# Table of Contents

Figures ............................................................................................................................................. 3  
Acknowledgements ................................................................................................................................. 4  
Executive Summary ................................................................................................................................. 5  
Introduction ........................................................................................................................................... 9  
Methodology .......................................................................................................................................... 9  
  Advisory Committee ........................................................................................................................... 10  
  Quantitative Indicators ....................................................................................................................... 10  
  Key Informant Interview Protocol ...................................................................................................... 11  
  Focus Group Protocol ......................................................................................................................... 12  
Findings .................................................................................................................................................. 13  
  Demographics and Socio-economic Measures .................................................................................... 13  
  Access to Healthcare ............................................................................................................................ 16  
  Health Outcomes ............................................................................................................................... 18  
    Physical health .................................................................................................................................. 18  
    Mental health .................................................................................................................................... 23  
  Maternal and Child Health .................................................................................................................. 25  
  Health Behaviors and Screening ......................................................................................................... 27  
  Hospital Data ....................................................................................................................................... 29  
  Other Issues Highlighted by Qualitative Data ...................................................................................... 32  
Summary and Discussion of Prioritized Community Health Needs .................................................... 33  
  Prioritization Process and Community Validation Meeting Input ..................................................... 33  
  Issues Not Selected for Prioritization ................................................................................................ 37  
  Available Resources and Opportunities for Action ........................................................................... 37  
  Community Impact Thus Far .............................................................................................................. 40  
Appendix A. Source List ......................................................................................................................... 42  
Appendix B. Matrix of Key Informants Meeting IRS Requirement Guidelines .................................. 43  
Appendix C. Recommendations Provided by Interview and Focus Group Respondents .................. 44  
Appendix D. Organizations / Community Assets Mentioned by Respondents ................................. 45
Figures

Figure 1. Population Age Distributions ............................................................................................................. 13
Figure 2. Population Race and Ethnicity Distributions ..................................................................................... 14
Figure 3. Educational Status ............................................................................................................................. 14
Figure 4. Percent Living in Poverty by Age .......................................................................................................... 15
Figure 5. Percent Living in Poverty by Race/Ethnicity ..................................................................................... 15
Figure 6. Types of Healthcare Insurance .......................................................................................................... 16
Figure 7. Primary Care Physicians and Hospitals per Capita ............................................................................. 17
Figure 8. Percentage of Parishes in the Region Defined as Health Provider Shortage Areas ......................... 17
Figure 9. The Top 5 Cause of Mortality ............................................................................................................ Error! Bookmark not defined 18
Figure 10. Death Rates due to Suicide and Homicide ....................................................................................... 18
Figure 11. Prevention Quality Indicators Observed Rates ................................................................................. 19
Figure 12. Diabetes Prevention Quality Indicators Observed Rates ................................................................. 20
Figure 13. Chlamydia Rates by Race .................................................................................................................. 21
Figure 14. Syphilis Rates by Race ...................................................................................................................... 21
Figure 15. Gonorrhea Rates by Race .................................................................................................................. 22
Figure 16. Currently Living with HIV/AIDS Rates by Race ............................................................................ 22
Figure 17. Colorectal Cancer Incidence and Mortality Rates by Race ............................................................ 23
Figure 18. Prostate Cancer Incidence and Mortality Rates by Race ................................................................ 23
Figure 19. Substance Dependence and Abuse Rates ....................................................................................... 24
Figure 20. Top Diagnoses for Behavioral/Mental Health Conditions .............................................................. 24
Figure 21. Percent of Adult Population with Serious Mental Illness ................................................................. 25
Figure 22. Teen Birth Rate ................................................................................................................................. 26
Figure 23. Percent Low Birth Weight by Race ................................................................................................... 26
Figure 24. Infant Mortality Rate by Race ........................................................................................................... 27
Figure 25. Health-Related Risk Factors in the Adult Population ................................................................. Error! Bookmark not defined 28
Figure 26. Screening for Health Conditions in the Adult Population ........................................................... 28
Figure 27. Top Causes of Admission ............................................................................................................... 29
Figure 28. Insurance Types for Hospital Admissions ...................................................................................... 29
Figure 29. Hospital Admissions by the Top 20 Zip-codes ............................................................................... 30
Figure 30. Top Causes of Emergency Room Visits ......................................................................................... 31
Figure 31. Emergency Room Visits by the Top 20 Zip-codes ........................................................................ 31
Figure 32. Priority Ranking Poll Results from Community Validation Meeting ............................................. 36
Acknowledgements

This report was developed under the care and guidance of the Community Benefit Department at the CHRISTUS Health System Office in Irving, Texas. In addition, the following individuals contributed to the data collection, analysis, writing, and editing of this report.

Sandra Veronica Serna, MPH
Louisiana Public Health Institute

Karen Mason, MSPH
Louisiana Public Health Institute (formerly)

Heather Farb, MPH
Louisiana Public Health Institute

Jackie Hammers-Crowell
Louisiana Public Health Institute (formerly)

Lisanne Brown, Ph.D., MPH
Louisiana Public Health Institute

A special acknowledgment also goes to Khoa M. Nguyen, MA, MDiv., STB, Director of Mission Integration and Spiritual Care Services, and Sr. Sharon Rambin SFCC, MRE, MHA, Manager of Community Health & Manager of School Based Health Programs, at CHRISTUS Shreveport-Bossier Hospital.

The authors of this report also thank the CHRISTUS Shreveport-Bossier Hospital CHNA Advisory Committee and all of the individuals who participated in the key informant interviews, focus group discussion, and the numerous prioritization and planning sessions conducted to develop this report. This report could not have been completed without your time, effort, and dedication.

About the Louisiana Public Health Institute:

Founded in 1997, Louisiana Public Health Institute (LPHI) is a 501(c)(3) nonprofit organization that serves as a partner and convener to improve population-level health outcomes. LPHI’s mission is to improve health and quality of life for all. This is achieved through the coordination and management of public health programs and initiatives in the areas of health information, public policy, applied research, and community capacity enhancement. Through these initiatives, LPHI provides an array of services to meet the needs of local, regional, and national partners and to develop community-oriented solutions that improve community health and well-being.
Executive Summary

CHRISTUS Health Shreveport-Bossier is a non-profit hospital located in Shreveport, Louisiana and represents CHRISTUS Health Northern Louisiana. CHRISTUS Health Northern Louisiana is part of CHRISTUS Health, formed in 1999 to strengthen the Catholic faith based health care ministries of the Congregations of the Sisters of Charity of the Incarnate Word of Houston and San Antonio that began in 1866. Founded on the mission “to extend the healing ministry of Jesus Christ”, CHRISTUS Health’s vision is to be a leader, a partner and an advocate in creating innovative health and wellness solutions that improve the lives of individuals and communities so that all may experience God’s healing presence and love. As part of this effort and to meet federal IRS 990H requirements, CHRISTUS Health corporate office contracted with the Louisiana Public Health Institute (LPHI) and the Texas Health Institute (THI) to develop a uniform, comprehensive CHNA process for its facilities in Texas and Louisiana.

LPHI was responsible for conducting the community health needs assessment (CHNA) and community health improvement plan (CHIP) reports for CHRISTUS Health Northern Louisiana. This report serves as the CHRISTUS Health Northern Louisiana CHNA report for 2017-2019, and meets the requirements set forth by the IRS in Notice 2011-52, 990 Requirements for non-profit hospitals’ CHNA.

