



Community Health Needs Assessment **2023-2025**



Table of Contents

Executive Summary	2
IRS Form 990, Schedule H Compliance	2
Health Need Priorities	3
Introduction: What is a Community Health Needs Assessment?	4
CHRISTUS St. Michael Health System Overview	5
Community Benefit	5
CHRISTUS St. Michael Health System Service Area	5
CHNA Process	7
Stakeholder Engagement	7
Data Collection	8
Community Resident Surveys	8
Community Focus Groups and Key Informant Interviews	10
Secondary Data	11
Data Needs and Limitations	12
Consideration of COVID-19	13
CHNA Results	15
Demographic Characteristics	15
Overall Community Input	20
Social and Structural Determinants of Health	22
Access to Care	30
Food Access	35
Violence and Community Safety	37
Health Data Analysis	38
Health Outcomes: Morbidity and Mortality	38
Chronic Disease	38
Maternal Health	41
Mental Health	42
Leading Causes of Death	43
Hospital Utilization	54
Conclusion	57
Appendix 1: Evaluation of Community Health Improvement Plan (CHIP) Activities	59
Appendix 2: Primary Data Tools	66
Appendix 3: Data Sources	78

Executive Summary

CHRISTUS St. Michael Health System, which includes St. Michael Health System – Texarkana and CHRISTUS St. Michael - *Atlanta*, conducted a Community Health Needs Assessment (CHNA) to assess the greatest community health needs. The CHNA guides the hospital in selecting priority health areas and where to commit resources that can most effectively improve community members' health and wellness. To complete the 2023-2025 CHNA, CHRISTUS St. Michael Health System partnered with Metopio, health departments and regional and community-based organizations. The CHNA process involved engagement with multiple stakeholders to prioritize health needs. Stakeholders also worked to collect, curate and interpret the data. Stakeholder groups provided insight and expertise around the indicators to be assessed, types of focus group questions to be asked to the community, interpretation of results and prioritization of areas of highest need. Primary data for the CHNA was collected via community input surveys, resident focus groups and key informant interviews. The process also included an analysis of secondary data from federal sources, local and state health departments and community-based organizations.

IRS Form 990, Schedule H Compliance

For non-profit hospitals, a CHNA also serves to satisfy certain requirements of tax reporting, pursuant to provisions of the Patient Protection & Affordable Care Act of 2010. To understand which elements of this report relate to those requested as part of hospitals' reporting on IRS Form 990 Schedule H, the following table cross-references related sections.

SECTION	DESCRIPTION	BEGINS ON PAGE
Part V Section B Line 3a	A definition of the community served by the hospital facility	5
Part V Section B Line 3b	Demographics of the community	15
Part V Section B Line 3c	Existing health care facilities and resources within the community that are available to respond to the health needs of the community	30
Part V Section B Line 3d	How data was obtained	8
Part V Section B Line 3e	The significant health needs of the community addressed	3
Part V Section B Line 3f	Primary and chronic disease needs and other health issues of uninsured persons, low-income persons, and minority groups	38
Part V Section B Line 3g	The process for identifying and prioritizing community health needs and services to meet the community health needs	7
Part V Section B Line 3h	The process for consulting with persons representing the community's interests	20
Part V Section B Line 3i	The impact of any actions taken to address the significant health needs identified in the hospital facility's prior CHNA(s)	59

Health Need Priorities

Based on community input and analysis of a myriad of data, the priorities for the communities served by CHRISTUS St. Michael Health System for Fiscal Years 2023-2025 fall into two domains underneath an overarching goal of achieving health equity (Figure 1). The two domains and corresponding health needs are:

1. Advance Health and Wellbeing by addressing
 - Chronic Illness
 - Cancer
 - Heart Disease
 - Diabetes
 - Obesity
 - Behavioral Health
 - Mental Health
 - Substance Abuse
 - Access to Care
2. Build Resilient Communities and Improve Social Determinants by
 - Reducing smoking and vaping
 - Improving employment by building education and training opportunities
 - Improving food access



Figure 1. CHRISTUS St. Michael Health System Priority Areas

This report provides an overview of the CHRISTUS St. Michael Health System process involved in the CHNA, including data collection methods, sources, and CHRISTUS St. Michael Health System service area. The body of the report contains results by service area zip codes, or counties when zip code granularity is not possible, where health needs for the entire service area are assessed.

Introduction: What is a Community Health Needs Assessment?

The Community Health Needs Assessment (CHNA) is a systematic, data-driven approach to determine the health needs in the service area of the CHRISTUS St. Michael Health System. In this process, CHRISTUS St. Michael Health System directly engages community members and stakeholders to identify the issues of greatest need as well as the largest impediments to health. With this information, CHRISTUS St. Michael Health System can better allocate resources towards efforts to improve community health and wellness.

Directing resources toward the greatest needs in the community is critical to CHRISTUS St. Michael Health System's work as a nonprofit hospital. The important work of CHNAs was codified in the Patient Protection and Affordable Care Act added Section 501(r) to the Internal Revenue Service Code, which requires nonprofit hospitals, including CHRISTUS St. Michael Health System, to conduct a CHNA every three years. CHRISTUS St. Michael Health System completed similar needs assessments in 2013, 2016 and 2019.

The process CHRISTUS St. Michael Health System used was designed to meet federal requirements and guidelines in Section 501(r), including:

- clearly defining the community served by the hospital, and ensuring that defined community does not exclude low-income, medically underserved, or minority populations in proximity to the hospital;
- providing a clear description of the CHNA process and methods; community health needs; collaboration, including with public health experts; and a description of existing facilities and resources in the community;
- receiving input from persons representing the broad needs of the community;
- documenting community comments on the CHNA and health needs in the community; and
- documenting the CHNA in a written report and making it widely available to the public.

The following report provides an overview of the process used for this CHNA, including data collection methods and sources, results for CHRISTUS St. Michael Health System's service area, historical inequities faced by the residents in the service area and considerations of how COVID-19 has impacted community needs. A subsequent strategic implementation plan, the Community Health Improvement Plan (CHIP), will detail the strategies that will be employed to address the health needs identified in this CHNA.

When assessing the health needs for the entire CHRISTUS St. Michael Health System's service area, the CHNA data is presented by zip code and county depending on the available data. Providing localized data brings to light the differences and similarities within the communities in the CHRISTUS St. Michael Health System service area.

Included in Appendix 1 is an evaluation of St. Michael Health System's past efforts to address the community needs identified in the 2020-2022 CHNA.

CHRISTUS St. Michael Health System Overview

CHRISTUS St. Michael Health System (CSMHS) is a non-profit hospital system serving the Upper East Texas and Southwest Arkansas regions and includes two medical centers along with a number of outpatient centers and medical homes. The CHRISTUS St. Michael Health System campus in Texarkana includes the main 311-bed acute-care hospital, a 50-bed rehabilitation hospital, an outpatient rehabilitation center and an outpatient imaging center. The campus was designed to also address the spiritual needs of our patients by providing a healing environment of streams, a 1-1/2 acre lake, wooded paths and water features. The CHRISTUS St. Michael Health System campus in Atlanta has a 43-bed, acute-care hospital providing general and medical care for inpatient, outpatient and emergency room patients. General and medical services include radiology, laboratory, respiratory, physical and speech therapy, rehabilitation, as well as wellness programs. This CHNA covers the service areas for both campuses in the CHRISTUS St. Michael Health System.

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," CHRISTUS St. Michael Health System strives to be, "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."

Community Benefit

CHRISTUS St. Michael Health System implements strategies to promote health in the community and provide equitable care in the hospital. CHRISTUS St. Michael Health System builds on the assets that are already found in the community and mobilizes individuals and organizations to come together to work toward health equity.

CHRISTUS St. Michael Health System Service Area

Following IRS guidelines, 501(r) rules as required by the Affordable Care Act, CHRISTUS St. Michael Health System's CHNA primary service area includes 16 zip codes covering over 190,000 individuals (Table 1). The primary service area (PSA) is the geographic region with 80% of hospital utilization. The primary service area zip codes are located in the following counties: Bowie and Cass in Texas; Hempstead, Howard, Little River, Miller and Sevier in Arkansas (Figure 2).

While the hospital is dedicated to providing exceptional care to all of the residents in East Texas and Southwest Arkansas, St. Michael Health System will use the information in this assessment to strategically establish priorities and commit resources to address the key health issues for the zip codes, counties and municipalities that comprise the region.

CHRISTUS St. Michael PSA Zip Codes						
Hempstead County, AR	Howard County, AR	Little River County, AR	Miller County, AR	Sevier County, AR	Bowie County, TX	Cass County, TX
71801	71852	71822	71854	71832	75501	75551
			71837		75503	75563
					75559	75572
					75561	
					75567	
					75569	
					75570	

Table 1. Primary Service Area of CHRISTUS St. Michael Health System

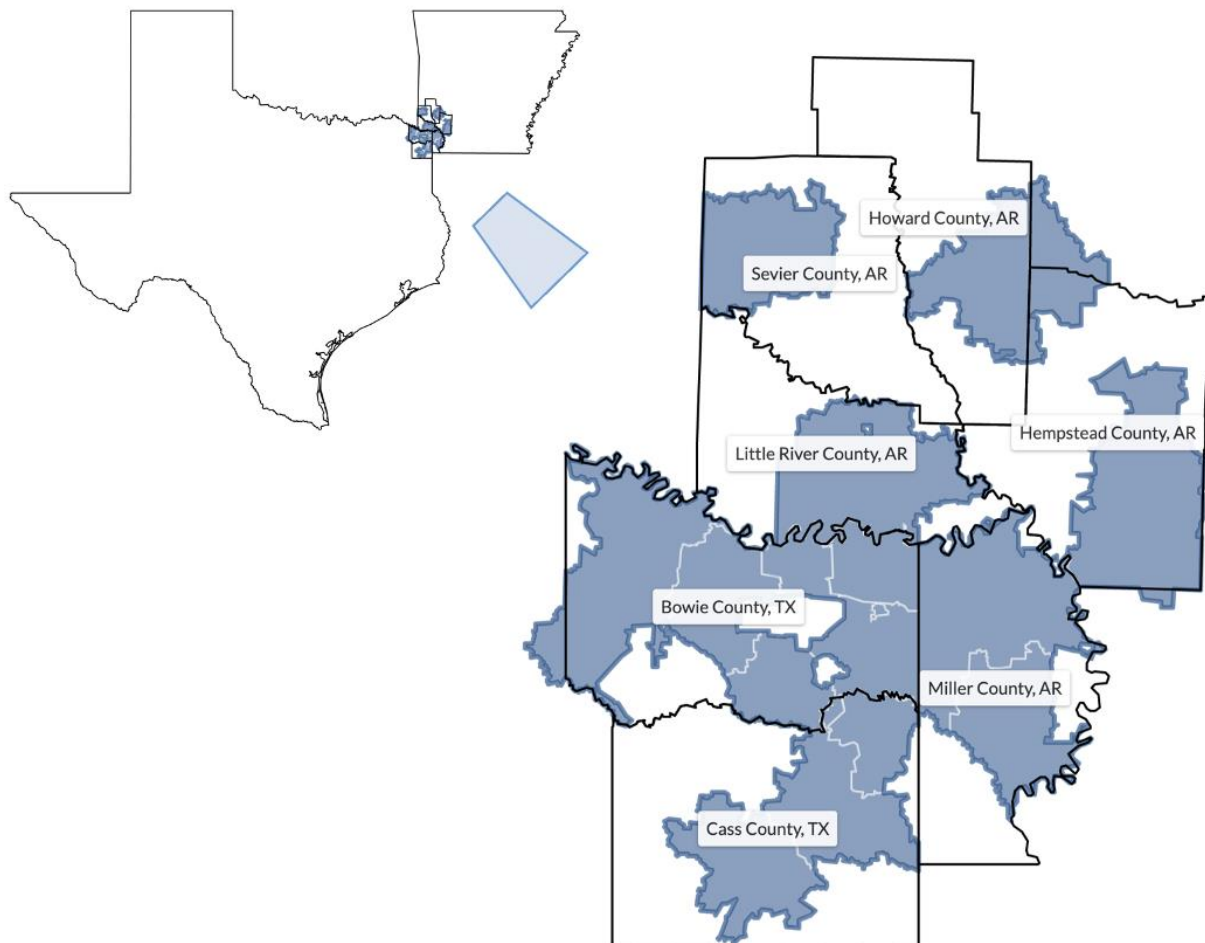


Figure 2. Primary Service Area of CHRISTUS St. Michael Health System

CHNA Process

Stakeholder Engagement

The CHNA process involved engagement with several internal and external stakeholders to collect, curate and interpret primary and secondary data. That data was then used to prioritize the health needs of the community. For this component, CHRISTUS St. Michael Health System worked with Metopio, a software and services company that is grounded in the philosophy that communities are connected through places and people. Metopio's tools and visualizations use data to reveal valuable, interconnected factors that influence outcomes in different locations.

Leaders from the CHRISTUS St. Michael Health System guided the strategic direction of Metopio through roles on various committees and workgroups.

CHRISTUS St. Michael Health System and Metopio relied on the expertise of community stakeholders throughout the CHNA process. The health system's partners and stakeholder groups provided insight and expertise around the indicators to be assessed, types of focus group questions to be asked, interpretation of results and prioritization of areas of highest need.

The Community Benefit Team is composed of key staff with expertise in areas necessary to capture and report CHRISTUS St. Michael Health System community benefit activities. This group discusses and validates identified community benefit programs and activities. Additionally, the team monitors key CHNA policies, provides input on the CHNA implementation strategies and strategic implementation plan, reviews and approves grant funding requests, provides feedback on community engagement activities

Input from community stakeholders was also gathered from CHRISTUS St. Michael Health System's community partners. These partners played a key role in providing input to the survey questions, identifying community organizations for focus groups, survey dissemination and ensuring diverse community voices were heard throughout the process.

The St. Michael Health System leadership team developed parameters for the 2023-2025 CHNA process that help drive the work. These parameters ensure that:

- the CHNA builds on the prior CHNA from 2020-2022 as well as other local assessments and plans;
- the CHNA will provide greater insight into community health needs and strategies for ongoing community health priorities;
- the CHNA leverages expertise of community residents and includes a broad range of sectors and voices that are disproportionately affected by health inequities;
- the CHNA provides an overview of community health status and highlights data related to health inequities;
- the CHNA informs strategies related to connections between community and clinical sectors, anchor institution efforts, policy change, and community partnerships; and

- Health inequities and their underlying root causes are highlighted and discussed throughout the assessment.

Data Collection

CHRISTUS St. Michael Health System conducted its CHNA process between September 2021 and March 2022 using an adapted process from the Mobilizing for Action through Planning and Partnerships (MAPP) framework. This planning framework is one of the most widely used for CHNAs. It focuses on community engagement, partnership development and seeking channels to engage people who have often not been part of decision-making processes. The MAPP framework was developed in 2001 by the National Association for County and City Health Officials (NACCHO) and the Centers for Disease Control and Prevention (CDC).

