CHRISTUS St. Michael Health System

Community Health Needs Assessment 2020-2022

About Texas Health Institute:

Texas Health Institute (THI) is a non-profit, non-partisan public health institute. Since 1964, THI has served as a trusted, leading voice on public health and healthcare issues in Texas and the nation. THI's expertise, strategies, and nimble approach makes it an integral and essential partner in driving systems change efforts. THI works across and within sectors to lead collaborative efforts and facilitate connections to foster systems that provide the opportunity for everyone to lead a healthy life.

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EXECUTIVE SUMMARY

CHRISTUS St. Michael Health System is a non-profit, Catholic integrated health care delivery system that includes two acute care hospitals in Texarkana, Texas and Atlanta, Texas. CHRISTUS St. Michael Health System's dedicated staff provide specialty care tailored to the individual needs of every patient, aiming to deliver high-quality services with excellent clinical outcomes. CHRISTUS St. Michael Health System works closely with the local community to ensure that regional health needs are identified and incorporated into system-wide planning and strategy. To this end, CHRISTUS St. Michael Health System commissioned Texas Health Institute to conduct and produce its 2020-2022 Community Health Needs Assessment, as required by law to be performed once every three years as a condition of 501(c)(3) tax-exempt status.

In this community health needs assessment, THI staff and CHRISTUS St. Michael Health System community stakeholders analyzed over 40 different indicators of health needs based on demographics and socioeconomic trends; measures of physical, behavioral, social, and emotional health; and risk factors and behaviors that promote health or produce sickness. The latter provided insight into social determinants of health operating in the report area, such as transportation, and food insecurity. Report findings combine secondary analysis from publicly available data sources, hospital utilization data and input from those with close knowledge of the local public health and health care systems to present a comprehensive overview of unmet health needs in the region.

The voice of the community guided the needs assessment process throughout the life of the project, ensuring the data and analyses remained grounded in local context. Focus group and needs prioritization meetings ensured input from low income and minority communities and stakeholders representing those communities. Through an iterative process of community debriefing and refinement of findings, a final list of five prioritized health concerns were developed. These are summarized in the table below. This priority list of health needs and the data compiled in support of their selection lays the foundation for CHRISTUS St. Michael Health System to remain an active, informed partner in population health in the region for years to come.

Rank	Health Concern
1	Mental Health
2	Chronic Illness
3	Health System Performance
4	Aging Population
5	Lack of Employment Opportunities

CHRISTUS St. Michael Health System Prioritized Health Needs, 2020-2022

INTRODUCTION

CHRISTUS St. Michael Health System (CSMHS) is a non-profit hospital system serving the greater Texarkana, Texas region. Two acute care hospitals anchor the system — a 311-bed facility in Texarkana, and a 43-bed acute care hospital in Atlanta, Texas, 25 miles south of Texarkana — along with one rehabilitation hospital, two outpatient rehabilitation facilities, two health and fitness centers, an imaging center, a cancer center, two retail pharmacies, a mobile clinic, and 14 outpatient centers.[1] While the CSMHS family of facilities serves a multi-state region encompassing northeast Texas, southwest Arkansas, southeast Oklahoma, and northwest Louisiana, CSMHS defines its primary service area as Bowie County, Texas; Cass County, Texas; Little River County, Arkansas; and Miller County, Arkansas. These four counties constitute the report area for this Community Health Needs Assessment (CHNA).

CHRISTUS Health is a Catholic health system formed in 1999 to strengthen the faith-based health care ministries of the Congregations of the Sisters of the Incarnate Word of Houston and San Antonio that began in 1866. In 2016 the Sisters of the Holy Family of Nazareth became the third sponsoring congregation to CHRISTUS Health. Today, CHRISTUS Health operates 25 acute care hospitals and 92 clinics in Texas. CHRISTUS Health facilities are also located in Louisiana, Arkansas, and New Mexico. It also has 12 international hospitals in Colombia, Mexico and Chile. As part of CHRISTUS Health's mission "to extend the healing ministry of Jesus Christ," CSMHS strives to be, "a leader, a partner, and an advocate in the

[1] CHRISTUS Health. (2018). *System Profile 2018*. Available at: https://www.christushealth.org/-/media/files/Homepage/About/2018_SysProfile.ashx.

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."[2]

Federal law requires all non-profit hospitals to conduct a CHNA every three years to maintain their tax exempt status. CHRISTUS Health contracted with Texas Health Institute (THI) to develop the CHNA report for CSMHS, a document that will fulfill the requirements set forth in IRS Notice 2011-52, 990 requirements for non-profit hospitals' community health needs assessments, and will be made available to the public. To complete its CHNA, the THI team and CSMHS leadership drew upon a wide range of primary and secondary data sources and engaged a group of community residents and stakeholders with special knowledge of vulnerable population groups and the local public health landscape. All together, these data and diverse perspectoves provide insight into community health needs and priorities, challenges, resources and potential solutions.

A CHNA ensures that CSMHS has made efforts to identify the unmet health needs of residents in its service region, examine barriers residents face in achieving and maintaining good health status and inventory health opportunities and assets available within the report area that can be leveraged toward the improvement of population health. The CHNA lays the foundation for future planning, ensuring that CSMHS is prepared to undertake efforts that will help residents of the local community attain the highest possible standard of health.

METHODOLOGY

REVIEW OF LITERATURE AND QUANTITATIVE DATA

THI staff conducted a literature review using previously published community health needs assessments and other reports focused on health in the the Texarkana region, such as the

[2] CHRISTUS Health. (2019). Our mission, values, and vision. Available at: http://www.christushealth.org/OurMission.

Regional Needs Assessment released in 2018 by the Prevention Resource Center 4.[3] Findings from previous CHNAs and progress reporting on initiatives launched in response were incorporated into project design, interviews, focus groups,, and this report as applicable.

THI used a mixed-methods approach to data collection and analysis. Both qualitative and quantitative measures are drawn from primary and secondary data sources to ensure a comprehensive understanding of health needs and the potential for CSMHS to address those needs in collaboration with community partners. This mixed-methods approach is standard in all THI needs assessments and was used in concurrent needs assessments in four other CHRISTUS services areas in 2019.

CHNA development began with collection and examination of quantitative data from secondary sources. Unless otherwise specified, all data were accessed from Community Commons, a repository of community-level data compiled from archival sources including, but not limited to, the American Community Survey, U.S. Census Bureau, the CDC Behavioral Risk Factor Surveillance System, and the National Vital Statistics System. The most recent data available from this source were examined for the report area in aggregate and by county across several dimensions, including sociodemographics, health risk behaviors, access to care and clinical outcomes. THI subsequently obtained internal data from the two CSMHS acute care hospitals and conducted a descriptive analysis. Together, THI staff reviewed over 40 measures and categorized them for higher-level examination.

KEY INFORMANT INTERVIEWS

Purpose

The purpose of in-depth interviews was to gather a broad sample of perspectives on significant health needs in the community. Findings from interviews informed the design of the focus group and were incorporated into the results to lend context to quantitative patterns and trends. Semi-structured interviews followed a pre-designed questionnaire covering the identification of health needs, community resources, and possible opportunities for action. The interviewer asked about barriers and reasons for unmet health needs, existing

[3] Regional Needs Assessment. (2018). Region 4 Prevention Resource Center. Available at: https://www.etcada.com/rna.

capacity, needed resources, and potential solutions that could enhance well-being in the community, either for specific subgroups or the population at-large. The full length Key Informant Interview Protocol can be found in Appendix B of this report.

Sample and Recruitment

Representatives from CSMHS contributed contact information for 16 people who represent the broad interests of Texarkana and who possess knowledge about the region's health-related challenges. For example, key stakeholders included nonprofit leaders, health department authorities, university and college leaders, healthcare providers or leaders, human services providers, local and state agencies, people representing distinct geographic areas and people representing diverse racial/ethnic groups.

To recruit interviewees the THI team contacted these 16 key informants by email and telephone, and 9 individuals responded to the request. THI conducted 9 interviews between September and December 2018, each lasting between 30 to 60 minutes.

Transcription

THI used the notes and recordings to develop transcripts of each key informant interview for later coding and analysis. The identities of key informants and transcribed content of their statements will remain confidential.

FOCUS GROUP

Purpose and Questions to Address

The purpose of the focus group was to obtain clarity around needs and concepts proposed for inclusion in the CHNA report, and to approximate a group response to the collection of ideas put forth. The group followed a semi-structured protocol intended to elicit responses aligned with the following objectives:

1. Identify significant health needs
2. Identify community resources to meet its health needs
3. Identify barriers and reasons for unmet health needs
4. Identify supports, programs, and services that would help to improve the needs or issues

THI staff finalized the design of the focus group guide after a review of quantitative data and discussions with CSMHS staff.

Recruitment and Sample

Potential participants were identified by CSMHS leadership. A total of 12 people participated in the focus group. To assist with recruitment the local CHRISTUS liaision recruited these stakeholders who represented diverse population groups, occupations, and healthcare or realted service providers (e.g., clinics, community organizations and social service agencies). .

Administering Focus Group and Collecting Data

The focus group lasted two hours. The facilitator opened with a general assessment of the participants' views of the community's overall health profile, inviting general comments using open-ended questions about health needs. Next, the facilitator followed with probes regarding any health needs that arose in the quantitative and qualitative analyses but did not appear in the group members' initial responses. An assistant moderator took notes and recorded the group responses. THI used the notes and recordings to develop transcripts for later coding and analysis.

ANALYSIS

Quantitative Analysis

The first stage of the analysis involved comparing rates of mortality, morbidity, health utilization, and various measures of social determinants of health using publicly available secondary data sources. The THI team compared the rates in the report area with Texas, Arkansas and the US to determine evidence of "health needs."[4] These comparisons represented quantitative indicators of need. For example, if the lung cancer rate in the report area were greater than the rate in Texas, that would be indicative of the need for more oncological services or primary prevention (e.g., reducing cigarette smoking). In addition to these comparisons, THI compared rates across counties within the report area to uncover potential regional disparities.

Primary data from CSMHS provided additional information to supplement the analysis of health needs. THI calculated rates of hospital and emergency room admissions. Indicators

[4] Rates were age-adjusted for comparisons.

from these data were based on comparisons across facility, service line, payment type, and zip code. For example, if ER visits for an ambulatory care sensitive condition were concentrated in one zip code, along with increasing trends across adjacent years, this might be indicative of the need to improve access to primary care in that region.

Qualitative Analysis

Whereas quantitative data analysis provides evidence of the magnitude of various health needs in the report area population (relative to a standard), qualitative data analysis facilitates exploration of *why* those health needs were arising in the report area and *how* the community could potentially respond.

THI utilized a hybrid approach to qualitative analysis based on both thematic and content analysis as well as grounded theory-based methods.[5,6,7] Whereas thematic analysis identifies and *qualifies* narratives, content analysis identifies and *quantifies* recurring narratives.[8] These two approaches are used to develop a comprehensive understanding of the report area while identifying priority health needs based on the weight of the evidence.

Grounded theory is an inductive approach to forming an understanding of a phenomenon that best fits *all* the data. The approach is an iterative process that involves collecting the data, coding similar concepts, forming concepts into categories, generating theory, and then going back to the data to verify the theory. THI used this iterative process to identify recurring themes that evidenced community health needs and health system needs—instead of generating theory per se. The iterative nature of collecting, analyzing, and reviewing data with stakeholders was built into THI's CHNA process from start to finish.

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[5] Smith, J., & Firth, J. (2011). Qualitative data analysis: the framework approach. *Nurse researcher*, *18*(2), 52-62.

[6] Joffe, H., & Yardley, L. (2004). Content and thematic analysis. *Research methods for clinical and health psychology*, *56*, 68.

[7] Corbin, J. & Strauss, A. (1990). Grounded theory method: Procedures, canons, and evaluative criteria. *Qualitative Sociology*, 13, 3-21.