The CHNA report contains secondary data from existing sources, such as the American Community Survey (ACS), Behavior Risk Factor Surveillance Survey (BRFSS), Louisiana Tumor Registry, and data from the Louisiana Department of Health and Hospitals, among others. This report also includes input from key informants in the region, particularly those with special knowledge of public health, the health of the communities served by the hospital, and/or vulnerable populations in the communities served by the hospital. This input was gathered through individual interviews, a focus group discussion, a publically-advertised community validation meeting, and CHNA Advisory Committee meetings. As a result, seven community health needs were identified as top priorities. These priorities were selected based off of issue prevalence and severity according to parish and regional secondary data in addition to the stakeholder input provided. The top needs identified through the process are as follows:

1. **Cardiovascular Health (includes Heart Disease, High Blood Pressure, High Cholesterol, Diabetes, and Stroke)**

The U.S. Centers for Disease Control and Prevention (CDC) cites chronic diseases and conditions—such as heart disease, stroke, cancer, type 2 diabetes, obesity, and arthritis—as some of the most common, costly, and preventable of all health problems affecting the American public.\(^1\) While deaths in the Shreveport-Bossier region due to diseases of the heart are about equal to the number seen for the state (220.6 vs. 219.8 per 100,000), when looking at the Prevention Quality Indicators (PQIs) for Congestive Heart Failure, the CHRISTUS Health Northern Louisiana region has higher admissions than the state—indicating a need for improved primary care for this condition. Diabetes PQIs for uncontrolled diabetes are also higher in the region compared to the state. Unsurprisingly, heart disease and diabetes were cited as health issues of concern in several interviews. Both

conditions were frequently mentioned as related to nutrition and obesity.

2. Nutrition & Healthy Eating (includes both obesity & malnutrition)

Louisiana consistently ranks as one of the most obese states in the U.S. The state had the 4th highest obesity rate for adults (34.9% in 2014) and among 10-17-year-olds (21.1% in 2011). For the CHRISTUS Health Northern Louisiana region, the rate is actually 36.1% among adults. Poor nutrition and obesity, including childhood obesity, was a large concern of many of the interview participants. Participants shared how there are a number of food deserts where grocery stores may be miles away. They explained how people might know how to eat well, but may be unable to afford it. Participants connected obesity as a byproduct of the built environment, competing priorities, and concerns about neighborhood safety. They also acknowledged obesity as a cause of higher risk for diabetes, hypertension, and heart disease in their community. Some members of the CHNA Advisory Committee also expressed concern over issues of food insecurity and malnutrition among some populations in the community.

3. Tobacco Use

While the percentage of adults in the CHRISTUS Health Northern Louisiana region surveyed in the 2014 Behavioral Risk Factor Surveillance Survey (BRFSS) reporting that they were active smokers is slightly smaller than the percentage of adults for the entire state (23.6% vs. 24%), this number is still alarmingly high. Cigarette smoking is the leading cause of chronic obstructive pulmonary disease (COPD), the most deadly of the chronic lower respiratory diseases. Regional data shows that the PQI for COPD in older adults in the CHRISTUS Health Northern Louisiana region is higher than the state (551.77 vs. 507.21 per 100,000), indicating a need for improved primary care for this condition. Deaths due to all chronic lower respiratory diseases in this region are also slightly higher than the state. Additionally, focus group participants reported lung cancer being one of many community concerns, especially among low-income populations.

4. Sexually transmitted infections (STIs) and Teenage Pregnancy

Sexually transmitted infections (STIs) rank among the top five disease categories for which adults seek care worldwide. The disparity in the infectious disease burden due to STIs and persons living with HIV/AIDS is pronounced between races, with African Americans bearing the brunt. Not only do African Americans in the CHRISTUS Health Northern Louisiana region show the highest rates for most STIs, regional rates for this population are even higher than the African American rate for the

---

state. This was also reflected in focus group and interview participant comments, which described STIs as being endemic to the area. Additionally, births to mothers aged 15 to 19 years are much higher in this region than the entire state. While state and regional public health officials report ramping up efforts over the last couple of years to address STI rates, they also expressed an interest in better partnering with CHRISTUS Health and others to fully tackle this priority area.

5. **Lack of Knowledge of Health Care Resources in the Community**

The Advisory Committee noted that many minority populations have very little understanding on how to access the medical and social services available to them and there is a great need to educate everyone—individual patients, case managers, and physicians—on what is available throughout the community. Likewise, interview and focus group participants shared that health screenings for conditions like cancer and diabetes are readily available but many people do not know about them or do not go.

6. **Improve Access to Care for Uninsured and Underinsured Populations**

According to CHRISTUS Shreveport-Bossier Hospital admissions data, the largest single cause of Emergency Room visits (40%) is for “General Medicine.” Focus group and interview participants reported frequent emergency room use among the uninsured and underinsured, with many choosing to go to the ER for a variety of reasons, such as: clinics and providers lacking flexible hours, not having a primary care provider, or a level of comfort and familiarity with using the ER in that capacity. Similarly, the two top causes of hospital admissions for CHRISTUS Shreveport-Bossier Hospital are for “General Medicine” and “General Surgery,” with General Medicine comprising over 20% of all admissions for 2013-2014. Data for the CHRISTUS Health Northern Louisiana region also indicates that a slightly higher percentage of the population are uninsured compared to the state (17.8% vs. 17.1%). Private insurance coverage is also lower in this region compared to all of Louisiana, whereas Medicaid is slightly higher. During the focus group and interviews, it was noted that even with the Affordable Care Act, it still remains difficult for the working poor to afford co-pays and deductibles, especially for specialty care.

7. **Child Safety & Well-Being**

The priority area of child safety and well-being incorporates a variety of issues relevant to child and adolescent health, such as infant mortality, low use of safety seats, and child abuse/ exploitation. Data supporting this priority include the infant mortality rate (IMR) and percent low birth weight (LBW), both of which are significantly higher for African Americans than Caucasians (18.5 vs. 6.1 and 17.4 vs. 9.5, respectively) in the CHRISTUS Health Northern Louisiana region. Additionally, LBW for all races is greater in the region than the state, and IMR is much higher for African Americans in this region compared to the IMR for African Americans in the entire state (18.5 vs. 13.7). Focus group and interview participants also discussed the high IMR, especially among low-income populations and in certain zip codes. The Advisory Committee also cited interview and focus group participant observations regarding domestic violence, lack of seat belt use and safety seats for children, and
increased concerns regarding the trafficking of “girls from less protective environments” as additional evidence for the need to address child safety and well-being as a priority area.

The CHNA report presents data for a number of needs for the CHRISTUS Health Northern Louisiana region, as well as additional information specific to the above prioritized community health needs. This report will be used by CHRISTUS Health Northern Louisiana as a resource for developing implementation strategies to improve community health over the next three years.
CHRISTUS Health Shreveport-Bossier is a non-profit hospital located in Shreveport, Louisiana represents CHRISTUS Health Northern Louisiana. As part of the larger CHRISTUS Health system, CHRISTUS Health Northern Louisiana strives to serve as “a leader, a partner and an advocate in the creation of innovative health and wellness solutions that improve the lives of individuals and communities so that all may experience God’s healing presence and love.” As part of this effort and to meet federal IRS 990H requirements, CHRISTUS Health contracted with the Louisiana Public Health Institute (LPHI) to conduct the community health needs assessment (CHNA) and community health improvement plan (CHIP) reports for CHRISTUS Health Northern Louisiana.

This document serves as the CHRISTUS Health Northern Louisiana CHNA report for 2017-2019, and will be made publically available on the CHRISTUS Health website for future reference. The purpose of the CHNA is to identify needs, assets, and opportunities to answer the following research questions:

1. What constitutes the community/communities which CHRISTUS Health Northern Louisiana serve(s)?
2. What are the community’s attributes (i.e., demographics, health status, etc.)?
3. What are the community’s health needs?
4. What are the community’s assets and opportunities?
5. What action can CHRISTUS Health Shreveport-Bossier Hospital feasibly take to meet identified health needs?

These questions were answered using a mixed-methods approach (described in further detail below), and the report presented here describes the methods used for data collection and a summation of findings based on hospital data, publically available secondary data, key informant interviews and focus group discussions. This summation was further discussed and analyzed by a panel of experts comprised of both CHRISTUS staff and external partners representing various community organizations, and with guidance from LPHI. Formally known as the CHNA Advisory Committee, this panel assisted in the recruitment of a larger group of stakeholders to attend a community validation meeting, facilitated by LPHI staff, to share findings, refine priorities, and to begin charting next steps for community health improvement implementation plan with a larger audience. This plan is provided in a separate document.