Primary data for the CHNA was collected through four channels:

- Community resident surveys
- Community resident focus groups
- Health care and social service provider focus groups
- Key informant interviews

Secondary data for the CHNA were aggregated on Metopio's data platform and included:

- Hospital utilization data
- Secondary sources including, but not limited to, the American Community Survey, the Decennial Census, the Centers for Disease Control, the Environmental Protection Agency, Housing and Urban Development and the Texas Department of State Health Services

Community Resident Surveys

Between October and December of 2021, 330 residents in the CHRISTUS St. Michael Health System PSA provided input to the CHNA process by completing a community resident survey. The survey was available online and in paper form in English and Spanish. Survey dissemination happened through multiple channels led by CHRISTUS St. Michael Health System and its community partners. The survey sought input from priority populations in the CHRISTUS St. Michael Health System PSA that are typically underrepresented in assessment processes, including communities of color, immigrants, persons with disabilities, and low-income residents. The survey was designed to collect information regarding:

- Demographics of respondents
- Health needs of the community for different age groups
- Perception of community strengths
- Utilization and perception of local health services

The survey was based on a design used extensively for CHNAs and by public health agencies across the country. The final survey included 26 questions. The full community resident survey is included in Appendix 2. Table 2 summarizes the demographics of survey respondents in the CHRISTUS St. Michael Health System PSA.

Demographic	%
<i>Age (N=316)</i>	
18-24	0.1
25-44	25.0
45-64	54.6
65 and older	20.3
<i>Gender (N=315)</i>	
Male	19.8
Female	79.1
Choose not to answer	1.1
<i>Orientation (N=315)</i>	
Straight or heterosexual	94.0
Bisexual	0.9
Lesbian or gay or homosexual	1.4
Choose not to disclose	3.2
Other	0.5
<i>Race (N=314 (multiple answers allowed))</i>	
American Indian or Alaska Native	3.8
Asian	0.9
Black or African American	11.4
White	79.1
Hispanic/Latino(a)	2.8
Native Hawaiian or Pacific Islander	0.2
Choose to not disclose	6.6
<i>Education (N=316)</i>	
Some high school	1.4
High school graduate or GED	9.3
Vocational or technical school	21.3
Some college, no degree	7.4
College graduate	33.7
Advanced degree	26.9
<i>Current Living Arrangements (N=315)</i>	
Own my home	77.7
Rent my home	17.2
Living with a friend or family	4.2
Other	0.9
<i>Disability in Household (N=313)</i>	
	30.5
<i>Income (N=309)</i>	
Less than \$10,000	3.9
\$10,000 to \$19,999	6.8
\$20,000 to \$39,999	16.1
\$40,000 to \$59,999	14.6

\$60,000 to \$79,999	15.6
\$80,000 to \$99,999	12.2
Over \$100,000	30.8
Average Number of Children in Home (#) (N=462)	0.6

Table 2. Demographics of Community Resident Survey Respondents in CHRISTUS St. Michael Health System Communities

Community Focus Groups and Key Informant Interviews

A critical part of robust, primary data collection for the CHNA involved speaking directly to community members, partners and leaders that live in and/or work in the CHRISTUS St. Michael Health System PSA. This was done through focus groups and key informant interviews.

During this CHNA, CHRISTUS St. Michael Health System held two local focus groups in CHRISTUS St. Michael Health System, one covering Adult Health and the other Maternal and Child Health, and joined two systemwide focus groups. All focus groups were coordinated by CHRISTUS St. Michael Health System and the CHRISTUS Health system office and facilitated by Metopio. CHRISTUS St. Michael Health System sought to ensure groups included a broad range of individuals from underrepresented, priority populations in the CHRISTUS St. Michael Health System. Focus group health topic areas are listed below:

- Adult health
- Maternal and child health
- Health care and social service providers
- Behavioral health

CHRISTUS St. Michael Health System conducted its focus groups in person. Focus groups lasted 90 minutes and had up to 15 community members participate in each group. The following community members participated in the focus groups:

Organization	Role
National Association for the Advancement of Colored People (NAACP)	Board President
Veterans	Community Volunteer
Ark-Tex Council of Governments	Transportation Planner
The Scholars	Board President
Tough Cookie (Cancer Support)	Cancer Survivor/Retired Educator
Area Agency on Aging	Care Coordinator
Alpha Kappa Alpha Sorority, Kappa Xi Omega Chapter	Sorority Member, Registered Nurse
Alpha Kappa Alpha Sorority, Kappa Xi Omega Chapter	Sorority Member/Community Volunteer
Community Health Core	Substance Abuse Counselor
CHRISTUS St. Michael Health System	Director, Registered Nurse
CHRISTUS St. Michael Health System	Director, Registered Nurse

CHRISTUS St. Michael Health System	Physician
CHRISTUS St. Michael Health System	Registered Nurse
CHRISTUS St. Michael Health System	Registered Nurse
CHRISTUS St. Michael Health System	Registered Nurse
CHRISTUS St. Michael Health System	Mobile Health, Nurse Practitioner
Support Group for infant demise	Community Volunteer
Support Group for infant demise	Community Volunteer
Bereavement Group for loss of children	Community Volunteer

Table 3. Focus Group Participants

In addition to the focus groups, 10 key informants were identified by CHRISTUS St. Michael Health System Management team for one-on-one interviews. Key informants were chosen based on areas of expertise to further validate themes that emerged in the surveys and focus groups. Each interview was conducted virtually and lasted 30 minutes.

Secondary Data

CHRISTUS St. Michael Health System used a common set of health indicators to understand the prevalence of morbidity and mortality in the CHRISTUS St. Michael Health System PSA and compare them to benchmark regions at the state and the full CHRISTUS Health service area. Building on previous CHNA work, these measures have been adapted from the County Health Rankings MAPP framework (Figure 3). Where possible, CHRISTUS St. Michael Health System used data with stratifications so that health inequities could be explored and better articulated. Given the community input on economic conditions and community safety, CHRISTUS St. Michael Health System sought more granular datasets to illustrate hardship. A full list of data sources can be found in Appendix 3.

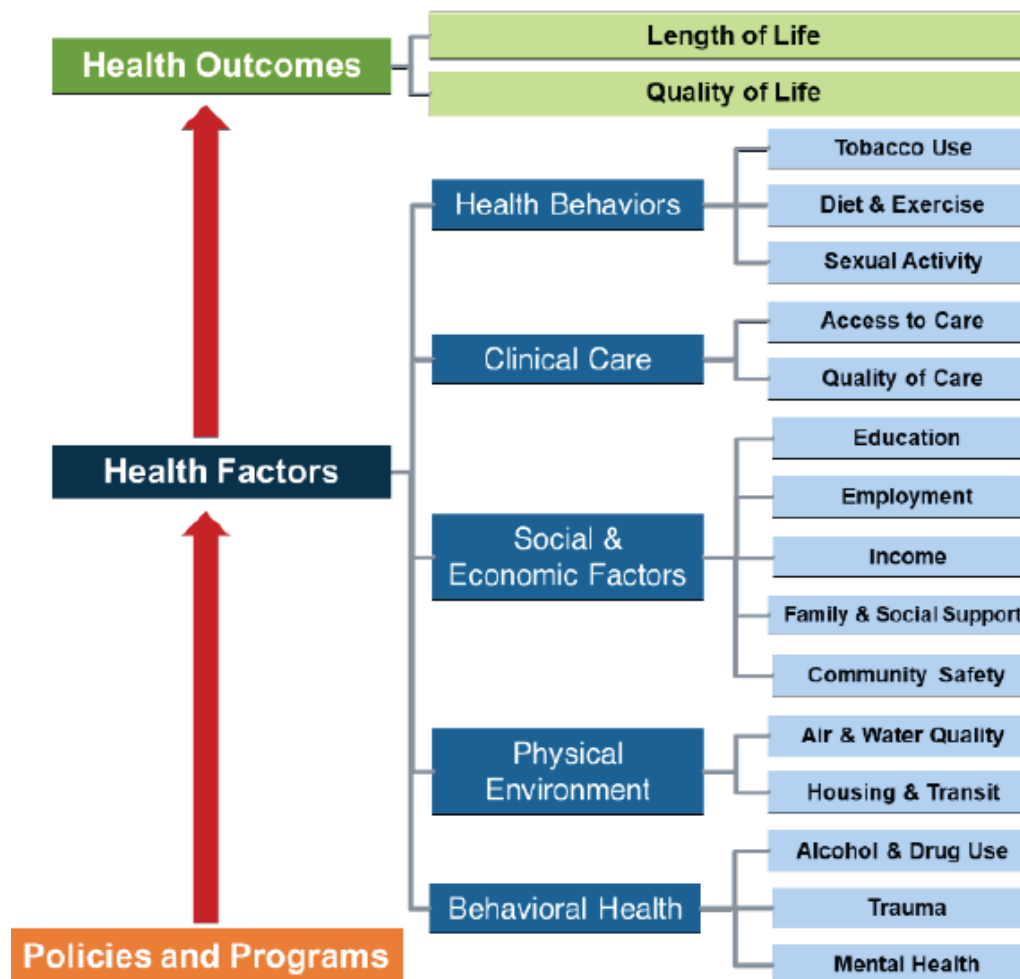


Figure 3. Illustration of the County Health Rankings MAPP Framework

Data Needs and Limitations

CHRISTUS St. Michael Health System and Metopio made substantial efforts to comprehensively collect, review and analyze primary and secondary data. However, there are limitations to consider when reviewing CHNA findings.

- Population health and demographic data are often delayed in their release, so data are presented for the most recent years available for any given data source.
- Variability in the geographic level at which data sets are available (ranging from census tract to statewide or national geographies) presents an issue, particularly when comparing similar indicators and collected at disparate geographic levels. Whenever possible, the most relevant localized data are reported.
- Due to variations in geographic boundaries, population sizes and data collection techniques for suburban and city communities, some datasets are not available for the same time spans or at the same level of localization throughout the county.
- Gaps and limitations persist in data systems for certain community health issues such as mental health and substance use disorders (youth and adults), crime reporting, environmental health, and education outcomes. Additionally, these data are often

collected and reported from a deficit-based framework that focuses on needs and problems in a community, rather than assets and strengths. A deficit-based framework contributes to systemic bias that presents a limited view on a community's potential.

With this in mind, CHRISTUS St. Michael Health System, Metopio and all stakeholders were deliberate in discussing these limitations throughout the development of the CHNA and selection of the 2023-2025 health priority areas.

Consideration of COVID-19

The COVID-19 pandemic touched all aspects of life for two of the last three years, which begs the question—should COVID-19 be considered its own health issue, or did it merely expose existing health inequities in the community?

The CHRISTUS St. Michael Health System PSA has experienced fluctuations in case rates and case fatality rates but was especially hard hit during the Delta surge in 2021. While causal factors are hard to pinpoint, several important determinants of health are more pronounced in the CHRISTUS St. Michael Health System PSA including a lack of access to care, higher rates of chronic disease and a lack of transportation options. These vulnerabilities certainly exacerbated the spread and impact of COVID-19.

As demonstrated in the survey results in Table 4, a majority of respondents saw the pandemic as the biggest issue their community faced over the last two years. And while many community members did not delay care, over half did experience challenges with feelings of hopelessness and depression. The community's major emphasis in focus groups and key informant interviews was on addressing the barriers to health equity, not necessarily the pandemic itself. Because of this, the CHNA will focus more on COVID-19's impact on existing health disparities.

"Mental health is a right now need because of the pandemic. Free mental help should be available when people need it, not when they just happen to be available for an appointment."

-Survey Respondent

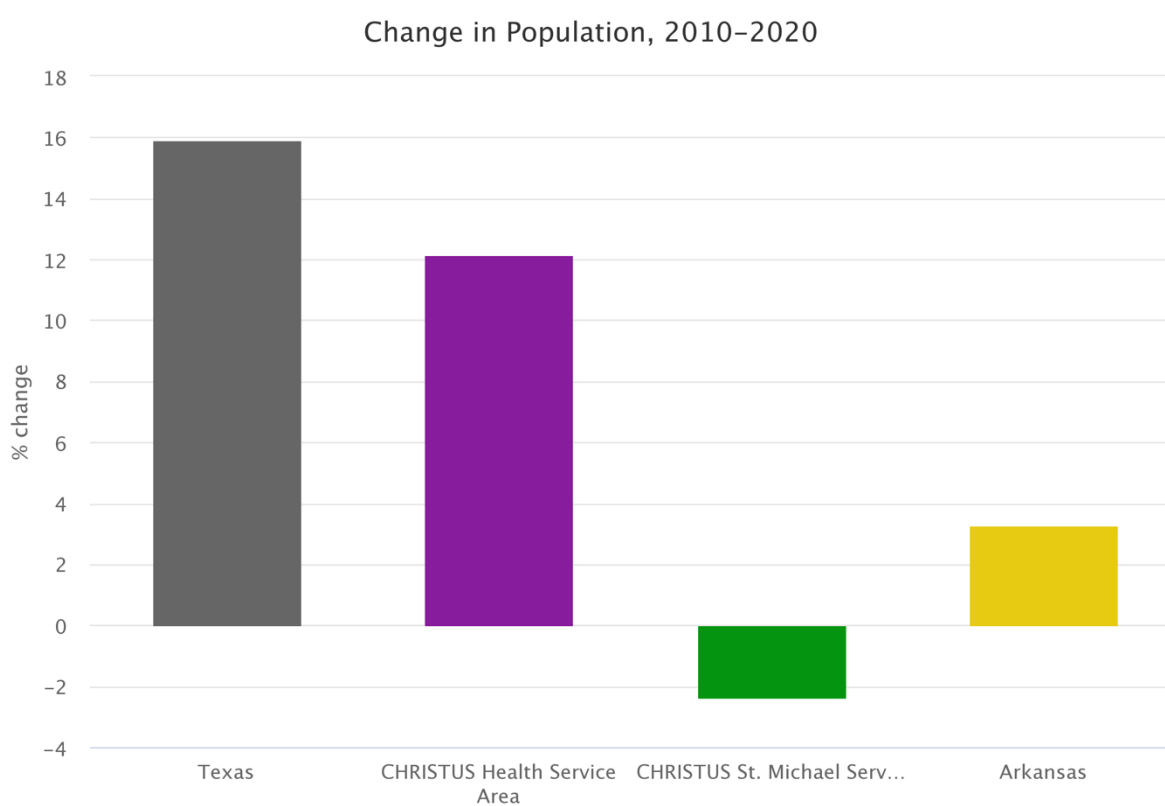
During the pandemic (March 2020-present) have you had any of the following (please check all that apply):	% of respondents
Visited a doctor for a routine checkup or physical	85.3
Dental exam	67.2
Mammogram	46.1
Pap test/Pap smear	32.4
Sigmoidoscopy or colonoscopy to test for colorectal cancer	14.2
Flu shot	58.3
Prostate screening	4.4
COVID-19 vaccine	71.1
Because of the pandemic, did you delay or avoid medical care?	
Yes	34.7
No	65.3
During this time period, how often have you been bothered by feeling down, depressed, or hopeless?	
Not at all	47.2
Several days every month	39.2
More than half the days every month	8.5
Nearly every day	5.2
What is the most difficult issue your community has faced during this time period?	
COVID-19	75.7
Natural disasters (for example, hurricanes, flooding, tornadoes, fires)	2.4
Extreme temperatures (for example, snowstorm of 2021)	10.2
Other:	11.7
	N=306