[8] Vaismoradi, M., Turunen, H., & Bondas, T. (2013). Content analysis and thematic analysis: Implications for conducting a qualitative descriptive study. *Nursing & health sciences*, *15*(3), 398-405.

From successive readings of key informant and focus group transcripts, the THI team methodologically analyzed transcripts to understand interviewee narratives. The analysis focused on understanding stakeholders and focus group participant views with respect to (1) health needs (including physical, behavioral, and social/emotional) (2) the social determinants of health (3) barriers to care and (4) assets and solutions to address population health and health system needs. Next, the THI team tagged transcript passages, open-coded key concepts within passages, compared patterns of codes within and across transcripts, and collapsed these codes into thematic categories.

The key informant interviews and focus group interviews varied in the themes that arose. In addition, some of the themes were supported by quantitative findings. The THI team therefore triangulated the results across all the data—key informant interviews, the focus group interview, and quantitative measures—to identify themes that emerged most frequently. These themes essentially offer a "theory" about the health needs in the community and the ways in which (health and non-health sector) systems could improve to support greater health outcomes in the report area. The last stage of the analysis involved verifying whether these themes were an accurate reflection of health and systems needs in the service area. This last step was incorporated as part of the needs prioritization.

NEEDS PRIORITIZATION

Phase 1: Initial Prioritization

The needs rioritization occurred in two phases. The first phase included a data-based prioritization from the THI team in advance of convening a needs prioritization committee comprised of local stakeholders. In this phase, THI identified the top indicators of need based on both the qualitative and quantitative analysis. The top indicators based on the qualitative analysis included the most recurring themes for which there was the greatest evidence base on all available data. These emerged in the process of triangulation described above.

For quantitative analysis, THI determined whether:

- Rates for the report area exceeded those for Texas, Arkansas or the US.
- Health measures were deemed to impact a large percentage of residents in the report area.

- Evidence of significant variation in rates across counties in the report area, indicating potential regional disparities.

This process enabled THI to sort quantitative indicators across three tiers—those with (I) clear, (II) middling, or (III) no evidence of health needs. All of Tier I and some of Tier II indicators were assembled for presentation at a needs prioritization workshop.

Phase 2: Workshop for Validation and Prioritization

The second phase involved facilitating a community-driven process to validate phase 1 findings and further refine and prioritize health needs. More specifically, the key objectives of this process were to determine the validity of THI's findings about community health needs (i.e., phase 1 results), identify a core set of community health issue areas for more focused discussion, and implement a fair process that enabled the group to prioritize needs through generative dialogue and group consensus.

To do this, THI designed a needs prioritization workshop that combined focused discussion with liberating structures.[9] The workshop design (1) facilitated a fair and inclusive process so that all the stakeholders could review and comment on preliminary results on an equal footing, (2) enabled all stakeholders to feel free to present their views about the core health needs in the community, and (3) utilized a cumulative voting method to prioritize needs after uncovering the diverse perspectives of the group.

The needs prioritization workshop took place in January 2019. THI staff informed the CSMHS liaison about the purpose of this meeting and appropriate logistics were arranged. The local liaison recruited individuals from the community to serve on the needs prioritization committee, and 28 people ultimately attended the meeting. A key component of recruitment was to ensure that the focused discussion included residents from or stakeholders representing the interests of low income, minority, vulnerable, or medically underserved communities.

THI staff facilitated the needs prioritization workshop and successfully identified a prioritized list of health needs. THI staff presented the initial analysis of all data, facilitated discussion

[9] Lipmanowicz, H., & McCandless, K. (2010). Liberating structures: innovating by including and unleashing everyone. *E&Y Performance*, *2*(4), 6-19.

about the validity of the results, and identified approximately 10 issue areas for focused discussion based on the indicators presented. The facilitation ensured open discussion among all participants and used group consensus before moving to the next stage of the workshop. After discussion of the issue areas, participants voted on their top priorities based on a three-vote cumulative voting method. Facilitators from THI consolidated individual participants' scores to generate an overall ranking and a ranking based on community votes only to identify any differences in prioritization between community stakeholders and those from CHRISTUS. No differences were found, and the prioritization committee reached consensus on the composite ranking before finalizing the priority health needs list.

SUMMARY OF ACTIVITY SINCE 2017-2019 CHNA

In 2016, CSMHS completed its most recent CHNA and companion Community Health Improvement Plan (CHIP), informing system-wide planning and strategy for the 2017-2019 triennium. The information below summarizes the expanded actions CSMHS has pursued since that time.

SIGNIFICANT NEEDS WITH HOSPITAL IMPLEMENTATION RESPONSIBILITY

Access to Healthy Living Resources

To address the need for improved access to screening and healthy living resources, CSMHS collaborated with Catholic Charities to deliver a Parish Nurse Program. The program offers free screenings, health education, patient navigation, and fitness activities in the community. CSMHS provided financial support to expand the Parish Nursing Program to 5 new locations.

Unhealthy Behaviors

CSMHS addressed unhealthy behaviors in the community by collaborating with area school districts to reduce obesity and increase physical activity among area students. CSMHS identified a partner organization, Go Noodle, to deliver interactive health education modules in area school districts. The Go Noodle program integrates physical activity during the school day in ways that enhance academic learning among elementary school students.

Between the 2016-2017 and 2017-2018 school years, the number of participating schools increased from 81 to 90. This was associated with 14,736 and 14,347 active students in the 2016-2017 and 2017-2018 school years respectively. Over 600 teachers in participating schools also benefited. Across the two respective school years, there were 6.5 and 5.3 million of minutes of physical activity. Statistics are unavailable for the current school year.

Access to Primary Care

CSMHS has partnered with Genesis Primecare to provide and expand primary care services in the report area. As a federally qualified health center (FQHC), Genesis Primecare provides primary care to underinsured and uninsured residents offering care on a sliding fee scale. Concurrent with ingoing support and referrals from CSMHS, Genesis Primecare has expanded and seen increasing patient encounters. Genesis Primecare opened additional primary care sites in Atlanta, Texas (Cass County) and Texarkana, Arkansas (Miller County). OB, dental and behavioral health services are available. From FY2017 to FY2018 patient encounters at Genesis Primecare increased from 66,794 to 77,337. These numbers are projected to increase. During the first four months of the current fiscal year (September through December), there were 32,450 encounters, suggesting an even greater number of encounters for FY2019.

Social and Emotional Support

To address the need for social and emotional support in the community, CSMHS explored opportunities to create a community resource call center. The call center was a proposed mechanism for CSMHS and community-based organizations to coordinate referral, resources, and assistance for people experiencing a lack of social or emotional support. Instead of creating a call center, however, CSMHS developed a resource document that is distributed to patients needing information regarding available resources in the community. This document is now shared in multiple venues in the health system and in the community.

Chronic Disease Reduction

CSMHS's strategy to this priority focued on increasing access to transitional care programs to reduce readmissions for patients with chronic disease. Since 2011, CSMHS has coordinated a successful Transitional Care program to assist patients diagnosed with certain chronic diseases with managing their conditions outside of a hospital setting. To address the continued need to reduce the burden of chronic disease in the report area, CSMHS

expanded access to this program by increasing the number of chronic diseases the program's staff and technology are equipped support. The expanded access to this program has led to an increase in the number of patients served. Enrollment increased from 843 patients to 1000 patients from FY2017 to FY2018. During the first four months of FY2019, 517 patients have enrolled. The readmission rate for the current fiscal year is 7.9% a percentage point lower than the rate in FY17.

KEY FINDINGS

POPULATION DEMOGRAPHICS

CHRISTUS St. Michael Health System primarily serves Bowie and Cass Counties in Texas, and Miller and Little River Counties in Arkansas (henceforth referred to as the "report area" [Figure 1]), consisting of a total population of 180,367 residents (Table 1). More than 75% of the region's population resides in Bowie County and Miller County, and the remaining reside in Cass County and Little River County. Eighty-three percent of residents in the report area live in Little River, Miller and Bowie Counties which are urban counties, while the remaining 17% live in Cass which is rural county.[10] This also mirrors the urban-rural breakdown of Texas population statewide.[11] The population increased only in the urban counties. Whereas Miller County and Bowie County grew by 1.2% and 1.6% respectively, Little River County's population declined by 6.2% and Cass's by 1.5%.

[10] Little River County is classified as a metropolitan county but does have certain census tracts that are considered rural.

[11] Health Services and Resources Administration. (2016). List of Rural Counties and Designated Eligible Census Tracks in Metropolitan Counties. Available at https://www.hrsa.gov/sites/default/files/ruralhealth/resources/forhpeligibleareas.pdf

County Name	Population (%)
Little River County, AR	12,359 (7%)
Miller County, AR	43,984 (24%)
Bowie County, Texas	94,012 (52%)
Cass County, Texas	30,012 (17%)
Report Area	**180,367**

Table 1. Report Area Population, by County

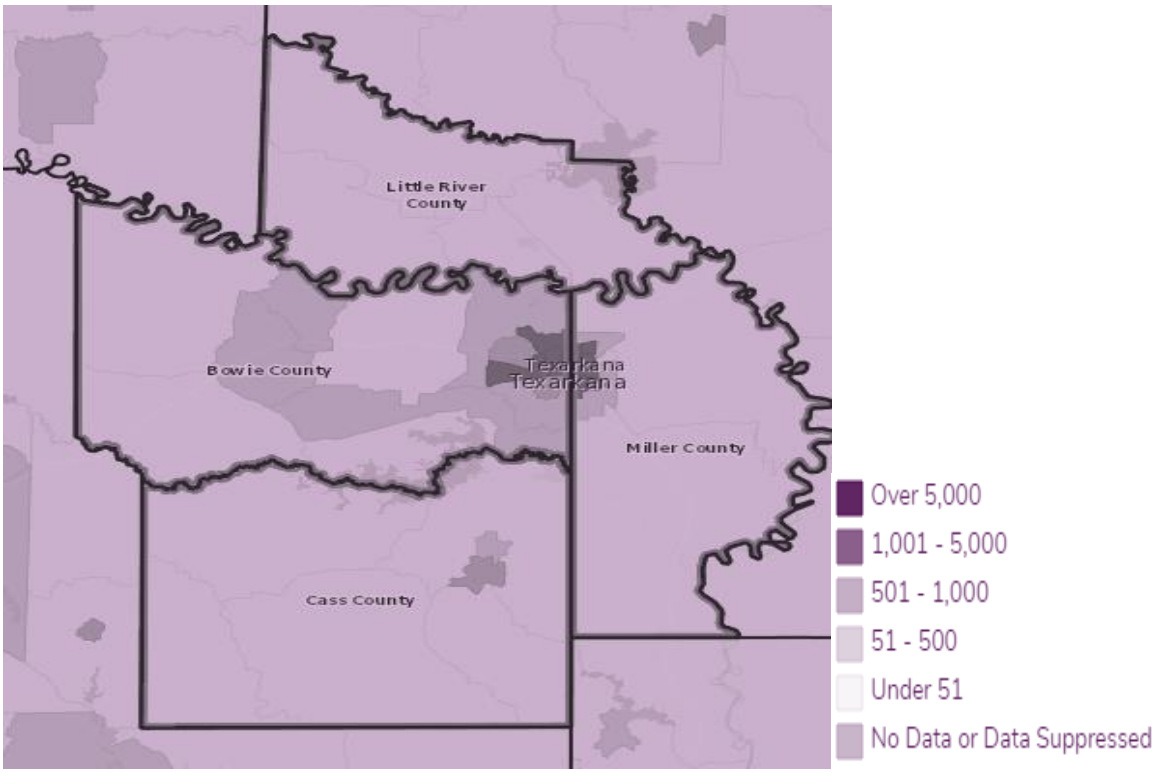

Figure 1. Population Density (Persons per Square Mile)

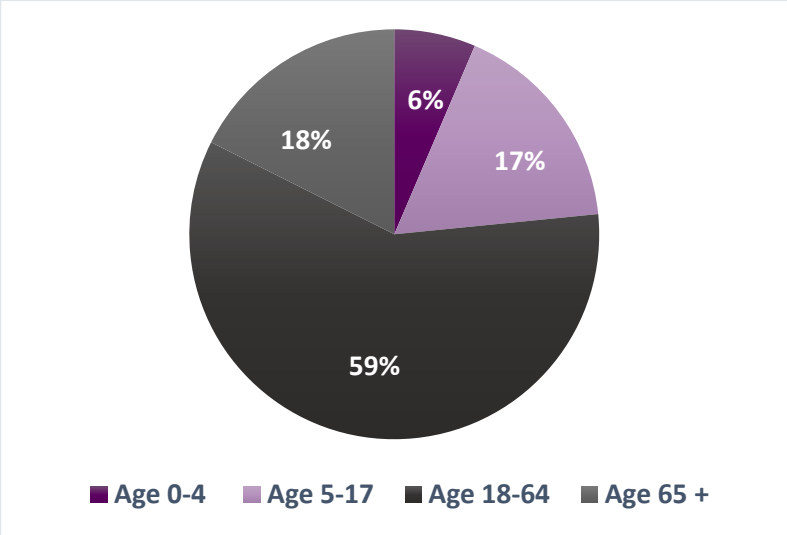

Figure 2. Report Area Population by Age Groups

Individuals between ages 18 and 64 (working-aged adults) constitute 59% of total population. Of the remaining population, 18% are ages 65 and older, 17% are school age children, and 6% are in infancy or early childhood (Figure 2). Overall, the population ages 65 and older is slightly higher than that of the population of Texas (12%) but similar to that of Arkansas (17%). Cass (22%) and Little River (21%) Counties have an even higher population above age 65.