Methodology

The mixed-methods approach conducted for this report was based off methodology used by LPHI when previously contracted by CHRISTUS Health Shreveport-Bossier to complete their 2012 CHNA report. Originally informed by assessment materials developed by national organizations such as the Association for Community Health Improvement (ACHI), the Catholic Health Association (CHA), and the National Association of County and City Health Officials (NACCHO), further refined through discussions with LPHI’s counterpart conducting the CHNA and CHIP process for CHRISTUS facilities in Texas, Texas

---

6 http://www.christusadvocacy.org/
7 All statements and opinions herein were expressed by key informants and focus group participants and do not necessarily represent the opinions or viewpoints of LPHI or its contractors.
Health Institute (THI), and the CHRISTUS Health corporate office. Representatives from the CHRISTUS Health corporate office were especially interested in formulating a process for CHNA report development that could serve as a template to all hospitals within its southeastern footprint in the U.S., including but not limited to its facilities in Louisiana, New Mexico, and Texas. As a result, both LPHI and THI agreed to conduct a combination of key informant interviews, focus groups, and much more widely advertised community validation meetings to provide CHRISTUS Health with critical input from various community representatives to assist each CHRISTUS facility with determining what priorities will be addressed over the next three years. This feedback was used to supplement the quantitative data provided by each hospital and available from secondary sources, such as the American Community Survey (ACS) and the State of Louisiana Department of Health and Hospitals. A full list of data sources referenced in this report is provided in Appendix A.

Each step of the CHNA process essential to this methodology is explained in detail below.

Advisory Committee
In order to ensure community input and expert oversight throughout the entire project, an advisory committee representing internal and external stakeholders in the CHRISTUS Health Northern Louisiana region was established in late 2015. The CHNA Advisory Committee met periodically on the CHRISTUS campus throughout this process. The committee was involved in the review of all data collection materials developed by LPHI and THI, including a list of recommended quantitative indicators, the key informant interview guide, and the focus group interview guide. The committee was also involved in recruitment and outreach for the community validation meeting that occurred on May 12, 2016. Prior to this meeting, the group met on April 25, 2016 to review a draft version of the findings and to determine which priority issues would be presented at the validation meeting. Details regarding the prioritization and validation processes are provided on page 33 of this report.

Quantitative Indicators
LPHI and THI worked with CHRISTUS Health to adapt a list of potential indicators for analysis based off of prior CHNA reports completed by both public health institutes and a list of recommended indicators provided by the Catholic Health Association. In most cases, indicators were chosen based on availability. For topics in which secondary data was not readily available, these topics were representatively addressed in the qualitative instruments developed by LPHI.

The geographic region of focus was determined in collaboration with CHRISTUS. Given that CHRISTUS Health Northern Louisiana serves patients in a geographic region with both urban and rural characteristics over nine parishes, it made the most sense to define the community assessed in this report by the population residing in the those parishes. The nine parishes within CHRISTUS Health Northern Louisiana are as follows:

<table>
<thead>
<tr>
<th>CHRISTUS Health Northern Louisiana Parishes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bossier</td>
</tr>
<tr>
<td>Caddo</td>
</tr>
<tr>
<td>Claiborne</td>
</tr>
<tr>
<td>DeSoto</td>
</tr>
<tr>
<td>Lincoln</td>
</tr>
</tbody>
</table>
Existing data for this nine-parish footprint was compiled from local and national sources by an experienced biostatistics epidemiologist. Data was compiled and analyzed using SPSS. A full list of indicators provided in this report can be viewed in the list of Figures on page 3. As previously mentioned, all data sources referenced in this report are listed in Appendix A. For benchmarking, data at the zip code level were compared to parish level and state level data, where applicable. This data is presented in the Findings section starting on page 13.

Key Informant Interview Protocol

The key informant semi-structured interview guide was designed to illicit responses about both the direct and indirect factors that influence the health of community members. Major areas of focus of the guide included: community health and wellness, behavioral risk factors, health care utilization, and access to care. Additional probes and follow up questions were designed to ensure the participant provided detailed responses, including opportunities to share information on assets in the community that could be tapped for future implementation planning. The guide was reviewed and approved by CHRISTUS Health Northern Louisiana representatives in January 2016.

Per IRS regulations (Section 3.06 of Notice 2011-52), each facility must get input from people who fall into each of these three categories:

“(1) Persons with special knowledge of or expertise in public health; (2) Federal, tribal, regional, State, or local health or other departments or agencies, with current data or other information relevant to the health needs of the community served by the hospital facility; and (3) Leaders, representatives, or members of medically underserved, low-income, and minority populations, and populations with chronic disease needs, in the community served by the hospital facility.

Treasury and the IRS expect that certain persons may fall into more than one of the categories listed above in paragraphs (1) through (3). For example, taking into account input from certain government officials with special knowledge of or expertise in public health may allow a hospital organization to satisfy the requirements described in both paragraphs (1) and (2).”

In order to satisfy these requirements, the Community Benefit Director from each CHRISTUS facility, with input from CHRISTUS Health corporate office and the CHNA Advisory Board, provided LPHI with a list of potential key informants, many of whom met one or more of these requirements and were able to speak to the geographic region served by CHRISTUS Health Northern Louisiana. A matrix detailing key informant affiliation in compliance with these requirements can be viewed in Appendix B.

Key informants were contacted by phone or email to initiate the scheduling of the interview. The interviewer provided a brief introduction to the project and explained the purpose of the interview, including how the data will be used and the time commitment to complete the interview. All key informants were ensured that no names would be associated with responses in any way and that all results would be reported in aggregate. If the key informant agreed to participate, phone interviews were scheduled depending on interviewer and participant availability.

At the beginning of the scheduled interview, consent was obtained to record the phone call. All interviews were recorded using an audio recorder. Recording did not begin until all instructions were provided and agreed upon. The interviewer assigned a study number to the participant and no
identifiers were captured on the recording. Participants were only asked about their names, job titles, and affiliation with CHRISTUS to determine if they met one of the three IRS requirements listed above.

On average, most interviews took around 45 minutes. Detailed notes comprised of quotes, key themes, and the interviewer’s general comments regarding each interview were typed up and synthesized into a larger master notes document for each facility or hospital region. For CHRISTUS Health Northern Louisiana, a total of 7 interviews were conducted.

**Focus Group Protocol**

Focus groups were also selected as an additional mechanism to obtain community input. Like the key informant interview guide, the focus group guide was also designed to encourage participants to think about the behavioral, environmental, and social factors that influence a person’s health status within the geographic area of focus. Questions inquiring about existing community assets and ways CHRISTUS could partner with others, to address some of the factors discussed, were included in the guide. The guide was reviewed and approved by CHRISTUS Health Northern Louisiana representatives in January, 2016.

As part of the protocol, one of LPHI’s qualitative experts provided all community benefit directors with a one-hour virtual focus group facilitation training. All directors were responsible for conducting a 90-minute focus group with participants, who were recruited to represent CHRISTUS patients and/or other community stakeholders with knowledge and awareness of health issues impacting the region. Individuals who participated in a key informant interview were not recruited for these groups.

All focus groups were audio recorded to accurately capture responses. Additionally, at least one note taker was assigned to take notes in person and, within the notes, each participant was assigned and referred to by a corresponding number to provide anonymity. Staff from LPHI also listened in via phone or Skype to observe conversation and take their own notes. The notes taken onsite and the audio recording were then provided to LPHI, who combined all notes for a given facility within one master document.

The focus group for CHRISTUS Health Northern Louisiana occurred on February 29, 2016. Information provided during this session is incorporated into the findings shared in the following pages.
Findings
The quantitative data and qualitative data were analyzed independently and then cross-walked together to identify areas of agreement and areas of disconnect. Notes from both the interviews and focus groups were carefully read through to identify major themes, which are summarized below. For the purposes of this report, “participant” refers to key informant interview participants and focus group participants, unless specified.

