, the parish is designated as a Health Professional Service area for the low-income population.¹⁵

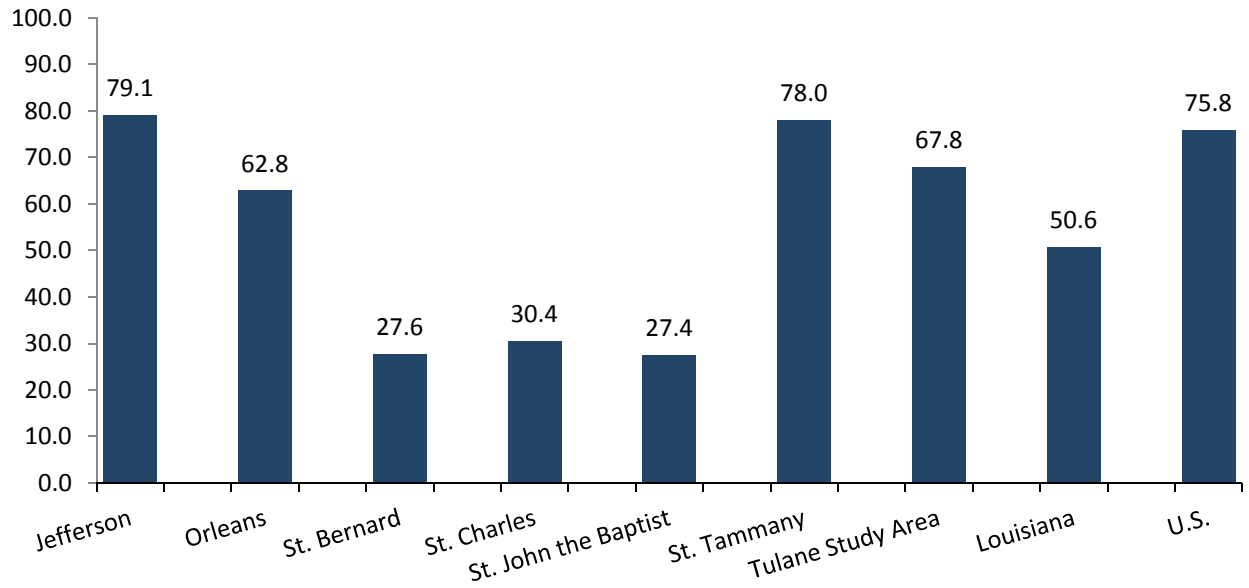
Similar trends also are seen in the rate of dentists in the Tulane Medical Center study area (See Chart 4).¹⁶

¹⁴ US Department of Health & Human Services. Health Resources and Services Administration. Area Health Resource File. 2013.

¹⁵ Health Resources and Services Administration. Data Warehouse. Health Professional Shortage Area Find. July 2016.

¹⁶ US Department of Health & Human Services. Health Resources and Services Administration. Area Health Resource File. 2013.

Chart 4. Dentist Rate per 100,000 Population



- Similar to PCP rates, St. Bernard, St. Charles, and St. John the Baptist have dentist rates that are significantly lower than those throughout the other study area parishes (27.6, 30.4, and 27.4 dentists per 100,000 respectively).

Mental health provider rates also demonstrate the differences in provider rates across the study area. While the study area has a rate of mental health providers that is comparable to state and national rates, the rate of mental health providers per 100,000 population is significantly lower in St. Charles and St. John the Baptist parishes, while St. Bernard and Orleans parishes have much higher rates with 333.2 and 243.5 mental health providers per 100,000 population respectively.¹⁷

The smaller populations in St. Bernard, St. Charles, and St. John the Baptist parishes may account for lower provider rates in these areas. While a lower rate of providers may be sufficient to care for a smaller population base, it can be difficult for residents within these parishes to access care if a provider is not available within their community.

- Stakeholders identified transportation as a need across the Greater New Orleans area. The lack of adequate transportation impacts the health of residents as it limits their

¹⁷ Mental health providers include psychiatrists, psychologists, clinical social workers, and counselors that specialize in mental health care. University of Wisconsin Population Health Institute. County Health Rankings. 2016.

ability to access medical providers. For residents who live in areas with provider shortages and who do not have their own form of transportation, it can be difficult to cross parish lines to attend appointments.

- In particular, stakeholders cited specialty services that are not readily available within their communities, including outpatient Medicaid providers, inpatient and outpatient behavioral health services, and certain pediatric care. Residents in need of specialty health care services in the Tulane study area may be forced to travel in order to receive such services. Stakeholders noted that the areas with the most poverty and those most in need of services typically are the ones with the fewest available resources.

Increasing access to health care is a key issue in the Greater New Orleans region. Stakeholder interview results revealed that an increase in the number of community-based clinics has served as an efficient way to make health care services more accessible, specifically for the underserved. Medicaid expansion in Louisiana also has helped to make health care more attainable. Yet, socioeconomic barriers such as high deductibles and the cost of care, as well as discrepancies in the availability of providers in the region, continue to make access to care a top issue in the Tulane Medical Center study area.

Chronic Conditions

Underlying factors identified by secondary data and primary input from community leaders, community stakeholders, and resident survey respondents:

1. Social Determinants of Health
2. Health Behaviors

Chronic conditions have a negative effect on a person's general health. Chronic illness can lead not only to physical issues, but can also affect the mental, emotional, and social well-being of an individual. In addition, the toll and the overall health care costs associated with chronic diseases are staggering. The CDC estimates that health care costs due to chronic conditions are estimated to be anywhere between \$147 billion to \$210 billion per year.¹⁸

¹⁸ "The Healthcare Costs of Obesity." The State of Obesity. <http://stateofobesity.org/healthcare-costs-obesity/>. 2015.