Table 4. Community Resident Survey Responses to COVID-19 Questions

CHNA Results

Demographic Characteristics

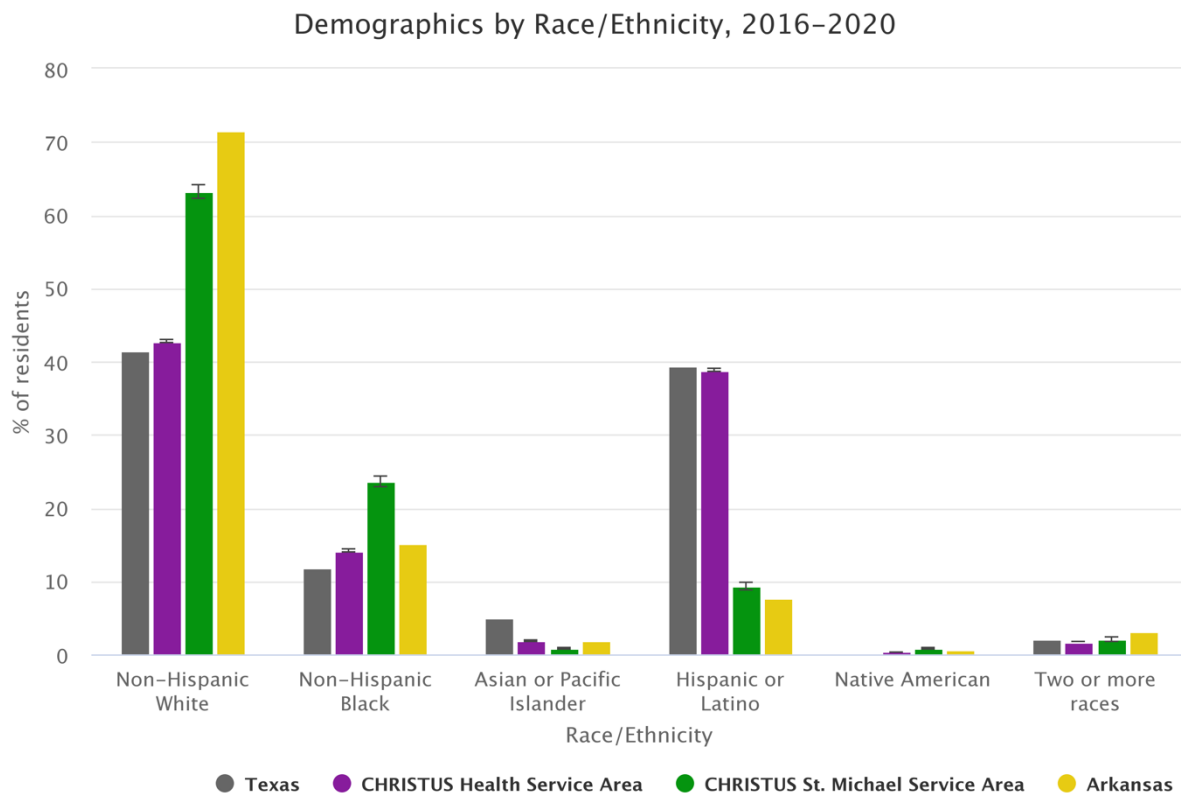
Over the past decade, the CSMHS PSA has experienced a change in population. Changes between the 2010 and 2020 Census show that the population in the PSA decreased by 2.3% over this period. The entire CHRISTUS Health service area had a somewhat larger growth rate of 12.3%, Texas had a growth rate of 15.9%, and Arkansas experienced a slight increase of 3.3% (Figure 4). In this report, the CHRISTUS Health service area refers to the geographic area that encompasses all primary service areas of CHRISTUS Health hospital systems in New Mexico, Texas, Louisiana and Arkansas. Currently, 192,516 people live in the CSMHS PSA.



Created on Metopio | <https://metop.io/i/qzdioefn> | Data source: Decennial Census (Derived from 2010 and 2020 Census data)
Change in Population: Percent change of population between the 2010 and 2020 decennial census.

Figure 4. Change in Population in the CHRISTUS St. Michael Health System PSA

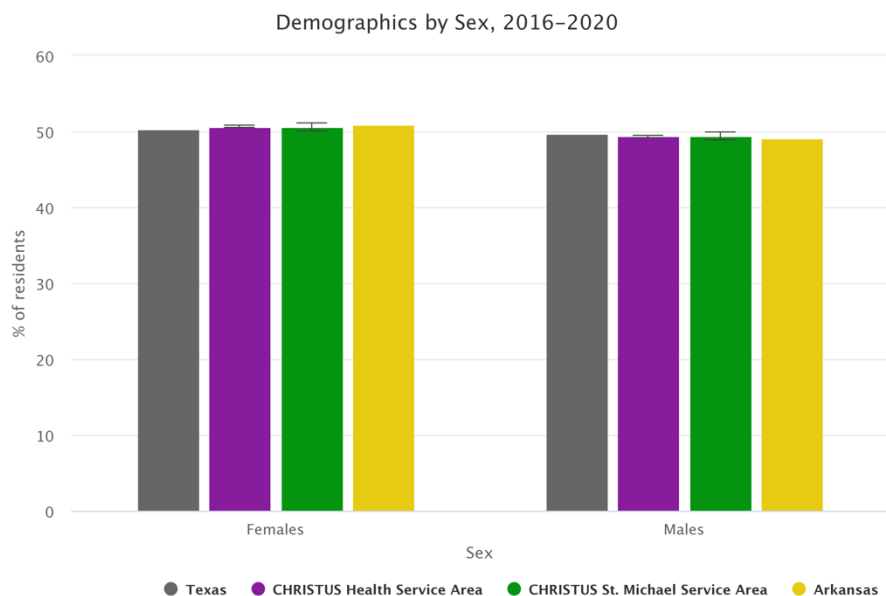
As illustrated in Figure 5, Non-Hispanic White individuals make up the majority of the CHRISTUS St. Michael Health System PSA population at 63.3%. Non-Hispanic Black people represent the second most populous racial/ethnic group in the PSA, comprising 23.6% of the population, which is higher than all other benchmark regions. Hispanic or Latino people make up 9.3% of the PSA population. 2.0% of the population identifies as two or more races. Asian or Pacific Islander individuals account for 0.86% of the population. Native Americans make up 0.75% of the population in the CHRISTUS St. Michael Health System PSA.



Created on Metopio | <https://metop.io/i/mrert9hi> | Data source: American Community Survey (Table B01001)
 Demographics: Percent of residents within each major demographic group. Use this topic to explore age, gender, and racial/ethnic breakdowns. This topic is expressed as a percent; to see a breakdown of all residents (pie or area chart), use Population (POP).

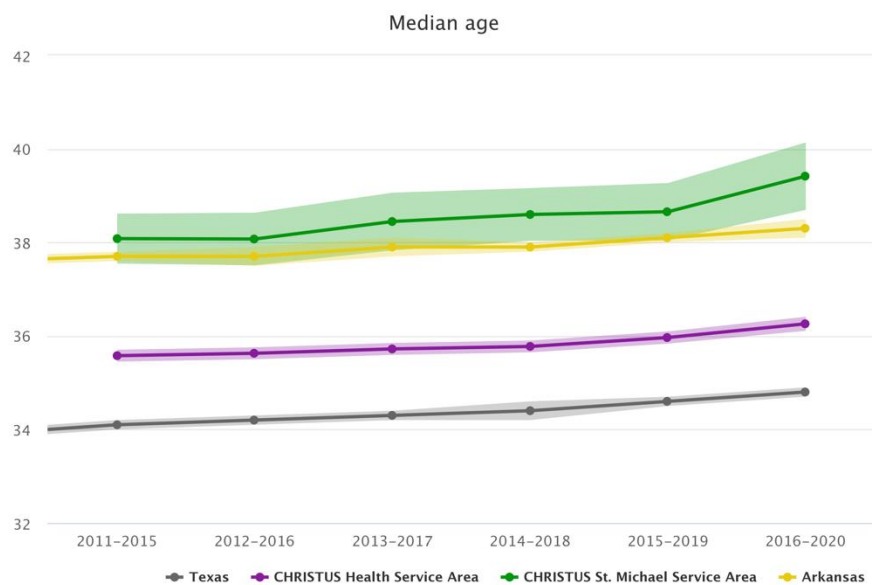
Figure 5. Demographics by Race/Ethnicity in the CHRISTUS St. Michael Health System PSA

Females represent 50.6% of the CHRISTUS St. Michael Health System PSA population and males represent 49.4% (Figure 6). This ratio is similar to the other benchmarks in the chart above. As outlined in Figure 7, the median age in the CHRISTUS St. Michael Health System PSA is 39.4 years old, which is slightly higher than the entire CHRISTUS Health service area (36.3 years old), Texas overall (34.8 years old) and Arkansas (38.3 years old).



Created on Metopio | <https://metopio.io/j/j1zvfofi> | Data source: American Community Survey (Table B01001)
 Demographics: Percent of residents within each major demographic group. Use this topic to explore age, gender, and racial/ethnic breakdowns. This topic is expressed as a percent; to see a breakdown of all residents (pie or area chart), use Population (POP).

Figure 6. Demographics by Sex in the CHRISTUS St. Michael Health System PSA



Created on Metopio | <https://metopio.io/j/mfqg5ysd> | Data source: American Community Survey (Table B01002)
 Median age: The median age represents the age of the "middle" resident, if they were all lined up from youngest to oldest. (Half of all residents are older than this, and half are younger.)

Figure 7. Median Age in the CHRISTUS St. Michael Health System PSA

In the CHRISTUS St. Michael Health System PSA, only 1.67% of residents have limited English proficiency. As demonstrated in Figure 8, this is much lower than the entire CHRISTUS Health service area (4.0%) and Texas overall (7.0%), but somewhat higher than the average in Arkansas (1.6%). The households with limited English proficiency are primarily concentrated in 71832 (10.9%) (Figure 9).

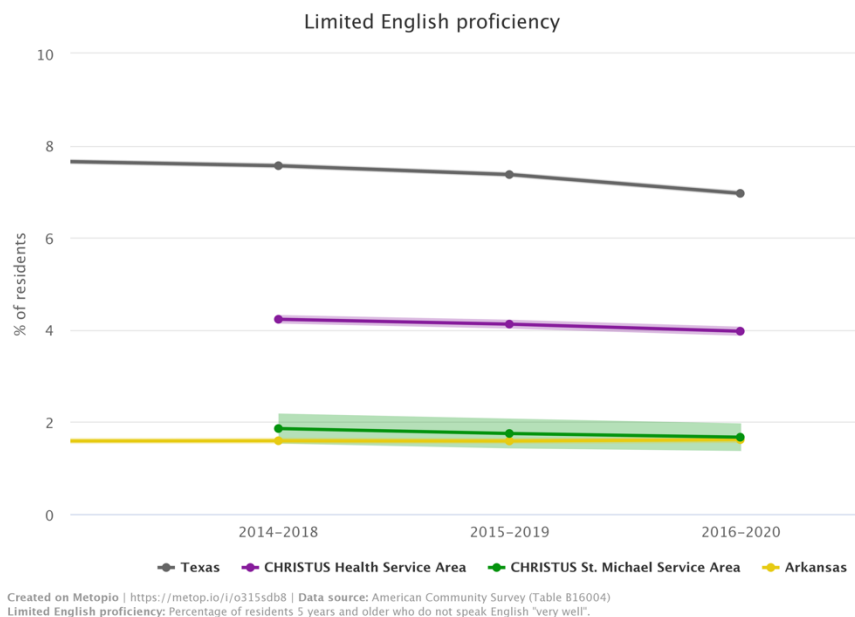


Figure 8. Limited English Proficiency in the CHRISTUS St. Michael Health System PSA

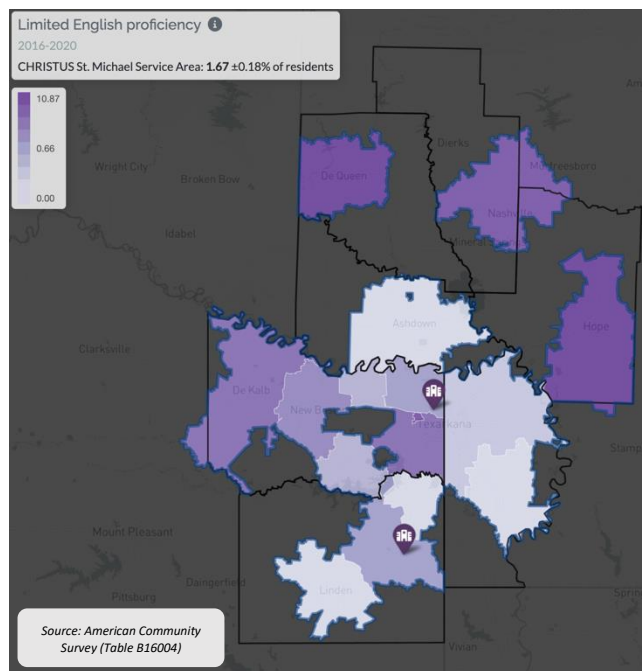
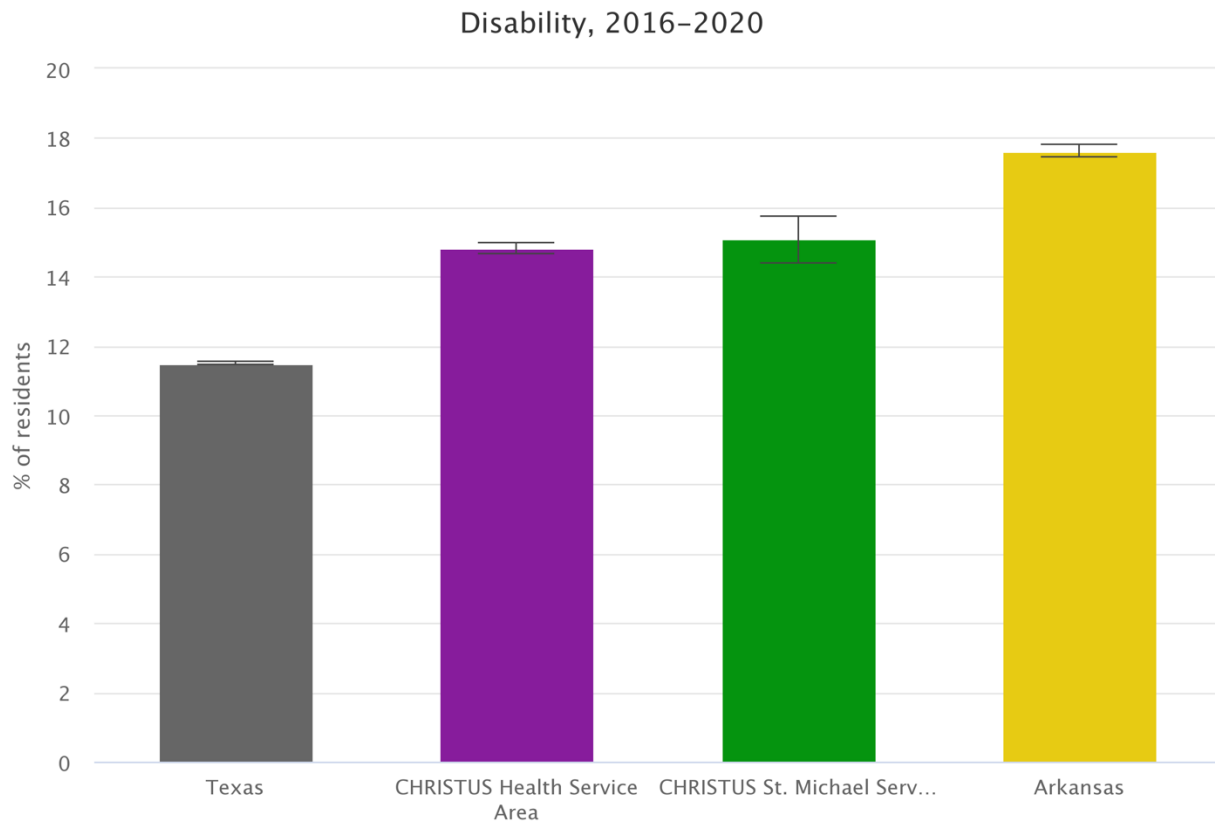


Figure 9. Map of Limited English Proficiency in the CHRISTUS St. Michael Health System PSA

As shown in Figure 10, the percentage of residents with a disability in the CSMHS PSA (15.1% of residents) is slightly higher than the entire CHRISTUS Health service area (14.8%) and Texas (11.5%), and only lower than Arkansas (17.6%). Disability here is defined as one or more sensory disabilities or difficulties with everyday tasks.