Compared to Texas and Arkansas, the population in the report area has a greater proportion of Black residents and a lower proportion of Hispanic residents (Table 2). Whereas Non-Hispanic (NH) Blacks constitute 23% of the population in the report area, they are only 12% and 15% of the Texas and Arkansas populations, respectively. The Hispanic/Latino population in the report area more closely resembles that of Arkansas than that of Texas — just over 5% of the report area is Hispanic/Latino, compared to 7% of Arkansans and 39% of Texans. The NH-Asian, NH-Native Hawaiian/Pacific Islander and NH-Native American/Alaska Native categories each comprise less than 1% of the report area population. The report area population is virtually evenly distributed by gender (50% male, 50% female), mirroring the gender distribution of Texas and Arkansas.

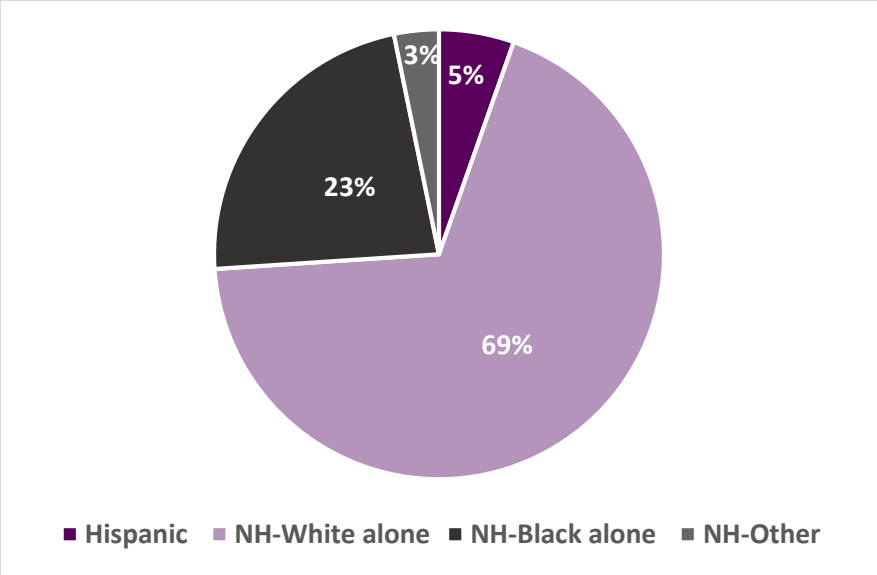

Figure 3- Report Area Population by Race and Ethnicity

Race and Ethnicity	Report Area	Texas	Arkansas	United States
Hispanic (%)	5.4	38.6	7.0	17.3
NH- White alone (%)	68.6	43.4	73.4	62.0
NH - Black alone (%)	22.8	11.6	15.4	12.3
NH- American Indian and Alaska Native alone (%)	0.6	0.2	0.5	0.7
NH - Asian alone (%)	0.6	4.3	1.4	5.2
NH - Native Hawaiian and Other Pacific Islander alone (%)	0.0	0.1	0.2	0.2
NH - Some other race alone (%)	0.0	0.1	0.1	0.2
NH - Two or more races (%)	1.9	1.6	2.0	2.3

Table 2. Report Area Population by Race and Ethnic Breakdown

SOCIAL AND ECONOMIC ENVIRONMENT

Consolidated median income data for the report area is not available, but county-level data show that Bowie County has a median annual family income just over $4,200 higher than Little River County ($51,925 compared to $47,682), which in turn is higher than Miller ($50,961) and Cass County ($50,017). This income level is on par with the statewide median income of Arkansans ($53,123), but substantially lower than Texas' median family income ($64,585).

Poverty is fairly widespread in the report area, with 43% of report area residents earning annual incomes at or below 200% FPL. According to 2019 federal guidelines, 200% FPL corresponds to an income of $51,500 per year for a family of four.[12]

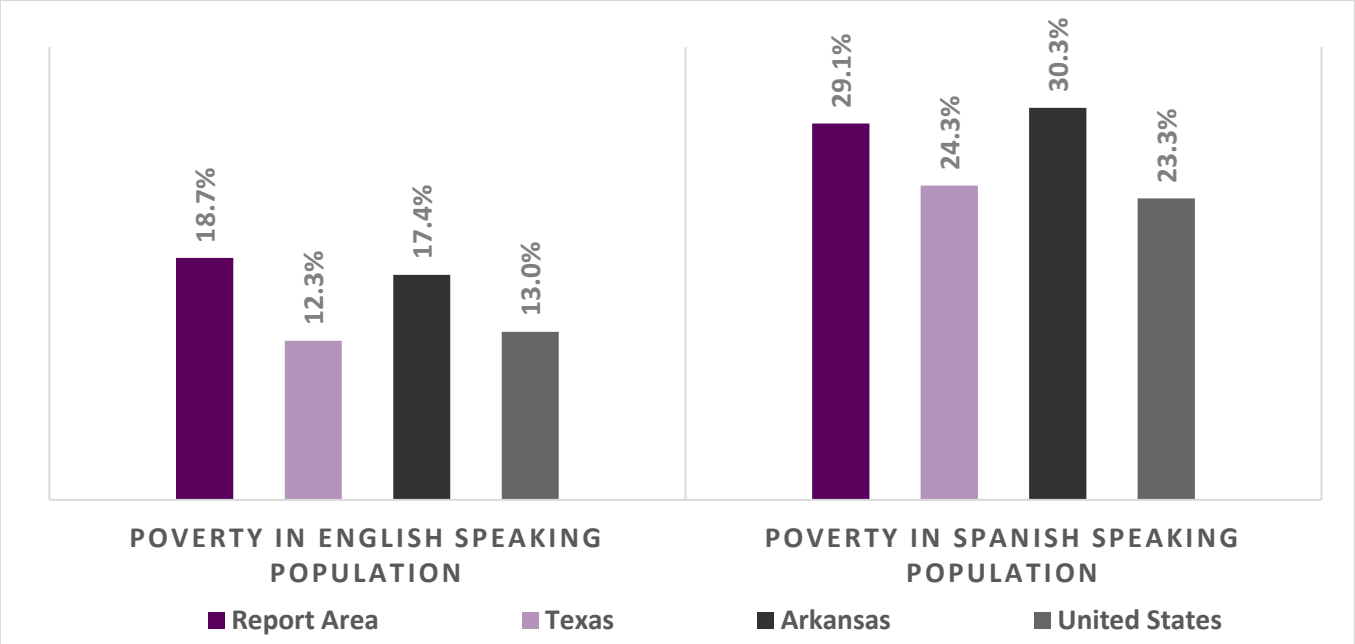

Figure 4. Poverty Distribution by Language

[12] Office of the Assistant Secretary for Planning and Evaluation. (2019). US Poverty Guidelins Used to Determine Financial Eligibility for Certain Government Programs. Available at https://aspe.hhs.gov/poverty-guidelines

County information was available for poverty by Spanish- versus English-speaking populations (Figure 4). Spanish-speaking populations have higher poverty rates on average than English-speaking populations. However, the high report area poverty rate for Spanish-speakers masks a significant disparity. Spanish-speaker poverty rates for three counties in the report area are similar to rates for Texas and Arkansas; however, the rate for Little River County is much higher at 65%.

Compared to both states, the report area's unemployment and food insecurity and rates are substantially higher. Unemployment is marginally higher in the report area (5.6%) than Texas' overall unemployment rate (4.2%), and Arkansas' (4.0%). Twenty-two percent of report area residents experience food insecurity (i.e., uncertainty about whether they will be able to get enough nutritious food at some point during the year) compared to about 15% of Texas residents and 17% of Arkansas residents.

Figure 5. Socioeconomic Characteristics of Report Area

Overweight, obesity and chronic disease have remained consistent areas of need within the CSMHS report area, and food insecurity can create barriers for individuals who need to manage their weight and nutrition. Feeding America measures food insecurity and defines it as a lack of consistent access to enough food for an active, healthy life. According to this measure, 22% of the report area was considered food insecure in comparison to Texas at 15% and Arkansas at 17%, respectively.

Figure 5 provides a comparative summary chart of socioeconomic indicators for the report area and the states of Texas and Arkansas. Notwithstanding higher rates of poverty, food insecurity, and unemployment, the report area's rate of high school completion stands out. Although Texas and Arkansas have lower high school graduation rates than the US, the report area's graduation rate is on par with the US graduation rate. Eighty seven percent of residents in the report area have a high school degree or higher. However, the college graduation in the report area of 22% is significantly lower than the Texas and Arkansas graduation rate at 35% and 28%, respectively. When broken down by further, Little River County's rate is 17%.