Findings supported by study data:

In the Tulane Medical Center study area, chronic conditions are a top concern. Results from patient/resident surveys in the Tulane study area as part of the 2015 MHCNO CHNA reveal that chronic conditions are prevalent. When asked to select the top community health concerns, survey respondents chose chronic conditions as three of the top five concerns:

- Diabetes (49.8 percent) (#1 concern)
- High Blood Pressure (49.0 percent) (#2 concern)
- Heart Disease (35.6 percent) (#5 concern)

Secondary data analysis also reveal the concern over chronic conditions in the study area.

- Breast cancer rates in the Tulane Medical Center study area exceed those in the state of Louisiana and United States (Study Area – 131.9, LA – 123.4, U.S. – 123.4 per 100,000 population).
- A high percentage of residents in the study area have high cholesterol (Study Area – 39.0 percent, LA – 38.7 percent, U.S. – 38.5 percent).
- Study area parishes are experiencing higher rates of certain chronic conditions than state and national averages:
 - Jefferson – Heart Disease, High Cholesterol, Breast Cancer
 - Orleans – Diabetes, High Blood Pressure, Breast Cancer
 - St. Bernard – Diabetes, Heart Disease, Colon Cancer
 - St. Charles – Breast Cancer
 - St. John the Baptist – Diabetes, Heart Disease, Colon Cancer
 - St. Tammany – Heart Disease, High Cholesterol, Breast Cancer^{19,20,21}

¹⁹ Centers for Disease Control and Prevention. Behavioral Risk Factor Surveillance System. 2006-2012.

²⁰ Centers for Disease Control and Prevention. National Center for Chronic Disease Prevention and Health Promotion. 2013.

²¹ State Cancer Profiles. 2009-2013.

As socioeconomics play a role in an individual's ability to access health care services, social and economic conditions, or social determinants of health, also have an effect on a person's overall health status. Along with the inability to afford insurance or care, a lack of health care resources and environmental conditions can alter a person's susceptibility to developing a chronic condition and ability to properly manage his or her health issues.

- More than 90 percent of stakeholders discussed the social and environmental determinants of health in Tulane Medical Center communities.
 - Close to 30 percent of patient/resident survey respondents from the Tulane Medical Center study area have not seen a doctor when they needed to due to cost. Cost of care or lacking insurance can deter residents from seeking health services and preventive health screenings. Furthermore, survey results reveal that patients are not taking preventive health care measures.
 - Over 53 percent of survey respondents in the Tulane study area as part of the MHCNO 2015 study did not receive a check up in the past year.
 - With chronic conditions, such as high blood pressure and heart disease serving as top health concerns, receiving health screenings to detect such issues should be a top priority. Close to 70 percent of survey respondents, however, did not receive a cholesterol screening in the past year.
 - Percentages of breast and colon cancer are high in the study area. In 2014-2015, over 75 percent of female survey respondents did not receive a mammogram and over 90 percent of respondents did not receive a colonoscopy. The average age of survey takers was 47 for females and 49 for males. It is recommended that women receive mammograms anywhere between age 40 and 50. Individuals should begin receiving a colonoscopy exam around age 50.²²
- Stakeholders cite that the lack of preventive health care among residents in the study area is due to income and insurance, but also is due to a lack of health education in the area. Especially in parishes and communities where education levels are low, there is a need for greater emphasis on providing education and materials that outline preventive measures that residents should take in order to reduce their risk of developing a chronic

²² American Cancer Society. Guidelines for Early Detection of Cancer. July 26. 2016.

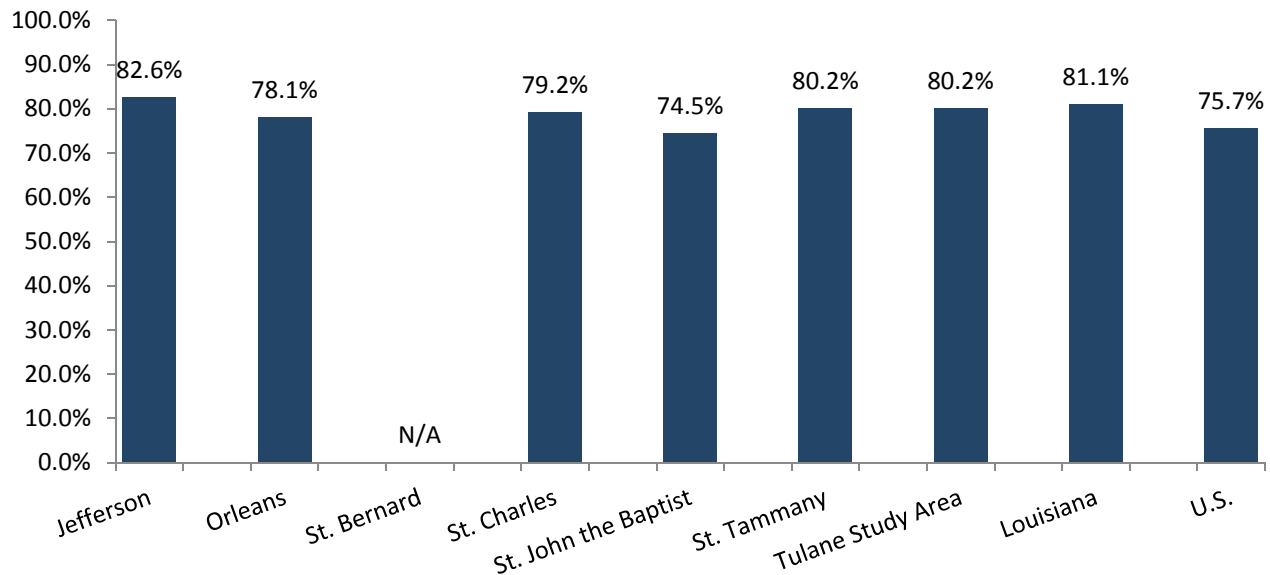
condition. Education also should help residents be able to navigate the health care system and know steps they can take to properly manage their chronic conditions if developed.