Created on Metopio | <https://metop.io/i/1a3xz5gv> | Data source: American Community Survey (Table S1810)
Disability: Percent of residents with a disability, defined as one or more sensory disabilities or difficulties with everyday tasks (topics DIT, DIU, DIV, DIW, DIX, and DIY).

Figure 10. Disability in the CHRISTUS St. Michael Health System PSA

Overall Community Input

Community residents who participated in focus groups, key informant interviews and the survey provided in-depth input about how specific health conditions impact community and individual health. Cross-cutting themes that emerged included:

- Access to care was a major issue that came up across the focus groups. Participants shared that access is particularly difficult for elderly, children and the working poor because of high costs. They also expressed a need for more physicians of color to care for diverse residents who are underserved and disproportionately affected by chronic health issues.
- Focus group participants shared that there is a need for mental health care in the PSA. Current mental health services do not meet the growing need. There is also a cultural stigma prevents some communities from seeking care. Specific mental health needs include services for homeless people and addiction services.
- Economic opportunity and poverty came up as an area of need. Participants expressed a need for more job training services, as well as medication and utility assistance to help residents get back on their feet after experiencing hardship and to prevent homelessness.
- Elements of the built environment make it difficult to be healthy. There are limited affordable options for affordable transportation and housing. Participants reported that public space, such as sidewalks and parks, is not available in low-income neighborhoods, making it difficult to exercise outside.

Survey respondents were asked to rank a number of health issues on a scale of 1 to 5, with 1 being “not significant” and 5 being “very significant.” Table 5 shows the top 10 issues from the survey in descending order.

Health Issue	% of respondents who ranked either 4 or 5
Obesity	64.2%
Mental health	50.9%
Drug, alcohol, and substance abuse	50.6%
Smoking and vaping	49.0%
Heart disease	48.8%
Cancer(s)	48.6%
Diabetes	47.7%
Chronic pain	47.6%
Exercise and physical activity	33.2%
Healthy eating	32.7%

Table 5. Ranking of Health Issues by Survey Respondents

The primary data covered many health issues that community members see in the PSA, but data collection also included strengths that residents see in the community. Focus group participants and key informants shared potential that they see in expanding local farming initiatives to meet food insecurity needs and build community.

Additionally, survey respondents were asked to select all things which they thought contributed to health and were available in the community (Figure 11). These represent the assets that community members take advantage of to maintain their health during challenging times.

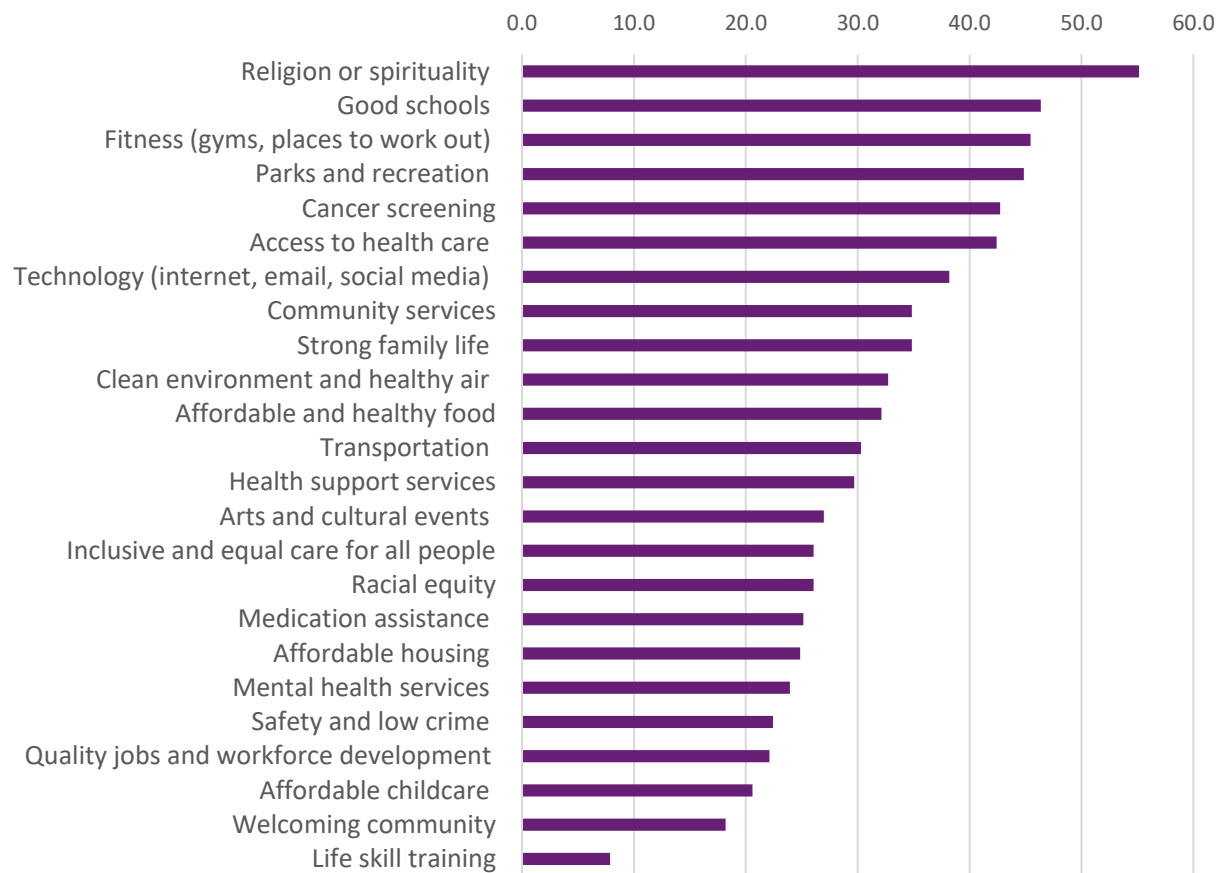


Figure 11. Survey Responses of Community Strengths that Support Health

Social and Structural Determinants of Health

Community residents who participated in focus groups and the community resident surveys also provided in-depth input about how social and structural determinants of health – such as education, economic inequities, housing, food access, access to community services and resources, and community safety and violence – impact community and individual health. The following sections review secondary data insights that measure the social and structural determinants of health.

“We have enough empty lots around here. Why can't we start community gardens? It would help with food, exercise and people would get to know each other which might cut down on tension.”

- Survey participant

Hardship

One way to measure overall economic distress in a place is with the Hardship Index. This is a composite score reflecting hardship in the community, where the higher values indicate greater hardship. It incorporates unemployment, age dependency, education, per capita income, crowded housing and poverty into a single score. The Hardship Index score for the CSMHS PSA is 64.8, which is higher than the measure of the full CHRISTUS Health service area (60.1), Texas (55.8) and Arkansas (59.0). There are several zip codes throughout the PSA with a high hardship index score. The highest zip codes include 71832 (84.0) and 75551 (79.6) (Figure 12).

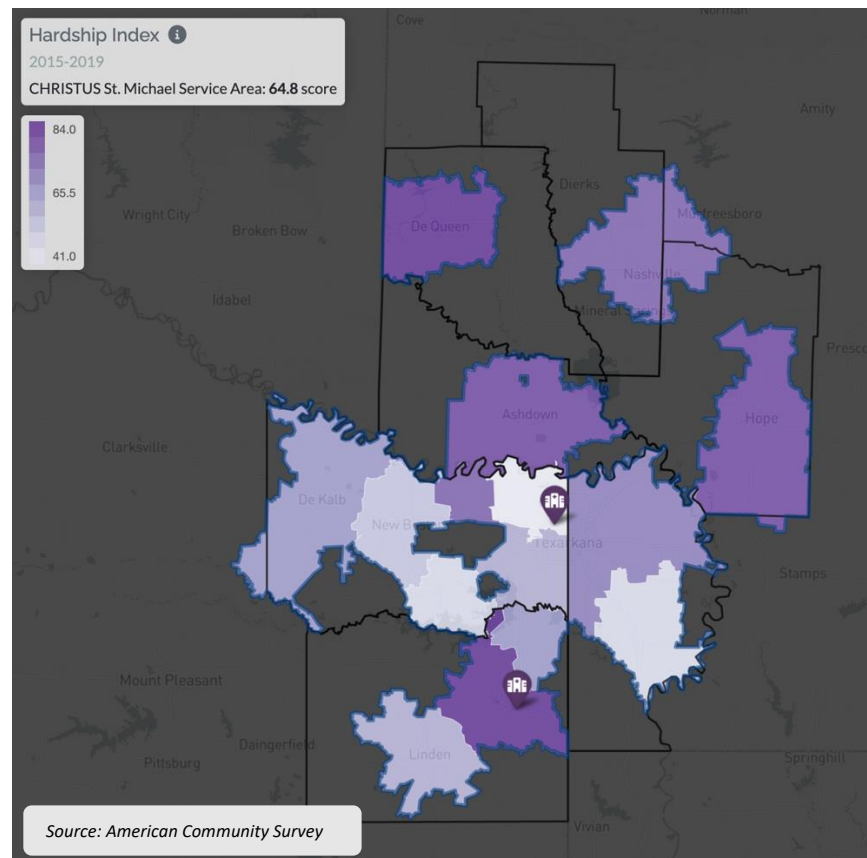
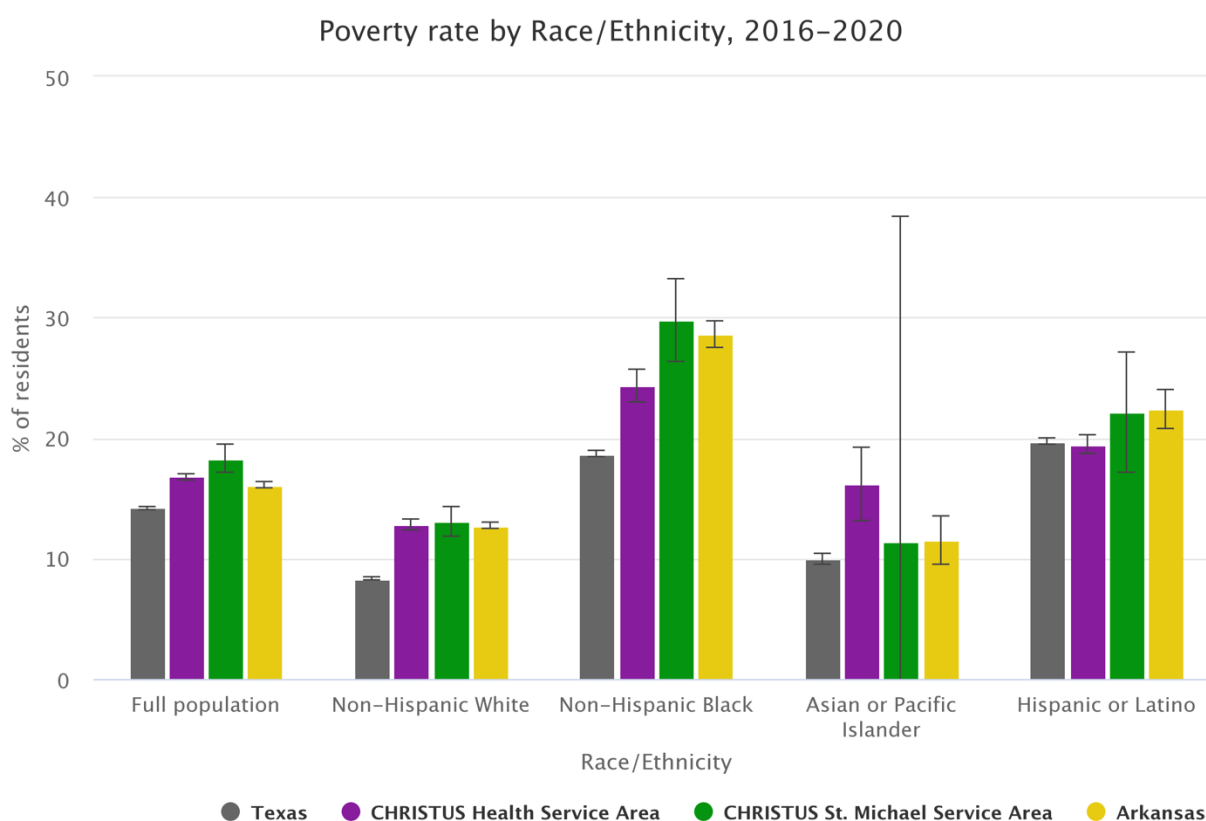


Figure 12. Map of Hardship in CHRISTUS St. Michael Health System PSA

Poverty

Poverty and its corollary effects are present throughout the CSMHS PSA. The median household income is \$52,593 and the poverty rate is 18.3% (Figure 13; Figure 14). In comparison, the overall CHRISTUS Health service area has a median household income of \$58,813 and 16.8% of residents live in poverty; in Texas, \$67,267 and 16.7%; and in Arkansas, \$52,143 and 16.1%, respectively (Figures 13; Figure 14). Within the PSA, Non-Hispanic Black and Hispanic/Latino people disproportionately face the burden of poverty with 29.8% and 22.2% of the respective populations living in poverty. The effects of poverty can be felt by high housing costs, represented below as the percentage of households spending more than 50% of their income on rent. The highest rent burden is seen in zip codes 75503 (23.7%) and 75501 (21.6%), compared to the average of 18.1% in the CSMHS PSA (Figure 15).



Created on Metopio | <https://metop.io/i/8u3bqme8> | Data source: American Community Survey (Table B17001)
Poverty rate: Percent of residents in families that are in poverty (below the Federal Poverty Level).