Demographics and Socio-Economic Measures
The CHRISTUS Health Northern Louisiana region includes the following nine Louisiana parishes: Bossier, Caddo, Claiborne, De Soto, Lincoln, Natchitoches, Sabine, Webster, and Winn. Throughout this report, all figures labeled Shreveport-Bossier include data from these nine parishes.

The total population of these parishes is 586,058 comprising 89% of the total population for Louisiana Department of Health and Hospitals (LA-DHH) Administrative Region 7 from the US Census American Community Survey 2013. This region is a mixture of urban and rural with a population density of 76 people per square mile compared to the overall density of 106 in the state. In comparison, more urban regions, such as LA-DHH Region 1, have a population density of 528 people per square mile.

Age distributions are similar to the state with about 25% under 18 years of age, 61% between 18 and 64 years, and 14% over 65 years (Figure 1). Race and ethnicity shows a larger African American population and lower Caucasian, Asian, and Hispanic/Latino populations compared to the state (Figure 2).

Figure 1: Population age distributions (ACS 2013)

---

8 All demographic indicators were compiled from the ACS 5 Year average file (2009-2013) in order to include all parishes with small populations (Only the 5 year file includes all parishes regardless of population). This was the most recent file available from the Census at the time of this analysis.
When looking at the data for educational status, the population in the CHRISTUS Health Northern Louisiana region has a higher percentage with less than a high school education than the state (24% vs. 22%), as well as a slightly lower percentage with college or graduate degrees (21% vs. 22%) (Figure 3). Low educational attainment was one of the most commonly reported economic and social concerns of interview participants. They described high drop-out rates and low numbers attending college, partially because schools are not adequately preparing students for colleges. The low percentage of college degrees has led to challenges finding living wage jobs, and participants shared how the population is unprepared to meet the needs of employers. Participants also reported high unemployment, especially as a result of the struggling oil industry. While they believed African American and Latino populations are disproportionately affected by these issues, they thought these issues impacted large sections of the total population.
The percent of the population living in poverty by age shows a slightly higher percentage of adults in poverty compared to the state (Figure 4). Figure 5 shows a higher percentage of African Americans live in poverty compared to any other race or ethnic group. High poverty levels and a lack of affordable housing were issues commonly reported as barriers to good health by all participants.

**Figure 4: Percent living in poverty by age (ACS 2013)**

**Figure 5: Percent living in poverty by race/ethnicity (ACS 2013)**
Access to Healthcare
Access to healthcare is an indisputable determinant of health. In 1993, The Institute of Medicine defined access as the “timely use of personal health services to achieve the best health outcomes.”\textsuperscript{9} Healthy People 2020 adds to this definition to state that “access to comprehensive quality health care services is important to the achievement of health equity,” and asserts that access encompasses not only health insurance coverage, but availability and quality of services, timeliness, and sufficient numbers of health care providers within the workforce.\textsuperscript{10}

The CHRISTUS Health Northern Louisiana area has a slightly higher percentage of the population who are uninsured compared to the state, 17.8\% vs. 17.1\% (Figure 6). Private insurance coverage is lower in Shreveport compared to all of Louisiana, and Medicaid is slightly higher (16.9\% vs. 15.8\%) indicating a larger low-income population overall. Also higher is the ‘other’ category, which includes military insurance, such as TRICARE.

Participants emphasized how even with the Affordable Care Act, it is difficult for the working poor to afford co-pays and deductibles, especially for specialists.

\begin{figure}[h]
\centering
\includegraphics[width=\textwidth]{figure6.png}
\caption{Types of healthcare insurance (ACS 2013)}
\end{figure}

The CHRISTUS Health Northern Louisiana region also has more primary care physicians per capita compared to the state (7.0 vs. 6.4), consistent with the lower percentage of parishes in this LA-DHH Administrative Region designated as Health Provider Shortage Areas (HPSA) for physicians and mental health care providers (Figures 7 & 8). This finding may better reflect urban parts of the region, as urban areas typically have more health care facilities per capita.

However, interview participants reported an insufficient number of mental health providers, including psychiatrists, especially for uninsured and underinsured individuals. They also reported an insufficient number of inpatient mental health beds, especially for children. The lack of treatment options for the uninsured and underinsured leads to many individuals “ending up in jail or on the streets” for mental health services.

Also, while the CHRISTUS Health Northern Louisiana region has more dentists per capita than the state, a few interview participants reported dental issues in uninsured children.
Health Outcomes

Physical health
The rate of mortality for the top five causes in Louisiana and the CHRISTUS Health Northern Louisiana region are compared in Figure 9. Deaths due to malignant neoplasms, chronic lower respiratory disease, and cerebrovascular diseases are slightly higher than the state. Heart disease and asthma were mentioned in interviews.

![Figure 9: Top 5 cause of mortality (Louisiana Department of Health and Hospitals, Vital Statistics 2013)](image)

The death rate due to suicide is the same as the state at 12 per 100,000 population, and the rate of homicide is lower, 7.8 vs. 11.8 (Figure 10).

![Figure 10: Death rates due to suicide and homicide (Louisiana Department of Health and Hospitals, Vital Statistics 2013)](image)
Prevention Quality Indicators (PQIs) are hospital admission rates for conditions for which good outpatient care can potentially prevent the need for hospitalization or for which early intervention can prevent complications or more severe disease. The Agency for Healthcare Research and Quality (AHRQ) promote the use of PQIs as a “screening tool” to help identify unmet community healthcare needs such as access to, and quality of, outpatient care. PQIs do not include all hospital admissions but only those referred to as “ambulatory care sensitive conditions”.

A selection of PQI measures are shown for the CHRISTUS Health Northern Louisiana region and the state in Figure 11. The greatest differences show that the Shreveport-Bossier region has higher admissions for all ambulatory care sensitive conditions compared to the entire state, with a particular gap in congestive heart failure. This indicates a need for improved primary care for these conditions.

![Figure 11: Prevention Quality Indicators observed rates (Louisiana Department of Health and Hospitals, Hospital Inpatient Discharge Data - LAHIDD 2012)](image)

**NOTE:** These rates include all hospitals serving Region 7.

Diabetes PQIs for uncontrolled diabetes are higher in the CHRISTUS Health Northern Louisiana region than compared to the state (Figure 12), although short and long-term complications are lower. Diabetes was frequently mentioned in the interviews, especially as related to nutrition and obesity.

---

Sexually transmitted infections (STIs) rank among the top five disease categories for which adults seek care worldwide\textsuperscript{12}. The disparity in the infectious disease burden due to STIs and persons living with HIV/AIDS is pronounced between races with African Americans bearing the brunt (Figures 13 through 16). Not only do African Americans show the highest rates for most STIs, but the Shreveport-Bossier region rates for this group are even higher than the state. The exception with state comparisons is with HIV/AIDS, which show lower rates of HIV/AIDS in in the Shreveport-Bossier region than the state. However, it should be noted the state rates may appear inflated given the extraordinarily high rates of HIV/AIDS in Baton Rouge and New Orleans; the rates in these two other cities are among the highest in the nation.\textsuperscript{13} It should also be noted that persons with other STIs are considered to be at an even greater risk (than those without STIs) to contract HIV.\textsuperscript{14}

The high rate of STIs, especially syphilis, was frequently mentioned by interview participants. Some participants described STIs as being endemic to the area, and affecting all walks of life, including the white upper and middle class, “so you don’t see it,” and African American populations. Other than the Louisiana Department of Health and Hospitals Office of Public Health, participants indicated that the number of groups working on STI prevention in the region were minimal.


Figure 13: Chlamydia rates by race (Louisiana DHH OPH STD/HIV Program 2013 Report)

Figure 14: Syphilis rates by race (Louisiana DHH OPH STD/HIV Program 2013 Report)
Figure 15: Gonorrhea rates by race (Louisiana DHH OPH STD/HIV Program 2013 Report)

Figure 16: Currently living with HIV/AIDS rates by race (Louisiana DHH OPH STD/HIV Program 2013 Report)

The Louisiana Tumor Registry collects information from the entire state on the incidence of cancer. The top four cancers commonly reported include: lung, breast, colorectal, and prostate cancer. Figures 17 and 18 look at reported incidence and mortality rates over a combined five-year period (2008 – 2012) for colorectal cancer and prostate cancer, respectively. Colorectal and prostate cancers are much higher for African Americans than Caucasians in the CHRISTUS Health Northern Louisiana region (Figures 17 & 18).