- St. Bernard Parish has the highest percentage of residents in the study area with less than a high school degree (18.8 percent), as well as the lowest rate of PCPs in the study area (16.1 per 100,000 population). This parish in particular should be targeted in terms of providing health education resources.

A number of chronic conditions can stem from the health behaviors of an individual. Proper nutrition and physical activity can help reduce a person’s chance of developing a chronic condition, namely heart disease, high cholesterol, diabetes, and high blood pressure. In the Tulane Medical Center study area, consumption of fatty foods and drinking alcohol play a role in rates the chronic conditions in the area.

- In the study area, a higher percentage of residents are consuming less than the recommended daily intake of five or more servings of fruits or vegetables per day (80.2 percent) compared to the United States (75.7 percent) (See Chart 5).²³

Chart 5. Percentage of Residents with Inadequate Fruit/Vegetable Consumption



²³ Centers for Disease Control and Prevention. National Center for Chronic Disease Prevention and Health Promotion. 2013.

Similar trends also are seen in the level of physical inactivity and alcohol consumption, as the study area has higher percentages of residents who do not participate in leisure time physical activity and who self-report heavy alcohol consumption compared to national rates (See Table 3).

Table 3. Rates of Physical Activity and Alcohol Consumption

Geographic Area	% With No Leisure Time Activity ²⁴	% Who Self Report Heavy Alcohol Consumption ²⁵
Tulane Medical Center Study Area	25.0%	18.1%
Louisiana	28.2%	15.9%
United States	21.8%	16.9%

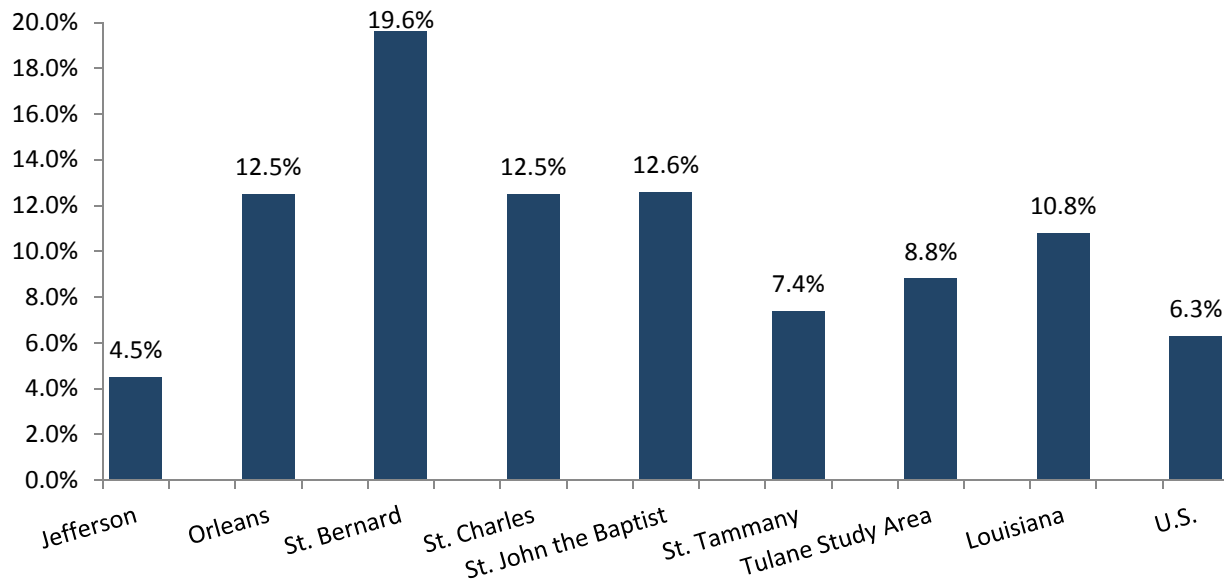
Health behaviors play a role in the issue of chronic conditions in the study area. At the same time, socioeconomic factors factor into a person’s ability to access healthy resources, such as nutritious food options. A high percentage of low income residents in a number of parishes in the study area experience low food access (See Chart 6).²⁶ It is difficult for residents to take steps to eat nutritious foods if they are not available within their communities and not affordable.

²⁴ Ibid.

²⁵ Heavy alcohol consumption is defined as more than two drinks per day on average for men and more than one drink per day on average for women. Centers for Disease Control and Prevention. Behavioral Risk Factor Surveillance System. 2006-2012.

²⁶ US Department of Agriculture, Economic Research Service, USDA - Food Access Research Atlas. 2010.

Chart 6. Percentage of Low-Income Residents with Low Food Access



Chronic conditions are a prevalent issue across the Tulane Medical Center study area. Stakeholders and surveyed patients/residents alike see chronic conditions as a key community health need, and secondary data further support this. Social determinants of health (or the social and environmental circumstances) and the health behaviors of residents in the region contribute to the chronic disease issue in the study area. While resources might be limited in certain areas and behaviors can be hard to break, health education can help support residents in knowing what resources are available to them, how they can take preventive measures to reduce their risk of developing a chronic condition, and determine ways to properly manage their health conditions.