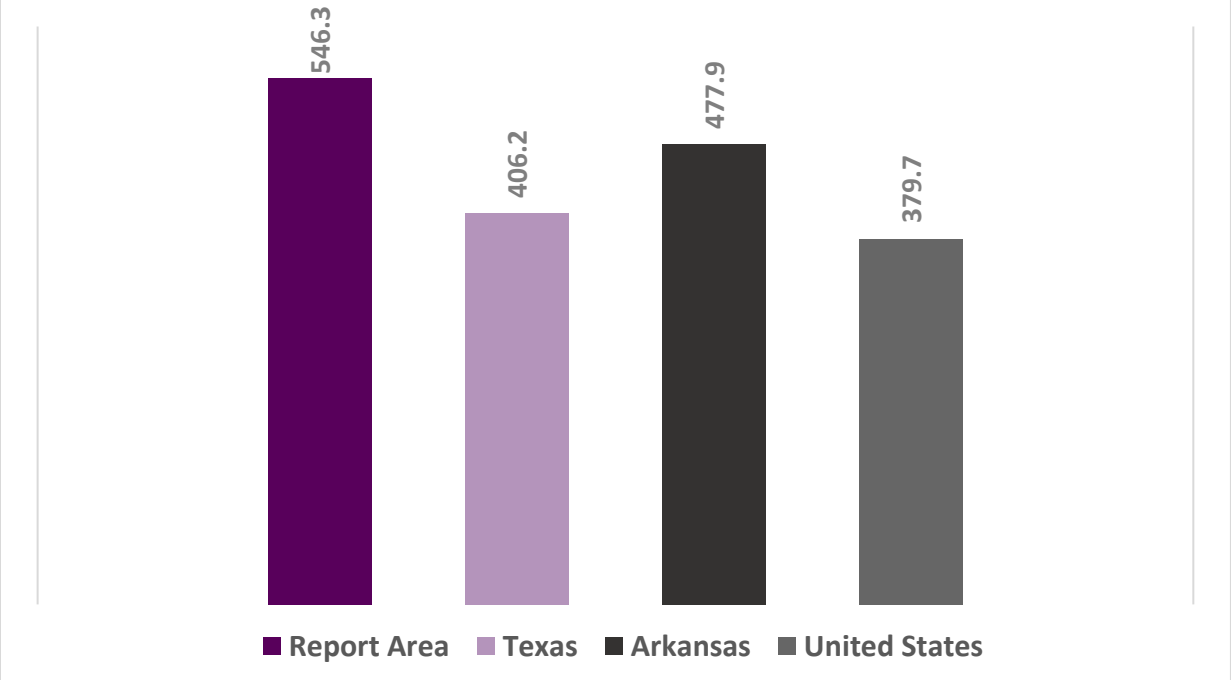

Figure 6. Violent Crime Rate per 100,000 Population

Community safety represents an environmental indicator with implications for population health, including mental health. Violent crime (defined as homicide, rape, robbery, and aggravated assault) occurred in the report area at a rate of 546.3 violent crimes per 100,000 population, substantially in excess of the overall violent crime rates in Texas (406.2 per 100,000 population) and Arkansas (477.9 per 100,000 population) (Figure 6). Within the report area, substantial disparities in violent crime appear by county. Miller and Bowie Counties have much higher than average crime rates (775.2 and 553.8 per 100,000 population, respectively), while Little River and Cass Counties have much lower than average crime rates (238.9 and 324.0 per 100,000 population, respectively).

A majority of key informant interview responses noted a high prevalence of chronic poverty. This was coupled with low employment opportunities and recent job layoffs from the Red River Army Depot and Harte Hanks Call Center. It was also noted that there was a lack of transportation, high teenage pregnancy, and a significant homeless population within the community.

ACCESS TO HEALTH CARE

Access to health care is a key component of maintaining and improving overall health. The Institute of Medicine identifies three essential steps in attaining access to care: gaining entry into the health care system, finding access to appropriate sites and types of care, and developing relationships with providers who meet patients' needs and whom patients can trust.[13] For many, health insurance represents not only a ticket into the health care system, but an assurance that the cost of most health services will remain affordable to them.

[13] Institute of Medicine. (1993). Access to health care in America. Committee on Monitoring Access to Personal Health Care Services. Washington, DC: National Academy Press.

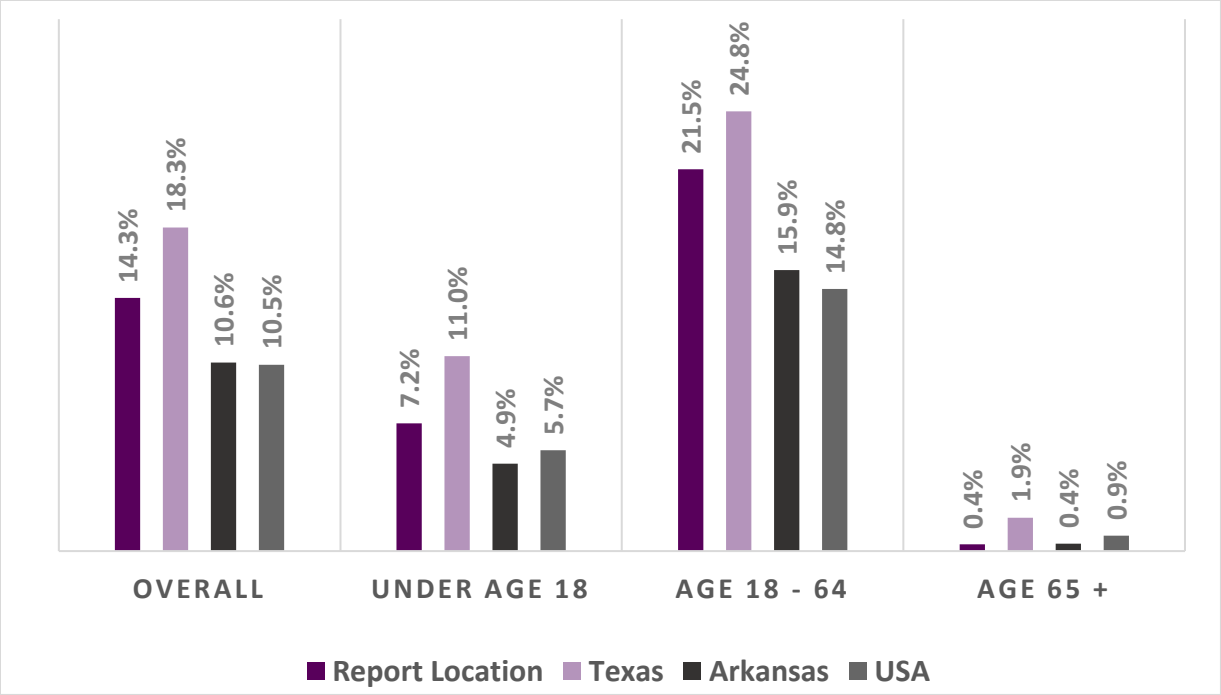

Figure 7. Uninsured Rate in Report Area, Overall and by Age Group

In the CSMHS report area the overall uninsured percentage of 14% falls between Texas' uninsured percentage of 18% and Arkansas' uninsured percentage of 11%. Less than 1% of elderly adults in the area are uninsured due to the availability of Medicare coverage for this age group. In contrast, nearly 1 in 4 working-age adults in the report area are uninsured and approximately 1 in 10 children living in the report area are uninsured. The coverage differences between states can be attributed to Medicaid expansion adopted in Arkansas. It is one of the only southern states to adopt the Affordable Care Act's Medicaid expansion, using its innovative "Arkansas Works" plan to extend coverage to all non-elderly adults with incomes below <138% FPL. At the time of this writing, Texas remains among the 14 states that have declined to expand Medicaid.[14]

[14] Kaiser Family Foundation. (2019). Stat of state action on the Medicaid expansion decision. Available at: https://www.kff.org/health-reform/state-indicator/state-activity-around-expanding-medicaid-under-the-affordable-care-act/?currentTimeframe=0&sortModel=%7B%22colId%22:%22Location%22,%22sort%22:%22asc%22%7D

Health insurance is just one component of access to care and does not guarantee access even to those who have it. Without an adequate supply of local health care providers, the health system will not have the capacity to accommodate all patients who need care, regardless of insurance status. Higher numbers of residents per provider in an area, the population to provider ratio, is an indicator of fewer providers available for the population in a region.

Differences in access to providers can be seen when comparing population to provider ratios across report area rural and urban counties. The more urban counties of Bowie and Miller have population to provider ratios similar to their respective states' ratios (Figure 7). Cass and Little River, however, have much larger population to provider ratios, specifically for primary care and mental health providers. Little River County has the highest mental provider ratio in the state of Arkansas at 12,450 individuals per provider. Note, however, that these ratios say nothing about the level of need for the services and many rural counties rely on close by urban areas.

Geography	Primary Care Physicians	Mental Health Providers	Dental health providers
Little River County, AR	4160:1	12450:1	2490:1
Miller County, AR	1830:1	470:1	2740:1
Bowie County, Texas	1410:1	1140:1	1960:1
Cass County, Texas	3790:1	10130:1	3380:1
Arkansas	1520:1	1010:1	2220:1
Texas	1670:1	490:1	1790:1

Table 3. Population to Healthcare Provider Ratio

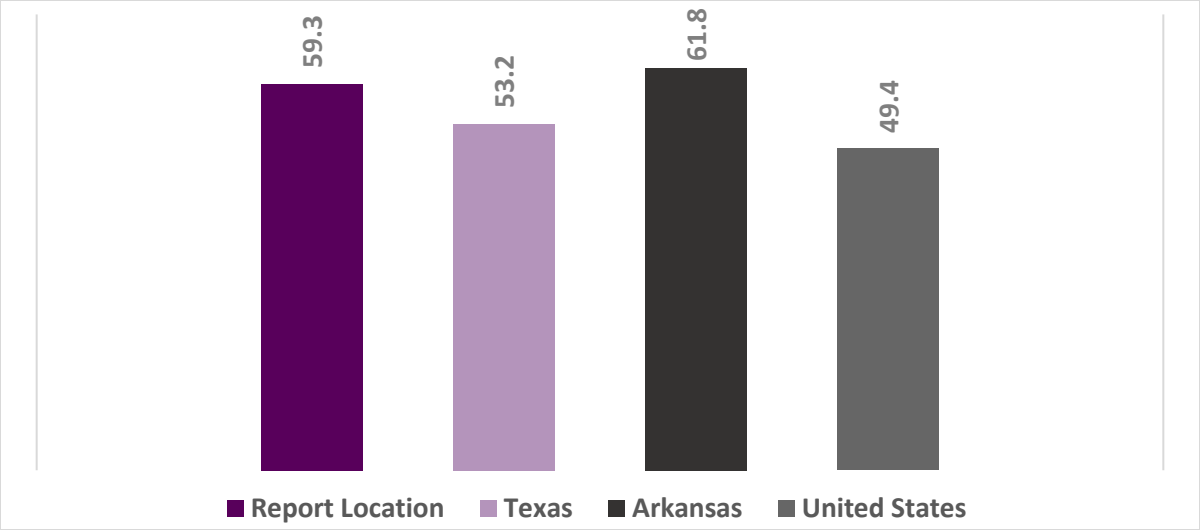

Figure 8. Preventable Hospital Admissions (per 1,000 Medicare Enrollees)

Among residents of the report area, nearly one in three (32%) were classified as having a shortage of primary medical care, dental or mental health professionals. This percentage is in between Texas at 17% and Arkansas at 46%. Health professional shortages and high population to provider ratios tell half the story, however. Excess needs for the services of a provider (e.g., high rates of dental canaries) alongside the lack of access to the provider (e.g., dentists) provides greater certainty of health needs.

Primary care access barriers are a concern due to the potential for minor, treatable health conditions to worsen in severity, leading to avoidable hospital visits and potential overuse of costly emergency department services. Preventable hospital stays are defined as hospital visits for conditions that could have been prevented if adequate primary care resources were available and accessed by those patients. These preventable visits numbered 59.3 per 1,000 Medicare enrollees in the report area, similar to the 61.8 preventable hospital events per 1,000 Medicare enrollees in Arkansas and 53.2 preventable events per 1,000 Medicare enrollees in Texas (Figure 8).

Texarkana is a city that is split between two healthcare philosophies.

--Key Informant

I've had people tell me that they have a two year waiting period before they can even get in to see someone and if they don't have any type of medical coverage at all, such as Medicaid and Medicare or private insurance. They were just kind of lost out there.

--Key Informant

Stakeholders identified access to care issues as some of the community's most urgent needs. There was a consensus that having two different healthcare systems for the city creates unique challenges and as one key informant interviewee said, "Texarkana is a city that is split between two healthcare philosophies." This has created difficulties in regards to state hospital admissions and Medicaid/Medicare reimbursements. Even though Arkansas has expanded Medicaid, the access to care is higher on the Texas side.

Limited access to specialty care such as surgical oncology, neurology and indigent gynecology services was also noted. Travel is often necessary for these services which is a significant barrier to care. Many others stated as well that consumers may not have the awareness, knowledge, or skills to navigate the system and use the available resources to their maximum benefit. In both the focus group and key informant interviews it was noted that a need for increased patient awareness was needed for private free-standing emergency rooms since they do not accept Medicaid, Medicare, or Tricare (military insurance).