Figure 13. Poverty Rate with Stratifications in the CHRISTUS St. Michael Health System PSA

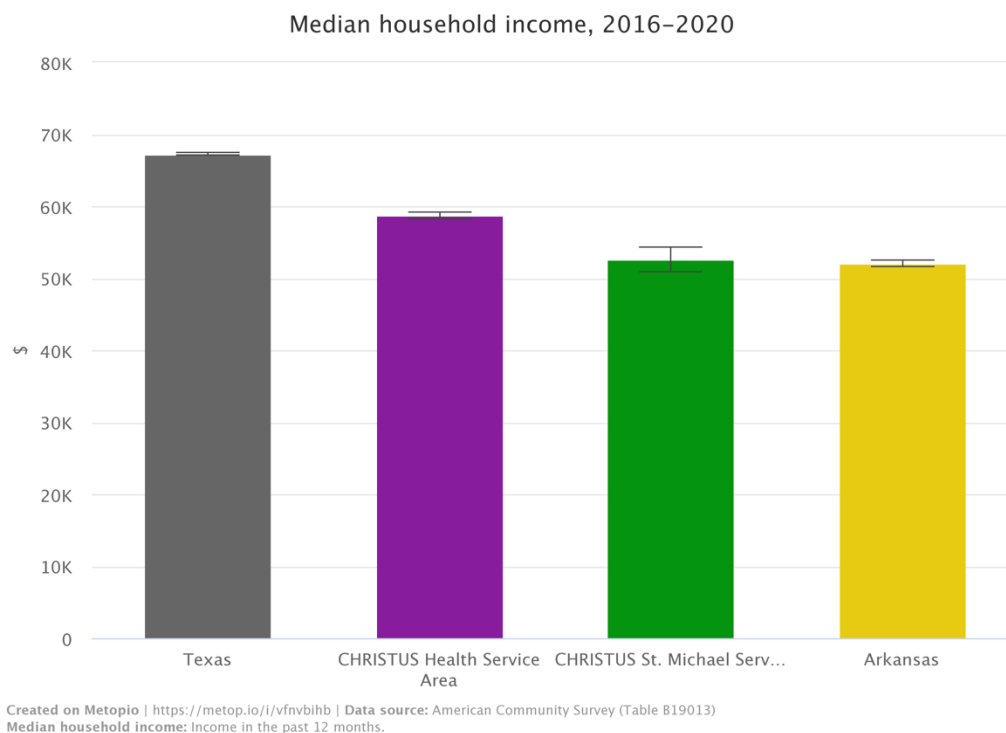


Figure 14. Median Household Income in the CHRISTUS St. Michael Health System PSA

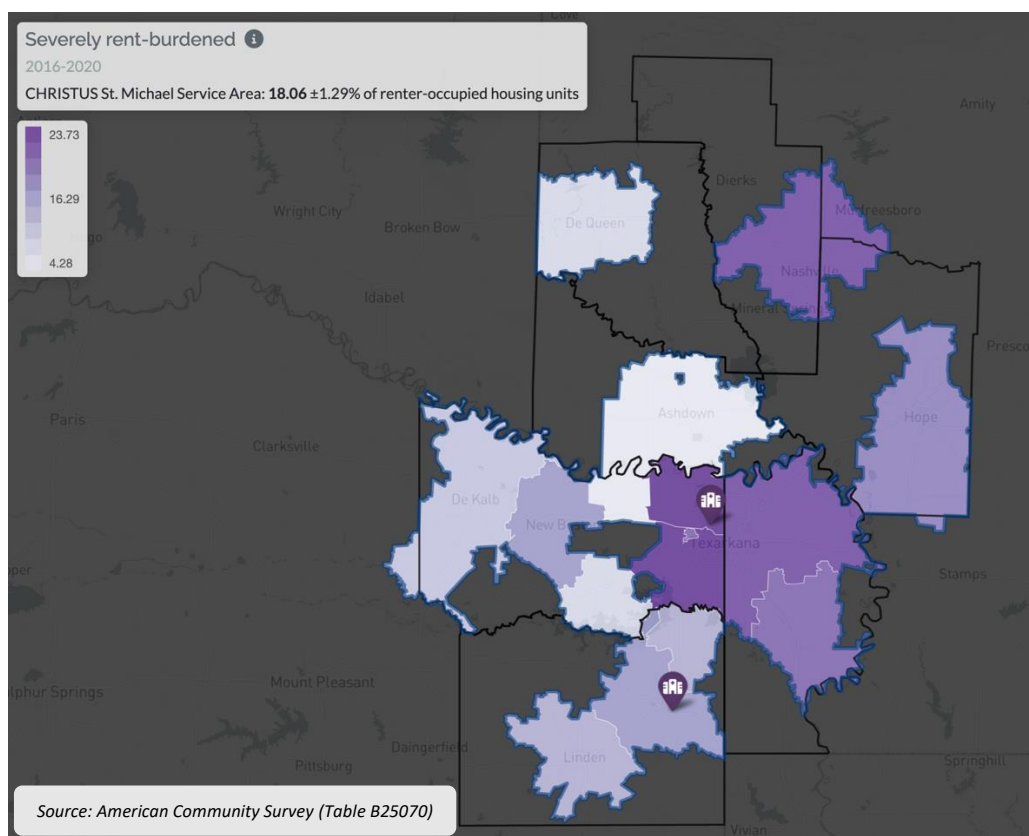
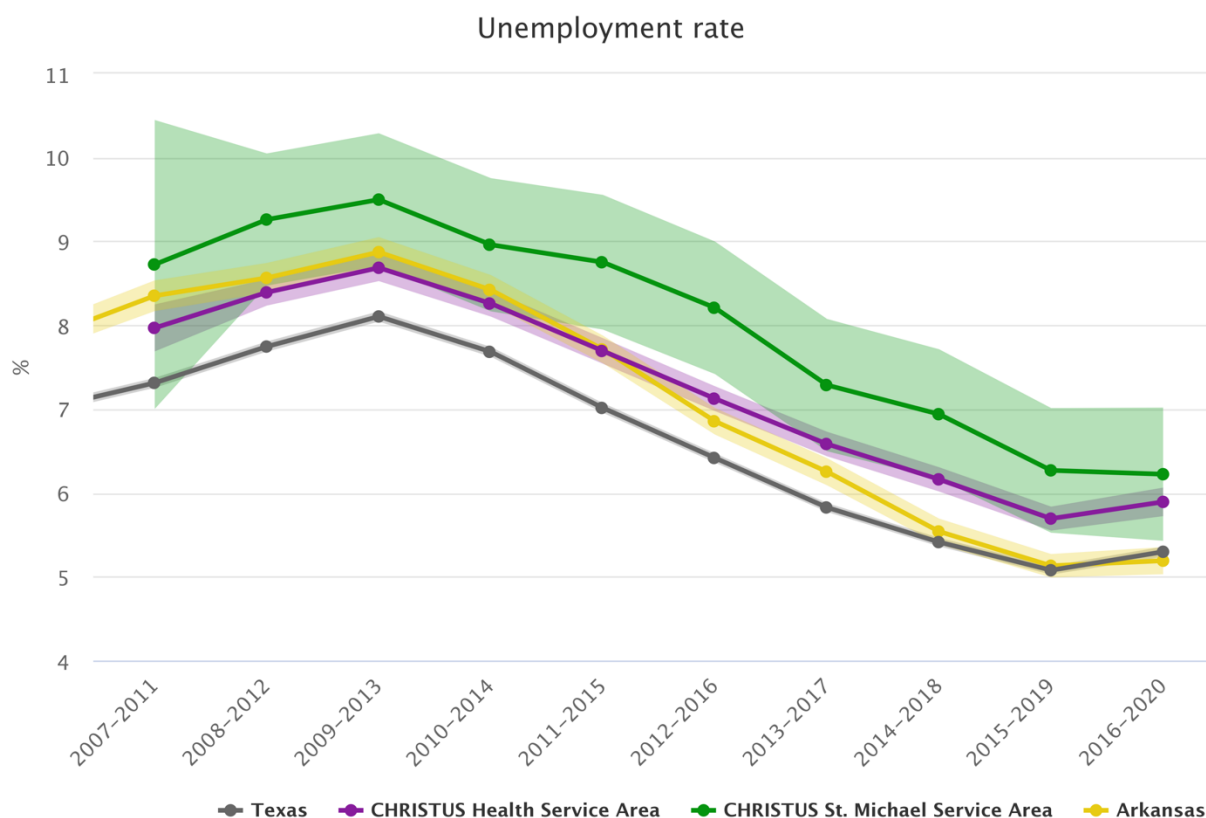


Figure 15. Housing Cost Burden in the CHRISTUS St. Michael Health System PSA

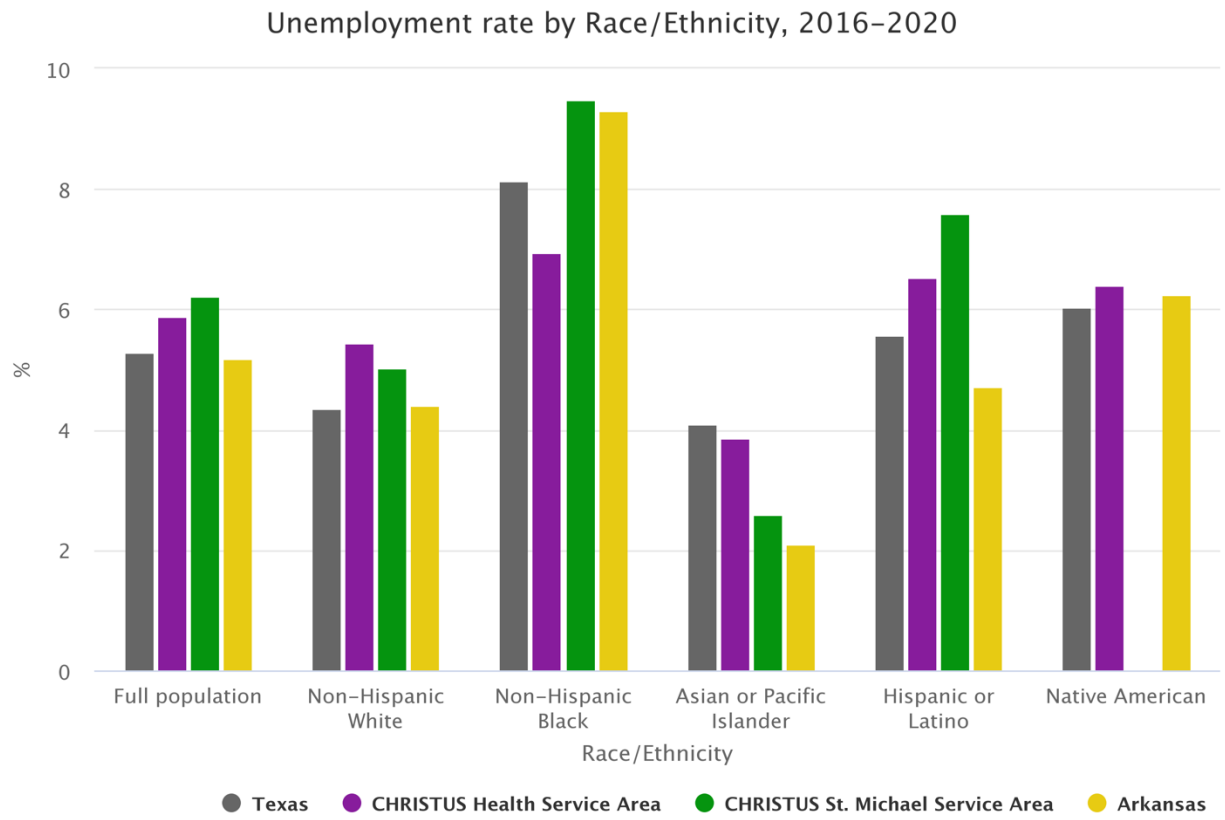
Unemployment

As shown in Figure 16, the overall unemployment rate in the CSMHS PSA (6.22%) is higher than the rate of the entire CHRISTUS Health service area (5.9%), Texas (5.3%) and Arkansas (5.2%). When this data is stratified by race/ethnicity, there are some disparities in unemployment rates. In particular, Non-Hispanic Blacks (9.3%) have higher rates of unemployment than the overall population. Hispanic/Latino people experience the second highest unemployment burden at 7.5% of the population (Figure 17). Over the past decade, the region has generally seen a decline in the unemployment rate, even into 2020, the year that the COVID-19 pandemic began.



Created on Metopio | <https://metop.io/ijj142zzx2> | Data source: American Community Survey (Tables B23025, B23001, and C23002)
Unemployment rate: Percent of residents 16 and older in the civilian labor force who are actively seeking employment.

Figure 16. Unemployment Rate in the CHRISTUS St. Michael Health System PSA



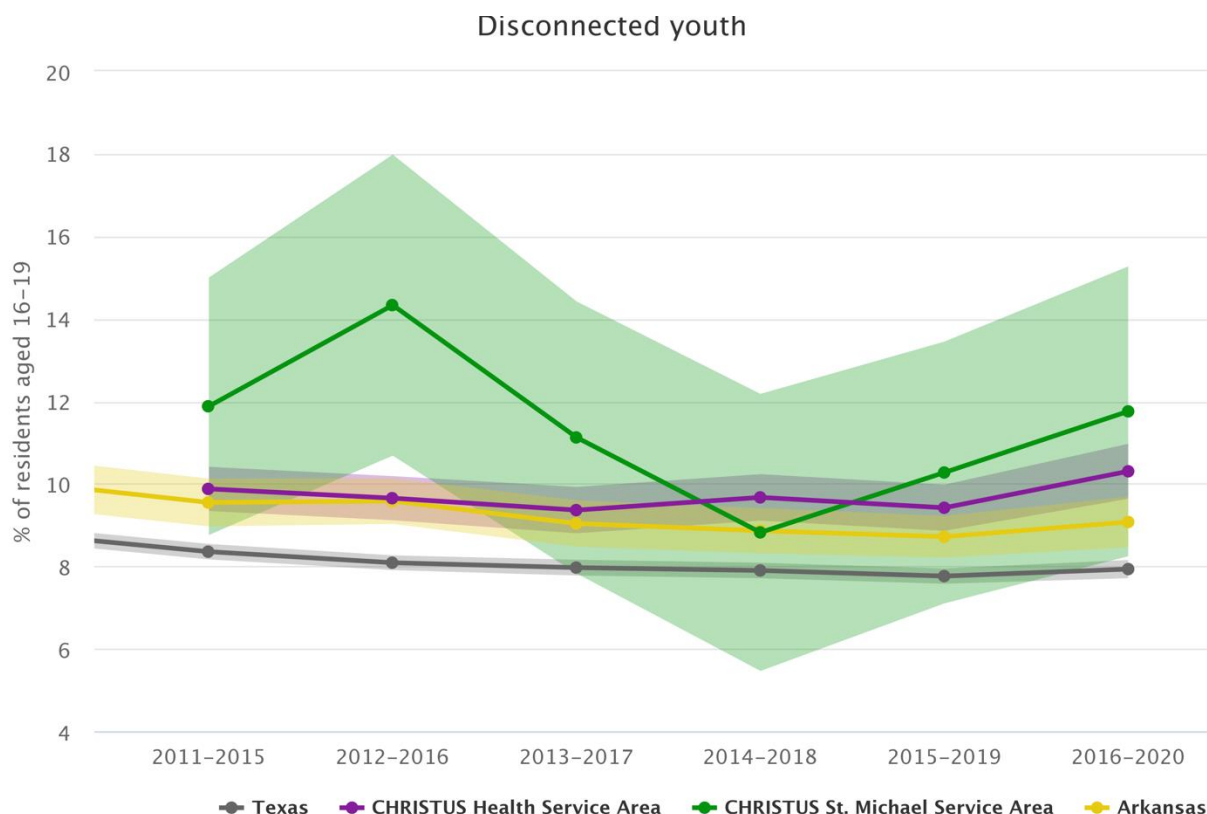
Created on Metopio | <https://metop.io/i/vpnhtjv9> | Data source: American Community Survey (Tables B23025, B23001, and C23002)
 Unemployment rate: Percent of residents 16 and older in the civilian labor force who are actively seeking employment.