Behavioral Health

Underlying factors identified by secondary data and primary input from community leaders, community stakeholders, and resident survey respondents:

1. Mental Health and Substance Abuse Issues
2. Access to Full-Spectrum Services

Mental health is a growing issue across the U.S. Approximately one in five adults in the U.S. – or 43.8 million residents – experiences mental illness in a given year. 21.5 percent of youth age 13

through 18 experience a severe mental disorder at some point during their lives.²⁷ In many instances, mental illness and substance abuse go hand-in-hand; among the 20.2 million adults in the U.S. with a substance abuse issue, approximately 10.2 million also have a co-occurring mental health issue.²⁸ As behavioral health issues are a concern across the nation, the Tulane Medical Center study area also experiences such concerns.

Findings supported by study data:

Stakeholders, hand-survey respondents, and those who provided public commentary are all in agreement that issues surrounding mental health and substance abuse are in need of attention in the Tulane Medical Center study area.

- Stakeholders discussed the prevalence of mental health issues and substance abuse in the region and attributed the influx in these behavioral health issues to the culture of New Orleans and the impact of Hurricane Katrina.
 - Stakeholders think that the culture and tourist industry of the region encourages substance abuse. Additionally, stakeholders cite the traumatic events of Hurricane Katrina in serving as a big contributor to the rise in substance abuse and mental health concerns within the New Orleans region. It has been difficult for some residents to rebuild after Hurricane Katrina and realize employment and economic opportunity, as well as social and emotional stability.
- Survey respondents from the 2015 MHCNO CHNA survey rank “Drugs and Alcohol” as the third biggest health concern for the region.
- Public commentary on the 2013 Tulane CHNA reveals that not enough emphasis was placed on mental health and substance abuse issues in the previous CHNA. Those who provided commentary on the previous CHNA deem mental health and substance abuse as top community needs and suggest that additional attention be given to these need areas in the 2016 CHNA.

Secondary data surrounding mental health and substance abuse in the Tulane Medical Center study area supports the concern over these issues among key stakeholders and residents in the region.

²⁷ “Mental Health by the Numbers” National Alliance on Mental Illness. 2016.

²⁸ Ibid.

- The City of New Orleans Health Department publishes a dashboard of data depicting mental health utilization. The June 2016 report suggests a growing prevalence of mental health issues in the region, as well as a need for more mental health services. Among the 12 main hospitals in the New Orleans region, including Tulane Medical Center, the monthly average of ER patients in mental health crisis increased by 35 percent since June 2015.²⁹
- Substance abuse is continually becoming a growing concern in the Tulane Medical Center study area. The New Orleans region currently is in the midst of an opioid epidemic. Abuse of heroin and the synthetic opioid fentanyl pose significant problems in the region and are leading causes of drug overdose deaths. As of July 2016, there were 65-opioid-related deaths in Orleans Parish. If the number of opioid-related deaths continue at the current pace, there will be double the amount of deaths due to opioid overdose in 2016 than 2015, as there were 63 total deaths caused by opioids in all of 2015.³⁰

With behavioral health issues rising as a top priority in the Tulane Medical Center study area, it is increasingly important that there are adequate services in number and spectrum of service offerings in order to try to combat this community health need.

- Stakeholders discussed gaps in the available services related to behavioral health and substance abuse diagnosis and treatment. There is, reportedly, a resistance among behavioral health providers to accept Medicaid insurance and the cost of uninsured behavioral health services is unaffordable for residents who are Medicaid eligible. While there are inpatient beds and outpatient counseling services available, stakeholders and community leaders indicated that they are not adequate to meet the demand for behavioral health and substance abuse services. In recent years, there has been a decrease in the number of inpatient beds, and crisis services have declined in the region. Outpatient services have improved but often have lengthy waiting lists for diagnostic services as well as ongoing treatment.
- Survey respondents to the public commentary survey cite the need for more mental health and substance abuse treatment services. Public commentary results also reveal the need for behavioral health organizations in the region to be involved in the community health and any implementation planning processes in relation to the CHNA.

²⁹ New Orleans Health Department. New Orleans Mental Health Dashboard. June 2016.

³⁰ Lipinski, Jed. "DEA says heroin, fentanyl pose biggest drug threat to New Orleans." NOLA.com. August 31, 2016.

- There are gaps in the availability of mental health providers/services in the Tulane Medical Center study area. The rate of mental health providers per 100,000 population is significantly lower in St. Charles and St. John the Baptist parishes in comparison to the rest of the study area, with 64.4 and 73.1 providers per 100,000 population. While other parishes within the study area have rates of mental health providers that are comparable to national rates, stakeholders and community leaders voice concern that services do not provide a full spectrum of care to combat these issues, particularly for those who are simultaneously dealing with mental health and substance addiction.

Behavioral health issues are creating growing concern in the Tulane Medical Center study area. Mental health needs have increased since Hurricane Katrina and continue to be prevalent in the region. The outbreak of the opioid epidemic in the New Orleans region has become a significant problem even in the last year, making accessing behavioral health services that provide a full spectrum of health services more critical now than ever.

Conclusion and Recommendations

Common issues and concerns rose to the forefront through the completion of project components for the 2016 CHNA for Tulane Medical Center. The CHNA utilized relevant data collected from stakeholder interviews and hand-survey results from the 2015 MHCNO CHNA. The 2016 Tulane CHNA also included feedback from hospital and community personnel from the previous Tulane Medical Center CHNA to identify ways to improve upon the current assessment, as well as secondary data from public health resources. Most important, the data collected from the overall assessment included feedback and input from community leaders and those who work with some of the most underserved, vulnerable populations in the region.