Focus group participants reported breast, lung, and prostate cancers as community concerns, especially among low-income populations.
Mental health

The Louisiana Office of Behavioral Health reports mental health diagnosis rates by parish in Louisiana for ten categories: Figures 19 & 20 show the distributions for 10 mental health diagnoses reported throughout the state. Based on this data, the population residing in the nine parishes within CHRISTUS Health Northern Louisiana region has fewer diagnoses of substance dependence and abuse than in the whole of Louisiana.

However, a few interview participants listed substance abuse as a community concern, especially prescription drug abuse. As one participant described, “What isn’t obvious is prescription drug abuse.
among affluent whites. There’s a high rate of abuse that is hidden there.” They also listed marijuana as being a large issue, and some use of synthetic drugs.

Figure 19: Substance dependence and abuse rates (Louisiana Office of Behavioral Health 2013-2014)

Figure 20: Top diagnoses for behavioral/mental health conditions (Louisiana Office of Behavioral Health 2013-2014).
The U.S. Centers for Disease Control and Prevention (CDC) carries out a Behavioral Risk Factor Surveillance Survey (BRFSS) annually in every state. It is a phone-based survey which covers the adult population only, and is carefully weighted based on a rigid sampling procedure incorporating both landlines and cell phones. Among its many goals is to assess health risk behaviors in the population, such as exercise frequency, alcohol consumption, and use of preventative services, such as cancer screenings. BRFSS is the second largest survey done in the U.S. (after the American Community Survey), and as such measures can be reported at the county/parish level.

Findings on serious mental illness from the 2014 Louisiana BRFSS show a lower or equal percentage of adults reporting serious mental illness in the CHRISTUS Health Northern Louisiana region than compared to the state (Figure 21). This is consistent with lower rates of mental health diagnoses shown in Figures 19 & 20.

As previously mentioned, mental health issues were frequently mentioned as a large community concern in the interviews. Common issues mentioned include: depression, anxiety, panic attacks, schizophrenia, and bipolar disorder.

Maternal and Child Health

Births to mothers aged 15 to 19 years are much higher in the CHRISTUS Health Northern Louisiana region than the entire state as seen in Figure 22. A focus on reducing teenage pregnancy could lessen this gap and prevent some of the many costs associated with early pregnancy. According to the U.S. Centers for Disease Control and Prevention, teen pregnancy and births are “significant contributors to high school dropout rates among girls,” with only about 50% of teen mothers receiving a high school diploma by the age of 22.15

Figure 22: Teen birth rate - number births per 1,000 mothers aged 15-19 years (Louisiana Department of Health and Hospitals, Vital Statistics 2013)

The infant mortality rate (IMR) and percent low birth weight (LBW) in the region are higher for African Americans than Caulcians (Figures 23 & 24). Also LBW for all races is greater in the CHRISTUS Health Northern Louisiana region than the state, and IMR is much higher for African Americans (18.5 vs. 13.7).

Participants also discussed the high IMR, especially among low-income populations and in certain zip codes. Some suggested that a large amount of the mortality was from unexpected sudden deaths.

Figure 23: Percent low birth weight by race (Louisiana Department of Health and Hospitals, Vital Statistics 2013)
Health Behaviors and Screening

The BRFSS, described above, collects information on screening and health risk behaviors. Figure 25 shows four of these, with the CHRISTUS Health Northern Louisiana region experiencing similar risk behavior factors, with the exception of obesity in which the CHRISTUS Health Northern Louisiana rate is slightly higher than the state (36% vs. 35%).

Poor nutrition and obesity, including childhood obesity, was a large concern of many of the interview participants. In one participant’s words, “we don’t have a culture of eating well.” Participants shared how there are a number of food deserts where grocery stores may be miles away. They explained how people might know how to eat well, but may be unable to afford it. Participants also connected obesity to the built environment and competing priorities: “we fish and hunt and people do what they can, but I don’t think it’s an accident that children are as obese as they are. Parents don’t feel it’s safe for them to be outside in their neighborhoods. The school is working so hard on testing, they don’t even let the kids have recess.” They acknowledged obesity as a cause of higher risk of diabetes, hypertension, and heart disease in their community.

Also collected by the BRFSS are the percent of adults who’ve ever had a screening procedure done (Figure 26). The percent of adults who ever had a screening test for breast and prostate cancer is similar in the CHRISTUS Health Northern Louisiana region to the state. Screening for diabetes is slightly higher (57% vs. 56%) and for colorectal cancer is lower (63% vs. 66%). Participants shared that screenings are offered but many people do not know about them or do not go.
Figure 25: Health-related risk factors in the adult population (Louisiana BRFSS 2014)

Figure 26: Screening for health conditions in the adult population (Louisiana BRFSS 2014)
CHRISTUS Health Northern Louisiana 2017-2019 CHNA

Hospital Data

All findings in this section refer to the CHRISTUS Health Northern Louisiana facility, also known as CHRISTUS Highland Medical Center.

The two top causes of hospital admissions are for General Medicine and General Surgery with Orthopedics closely following (Figure 27). Births make up 10% of all admissions at CHRISTUS Highland Medical Center.

![Figure 27: Top causes of admission (CHRISTUS Highland Medical Center admissions data 2013-2014)]

Medicare is the main source of health insurance for hospital admissions, followed by private insurance (Figure 28).

![Figure 28: Insurance types for hospital admissions (CHRISTUS Highland Medical Center admissions data 2013-2014)]
Hospital admissions by zip code show almost 12% of admissions come from 71106, followed by another 13% from 71105 and 71112 combined (Figure 29).

The largest single cause of emergency room visits (40%) is for General Medicine (Figure 30). Orthopedics, followed by cardiovascular disease, makes up another 23%.

Participants reported many low-income individuals going to the emergency room. Reasons cited by participants include: clinics and doctors lacking flexible hours, people being unable to take off from work, not having a primary care provider, and a level of comfort and familiarity with using the ER in that capacity (e.g. “that’s their culture”). In another participant’s words, “We’re lacking after hours primary care for the underserved. People end up in the ER for a cold at 3 am and that’s expensive.”
Emergency room visits by zip codes show a similar pattern as hospital admissions with 71106, 71105, and 71112 comprising the top three zip codes for ER admissions.

Figure 31: Emergency room visits by the top 20 zip-codes (CHRISTUS Highland Medical Center admissions data 2013-2014)
Human trafficking was mentioned by a few participants. “On I-20 there is human trafficking but people don’t know it goes on or don’t perceive it being a problem. But it is one of the upcoming issues that we have to address.” They described African American girls and “girls from less protective environments” as being at highest risk.

Transportation was a commonly reported challenge, especially because public transportation can take a long time, and many are unaware that they can receive free transportation through Medicaid. They specified that uninsured and elderly populations are most affected by the lack of transportation. In addition to transportation, other barriers to accessing primary care listed by participants include: providers not accepting Medicaid, lack of insurance and not being able to afford deductible and co-pay, time of services offered, and a lack of physicians.

Participants also listed a number of barriers to accessing behavioral health services including: high cost of services for uninsured and underinsured, long wait times, providers not accepting new patients, lack of providers and in-patient beds, stigma, “[un]willingness to admit they are mentally ill,” not knowing about available services and resources, and transportation. In one participant’s words, “people who don’t qualify for free services and cannot afford private providers or to buy insurance are stuck.”