HEALTH OUTCOMES

Physical Health

County	Diabetes Prevalence (%)	Poor Physical Health (Days)
Little River County, AR	14	4.9
Miller County, AR	12	4.8
Bowie County, Texas	13	3.9
Cass County, Texas	15	3.7
Texas	10	3.5
Arkansas	13	5

Table 4. Diabetes Prevalence and Poor Physical Health in Report Area

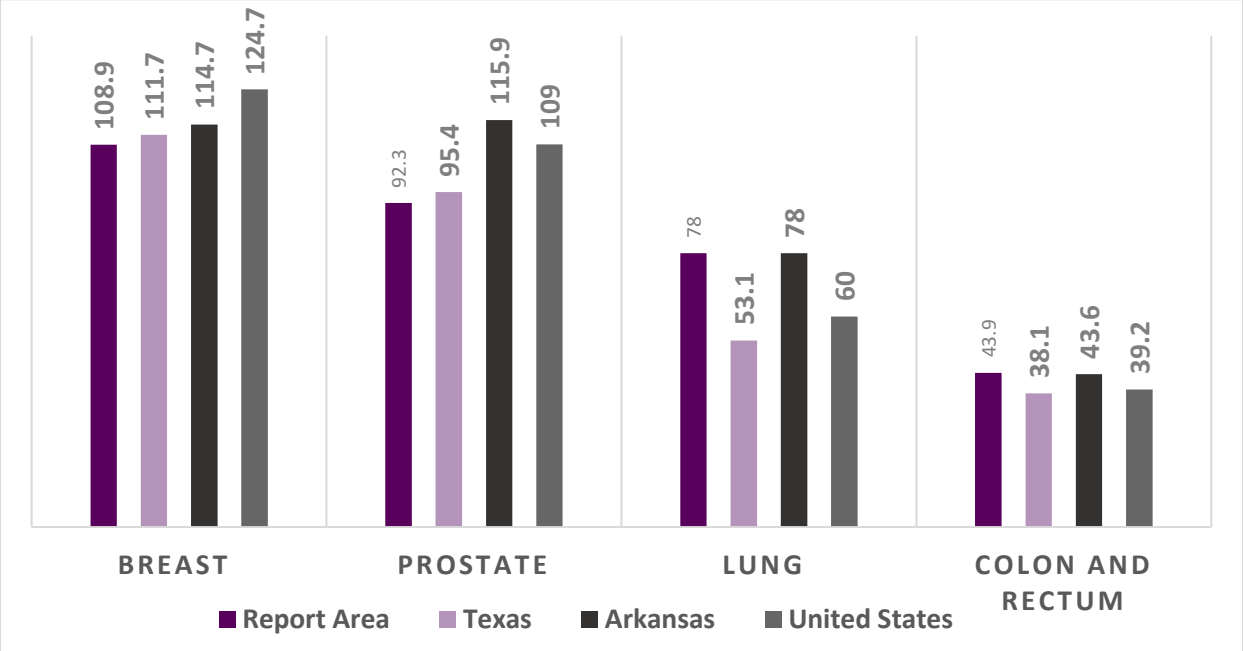

Figure 9. Age-adjusted Cancer Incidence per 100,000 Population, by Type

Among all types of cancer, breast cancer has the highest incidence in the report area at 108.9 per 100,000. The incidence of breast and prostate cancers in the report area are lower than those in both states and the US (Figure 9). The largest differences observed are in the

incidence of lung cancer and cancers of the colon and rectum. Incidence rates for these cancers mirror those in Arkansas. Compared to Texas, cancer mortality is also substantially elevated among residents in the report area. There are 36 more cancer deaths per 100,000 population in the report area than in the state of Texas (Figure 10). Cancer mortality in the report area is, however, comparable to cancer mortality in Arkansas.

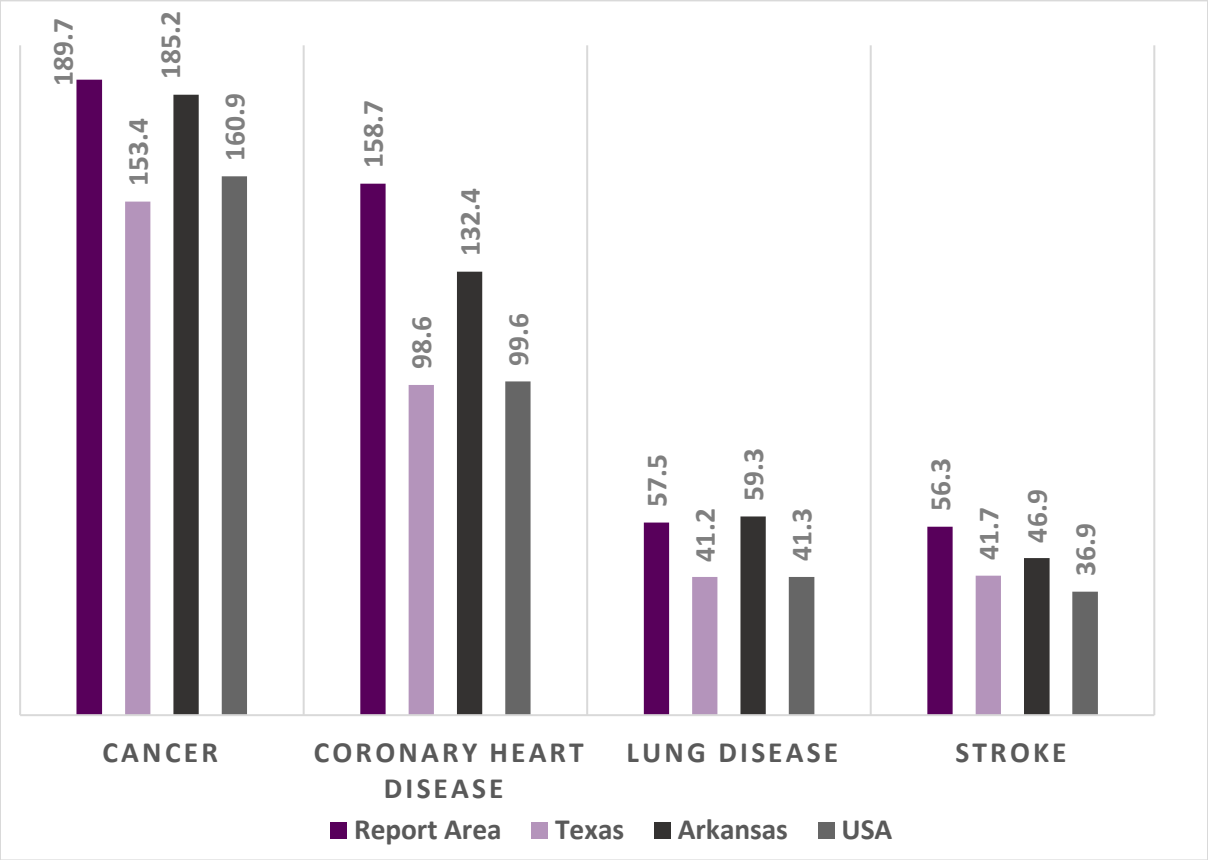

Figure 10. Age-adjusted Mortality Rate for Selective Diseases per 100,000 Population

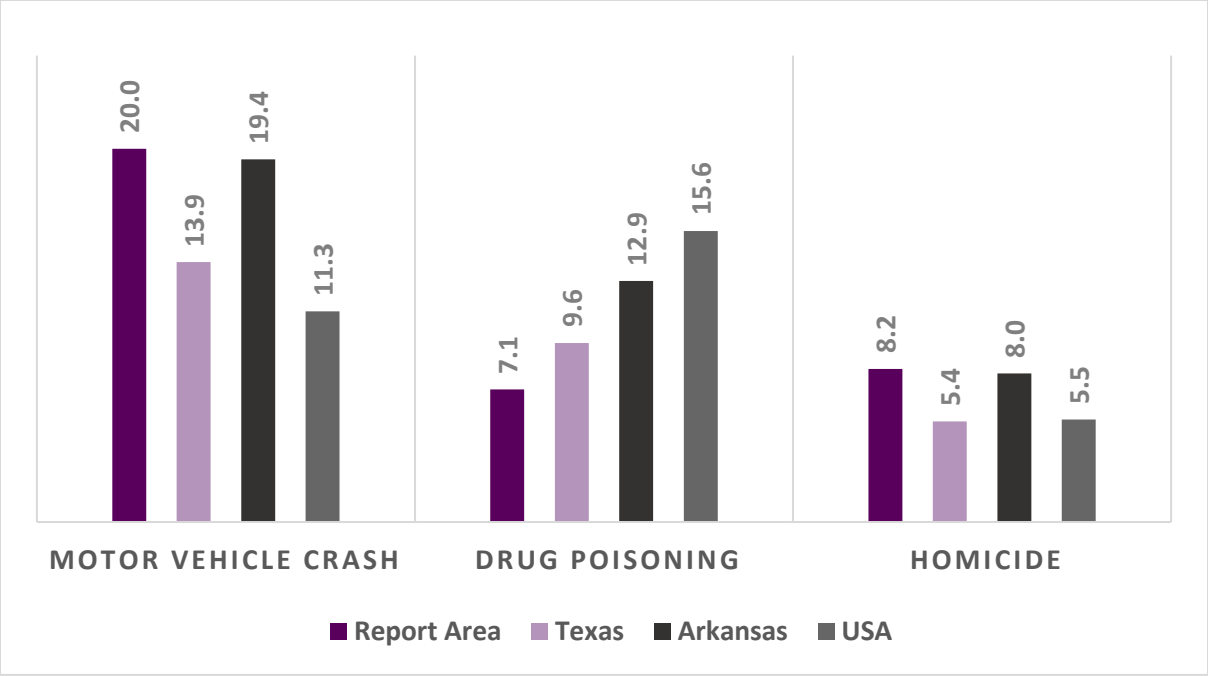

Figure 11. Age-adjusted Mortality Rate per 100,000 Population, by External Cause

Age-adjusted mortality from numerous other causes is elevated in the CSMHS report area as well (Figure 10). Heart disease is the second leading cause of mortality in the report area — 158.7 deaths per 100,000 in the report area versus 98.6 and 132.4 deaths per 100,000 in Texas and Arkansas, respectively. Along with cancer and heart disease, stroke and lung diseases are also leading causes of mortality, both of which have higher incidences than Texas but on par with the Arkansas. Motor vehicle crashes and homicides also contribute to high overall mortality in the report area (Figure 11).

Perhaps more than any other issue, stakeholders consistently noted the challenges associated with chronic disease. Diabetes, heart disease, hypertension and cancer were raised numerous times throughout the key informant interview process and focus group. Community members stressed the importance of educating the patient in regards to managing chronic illnesses and how to navigate the health care system. As well as increasing community collaboration and outreach in order to provide members of the community with this education.

I have seen blood pressure so high that I was scared to let them go. And I even had one man say, I'll let you take my blood pressure if you promise you won't make me go to the hospital.

--Key Informant

Mental and Behavioral Health

The burden of morbidity and mortality resulting from mental illness represents a significant and growing concern among the report area. After age adjustment, approximately 19.0 people per 100,000 population in the report area die of suicide, compared to 17.7 deaths by suicide per 100,000 population in Texas and 22.9 in Arkansas (Figure 12). The suicide rate among report-area males (30 per 100,000) is 50% higher than the suicide rate overall, suggesting strong variation by gender (a comparison point for report-area females is not available). Males die by suicide at a rate approximately four times higher than that of females in Arkansas, Texas, and the nation. Suicide risk is particularly elevated among older adults, which comprise a large and growing proportion of the report area population. Depression, a major risk factor for suicide, affects 16.9% of Medicare beneficiaries in the report area, nearly identical to rates of depression among Medicare beneficiaries across the states of Texas and Arkansas (Figure 13).

Mental and behavioral health is considered the number one community health need. Stakeholders discussed at great length the lack of available inpatient and outpatient treatment options, long wait times. In tandem with these discussions were conversations about high drug use, particularly meth, opioid and crack, along with trauma within families that with physical, sexual, and mental abuse.