The information provided throughout the CHNA serves as a starting point for leadership at Tulane Medical Center to work to address identified need areas. Findings from the CHNA ultimately should be used to help develop solutions to health care access issues, high rates of chronic conditions, and prevalent behavioral health issues. Doing so will benefit and improve the overall health status of individuals and communities in the study area.

Recommended Action Steps:

- Communicate the results of the CHNA process to staff, providers, leadership, boards, community stakeholders and the community as a whole.
- Use the inventory of available resources in the community in order to explore partnerships to address health needs.
- Implement a community engagement strategy to build upon the resources that already exist in the community.
- Develop working groups to focus on specific strategies and goals to address the top identified needs in the study area.
- Involve key community stakeholders to participate or be involved in providing expert knowledge on ways to strategically address key community health needs.
- Consistently evaluate goals and strategies as they are being implemented in the community to see where and when adjustments need to be made in order to achieve maximum community benefit.

Appendix A: Primary Data Collection

Public Commentary

As part of the community health needs assessment (CHNA), Tripp Umbach solicited public comments related to the 2013 CHNA completed on behalf of Tulane Medical Center.

Request for public comments offered community leaders and hospital personnel the opportunity to react to the methods, findings, and subsequent actions taken as a result of the CHNA and planning process. The following is a summary of the community's feedback regarding the 2013 CHNA for Tulane Medical Center.

The 2013 CHNA included a composition of secondary data, community stakeholder input, community surveys, and the identification and prioritization of community needs. The CHNA was collaborative in nature and included feedback from the community, local organizations, and agencies from the region.

Survey participants were asked to respond to a questionnaire developed by Tripp Umbach. Tulane Medical Center administrators emailed a survey link to hospital and community leaders. There were no restrictions or qualifications required of public commenters. In total, 46 surveys were collected and analyzed.

Public Comments:

- When asked if the assessment “included input from community members or organizations,” 65.1 percent of survey commenters reported that it did; 11.6 percent reported that it did not; and the remaining 23.3 percent did not know.
- 55.8 percent of respondents reported that the assessment did not exclude any community members or organizations that should have been involved in the assessment, while 32.6 percent did not know and 11.6 percent reported that a community member/organization was excluded.
 - The survey respondents who selected that a community organization was excluded in the assessment stated the following organizations should have been included: Federally Qualified Health Centers, behavioral health organizations (NAMI and others), and drug rehabilitation organizations.

- In response to the question “Are there needs in the community related to health (e.g., physical health, mental health, medical services, dental services, etc.) that were not represented in the CHNA,” 31.7 percent responded that some community needs were not presented. The following needs were identified as missing from the previous CHNA: dental care, mental health/behavioral health, social issues, transportation, and women’s health.

34.2 percent of respondents said that no needs related to community health were missing, and the remaining 34.2 percent did not know if needs were missing or not.

According to respondents, the CHNA benefited them and their community in the following manner (in no specific order):

- Served as an education tool.
- Identified the areas to focus on providing more opportunity for care.
- Gave a comprehensive overview of community health care services.
- Provided awareness.

Key Stakeholder Interviews

Tripp Umbach conducted interviews with over 50 key stakeholders in the Greater New Orleans region as part of the 2015 MHCNO CHNA. For Tulane’s CHNA, Tripp Umbach made use of results from interviews with 26 MHCNO key stakeholders who work and/or reside in the Tulane Medical Center service area.

Community stakeholders targeted for interviews encompassed a wide variety of professional backgrounds including: 1) public health expertise; 2) professionals with access to community health related data; and 3) representatives of underserved populations. The interviews offered community stakeholders an opportunity to provide feedback on the needs of the community, secondary data resources, and other information relevant to the study.

The qualitative data collected from community stakeholders are the opinions, perceptions, and insights of those who were interviewed as part of the CHNA process.

Those included in the stakeholder interview analysis represent the following organizations:

- ARC of St. Charles
- Boys and Girls Club Westbank
- Cancer Association of Greater New Orleans (CAGNO)

- City of Kenner
- City of New Orleans
- Covington Police Department
- Fifth District Savings and Loan
- First Baptist Church
- Greater New Orleans Foundation
- Healthy Start New Orleans
- Institute of Women and Ethnic Studies
- Jefferson Parish
- Kenner Council on Aging and Parks and Recreation
- McFarland Institute
- NAMI
- New Wine Fellowship
- NO/AIDS Task Force
- Nouveau Marc Residential Retirement Living
- Ochsner Health System
- PACE Greater New Orleans
- Prevention Research Center at Tulane University
- S.A.L.T
- St. Tammany EDF
- St. Tammany Outreach for the Prevention of Suicide (STOPS)
- St. Tammany Parish Fire District 4
- STPH Community Wellness Center
- The Good Samaritan Ministry

Hand-Survey

As part of the 2015 MHCNO CHNA, Tripp Umbach collected a total of 1,150 surveys from a number of community based organizations in the New Orleans region that serve vulnerable populations. Tripp Umbach designed a 32-question health status survey. The survey was offered in English, Spanish, and Vietnamese. The survey was administered by community-based organizations providing services to vulnerable populations in the hospital service area. Community-based organizations were trained to administer the survey using hand-distribution. For the 2016 Tulane Medical Center CHNA, Tripp Umbach applied survey results from respondents who reside within the Tulane Medical Center primary service area. The survey data

allowed for a deeper understanding of the health issues of those in the region who are most in need of health and social services.