Another participant shared, “all I’ve heard is that there isn’t enough of it, there are waiting lists and it’s not timely and effective. I’m not blaming individual practitioners, but it just seems like the system is broken.” One participant reflected on the stigma around mental health:

*We’re not supposed to have mental health problems. People try to figure out their own solutions or turn to other substances or behaviors to cope. It’s taboo to have mental health issues. People don’t want to admit it or seek treatment. African American and Hispanic populations especially struggle with the belief that you don’t tell people your business.*

Another participant described, “there is a feeling of shame sometimes and people are unwilling to get treatment. Or, if you’re too sick to know you’re sick, it takes other people doing an intervention with you.”

Participants also reported a lack of follow-up care or aftercare, leading “people [to] relapse because they cannot keep things under control.”

Environmental concerns include lead exposure and air pollution. Participants shared safety concerns with parks, as some parks are outdated and/or located in dangerous areas where “they can’t walk during the day or night,” and that there is a lack of safe, well-lit walking paths. “To cycle is to risk your life and the area is not very runner friendly either.” Focus group participants also identified living in unsafe conditions as an environmental concern, especially among low income and elderly populations.

Other issues mentioned include high incarceration and recidivism rates, domestic violence, and lack of seat belt use and safety seats for children.

Some participants also described a lack of data on the Latino population, and shared that they often cannot access programs, and there is a dearth of Spanish-speaking staff.
Summary and Discussion of Prioritized Community Health Needs

Prioritization Process and Community Validation Meeting Input

Once the quantitative and qualitative data were analyzed and gathered into an initial draft CHNA report, the draft report was shared with CHRISTUS Health Northern Louisiana leadership and the CHNA Advisory Committee. Both parties were tasked with reviewing the initial findings and determining which priority issues would be presented at a community validation meeting. Cardiovascular health, nutrition and healthy eating, tobacco use, sexually transmitted infections and teenage pregnancy, lack of knowledge of health care resources in the community, improve access to care for uninsured and underinsured populations, and child safety and well-being were the priority areas chosen.

Detailed rationale regarding these top priorities is provided below. Advisory Committee members took a number of things into consideration when choosing priorities. Some priorities were selected based off of issue prevalence and severity according to parish and regional secondary data. Input provided by key informants, focus group participants, and other community stakeholders was also heavily considered, especially for priority areas where secondary data is less available. The priorities selected were confirmed by attendees of the community validation meeting that took place on May 12, 2016.

1. Cardiovascular Health (includes Heart Disease, High Blood Pressure, High Cholesterol, Diabetes, and Stroke)

The U.S. Centers for Disease Control and Prevention (CDC) cites chronic diseases and conditions—such as heart disease, stroke, cancer, type 2 diabetes, obesity, and arthritis—as some of the most common, costly, and preventable of all health problems affecting the American public.\(^\text{16}\) While deaths in the Shreveport-Bossier region due to diseases of the heart are about equal to the number seen for the state (220.6 vs. 219.8 per 100,000), when looking at the Prevention Quality Indicators (PQI) for Congestive Heart Failure, the CHRISTUS Health Northern Louisiana region has higher admissions than the state—indicating a need for improved primary care for this condition. Diabetes PQIs for uncontrolled diabetes are also higher in the region compared to the state. Unsurprisingly, heart disease and diabetes were cited as health issues of concern in several interviews. Both conditions were frequently mentioned as related to nutrition and obesity.

2. Nutrition & Healthy Eating (includes both obesity & malnutrition)

Louisiana consistently ranks as one of the most obese states in the U.S. The state had the 4\(^\text{th}\) highest obesity rate for adults (34.9% in 2014) and among 10 - 17-year-olds (21.1% in 2011).\(^\text{17}\) For the CHRISTUS Health Northern Louisiana region, the rate is actually 36.1% among adults. Poor nutrition and obesity, including childhood obesity, was a large concern of many of the interview participants. Participants shared how there are a number of food deserts where grocery stores may be miles away. They explained how people might know how to eat well, but may be unable to afford it. Participants connected obesity as a byproduct of the built environment, competing priorities, and concerns about neighborhood safety. They also acknowledged obesity as a cause of higher risk for

---


diabetes, hypertension, and heart disease in their community. Some members of the CHNA Advisory Committee also expressed concern over issues of food insecurity and malnutrition among some populations in the community.

3. Tobacco Use

While the percentage of adults in the CHRISTUS Health Northern Louisiana region surveyed in the 2014 Behavioral Risk Factor Surveillance Survey (BRFSS) reporting that they were active smokers is slightly smaller than the percentage of adults for the entire state (23.6% vs. 24%), this number is still alarmingly high. Cigarette smoking is the leading cause of COPD, the most deadly of the chronic lower respiratory diseases. Regional data shows that the PQI for COPD in older adults in the CHRISTUS Health Northern Louisiana region is higher than the state (551.77 vs. 507.21 per 100,000), indicating a need for improved primary care for this condition. Deaths due to all chronic lower respiratory diseases in this region are also slightly higher than the state. Additionally, focus group participants reported lung cancer being one of many community concerns, especially among low-income populations.

4. Sexually transmitted infections (STIs) and Teenage Pregnancy

Sexually transmitted infections (STIs) rank among the top five disease categories for which adults seek care worldwide. The disparity in the infectious disease burden due to STIs and persons living with HIV/AIDS is pronounced between races, with African Americans bearing the brunt. Not only do African Americans in the CHRISTUS Health Northern Louisiana region show the highest rates for most STIs, regional rates for this population are even higher than the African American rate for the state. This was also reflected in focus group and interview participant comments, which described STIs as being endemic to the area. Additionally, births to mothers aged 15 to 19 years are much higher in the this region than the entire state. While state and regional public health officials report ramping up efforts over the last couple of years to address STI rates, they also expressed an interest in better partnering with CHRISTUS Health and others to fully tackle this priority area.

5. Lack of Knowledge of Health Care Resources in the Community

The Advisory Committee noted that many minority populations have very little understanding on how to access the medical and social services available to them and there is a great need to educate everyone—individual patients, case managers, and physicians—on what is available throughout the community. Likewise, interview and focus group participants shared that health screenings for

---

conditions like cancer and diabetes are readily available but many people do not know about them or do not go.

6. **Improve Access to Care for Uninsured and Underinsured Populations**

According to CHRISTUS Shreveport-Bossier Hospital admissions data, the largest single cause of Emergency Room visits (40%) is for “General Medicine.” Focus group and interview participants reported frequent emergency room use among the uninsured and underinsured, with many choosing to go to the ER for a variety of reasons, such as: clinics and providers lacking flexible hours, not having a primary care provider, or a level of comfort and familiarity with using the ER in that capacity. Similarly, the two top causes of hospital admissions for CHRISTUS Shreveport-Bossier Hospital are for “General Medicine” and “General Surgery,” with General Medicine comprising over 20% of all admissions for 2013-2014. Data for the CHRISTUS Health Northern Louisiana region also indicates that a slightly higher percentage of the population are uninsured compared to the state (17.8% vs. 17.1%). Private insurance coverage is also lower in this region compared to all of Louisiana, whereas Medicaid is slightly higher. During the focus group and interviews, it was noted that even with the Affordable Care Act, it still remains difficult for the working poor to afford co-pays and deductibles, especially for specialty care.

7. **Child Safety & Well-Being**

The priority area of child safety and well-being incorporates a variety of issues relevant to child and adolescent health, such as infant mortality, low use of safety seats, and child abuse/ exploitation. Data supporting this priority include the IMR and percent LBW, both of which are significantly higher for African Americans than Caucasians (18.5 vs. 6.1 and 17.4 vs. 9.5, respectively) in the CHRISTUS Health Northern Louisiana region. Additionally, LBW for all races is greater in the region than the state, and IMR is much higher for African Americans in this region compared to the IMR for African Americans in the entire state (18.5 vs. 13.7). Focus group and interview participants also discussed the high IMR, especially among low-income populations and in certain zip codes. The Advisory Committee also cited interview and focus group participant observations regarding domestic violence, lack of seat belt use and safety seats for children, and increased concerns regarding the trafficking of “girls from less protective environments” as additional evidence for the need to address child safety and well-being as a priority area.