Figure 17. Unemployment Rate with Stratifications in the CHRISTUS St. Michael Health System PSA

Topic	Bowie County, TX	Cass County, TX	Hempstead County, AR	Howard County, AR	Little River County, AR	Miller County, AR	Sevier County, AR
Poverty rate % of residents 2016-2020	16.83	17.53	22.05	19.25	14.20	17.74	19.78
Median household income 2016-2020	\$54,589	\$50,102	\$47,936	\$40,089	\$51,606	\$47,838	\$50,453
Severely rent-burdened % of renter-occupied housing units, 2016-2020	20.06	13.47	15.95	14.44	5.39	20.95	12.49
Unemployment rate %, 2016-2020	4.81	8.15	5.71	6.57	7.89	8.12	4.88
Hardship Index score, 2015-2019	56.9	73.7	72.7	67.5	68.2	65.9	80.0

Table 6. Economic Indicators by County in the CHRISTUS St. Michael Health System PSA

Another measure of potential economic stress is disconnected youth, defined as residents aged 16-19 who are neither in school nor employed. This measure in the CSMHS PSA (11.8%) is the similar to the whole CHRISTUS Health service area (10.3%), but slightly higher than both Texas (7.9%) and Arkansas (9.1%) (Figure 18).

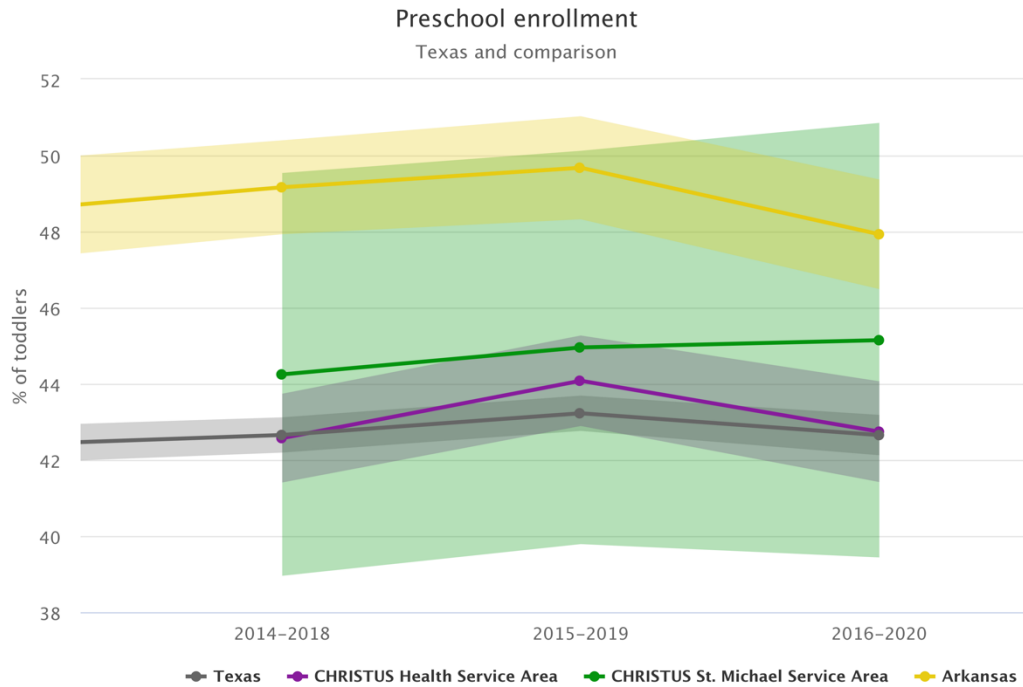


Created on Metopio | <https://metop.io/i/ucvg5asm> | Data source: American Community Survey (Table B14005)
 Disconnected youth: Percent of residents aged 16-19 who are neither working nor enrolled in school.

Figure 18. Disconnected Youth in the CHRISTUS St. Michael Health System PSA

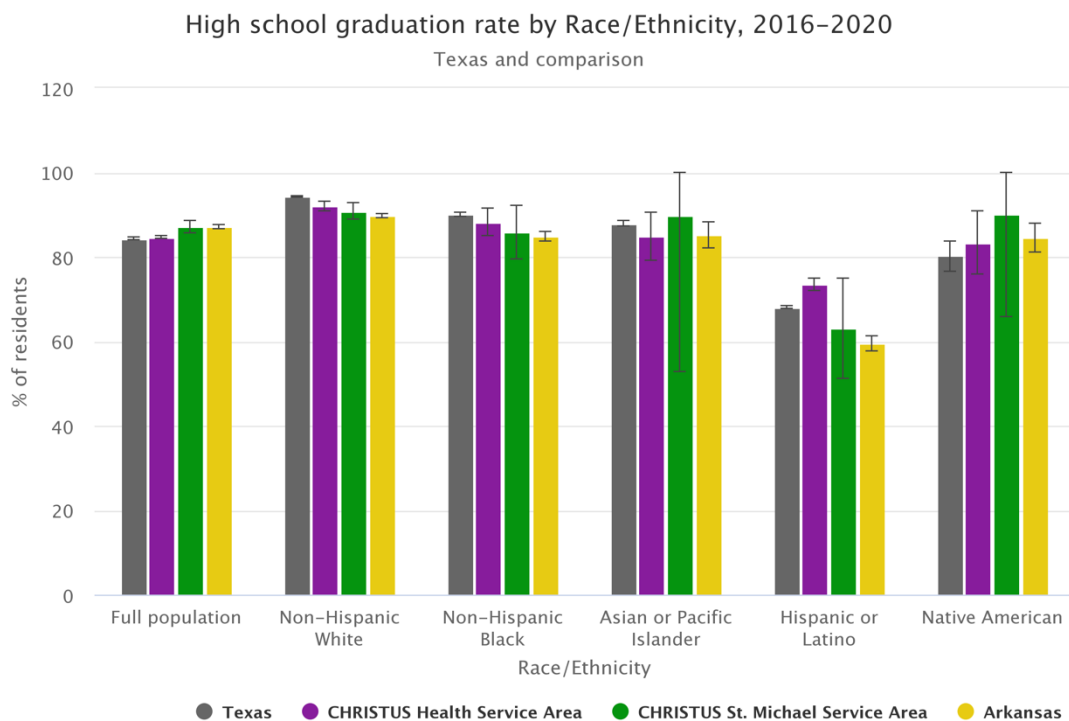
Education

Education is an important social determinant of health. Even enrollment in preschool influences future health and social outcomes. As shown in Figure 19, preschool enrollment in the CSMHS PSA (45.2% of toddlers) is in line with rate of Arkansas (47.9%) and just above the rate in the entire CHRISTUS Health service area (42.9%) and Texas (42.7%). The high school graduation in the CSMHS PSA is 87.1%, which is in line with averages of the full CHRISTUS Health service area, Texas and Arkansas (84.7%, 84.4%, and 87.2% respectively) (Figure 20). Within the PSA, there is some inequity in high school graduate rates for Hispanic and Latinos (63.2%) when compared to the overall population and other racial/ethnic groups. Post-secondary education in the PSA is lower than that of the region overall. For residents 25 or older with any post-secondary education, the higher degree graduation rate in the CSMHS PSA is 27.2% compared to 31.7% in the CHRISTUS Health service area, 38.1% in Texas and 31.3% in Arkansas (Figure 21).



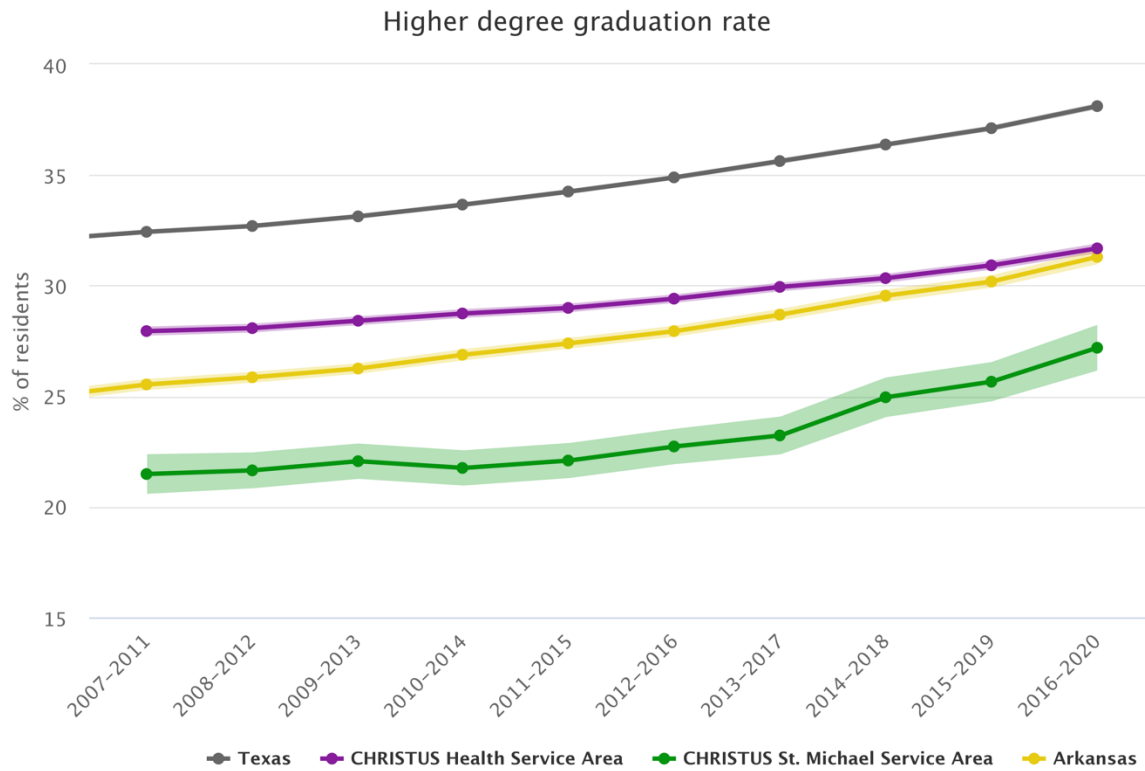
Created on Metopio | <https://metop.io/i/jfmgvmkp> | Data source: American Community Survey (Table B14003)
 Preschool enrollment: Percentage of 3- and 4-year-olds enrolled in school.

Figure 19. Pre-School Enrollment in the CHRISTUS St. Michael Health System PSA



Created on Metopio | <https://metop.io/i/hsktv6ph> | Data source: American Community Survey (Table B15002)
 High school graduation rate: Residents 25 or older with at least a high school degree: including GED and any higher education

Figure 20. High School Graduation Rate with Stratifications in the CHRISTUS St. Michael Health System PSA



Created on Metopio | <https://metop.io/i/4xno6k1h> | Data source: American Community Survey (Table B15002)
 Higher degree graduation rate: Residents 25 or older with any post-secondary degree, such as an Associates or bachelor's degree or higher

Figure 21. Higher Degree Graduation Rate in the CHRISTUS St. Michael Health System PSA

Topic	Bowie County, TX	Cass County, TX	Hempstead County, AR	Howard County, TX	Little River County, AR	Miller County, AR	Sevier County, AR
Preschool enrollment Infants (0-4 years) % of toddlers, 2016-2020	45.55	22.51	51.88	35.91	45.87	51.33	46.53
Private school Juveniles (5-17 years) % of grade school students, 2016-2020	3.27	4.22	7.12	6.80	2.89	8.50	2.12
9th grade education rate % of residents, 2016-2020	96.55	96.12	92.62	91.22	98.26	95.65	87.46
High school graduation rate % of residents, 2016-2020	89.49	86.91	84.00	80.12	89.77	85.67	75.75
Any higher education rate % of residents, 2016-2020	55.63	44.24	45.47	45.43	46.32	51.05	39.29
Graduate education rate % of residents, 2016-2020	7.65	5.59	5.86	4.24	4.29	6.76	4.87

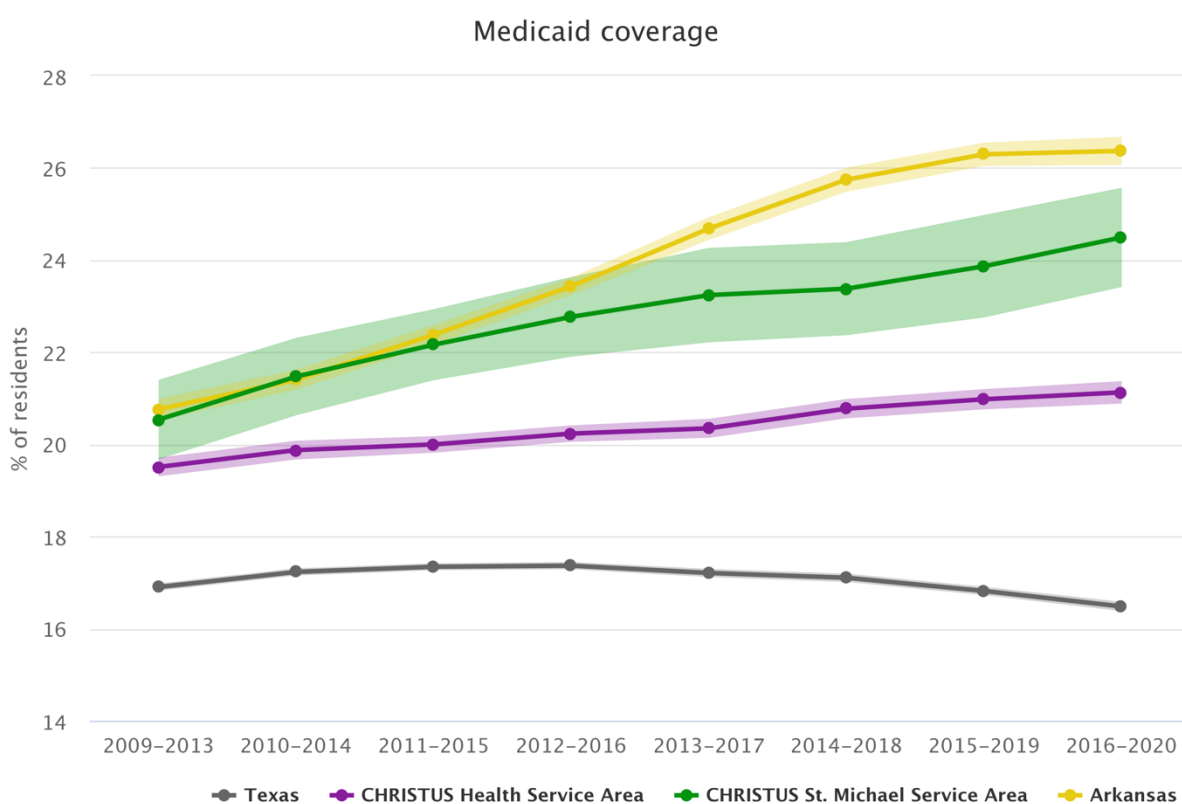
Table 7. Education Indicators by County in the CHRISTUS St. Michael Health System PSA

Access to Care

Being able to reliably access the health system, whether for primary care, mental health, or specialists, is often dependent on one's insurance. As shown in Figure 22, the percentage of residents covered by Medicaid in the CSMHS PSA (24.5%) is higher than that of Texas (16.5%) and the full CHRISTUS Health service area (21.1%) but is almost the same rate as Arkansas (26.4%).