Provider Resource Inventory

An inventory of programs and services available in the region was developed by Tripp Umbach. The provider inventory highlights available programs and services within Tulane Medical Center's primary service area. The inventory identifies the range of organizations and agencies in the community that are serving the various target populations within each of the priority needs. The inventory provides program descriptions and collects information about the potential for coordinating community activities and creating linkages among agencies.

An interactive link of the provider resource inventory will be made available on Tulane Medical Center's website.

Appendix B: Population/Demographic Profile³¹

As part of secondary data collection, Tripp Umbach obtained 2015 population and demographic data from Truven Health Analytics. The data is collected for each of the study area parishes, as well as for the state of Louisiana and United States. Population and demographic data help to provide an understanding of the overall study area, as well as gives insight into socioeconomic conditions.

Population

A review of population trends for the Tulane Medical Center study area shows that population growth is expected in all of the study area parishes between 2015 and 2020, with the exception of St. John the Baptist (expected population decline of 4.4 percent). St. Bernard Parish is expected to have the most significant population growth of the study area parishes with an anticipated population increase of 13.4 percent.

Table 4: Tulane Medical Center Study Area Population Snapshot

	Jefferson Parish	Orleans Parish	St. Bernard Parish	St. Charles Parish	St. John the Baptist Parish	St. Tammany Parish	Louisiana	USA
2015 Total Population	435,154	392,762	46,426	50,783	43,705	246,163	4,662,874	319,459,991
2020 Projected Population	441,911	429,069	52,642	51,124	41,765	258,662	4,800,027	330,689,265
# Change	6,757	36,307	6,216	341	- 1,940	12,499	137,153	11,229,374
% Change	1.6%	9.2%	13.4%	0.7%	- 4.4%	5.1%	2.9%	3.5%

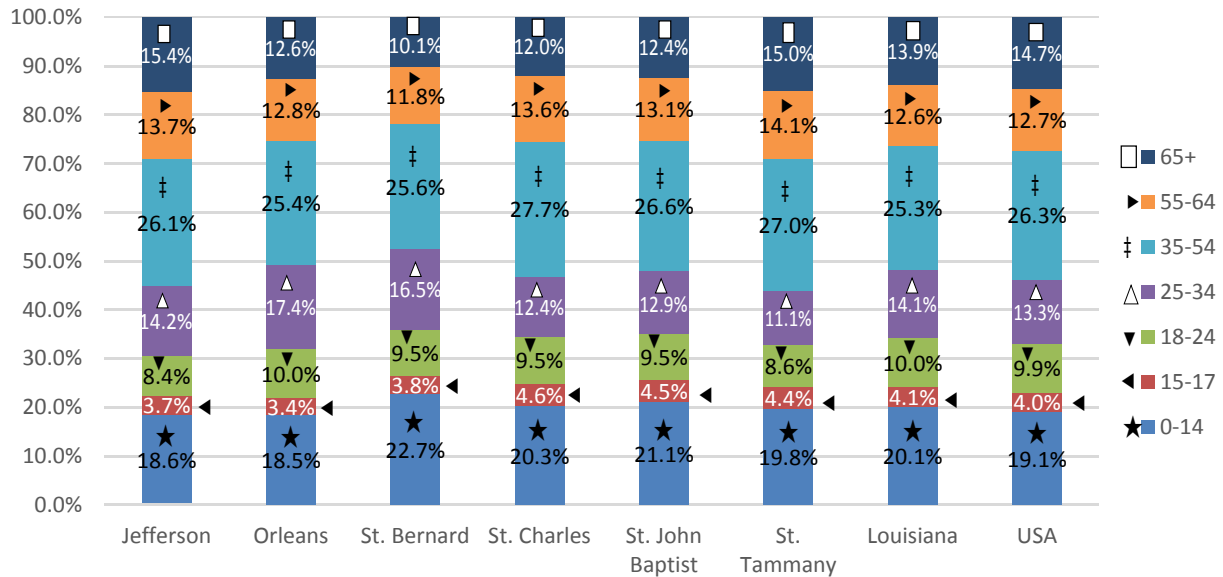
Demographics

Demographic data show that the Tulane Medical Center study area has a greater female population than male population in 2015, and this trend is anticipated to continue through 2020.

³¹ Truven Health Analytics. 2015.