The community validation meeting, which was facilitated by LPHI, served as an additional opportunity to obtain larger community input on the priorities selected for the future community health implementation plan (CHIP). During this meeting, attendees were provided with an overview of some of the quantitative data provided in the draft CHNA. Following the presentation and a question and answer period, attendees were given the opportunity to rank the priorities in terms of which ones they thought were the most pressing or the ones which CHRISTUS Health Northern Louisiana may want to devote the most attention or time. The vote was conducted using Turning Point audience response polling software.
Thirty-nine individuals participated in priority voting and were asked to rank their top five areas. At the time of the validation meeting, the issues of reducing emergency department utilization and reducing unnecessary hospitalization were not yet combined, so meeting participants were presented with eight options.

Twenty-one percent selected obesity (later renamed nutrition and healthy eating). Fourteen percent each voted for heart disease/high blood pressure/high cholesterol (renamed cardiovascular health) and lack of knowledge of existing services as the issue of utmost priority. Child abuse (later renamed child health and well-being) ranked 4th with 12.5% of the vote (Figure 32). Participants were then broken up into small groups to brainstorm ways CHRISTUS Health Shreveport-Bossier could address the top four issues and plan for implementation. Some of these suggestions are included in the next several pages of this report.

Rank the top 5 priority areas for CHRISTUS Shreveport-Bossier. (Priority Ranking)

<table>
<thead>
<tr>
<th></th>
<th>Responses</th>
<th>Percent</th>
<th>Weighed Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heart Disease, HBP, HC</td>
<td></td>
<td>14.31%</td>
<td>191</td>
</tr>
<tr>
<td>Obesity</td>
<td></td>
<td>20.15%</td>
<td>269</td>
</tr>
<tr>
<td>Smoking</td>
<td></td>
<td>8.54%</td>
<td>114</td>
</tr>
<tr>
<td>STDs &amp; Teen Pregnancy</td>
<td></td>
<td>19.4%</td>
<td>259</td>
</tr>
<tr>
<td>Lack of Knowledge of Existing Services</td>
<td></td>
<td>14.23%</td>
<td>190</td>
</tr>
<tr>
<td>ED Utilization as Primary Care</td>
<td></td>
<td>5.02%</td>
<td>67</td>
</tr>
<tr>
<td>Child Abuse</td>
<td></td>
<td>12.51%</td>
<td>167</td>
</tr>
<tr>
<td>Reduce Unnecessary Hospitalization</td>
<td></td>
<td>5.84%</td>
<td>78</td>
</tr>
<tr>
<td>Totals</td>
<td></td>
<td>100%</td>
<td>1335</td>
</tr>
</tbody>
</table>

*Figure 32: Priority ranking poll results from CHRISTUS Northern LA community validation meeting*
**Issues Not Selected for Prioritization**

In an effort to maximize any resources available for the priority areas listed above, the CHNA Advisory Committee determined that the following issues would not be explicitly included in their community health improvement plan (CHIP):

- Mental health
- Cancer
- Environmental health
- Human trafficking

While all four areas are a community concern, it was determined that there are other health care facilities and organizations in the region who better equipped to address these needs or have designated resources at their disposal to specifically address these needs in the near future. This is especially true for mental health and cancer—two conditions in which other facilities in the region are well known for their efforts.

While transportation is not specifically mentioned as a priority area, the Advisory Committee acknowledged that most efforts to improve access to care for uninsured and underinsured populations would likely incorporate strategies to address transportation. There are several programs already offered by CHRISTUS Health Shreveport-Bossier that seek to address this need.

The same can be said for environmental health and human trafficking. While CHRISTUS Health Shreveport-Bossier does not plan to explicitly tackle environmental health issues, CHRISTUS Health Northern Louisiana leadership acknowledged that many of the students served by their school-based health centers receive asthma treatment and care. Likewise, CHRISTUS Health Northern Louisiana already actively partners with several of the child advocacy centers in the area committed to combating human trafficking.

**Available Resources and Opportunities for Action**

As previously mentioned, participants involved in each step of the CHNA process were encouraged to offer ideas for implementation or provide examples of other organizations or local assets in the community that CHRISTUS Health Northern Louisiana could possibly engage or utilize when tackling the priority issues listed above. A list of recommendations provided by interview and focus group participants is provided in Appendix C. The various organizations working on some of these issues that were mentioned by participants are also included in Appendix D.

When selecting the seven priority areas, the CHNA Advisory Committee noted multiple ways CHRISTUS Health Northern Louisiana could make an impact for each. Potential ideas generated during the community validation meeting or other meetings held by CHRISTUS Health Northern Louisiana are as follows. It should be noted that many ideas listed below have the potential to work across more than one priority area.
1. **Cardiovascular Health (includes Heart Disease, High Blood Pressure, High Cholesterol, Diabetes, and Stroke)**

   Some suggested ideas for this priority area include:
   
   - enhance screening events for these conditions and provide additional educational sessions as screening follow-up,
   - collaborate with other organization to increase awareness and locate populations in need,
   - provide diabetic education program and support groups,
   - utilize community health workers or nurse navigators to provide education and ensure medication adherence,
   - offer specialized programs through Wellness Centers, and
   - partner with cardiology groups to provide intensive cardio rehab.

2. **Nutrition & Healthy Eating (includes both obesity and Malnutrition)**

   Suggested ideas for this priority area include:
   
   - partnering with schools and other local organizations to provide nutrition lessons, cooking demonstrations, and improved opportunities for increased physical activities (e.g. Project 5210),
   - increased support for urban farming and local food production such as sponsoring a growers’ market,
   - continuing to partner with Catholic Charities Healthy Eating on a Budget program which teaches folks how to shop and cook healthy on a budget, and
   - advocating for the creation of safer spaces for families to engage in physical activity.

3. **Tobacco Use**

   Suggested opportunities for action include:
   
   - expanding the Take Tobacco Control Program to local businesses and public schools,
   - ensure that all hospital departments routinely refer patients to agencies for stop-smoking programs,
   - actively promote the smoking QUIT LINE around the hospital, and
   - explore or expand partnerships with the American Cancer Society and other agencies to promote smoking cessation.
4. Sexually Transmitted Infections (STIs) and Teenage Pregnancy

Some ideas generated by community validation meeting participants include:

- mandating STI education for all clinical staff and providing continuing education periodically so clinicians can better diagnose conditions like syphilis, which often mimic other diseases,
- sponsor and promote a STI awareness campaign,
- partner with LA-DHH Office of Public Health and other organizations for testing events in high-risk areas—specifically, OPH knows the zip codes where prevalence is high and CHRISTUS may have the staff to expand resources and testing capacity,
- continue to provide STI education within the school-based health centers,
- expand the CHRISTUS’s Teen Mom program, and
- provide low-cost or free treatment to patients who test positive for STIs.

5. Lack of Knowledge of Health Care Resources in the Community

Suggested ideas for this priority area include:

- facilitate asset mapping among the organizations invited to the community validation meeting to determine existing resources in the community,
- partner with the Community Foundation of North Louisiana (CFNL) to see if mapped resources could be included in the Community Foundation’s web-based resource, LINCC,
- re-create Center Point Information Center,
- educate physicians and social workers on resources available,
- utilize social media to get word out about community resources, and
- participate in Hope Connections meetings or some other multi-agency collaborative.

6. Improve Access to Care for Uninsured and Underinsured Populations

Some suggested ideas for this priority area include:

- continue providing much-needed services through school-based health centers,
- explore case management partnerships with MLK Clinic and David Raines community health Centers,
- promote and provide information about health insurance enrollment and Medicaid expansion,
- expand urgent care clinics,
- expand CHRISTUS Home Care,
- provide medication assistance and referrals to primary care physicians,
- partner with physician practices, and
- de-centralize primary care physicians and increase their number throughout the region.
7. Child Safety & Well-Being

Suggested opportunities for action include:

- continue providing much-needed services through school-based health centers,
- continue partnership to support the Cara Center,
- take active steps to address and reduce the region’s high IMR,
- educate health professionals, such as ED staff, and teachers about the signs of suspected child abuse and neglect, and
- work with churches and other organizations to promote overall child safety & well-being.