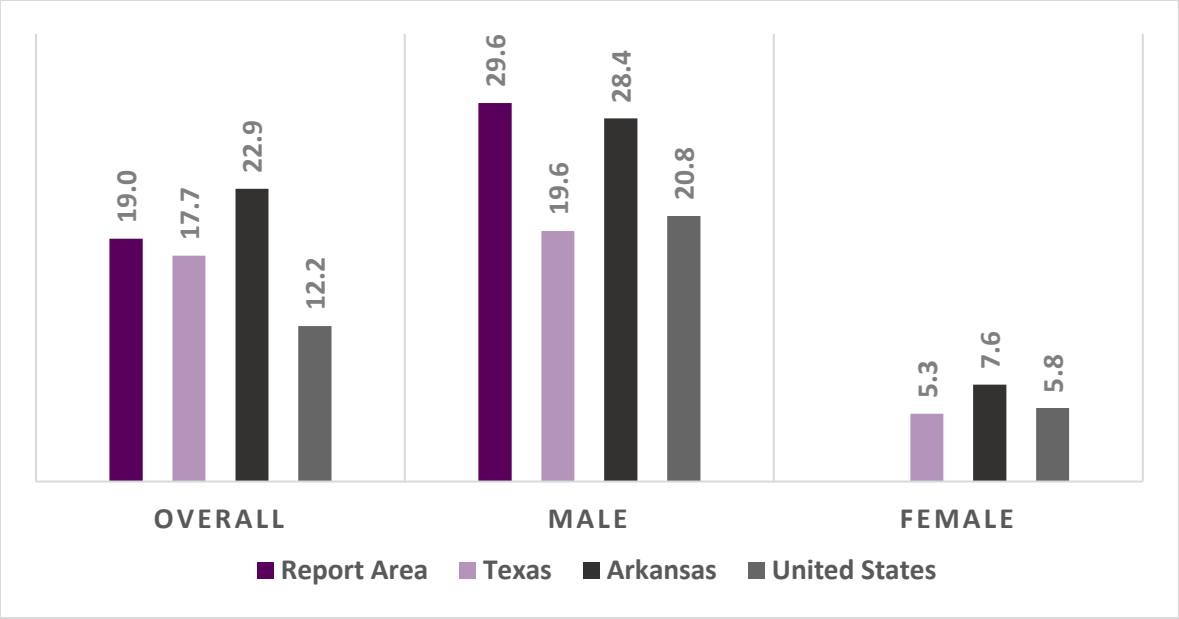

Figure 12. Age-adjusted Suicide Mortality Rate per 100,000 Population, Overall and by Gender

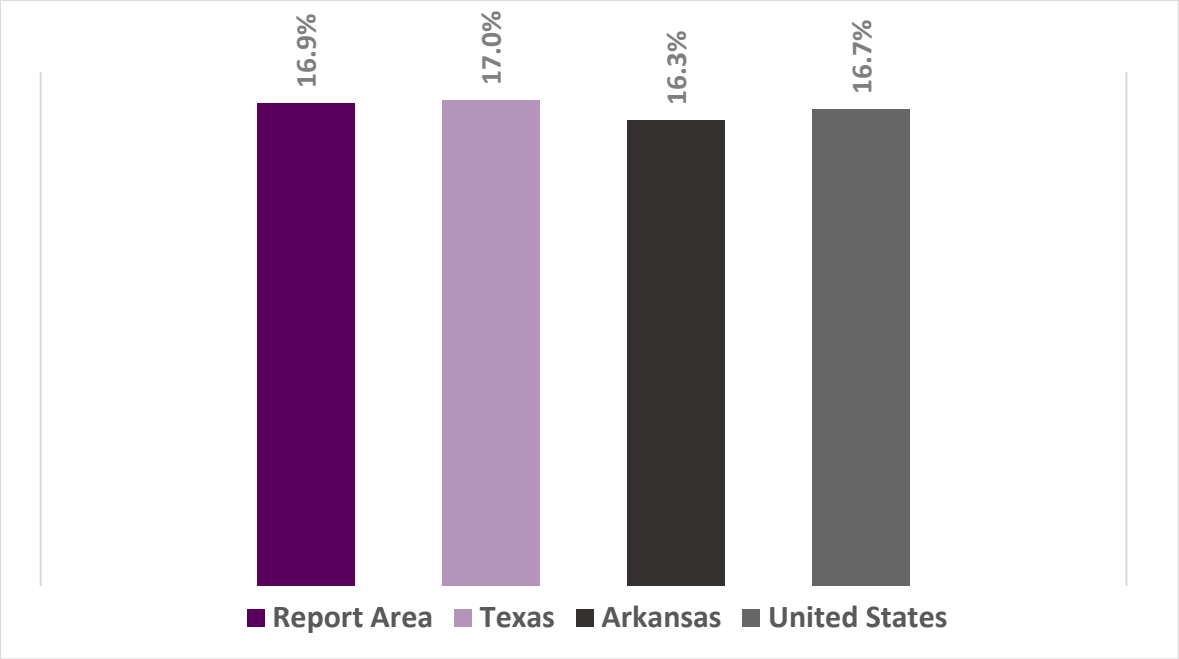

Figure 13. Prevalence of Depression among Medicare Beneficiaries

MATERNAL AND CHILD HEALTH

Healthy People 2020 stresses the role of maternal, infant, and child health as a key driver of overall population health and wellness. Delaying childbearing into adulthood decreases the likelihood of perinatal and postnatal complications, including low birth weight, disability, and infant mortality.[15] Over the long term, children born to teen parents are less likely to be prepared for kindergarten, have lower educational attainment and high school completion rates, and exhibit higher rates of social, emotional, and behavioral problems.[16]

Geography	Infant Mortality per 1,000 Live Births	Teen Birth per 1,000 Female Population Ages 15-19 Years	Low Birth Weight Percentage (< 2500 grams)
Little River County, AR	NA	41	9.0%
Miller County, AR	9	60	7.0%
Bowie County, Texas	8	57	9.4%
Cass County, Texas	NA	50	8.4%
Arkansas	8	44	9.0%
Texas	6	41	8.0%

Table 5. Maternal and Child Health

Teen births by each county in the report area, defined as births to mothers age 15-19, occur at a rate higher than the Texas and Arkansas rate except for Little River County (Table 5). The highest rate can be seen in Miller County at 60 teen births per 1,000 compared to Texas at 41 teen births per 1,000 and Arkansas at 44 teen births per 1,000.

The infant mortality rate is only available for the larger counties in the report area and is similar to Texas and Arkansas overall, while the percentage of infants born with low birth

[15] Healthy People 2020. (2014). Maternal, infant, and child health. Available at: http://www.healthypeople.gov/2020/topicsobjectives/topic/maternal-infant-and-child-health

[16] Youth.gov. (2016). Adverse effects of teen pregnancy. Available at: http://youth.gov/youth-topics/teen-pregnancyprevention/adverse-effects-teen-pregnancy

weight in the report area slightly exceeds rates observed across the reference states (Table 5).

HEALTH BEHAVIORS

Geography	Adult Obesity	Physical Inactivity	Excessive Drinking	Adult Smoking	Insufficient Sleep
Little River County, AR	38%	37%	13%	20%	36%
Miller County, AR	24%	38%	13%	21%	37%
Bowie County, TX	35%	33%	17%	18%	36%
Cass County, TX	33%	29%	17%	16%	32%
Arkansas	35%	32%	16%	24%	34%
Texas	28%	24%	19%	14%	33%

Table 6. Health Behavior Indicators

Residents in the report area describe a wide variety of unhealthy behaviors as highly prevalent. Table 6 displays comparative prevalence rates of select health behaviors within the report area, Texas and Arkansas. Rates of obesity, physical inactivity, and tobacco use in the report area all exceed the rest of the Texas by as much as 14%, and tend to be similar to the rates observed in Arkansas overall. The proportion of residents reporting heavy alcohol consumption (more than two drinks per day on average for men and more than one drink per day on average for women) was in between Texas and Arkansas for each county in the report area.

Of note, many of the counties in the report area have significantly higher prevalence of physical inactivity than both reference states. For example, Miller County's prevalence of physical inactivity is 38% compared to Texas and Arkansas at 24% and 32%, respectively.

HOSPITAL DATA

The CHRISTUS St. Michael Health System supplied internal data from its acute care hospitals and rehabilitation center for presentation and descriptive analysis in this section. Two years of hospital admission and emergency department utilization data are provided (2017- 2018),

disaggregated by facility, ZIP code, service line, and source of payment. For ZIP code, service line, and payment type, selected options reported at the greatest frequency and/or determined to be of interest are displayed in this report, as opposed to the full tabulation. Overall, the hospital data reveal a clear disproportionality in emergency department use compared to hospital admissions (Table 7; Figure 14). While some inherent differences may be expected, the frequency of emergency department visits overwhelmingly exceeded the frequency of hospital admissions over the data collection period. Emergency department visits exceeded hospital admissions by a ratio of 4.4 to 1 for the main CHRISTUS St. Michael hospital.

While further analysis is needed to determine what may be driving utilization trends in the report area, disproportionate emergency department use can indicate a high number of patients cycling in and out of the emergency department. Such patterns may highlight concerns regarding overuse and/or misuse of emergency services within the report area. Data presented in Figure 8 show a relatively high rate of avoidable hospital events in the report area, further supporting the notion that use of the emergency department for non-emergent or preventable needs may be a system-wide concern. Individuals who make frequent visits to the emergency department are likely to have lower incomes, be managing multiple chronic conditions, and report poorer health status — all important factors to consider when planning interventions for populations who may need assistance managing their health in settings other than the emergency department.[17]

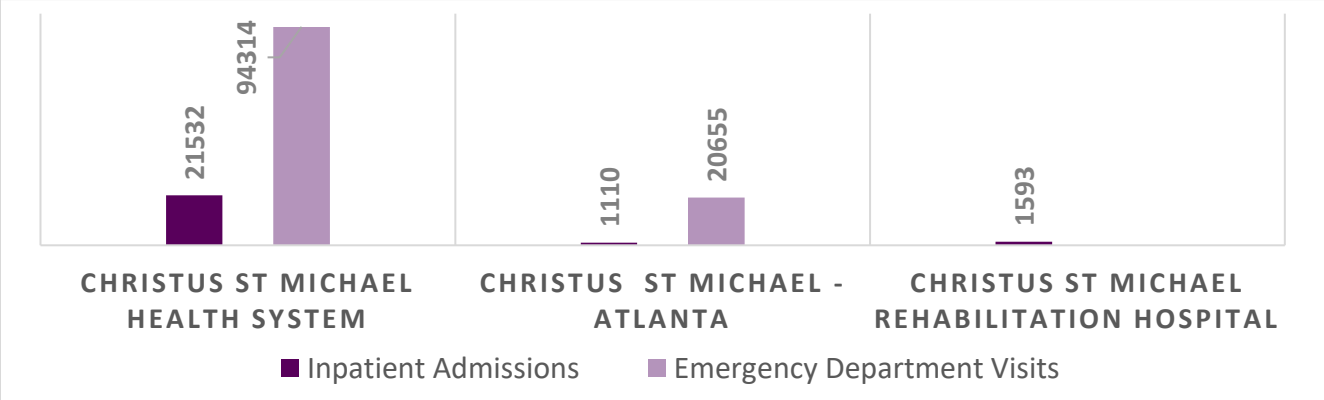

Figure 14. Total Inpatient Admissions and Emergency Department Visits by Facility (2017-2018)

Facility	Inpatient Admissions			Emergency Department Visits		
	FY2017	FY2018	Total	FY2017	FY2018	Total
CHRISTUS St. Michael Hospital - Atlanta	589	521	1110	10172	10483	20655
CHRISTUS St. Michael System	10442	11090	21532	46456	47858	94314
CHRISTUS St. Michael Rehabilitation Hospital	859	734	1593	-	-	-

Table 7. Inpatient Admissions and Emergency Department Visits by Facility

ZIP Codes	CHRISTUS St. Michael System		CHRISTUS St. Michael Hospital - Atlanta	
	FY2017	FY2018	FY2017	FY2018
75501	13722	14002	179	137
71854	10126	10399	87	89
75503	7060	7492	74	56
75570	2623	2767	25	17
75551	1327	1282	4615	4870

Table 8. Top Five ZIP Codes for Emergency Department Visits

Table 8 highlights some variation in emergency department utilization by ZIP code. For the two year period, two-thirds of visits to the CHRISTUS St. Michael emergency department originate from three report ZIP codes, all clustered around the city center of Texarkana: 75501 (southwest Texarkana, Texas), 71854 (east Texarkana, Arkansas), and 75503 (northwest Texarkana, Texas). For 2017-2018, 75551 constitutes nearly 50% of ER visits to the CHRISTUS St. Michael Hospital Atlanta emergency department.