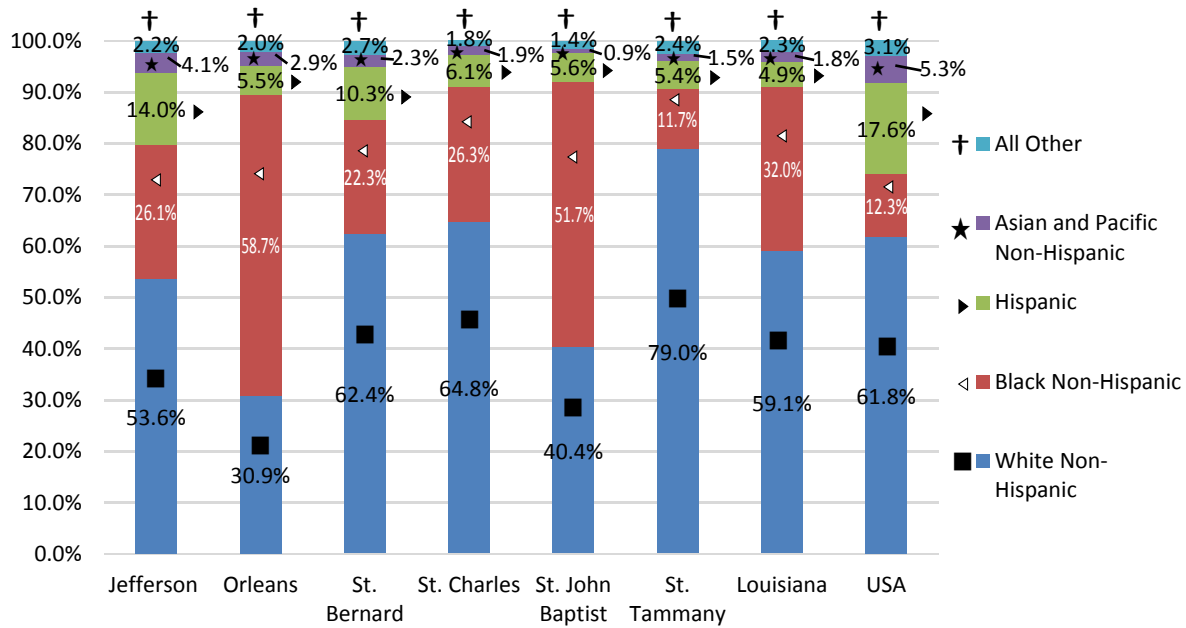
Across the study area, the majority of residents are between the ages of 35 and 54. The study area parishes also have a high percentage of adolescent residents. In St. Bernard Parish, close to 23 percent of the population is between the ages of 0 and 14 (See Chart 7).

Chart 7. Age



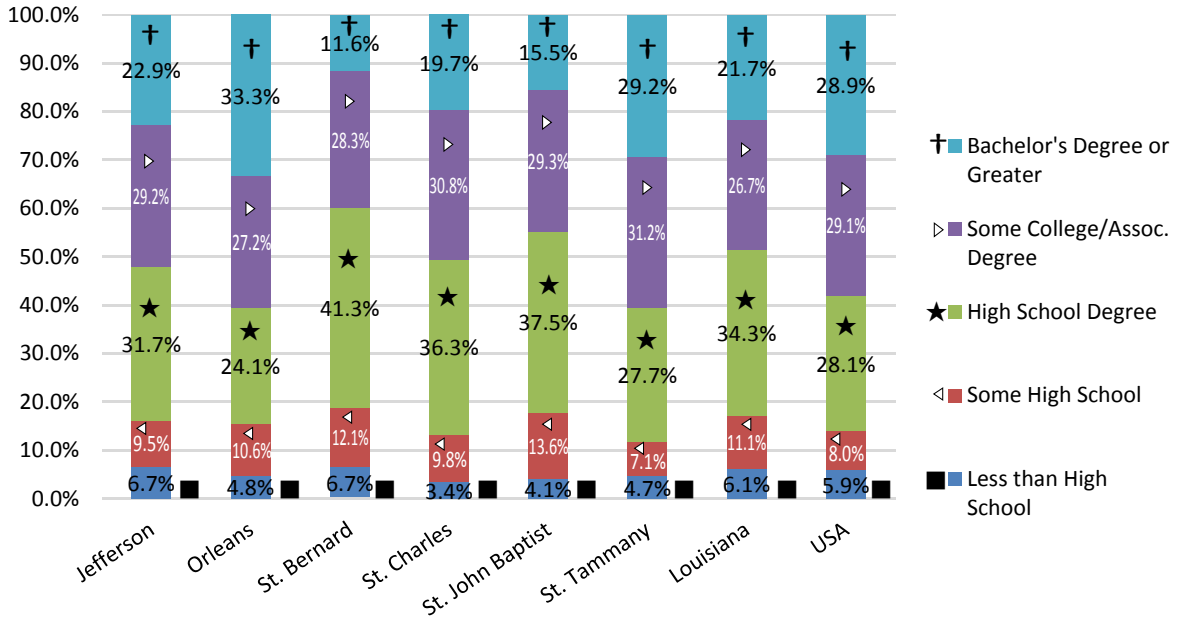
The data also reveal that the Tulane Medical Center study area is majority White, Non-Hispanic. Orleans and St. John the Baptist parishes, however, are majority Black, Non-Hispanic at 58.7 percent and 51.7 percent, respectively. Jefferson Parish has a larger Hispanic population in comparison to the other study area parishes and state of Louisiana with 14.0 percent of the population being Hispanic (See Chart 8).