Community Impact Thus Far

Since conducting the last community health needs assessment in 2012, CHRISTUS Health Shreveport-Bossier has engaged in the following activities to meet several of the previously identified needs.

- Transition Intervention Project/Community Health Worker:
  This project includes patient tracking/progress notes with information regarding emergency department visits, hospitalizations, and reason for visit since last previous visit. Trending data on patient bio-markers, hospitalizations, and ED visits are compiled periodically to report outcomes and make clinical care adjustments. Through the project, patients referred from hospital case management/ED can be efficiently tracked via monthly meetings between CHRISTUS and Martin Luther King Health Center and through information exchange.

- CHRISTUS/ Catholic Charities of North Louisiana Collaboration:
  Through this collaboration, CHRISTUS Health Shreveport-Bossier provides a designated registered nurse (RN) to educate clients about nutrition. Education occurs via classroom instruction and hands-on cooking demonstrations. Clients receive recipes from the demonstrations that they can try them at home. The nurse also provides store tours to teach clients how to read nutrition labels, understand unit pricing, and how pick fresh fruits and vegetables. Classes were held 6 times per month in autumn 2015 and spring 2016. Approximately 10-15 clients participated.

- CHRISTUS Health Shreveport-Bossier School-based Health Centers (SBHCs):
  CHRISTUS Health Shreveport-Bossier operates three SBHCs, where over 2,500 underserved children receive high-quality, comprehensive health care. Health promotion and disease prevention are major focuses of the SBHCs. Additionally, Project 5210 is a program designed to help children learn about nutrition and healthy lifestyles that is implemented through the SBHCs. Several hundred children have taken part in the project. Through community partnerships, CHRISTUS Health Shreveport-Bossier has also developed gardens at two schools.
The Cara Center:
Cara Center, a partnership between CHRISTUS Health Shreveport-Bossier and the Louisiana State University Health Sciences Center, provides a comprehensive diagnosis and continuing care of children who are victims of all forms of child abuse. The center cares for some 60-70 children per month. The Cara Center staff also provides child abuse awareness and prevention programs in the community.
Appendix A: Source List

Quantitative data utilized in this report were obtained through the following sources:

- United States Census Bureau American Community Survey (ACS) 2013
- U.S. Department of Health and Human Services Health Resources and Services Administration Area Health Resource Files (AHRF) 2014
- Louisiana Department of Health and Hospitals Vital Statistics 2013
- Louisiana Department of Health and Hospitals Hospital Inpatient Discharge Data (LAHIDD) 2012
- Louisiana Department of Health and Hospitals Office of Public Health STD/HIV Program 2013 Report
- Louisiana Tumor Registry 2008-2012
- Louisiana Department of Health and Hospitals Office of Behavioral Health data 2013-2014
- Centers for Disease Control and Prevention Behavioral Risk Factor Surveillance System (BRFSS) data for Louisiana 2014
- CHRISTUS Highland Medical Center Admissions data 2013-2014
Appendix B: Matrix of Key Informants Meeting IRS Requirement Guidelines

Per IRS regulations (Section 3.06 of Notice 2011-52), each facility must get input from people who fall into each category. It should be noted that several participants fall into more than one category, which is reflected in the counts below.

<table>
<thead>
<tr>
<th>Key Informant Affiliations Required by the IRS</th>
<th>Number of Key Informants Meeting Requirement</th>
</tr>
</thead>
<tbody>
<tr>
<td>1) Persons with special knowledge of or expertise in public health</td>
<td>4</td>
</tr>
<tr>
<td>2) Federal, tribal, regional, State, or local health or other departments or agencies, with current data or other information relevant to the health needs of the community served by the hospital facility</td>
<td>3</td>
</tr>
<tr>
<td>3) Leaders, representatives, or members of medically underserved, low-income, and minority populations, and populations with chronic disease needs, in the community served by the hospital facility</td>
<td>4</td>
</tr>
</tbody>
</table>
Appendix C: Recommendations Provided by Interview and Focus Group Participants

- CHRISTUS to become point organization to connect groups for locating needed resource
- More collaboration between hospitals and community groups- use collective capacity to do more
- Make health care more affordable
- CHRISTUS could help parents prepare 0-3 year old children for kindergarten
- Access to health care at non-traditional times, i.e. clinics could be open a couple of evenings a week and partner with schools
- Build medical homes on bus lines
- Set up a phone line at night where people can talk to a doctor and decide if they need to go to the ER (i.e. if their child is sick)- this could be a collaboration between different organizations
- Assess the community for upstream actions that will affect health
- Prevention education on nutrition/ physical activity/ seeking regular care, through neighborhood outreach or faith-based approaches in African American community—give faith-based organizations the tools they need for this
- More screening in African American community i.e. through faith-based communities for hypertension and diabetes
- Adopt a cultural plan versus strategic plan
- Develop relational level between patient and care givers
- Engage case workers to develop relationship between group partners and our own associates
- Hold educational events for adults similar to our children’s program of Back-To-School
- Back to school check-ups should include dental, eyes, nutrition, etc., plus a backpack full of school supplies
- CHRISTUS to collaborate with area Friendship Houses
- “The sequence is what I see missing, there is a lot of discussion and then it’s an unfunded mandate, so then who is responsible for it? Who is going to hold the meetings and such? If CHRISTUS wants to help poor people, talk to them. Find out what they want from their quality of live and what is missing now, which one can we help with and then delegate to specific people to fulfill the plan and a timeline. Have some small successes, really small. Maybe just address dental pain. It’s very treatable and annoying. Maybe a children’s cause or an elderly cause and build people’s trust. People will recognize CHRISTUS as the ones who get things done and the effected community becomes ambassadors for CHRISTUS.”
- Health coaches to help chronic patients to go to their appointments
- Streamline admission for appointments
- Help schools build gardens and food banks
- “Dedicate more resources to helping low income folks and for prevention”
- More school based health centers in all areas
- Make mental health more readily available
- Support programs that increase job skills and help people get more than a GED
- “Be more strategic in how we use our limited resources” - i.e. have 4 PET scans in one community; seems hospitals racing for best equipment
Appendix D: Local Organizations / Community Assets Mentioned by Participants

- Bossier Community College- offers a grant to help individuals get hired for living wage jobs
- Southern University- grant to help individuals get hired for living wage jobs
- MLK Health Center- has a pharmacy on a sliding scale, a community garden, and provided cooking lessons and group exercise classes
- Willis-Knighton
- Veterans Affairs
- David Raines Health Care Center
- Nurse Family Partnership
- Catholic Charities- garden, food bank
- Community Centers
- Step Forward- cradle-to-career childhood literacy initiative
- Providence House
- Shreveport Bossier Rescue Mission
- Salvation Army
- Community Renewal International-community garden
- The Fuller Center for Housing- builds houses, grocery store in food desert
- Chamber of Commerce
- Rotary Club
- Optimists of Bossier
- The Hub
- Hope for the Homeless
- The Homeless Coalition
- Shreveport Green- consortium of organizations around healthy eating and lifestyle changes, mobile food market
- LSU AgCenter- community garden
- YMCA- youth and exercise, sport leagues, baseline study
- One Great River- youth and exercise
- LSU Medical School- volunteer physicians, pediatric clinic on obesity educating child patients
- St. Luke’s- mobile medical unit
- Hope Central- daycare and clearing house for homeless
- Free Coalition- works on human trafficking
- Juvenile Justice- works on human trafficking
- Gingerbread House- works on human trafficking & is a children’s advocacy center
- Junior League
- Philadelphia Center- STI testing
- Northwest Louisiana Interfaith Pharmacy
- Public health units
- NAMI- support groups, walks
- Center for Families- provides mental health services on a sliding scale
- Friendship House
- School-based health centers
- A Better Shreveport- green space
- Healthy Neighborhoods- green space
- Shreveport Parks and Recreation- swimming lessons
- Knock it Off- local TV program on losing weight
- Samaritan Counseling Center- provides mental health services on a sliding scale