	Inpatient Admissions		Emergency Department Visits	
Rank	Service Line	Proportion (%)	Service Line	Proportion (%)
1	General Medicine	15.1	General Medicine	21.2
2	Cardiology	12.1	Cardiology	11.5
3	Pulmonary Medicine	10.7	Ear, Nose and Throat	11.5
4	Obstetrics	9.9	Gastroenterology	11.5
5	Neurology	7.0	Orthopedics	10.7

Table 9. Services Provided During Inpatient Admissions and Emergency Department Visit[17]

General medicine represents the most frequent type of clinical service delivered both for patients admitted to the hospital and for those seeking care in the emergency department (Table 9). Cardiovascular disease ranks as the second most common type of clinical service for admitted patients and emergency department visits, an observation that may be closely linked to the relatively high rates of obesity, physical inactivity, and smoking identified in the report area and presented in Table 6. Obstetrics is a service line unique to hospital inpatients admissions in these data as well as pulmonary medicine and neurology, while emergency department patients are more often receiving ear, nose, and throat care, gastroenterology, and orthopedics services.

Insurance Type	Inpatient Admissions	Emergency Department Visits
Medicare	51%	32%
Medicaid	19%	30%
Private	20%	16%
Self Pay	5%	18%
Other	5%	4%

Table 10. Payment Source for Inpatient Admissions and Emergency Department Visits[18]

[17]Peppe, E. Mays, JW, and Chang, HC (2007). Characteristics of frequent emergency department users. Kaiser Family Foundation, Available: http://kaiserfamilyfoundation.files.wordpress.com/2013/01/7696.pdf.

Table 10 presents the proportion of patients paying with select payment types, includes Medicare, Medicaid, Self-pay, and Private. Not presented are data on patients enrolled in certain types of public insurance (e.g., CHIP, TRICARE). Differences in the payer mix between the admitted patient population and users of emergency care are clearly evident. Medicare pays for 51% of hospital admissions at CHRISTUS St. Michael, but only 32% of emergency department visits. Conversely, the payer mix in the emergency department is comprised of far more uninsured patients, who comprise 18% of the emergency department mix but just 5% of the admitted patient cohort.

The proportion of patients covered under Medicaid is much higher in ED vists compared to inpatient admissions (30% Vs 19%).. It is useful to consider the CSMHS Medicaid payer data in light of Texas' and Arkansas' distinct Medicaid eligibility criteria described previously: roughly one-third of the report area population are Arkansas residents, who have increased access to Medicaid, while the remaining two-thirds of the report area population who are Texas residents experience more limited access to Medicaid.

OTHER QUALITATIVE FINDINGS

In regards to the five top health needs in the community, mental health was identified as the top priority. In addition to the long wait times and lack of providers, there were many comments around the need for mental health education pertaining to available resources and what to to do when residents concerns about themselves, family members, or friends. Another key finding involved improving systems-level performance, the second ranked health need, to address general patient education and navigation in the community particularly among lower-income neighborhoods.

The report area is seeing an aging population and was ranked as the 4th highest community need. Challenges that were highlighted in the focus group and key informant interviews were elderly community members with co-morbidities, often lacking connection to resources in the community that are aimed at nutrition education, prescription management, and health care navigation.

[18] Data includes combined admission from Main and Atlanta branches.

It was stated as well that there was good capacity of primary care within the report area and a large non-profit presence actively working on helping the community. Initiatives that would be helpful moving forward would involve collaboration among major stakeholders. One such collaborative intervention would involve providing non-profits and physicians with a referral system to connect folks to either additional healthcare or care addressing social determinants of health. Appendix C contains a number potential partners and stakeholders that could be involved in addressing the health needs uncovered in this report.

MOVING FORWARD

Findings from the qualitative and quantitative data and the final prioritization of needs highlight numerous gaps, issues, and threats to population health and quality of life in Texarkana. This report has also emphasized key resources, assets, capacity, and potential opportunities that exist in the region to address the identified problems. In particular, the voice of stakeholders in the community has been core and central to the needs assessment process, contextualizing data in community realities while shaping the process and product.

The content of this report is intended to inform planning and strategy for the CHRISTUS St. Michael Health System in coming years. The findings from this CHNA report lay the groundwork for a companion Community Health Improvement Plan (CHIP) to aid the CHRISTUS St. Michael Health System in taking action to improve the health of the community it serves. A forthcoming report presenting the CHIP in detail will closely follow the release of this CHNA report, and will describe opportunities, solutions, and innovations with the potential to address critical areas of unmet need in the region.

APPENDIX A: COUNTY LEVEL DATA

Indicator Name	*Population Characteristic*	*Little River, AR*	*Miller, AR*	*Bowie, TX*	*Cass , TX*
County Population (%)	Ages 0- 4	5.6	6.8	6.4	6.1
	Ages 5-17	16.3	17.1	17.2	16.4
	Ages 18 -64	57.4	59.5	60.0	55.6
	Ages 65 +	20.7	16.5	16.3	21.8
Race and Ethnicity (%)	Hispanic	3.2	2.9	7.2	4.2
	NH- White alone	73.1	69.7	64.8	76.6
	NH - Black alone	21.0	24.9	23.9	17.4
	NH - Other	2.7	2.5	4.1	1.8
	NH- American Indian and Alaska Native alone	1.2	0.6	0.8	0.1
	NH - Asian alone	0.0	0.1	1.0	0.4
	NH - Native Hawaiian and Other Pacific Islander alone	0.0	0.1	0.0	0.0
	NH - Some other race alone	0.0	0.0	0.0	0.0
	NH - Two or more races	1.5	1.7	2.3	1.2
Poverty (%)	English Speaking Population	18.2	20.1	18.3	18.1
	Spanish Speaking Population	64.7	15.2	27.8	24.8
Socioeconomic Characteristics (%)	Unemployment	6.0	5.5	5.6	5.6
	Population Age 25+ with no Highschool Diploma	14.0	14.5	12.5	14.1
	Food Insecurity	18.3	19.6	23.0	22.7
	Population with Income below 200% FPL	45.4	43.7	42.2	42.9
Violent Crimes (Per 100000 Population)		238.9	775.2	553.8	324.0
Uninsured Population (%)	Overall	11.1	13.0	14.9	15.6
	Under Ages 18	2.0	4.9	8.1	10.0
	Ages 18-64	18.3	20.0	22.2	23.4
	Ages 65 +	0.3	0.0	0.3	1.2
Preventable Hospital Admissions (Per 1000 Medicare Enrollees)		82.9	55.5	53.1	68.1
Cancer Incidence Rate (Age Adjusted Incidences per 100000 Population per Year)	Breast	123.9	110.3	105.8	109.8
	Prostate	93.2	87.4	95.5	89.7
	Lung	79.2	80.8	77.1	76.5
	Colon and Rectum	47.2	48.7	43.8	36.8

Mortality rates (Age Adjusted Deaths per 100000 Population per Year)	Cancer	159.4	206.7	189.5	178.6
	Coronary Heart Disease	175.6	114.6	173.6	169.5
	Lung Disease	91.8	56.3	55.3	51.8
	Stroke	37.7	64.9	52.5	63.5
	Motor Vehicle Crash	NA	NA	7.1	NA
	Drug Poisoning	NA	9.1	7.8	NA
	Homicide	33.9	19.2	16.7	25.6
	Suicide	NA	14.6	19.7	22.9
Depression (%) (In Medicare Population)		16.4	15.0	18.1	16.2

APPENDIX B: KEY INFORMANT INTERVIEW PROTOCOL

[Notes to interviewer: All instructions to the interviewer are in square brackets. Do not read the statements aloud. Suggested script for interviewer appears in italics. The main questions are numbered. Interviewer should read and understand questions prior to starting the interview. Interviewer should cover all questions in protocol.

Questions phrasing is *suggested*. This is a discussion. Interviewer should phrase questions in a way that s/he is comfortable speaking.

Follow-up questions may be employed to more fully explore the topic area when applicable. If interviewer believes the concept has been covered s/he may skip follow-up questions. Probes are optional. If interviewer believes the participant has not fully engaged or answered the main or follow-up question s/he may use one or more of the "probes" to further investigate and engage the participant. These optional questions are listed below the main question stem.]

*Hello, may I please speak with **[NAME]?***
*My name is **[INTERVIEWER'S NAME]** and I am calling from the **[Texas Health Institute]. [INSERT CHRISTUS HEALTH CONTACT PERSON'S NAME]** from CHRISTUS Health gave me your information in order to participate in CHRISTUS Health's Community Health Needs Assessment. Thank you so much for offering to speak with me.*

As you may know, all non-profit hospitals are required to conduct a community health needs assessment every three years. The purpose of this assessment is for the hospital to gain an understanding of the current health status of their target area, learn about the top health needs and priorities, and to develop an action plan to address some of those health needs when possible. Part of the assessment is gathering quantitative data on health indicators from secondary analysis and the other part of the assessment process includes getting input from community residents and key stakeholders, which is why I am conducting this interview with you. Your input will be used to inform the health needs assessment and potential future action by CHRISTUS Health in your community. The interview will take a maximum of one hour.

In order to capture all of the information we talk about, I will be taking notes throughout the conversation. I will not record your name on the call; I will only start taking notes with the beginning of the questions. After the interview is completed, we will transcribe and code the interviews so that we can see if any themes arise across the multiple interviews conducted. All transcripts will be

destroyed at the end of the project, and your responses will not be tied back to you in any way; the results of the interviews will only be reported in aggregate. Are you comfortable with having the conversation recorded in this way?

[IF YES]: *Great, thank you. I will call you at* ***[DATE AND TIME].*** *I look forward to speaking with you then.*
[IF NO, THANK THE PARTICIPANT FOR THEIR TIME AND END CALL]

[START HERE FOR ACTUAL INTERVIEW]

Hello, may I please speak with ***[NAME]?***
Thank you so much for taking this time to speak with me. Do you have any questions about the assessment that we discussed during our last call? **[ALLOW TIME FOR QUESTIONS]**

[IF PREVIOUSLY AGREED TO RECORDING]: *In order to capture all of the information we talk about, I am going to take detailed notes throughout our conversation. After the interview is completed, we will review and code the interviews so that we can see if any themes arise across the multiple interviews conducted. All of your responses will not be tied back to you in any way; the results of the interviews will only be reported in aggregate. Do you agree to participate in this way?*

[IF YES, PROCEED WITH INTERVIEW]
[IF NO, THANK THE PARTICIPANT FOR THEIR TIME AND END CALL]

[BEGIN INTERVIEW]: *Thank you! I appreciate your time. Again, please remember that your responses will not be tied back to you directly so feel free to be as honest as possible. We are truly interested in hearing your opinions and ideas. You may refuse to answer any question or topic during the interview. Do you have any questions? Let's get started. I am going to begin the recording now.* **[BEGIN RECORDING]**

This is key informant interview ***[#]*** *on* ***[day, date, time]***
As we go through these questions, please answer based on your perception for the following geographies: ***{Insert Relevant Counties}*** *counties*

1. Can you please tell me a little bit about your background and how you are connected to CHRISTUS Health, if at all?

Probe: Are you a public health expert, local/county/state official; community resident; representative of CBO, faith-based organization, schools, other health setting, etc.?