Chart 8. Race/Ethnicity



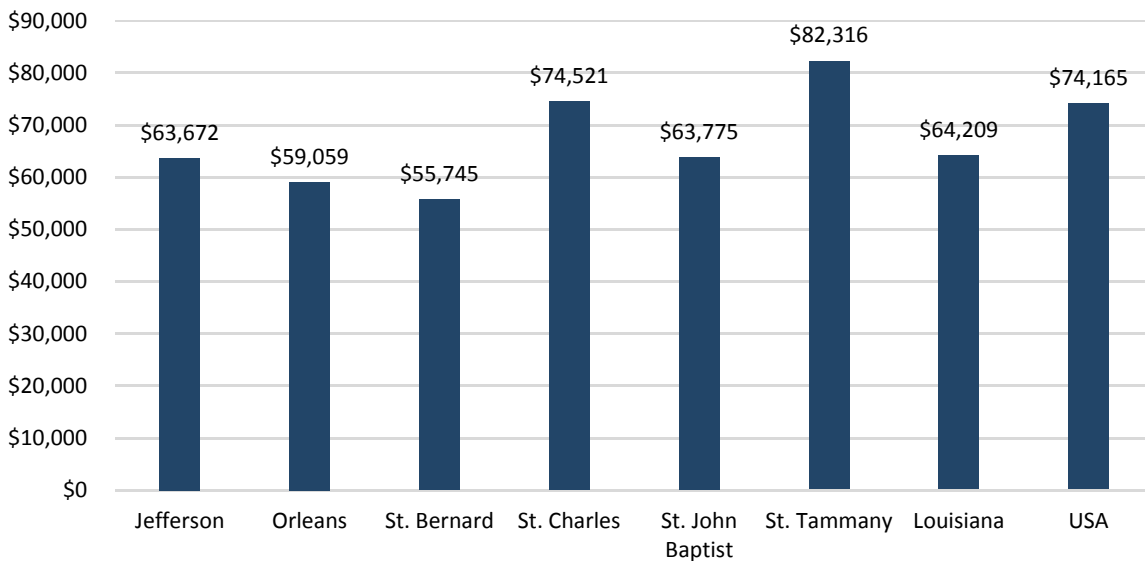
Education and income levels can serve as important socioeconomic determinants to health. Those with higher education levels have the ability to better understand their health needs and navigate through the health care system, while higher income levels provide individuals with the ability to afford health care services. In the study area, Orleans Parish has the highest percentage of individuals who have a bachelor’s degree or higher at 33.3 percent of residents (See Chart 9).

Chart 9. Educational Attainment



St. Tammany boasts the highest average household income in the study area at \$82,316. This average income is higher than the average income levels in the state of Louisiana (\$64,209) and United States (\$74,165). St. Bernard Parish has the lowest average household income of the study area parishes (\$55,745); the parish also has the highest percentage of residents without a high school degree (18.8 percent) (See Chart 10).

Chart 10. Average Household Income



Appendix C: Community Need Index Overview

Truven Health Analytics: Community Needs Index (CNI) Overview

Not-for-profit and community-based health systems have long considered a community's needs to be a core component of their mission of service to local communities. While specific initiatives designed to address health disparities vary across local communities (e.g., outreach to migrant farm workers, asthma programs for inner city children, etc.), the need to prioritize and effectively distribute hospital resources is a common thread among all providers.

Given the increased transparency of hospital operations (quality report cards, financial disclosures, etc.), community benefit efforts need to become increasingly strategic and targeted in order to illustrate to a variety of audiences how specific programs have been designed and developed. While local community needs assessments will always play a central role in this process, they are often voluminous, difficult to communicate, and may lack necessary qualitative and statistical justification for choosing specific communities as having the "greatest need."

Because of such challenges, Dignity Health and Truven Health jointly developed a Community Need Index (CNI) in 2004 to assist in the process of gathering vital socioeconomic factors in the community. The CNI is strongly linked to variations in community health care needs and is a strong indicator of a community's demand for various health care services.

Based on a wide array of demographic and economic statistics, the CNI provides a score for every populated county/parish in the United States on a scale of 1.0 to 5.0. The CNI should be shared with community partners and used to justify grants or resource allocations for community initiatives.

Methodology

The CNI score is an average of five different barrier scores that measure various socioeconomic indicators of each community using the source data. The five barriers are listed below, along with the individual statistics that are analyzed for each barrier. The following barriers, and the statistics that comprise them, were carefully chosen and tested individually by both Dignity Health and Truven Health:

1. Income Barrier
 - Percentage of households below the poverty line, with head of household aged 65 or older

- Percentage of families, with children under age 18, below poverty line
 - Percentage of single female-headed families, with children under age 18, below poverty line
2. Cultural Barrier
 - Percentage of population that is a minority
 - Percentage of population, over age 5, that speaks English poorly or not at all
 3. Education Barrier
 - Percentage of population, over age 25, without a high school diploma
 4. Insurance Barrier
 - Percentage of population in the labor force, age 16 or older, without employment
 - Percentage of population without health insurance
 5. Housing
 - Percentage of households renting their home

Data Sources

- 2016 Demographic Data, The Nielsen Company
- 2016 Poverty Data, The Nielsen Company
- 2016 Insurance Coverage Estimates, Truven Health Analytics

Appendix D: Tulane Medical Center

Tulane was founded in 1834 by seven physicians who sought to form a medical school in New Orleans that would teach others how to care for patients in the midst of an epidemic of cholera and yellow fever. They made history through their service to their patients and the learners under their wings. From its humble beginnings in a church schoolroom, Tulane has emerged as a major academic center in the south by adhering to the aspirations of our founders.

Tulane Medical Center operates under the vision of setting the standard for health care in the community through acts of kindness, innovation, and discovery, as well as the mission of providing world-class patient care and education.

Through its work in the community, the medical center upholds the values of:

- Truth
- Compassion
- Accountability
- Respect
- Excellence

Appendix E: Tripp Umbach

Tulane Medical Center contracted with Tripp Umbach, a private health care consulting firm headquartered in Pittsburgh, Pennsylvania to complete a community health needs assessment (CHNA). Tripp Umbach has worked with more than 200 communities in all 50 states.

From community needs assessment protocols to fulfilling the new Patient Protection and Affordable Care Act (PPACA) IRS 990 requirements, Tripp Umbach has turned needs assessments into practical action plans with sound implementation strategies, evaluation processes and funding recommendations for hundreds of communities. Tripp Umbach has helped more than 75 hospitals meet their IRS 990 requirements.

Changes introduced as a result of the PPACA have placed an increased level of importance on population health and well-being and on collaborative efforts between providers, public health agencies, and community organizations to improve the overall health of communities.