"I struggle with mental illness. My husband has COPD and serious heart problems. My father had dementia. There is little support in the community. It is overwhelming to be a caregiver."

- Survey Participant



Created on Metopio | <https://metopio.io/i/svrocwzv> | Data source: American Community Survey (Tables S2704, S2701, and B27010)
Medicaid coverage: Percent of residents covered by Medicaid, a state-administered health insurance program for residents meeting certain income limits and other eligibility standards that vary by state.

Figure 22. Medicaid Coverage in the CHRISTUS St. Michael Health System PSA

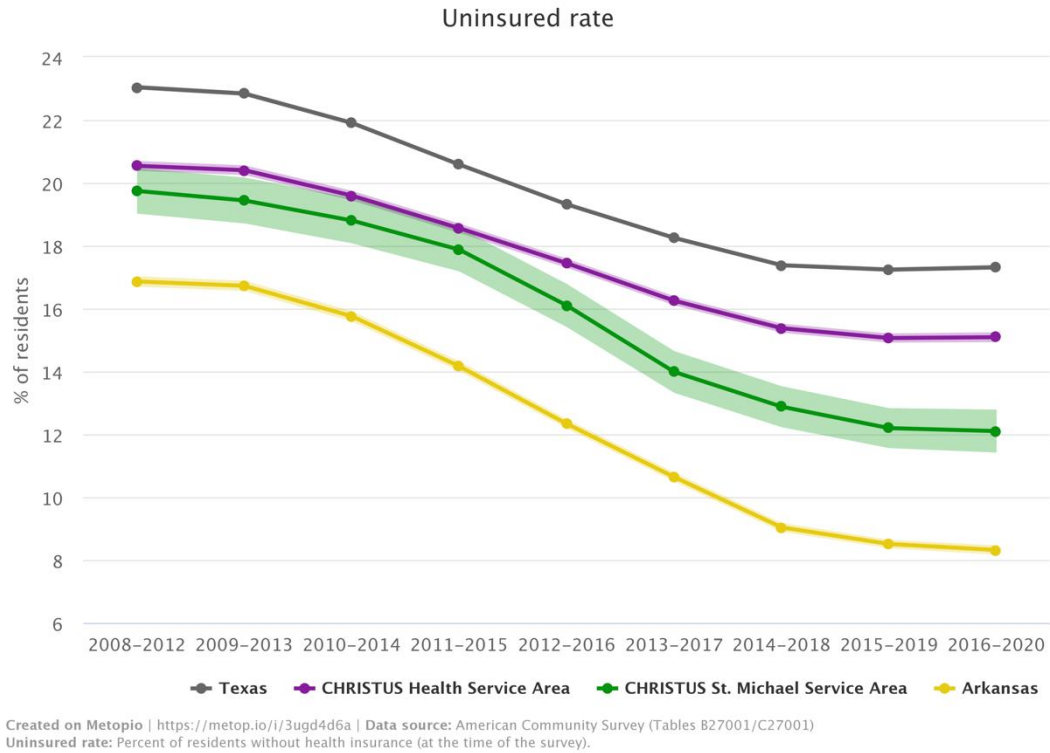


Figure 23. Uninsured Rate in the CHRISTUS St. Michael Health System PSA

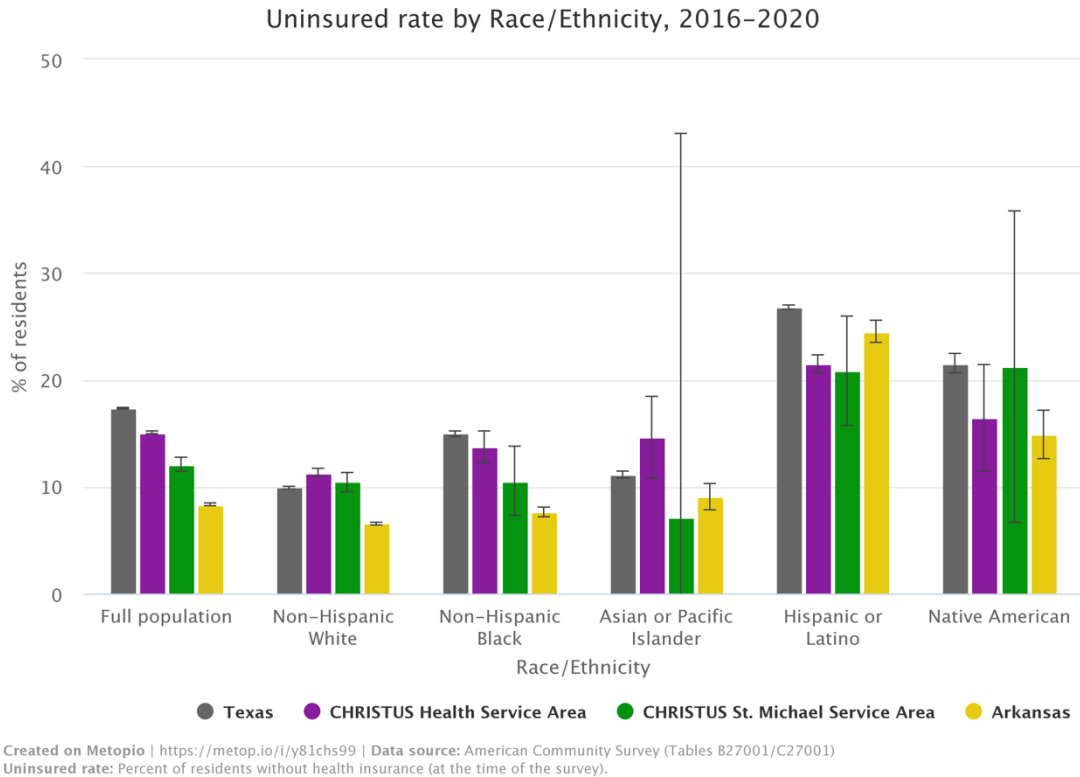


Figure 24. Uninsured Rate with Stratifications in the CHRISTUS St. Michael Health System PSA

The uninsured rate in the CHRISTUS St. Michael Health System PSA (11.9%) is lower than the full CHRISTUS Health service area (15.1%) and Texas (17.3%) but higher than the rate in Arkansas (8.3%) (Figure 23). However, it is much higher in the Hispanic or Latino population (23.5%) (Figure 24). Additionally, there is a high uninsured rate for Native Americans (19.6%), but it should be noted that this data has a high margin of error because of the small Native American population in the PSA (Figure 24).

As illustrated in Figures 22 and 23, Arkansas has had the sharpest increase in Medicaid coverage and decline in uninsured rates over the past few years. In the most recent reporting period, only 8.3% of the population was uninsured. This may be related to the expansion of Medicaid in that Arkansas. Texas, which has not approved Medicaid expansion, has the highest uninsured rate amongst benchmark regions (17.3%).

Overall, nearly 40% of residents in the CSMHS service area are either uninsured or have limited coverage through Medicaid. As demonstrated in Figure 24, the uninsured rate is highest for Hispanic or Latinos in the service area (20.8% of Hispanics or Latinos are uninsured) and for Native Americans (21.3%).

Mental health was raised as an issue through all channels of primary data collection. Many residents noted a lack of access to providers, regardless of a person's insurance. Table 8 shows the per capita rate for types of mental health providers compared to the full CHRISTUS service area and Texas. The PSA has a much smaller number of mental health providers per capita for all three provider categories compared to the other benchmark regions.

Topic		CHRISTUS St. Michael Service Area	CHRISTUS Health Service Area	Texas	Arkansas
Mental health providers per capita <i>providers per 100,000 residents, 2021</i>	i	156.3	266.7	171.0	314.6
Clinical social workers per capita <i>physicians per 100,000 residents, 2021</i>	i	18.15	37.48	29.76	58.51
Psychiatry physicians per capita <i>physicians per 100,000 residents, 2021</i>	i	7	16	16	16

Table 8. Access to Mental Health Providers in the CHRISTUS St. Michael Health System PSA

Many low-income residents in the CSMHS PSA rely on Federally Qualified Health Centers (FQHCs) for their care in addition to hospitals, outpatient centers and primary care offices. FQHCs are defined based on number of federally qualified health centers, community-based organizations recognized by the Centers for Medicare and Medicaid Services that provide comprehensive primary and preventative care to medically underserved areas and populations, regardless of the ability to pay. There are 13 FQHCs spread across the PSA. As shown in Figure 25, most are concentrated in zip code 71854 (5 FQHCs).

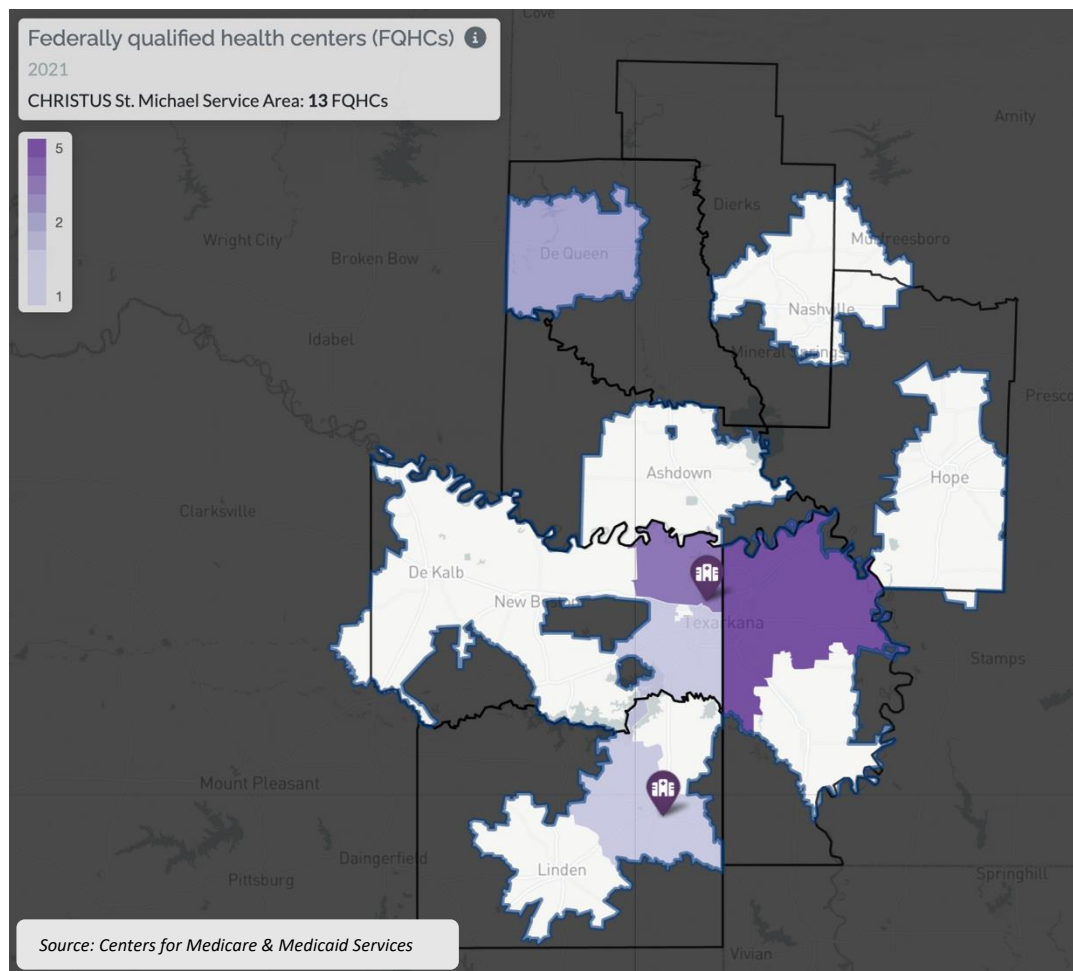
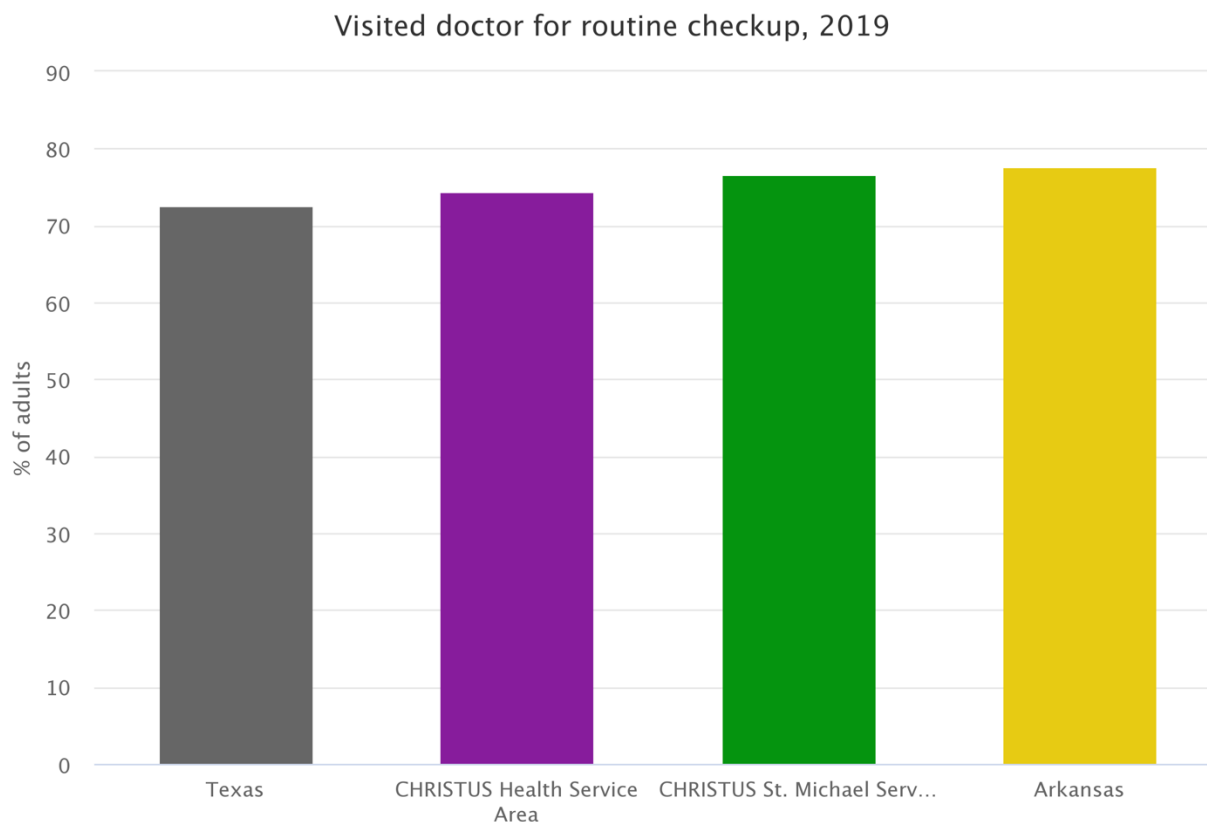


Figure 25. Heat Map of FQHC locations in the CHRISTUS St. Michael Health System PSA

Despite the specific access issues listed above, residents in the PSA are still able to receive regular primary care. In 2019, 76.6% of adults in the CHRISTUS St. Michael Health System PSA, aged 18 and older, report having been to a doctor for a routine checkup (e.g., a general physical exam, not an exam for a specific injury, illness, condition) in the previous year (Figure 26). This is in line with the rates for the rest of the CHRISTUS service area (74.3%), Texas (72.6%) and Arkansas (77.6%) (Figure 26).