Follow-up: Do you meet any of these criteria? **[Note: Participant does not necessarily have to meet any of these to participate]**

[CIRCLE ALL THAT APPLY]

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
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.

COMMUNITY HEALTH AND WELLNESS

2. What are some of your community's assets and strengths as related to the health and well-being of community residents?

Probe: primary and preventive health care; mental/behavioral health; social environment; any other community assets

3. What do you think are the physical health needs or concerns of your community? [free list]

Probe: heart disease, diabetes, cancer, asthma, STIs, HIV, etc.

Follow up: Who do these health needs or concerns affect the most (e.g. age groups, racial/ethnic groups, socioeconomic groups, geographic subsets, etc.)?

Follow up: Are there organizations already addressing these needs? [free list] If so, which ones? How could CHRISTUS possibly partner with or enhance the efforts of these organizations?

Follow up: These are the top 3 health needs we have identified: **[Refer to data sheet and read the corresponding top 3 health needs for the region from which the interviewee is representing].** Do you think these are primary concerns for your community?

Follow up: Are there any other needs that should be addressed?

Follow up: Are there organizations already addressing these needs? [free list] If so, which ones?

4. What do you think are the behavioral/mental health needs or concerns of your community? [free list]

Probe: suicide, depression, anxiety, ADHD, etc.

Follow up: Who do these health needs or concerns affect the most (e.g. age groups, racial/ethnic groups, socioeconomic groups, geographic subsets, etc.)?

Follow up: Are there organizations already addressing these needs? [free list] If so, which ones? How could CHRISTUS possibly partner with or enhance the efforts of these organizations?

5. What do you think are the environmental, including built environment, concerns facing your community? Not just limited to factors like air quality, these concerns can include things like access to green space, safe sidewalks or playgrounds, and reliable transportation. [free list]

Probe: Air quality, water quality, workplace related dangers, toxin/chemical exposures, transportation, green space, etc.

Follow up: Who do these health needs or concerns affect the most (e.g. age groups, racial/ethnic groups, socioeconomic groups, geographic subsets, etc.)?

Follow up: Are there organizations, assets or infrastructure (i.e. green space, parks, bike lanes, etc.) already addressing these needs? [free list] If so, which ones? How could CHRISTUS possibly partner with or enhance the efforts of these organizations?

6. Now I want you to think a little about a broader range of factors that could affect health. What do you think are the economic concerns facing your community? [free list]

Probe: Housing, employment, access to quality daycare, chronic poverty, etc.

Follow up: Who do these health needs or concerns affect the most (e.g. age groups, racial/ethnic groups, socioeconomic groups, geographic subsets, etc.)?

Follow up: Are there organizations already addressing these needs? [free list] If so, which ones? How could CHRISTUS possibly partner with or enhance the efforts of these organizations?

7. Again, thinking about other issues that could impact a person's health and well-being, what do you think are the social concerns facing your community? These could be concerns that impact a person's ability to interact with others and thrive or concerns that influence how the members of that society are treated and behave toward each other.

Probe: Neighborhood safety, violence, dropout rates, teen and unplanned pregnancy etc.

Follow up: Who do these health needs or concerns affect the most (e.g. age groups, racial/ethnic groups, socioeconomic groups, geographic subsets, etc.)?

Follow up: Are there organizations, assets or initiatives in place already addressing these needs? [free list] If so, which ones? How could CHRISTUS possibly partner with or enhance the efforts of these organizations?

BEHAVIORAL RISK FACTORS

8. What are behaviors that promote health and wellness in your community?

Probe: Exercise, healthy nutrition, etc.

Follow up: Who engages in these positive behaviors and who is impacted (e.g. age groups, racial/ethnic groups, socioeconomic groups, geographic subsets, etc.)?

Follow up: Based on your experience/ knowledge/ expertise, what could be done to facilitate that more individuals can engage in these behaviors?

9. What are behaviors that cause sickness and death in your community?

Probe: Smoking, drinking, drug use, poor diet/nutrition, lack of physical activity, lack of screening (breast cancer, diabetes, etc.), etc.

Follow up: Who engages in these risk factors and who is impacted (e.g. age groups, racial/ethnic groups, socioeconomic groups, geographic subsets, etc.)?

HEALTH CARE UTILIZATION

10. Where do members of your community go to access existing primary health care?

Probe: Can you identify the facilities and what types they are (free clinic, private doctors office)?

Follow up: Who accesses these services?

Follow up: How often do they go to these facilities?

Follow up: What are the reasons they go (preventive, chronic care, etc.)?

11. Where do members of your community go to access existing specialty care?

Probe: Can you identify the facilities and what types they are (free clinic, private doctors office)?

Probe: What types of specialty care are people in your community seeking (ie gynecology, heart specialist, dialysis, etc?

Follow up: Who accesses these services?

Follow up: How often do they go to these facilities?

Follow up: What are the reasons they go (preventive, chronic care, etc.)?

12. Where do members of your community go to access emergency rooms or urgent care centers?

Probe: Please identify these facilities:

Follow up: Who accesses these services?

Follow up: How often do they go to these facilities?

Follow up: What are the reasons they go (emergencies, preventive, chronic care, etc.)?

Follow up: Why do they go to emergency care facilities rather than primary care?

13. Where do members of your community go to access existing mental and behavioral health care?

Probe: Can you identify the facilities and what types they are (free clinic, private doctors office)?

Follow up: How often do they go to these facilities?

Follow up: What are the reasons they go (preventive, chronic care, etc.)?

ACCESS TO CARE

14. Are you satisfied with the current capacity of the health care system in your community?

Probe: Access, cost, availability, quality, options in health care, etc.

Follow up: Why or why not?

15. What are some barriers to accessing primary health care in your community? [free list]

Probe: inadequate transportation, long wait times, don't know where to go, lack of insurance, etc.

16. What are some barriers to accessing mental and behavioral care in your community [free list]

Probe: inadequate transportation, long wait times, don't know where to go, lack of insurance, stigma, etc.

17. Who are impacted by these barriers?

18. Reflecting on these barriers, what are one or two things CHRISTUS, its partners, or other organizations in the community could do to try to address these?

Those are all of the questions I have for you today. Is there anything else you would like to add before I turn of the recorder? **[ALLOW TIME FOR COMMENTS]**

Thank you very much for your time today; we really appreciate you sharing your thoughts on the current status and health needs of your community. If you have any questions about the interviews we are conducting, you can contact **[INSERT CONTACT NAME AND INFORMATION]**

Note: This interview protocol was originally designed by Texas Health Institute in Collaboration with the Louisianna Public Health Institute. Prompts and probes are tailored to the site.

APPENDIX C: COMMUNITY RESOURCES

An inventory of community resources was compiled based on key informant interviews, focus group discussions, and an internet-based review of health services in Texarkana. The list below is not meant to be exhaustive, but represents a broad sampling of feedback received from the stakeholder engagement process. The list of community resources is restricted to only those that are physically located within the report area. Several additional organizations located outside the report area may provide services to report area residents, but fall outside the scope of inclusion in this needs assessment. Similarly, many of the organizations identified in this resource compilation serve a population broader than the report area but are included here in the context of the services they offer to report area residents.

Name	Description
CHRISTUS St. Michael Health System	Two acute care hospitals in Texarkana and Atlanta, Texas, a rehabilitation hospital, imaging center, health and fitness centers, and cancer center. Level III Trauma Center and Level III Neonatal Intensive Care Unit. In Texarkana, Level IV Trauma center in Atlanta.
Wadley Regional Medical Center	Hospital system operating an emergency department, intensive care unit, surgical center, women and children's services, behavioral health unit, imaging and diagnostic services, and others. Level II Primary Stroke Center and Level III Trauma Center
CHRISTUS Health Care Center Pharmacy and Glenwood Pharmacy	Both open to the public. Health Care Center Pharmacy is located within the CHRISTUS St. Michael office building for patient convenience. Glenwood Pharmacy offers free delivery for Texarkana city residents.
Texarkana Bowie County Health Unit	Provides free or low-cost screenings and immunization services for young children and adults. Diabetes self-management education

Name	Description
	resources. Reproductive health services offered for women and men on select days of the week, including STI testing, breast examinations, nutritional counseling, pregnancy testing, and contraceptives. Administers WIC program for nutrition education and supplemental assistance.
University of Arkansas for Medical Sciences Southwest	UAMS Southwest in Texarkana is one of eight regional centers across the state. Serving as an Area Health Education Center, the campus is home to three UAMS colleges, two primary care clinics, a pediatric clinic, a family medicine residency program, a regional cancer registry, community education programs, and a comprehensive medical library. The UAMS Southwest mission: Teaching, Healing, Searching and Serving.
Harvest Regional Food Bank Texarkana	Collects food donations and distributes food throughout the community to those in need, including food insecure individuals, shelters, residential and senior/child care organizations, and group homes.
Community Health Core	Local Mental Health Authority for greater Texarkana. Manages the Regional Crisis Response Center (RCRC) to provide crisis support, interventions, admissions, and referrals 24 hours per day, 7 days per week.
Genesis Prime Care	Federally qualified health center providing primary care, pediatrics, obstetrics, behavioral health services, and dentistry. Specializing in Medicare and Medicaid patients.
Grace Clinic	Free clinic providing services to those in need on a first-come, first-serve basis.

Name	Description
Salvation Army - Texarkana	The local branch of the Salvation Army, an international movement, is an evangelical Christian social service provider. The Salvation Army operates a thrift store, offers disaster relief services, emergency housing and financial assistance, and more.
Randy Sam's Outreach Shelter	Provides safe, temporary shelter for people experiencing homelessness, averaging between 80 and 85 guests per night. Collaborates with other local agencies to provide medical assistance, substance use counseling, employment training and assistance, and more.
Miller County Health Unit	Delivers pregnancy testing, HIV/STI counseling, testing, and treatment, immunizations, select in-home services including personal care, home health, and hospice, maternity services, tuberculosis testing and treatment, breast health services, and health insurance enrollment information.
Southwest Arkansas Counselling and Mental Health Services, Inc.	Their mission is to prevent, treat and cure mental illnesses and related disorders regardless of an individual's ability to pay. Currently they serve individuals in Hempstead, Howard, Lafayette, Little River, Miller and Sevier Counties.
St. Edward Outreach Center	The Outreach Center is a part of the St. Edwards Catholic Church, striving to meet the needs of the less fortunate in the community. Daily lunches are distributed Monday through Friday. The Outreach Center contributes emergency financial assistance when funds are available.
Parish Nursing Ministry of Catholic Charities	The Parish Nursing Ministry of Catholic Charities-Diocese of Tyler is an interdenominational

Name	Description
	program, which extends the healing ministry of Jesus Christ. Currently operating in Texarkana and Atlanta, TX, Catholic Charities-Diocese of Tyler is in partnership with CHRISTUS St. Michael Health System and local churches to encourage and support ministries of health and healing.
Domestic Violence Prevention, Inc.	Domestic Violence Prevention, Inc. (DVP) is a 501C3 nonprofit that has provided services and advocacy for crime victims' rights since 1979. DVP provides services and advocacy for male and female victims of physical, mental and sexual abuse including adults, children and the elderly.
Jamisons' Center of Kindness, Inc.	Jamisons' Center of Kindness, Inc. is a 501 c (3) organization. It was founded in 2003, on the foundation of kindness, consideration, and respect for the less fortunate. They provide a meal service for the community and are diligently in the process of expanding our outreach services to meet the needs of our community.
Mission Texarkana	Mission Texarkana ministers to the residents of Texarkana by providing daily meals, food pantry items, vocational assistance, and most importantly, the gospel message of grace found in Christ Jesus.

CHRISTUS St. Michael Health System would like to thank residents and stakeholders from the community who contributed to this Community Health Needs Assessment.