Created on Metopio | <https://metop.io/i/g25bh29b> | Data sources: PLACES (Sub-county data (zip codes, tracts)), Behavioral Risk Factor Surveillance System (BRFSS) (County and state data), Behavioral Risk Factor Surveillance System (BRFSS) (County and state data)
Visited doctor for routine checkup: Percent of resident adults aged 18 and older who report having been to a doctor for a routine checkup (e.g., a general physical exam, not an exam for a specific injury, illness, condition) in the previous year.

Figure 26. Regular Doctors' Visits in the CHRISTUS St. Michael Health System PSA

Topic	Bowie County, TX	Cass County, TX	Hempstead County, AR	Howard County, AR	Little River County, AR	Miller County, AR	Sevier County, AR
Visited doctor for routine checkup % of adults, 2019	73.30	72.70	79.20	78.60	77.90	78.40	76.20
Primary care providers (PCP) per capita physicians per 100,000 residents, 2018	71.9	23.1	26.9	51.6	23.6	103.1	46.3
Nurse practitioners per capita nurses per 100,000 residents, 2019	157.80	39.57	58.20	44.26	86.48	84.76	98.45
Federally qualified health centers (FQHCs) FQHCs, 2021	5	2	—	1 (2020 data)	—	5	2

Table 9. Primary Care Access Indicators by County in the CHRISTUS St. Michael Health System PSA

Food Access

Both obesity and healthy eating were raised as top health issues by survey respondents. Often obesity is correlated with poor food access, and about 9.9% of residents in the CSMHS PSA live in a food desert, meaning there isn't a grocery store with one mile for urban residents and five miles for rural residents (Figure 27). Without easy access to fresh, healthy foods, people sometimes rely on fast food and other unhealthy options. The map below shows that food desert areas are spread across the PSA, but highest concentrations are found in zip codes 75569 (20.0%) and 75572 (19.0%). In addition to food deserts, about 1-in-5 residents are considered food insecure, which is an indicator that incorporates both economic and social barriers to food access (Figure 28).

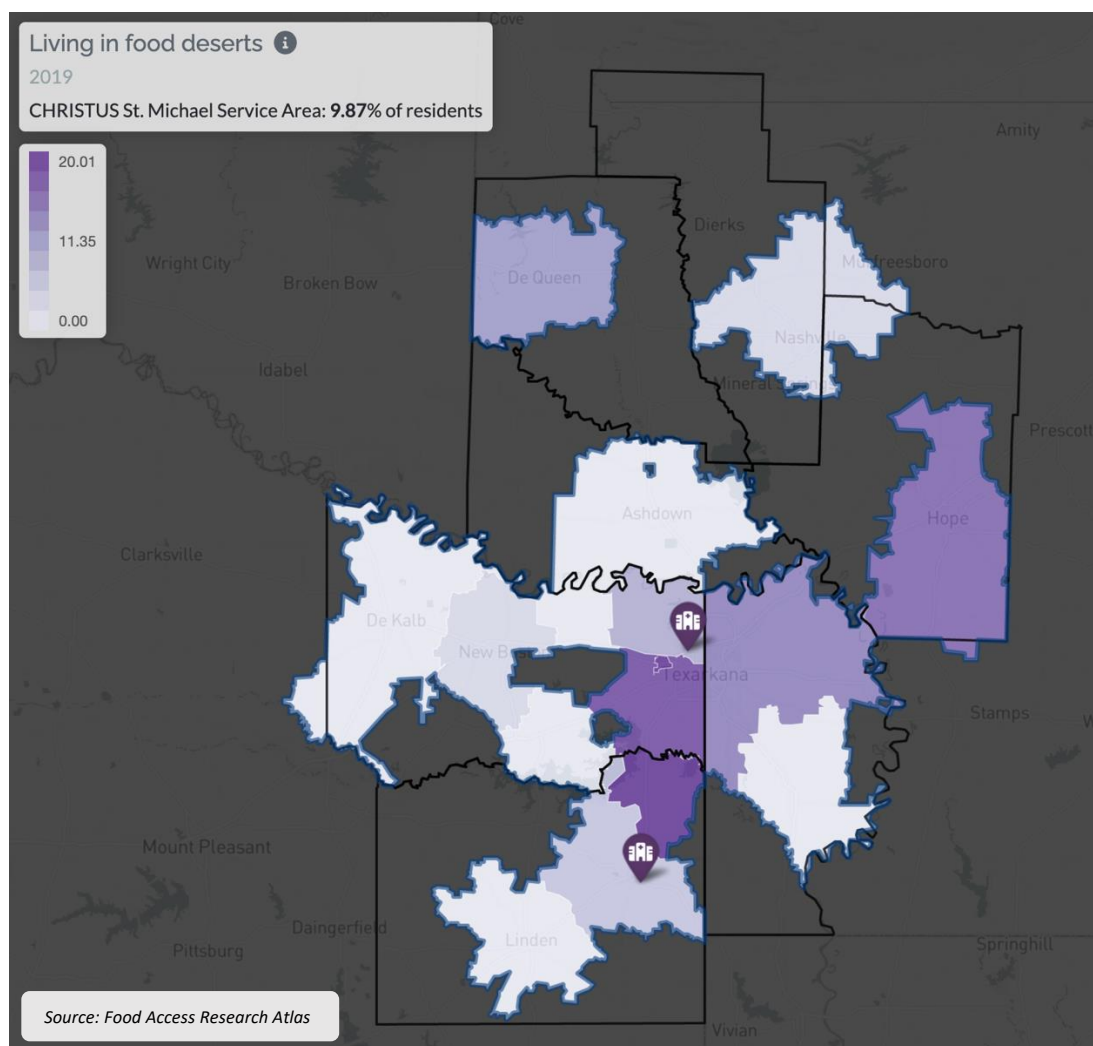
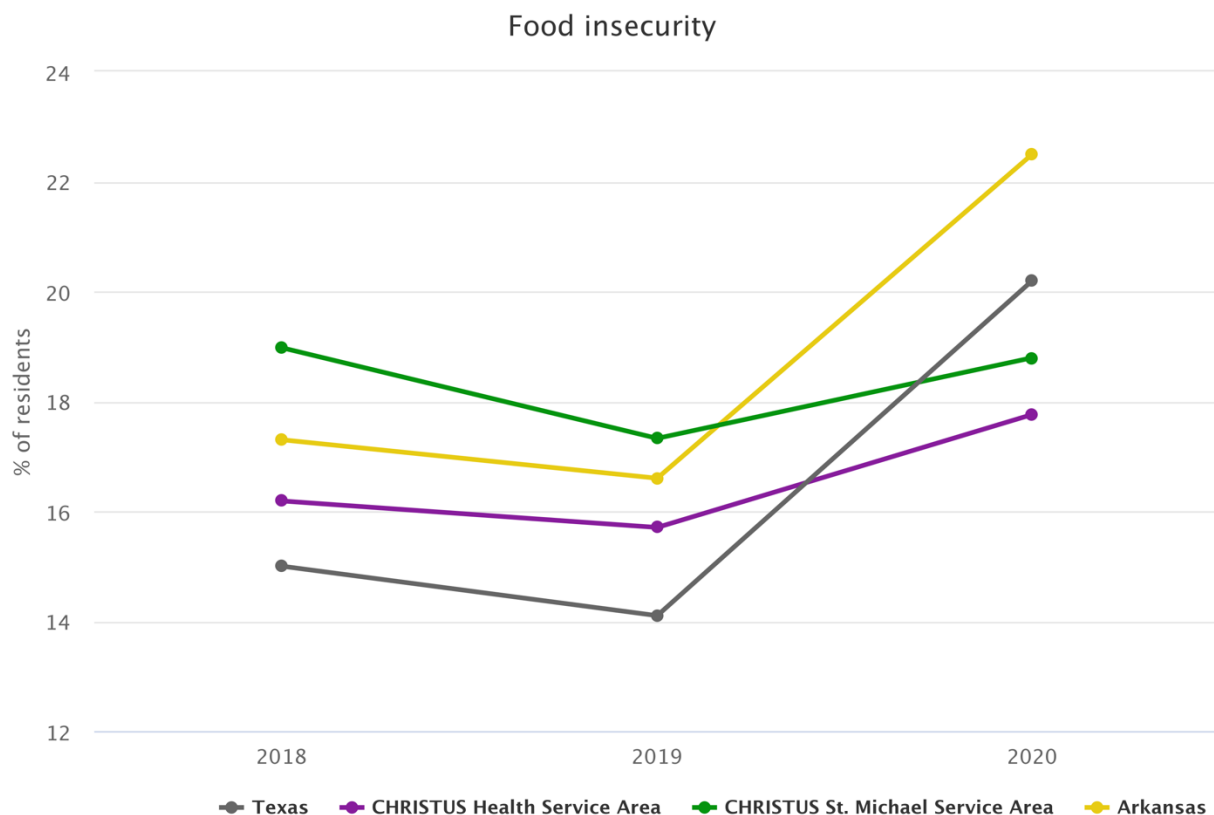


Figure 27. Map of Residents Living in Food Deserts in the CHRISTUS St. Michael Health System PSA



Created on Metopio | <https://metop.io/i/aqxpqcho> | Data source: Feeding America (Map the Meal Gap 2020)
 Food insecurity: Percentage of the population experiencing food insecurity at some point. Food insecurity is the household-level economic and social condition of limited or uncertain access to adequate food, as represented in USDA food-security reports. 2020 data is a projection based on 11.5% national unemployment and 16.5% national poverty rate.

Figure 28. Percent of Residents who are Food Insecure in the CHRISTUS St. Michael Health System PSA

Topic	Bowie County, TX	Cass County, TX	Hempstead County, AR	Howard County, AR	Little River County, AR	Miller County, AR	Sevier County, AR
Food insecurity % of residents 2020	23.0	24.1	23.7	21.8	23.2	24.6	20.5
Low food access % of residents 2019	54.20	22.52	51.07	50.93	2.99	49.88	45.79
Very low food access % of residents 2019	29.57	11.42	17.27	15.02	0.00	24.55	14.22
Living in food deserts % of residents 2019	9.48	5.63	9.98	7.30	0.00	10.99	7.55
Average cost per meal 2019	\$2.98	\$3.07	\$2.91	\$3.07	\$3.05	\$3.17	\$3.03

Figure 29. Food Access Indicators by County in the CHRISTUS St. Michael Health System PSA

Violence and Community Safety

As shown in Figure 30, the rate of property crimes in the CSMHS PSA (2,487.6 crimes per 100,000 residents), which includes burglary, larceny, motor vehicle theft and arson crimes, is lower than that of Texas (2,468.4) and Arkansas (2,970.2) and slightly higher than the rate in the country (2,222.6). The same pattern applies to violent crime in the PSA (442.6 crimes per 1,000 residents) compared to Texas (430.5), Arkansas (586.9) and the United States (391.0) (Figure 31). Violent crime includes homicide, criminal sexual assault, robbery, aggravated assault and aggravated battery.

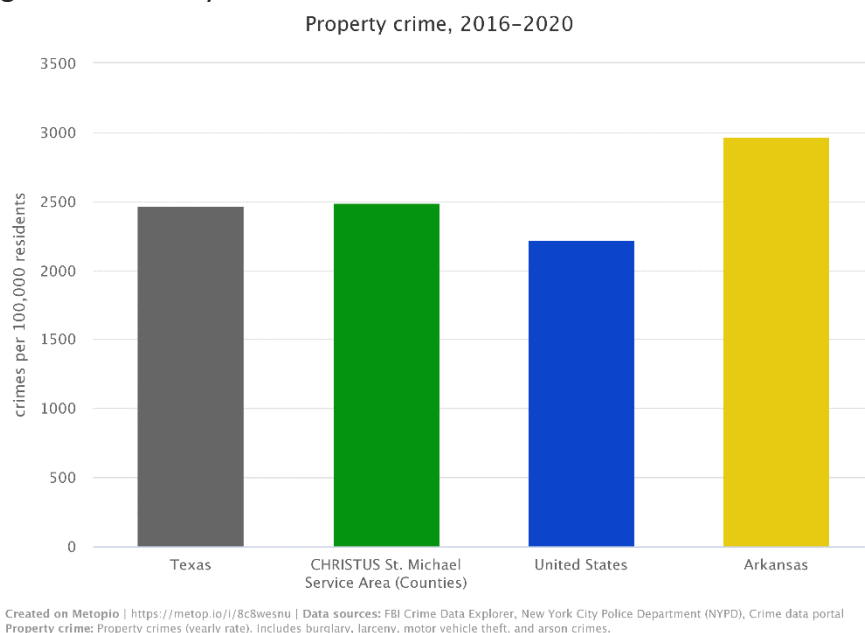


Figure 30. Property Crime Rate in the CHRISTUS St. Michael Health System PSA

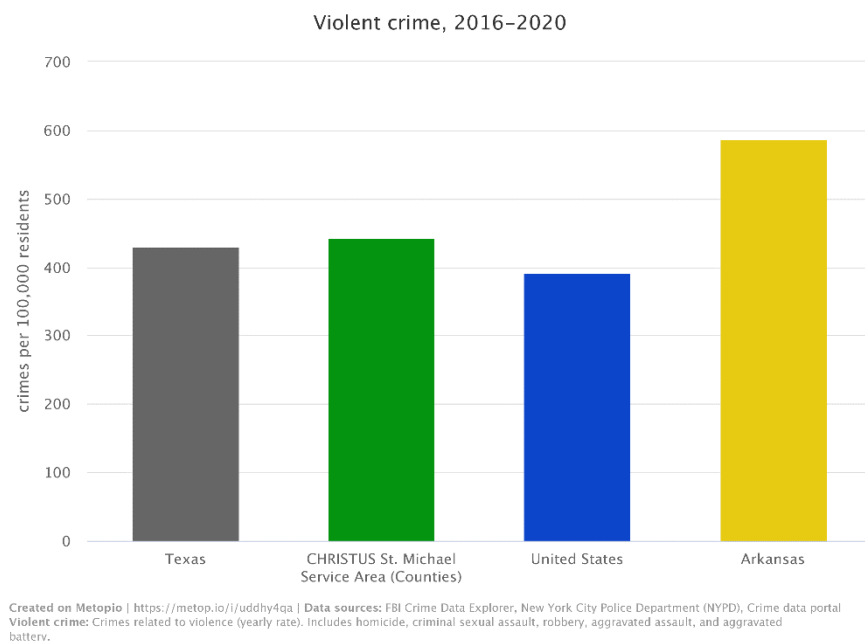


Figure 31. Violent Crime Rate in the CHRISTUS St. Michael Health System PSA

Health Data Analysis

Health Outcomes: Morbidity and Mortality

Chronic Disease

Community members noted that chronic conditions, especially heart disease and diabetes, had an outsized impact on the community. The rate of high blood pressure in the CSMHS PSA (39.4%) is higher than the full CHRISTUS Health service area (35.5%), Texas (32.2%) and Arkansas (36.1%) (Figure 32). Additionally, more than 1 in 10 adults has diabetes in the Texarkana service area. As shown in Figure 33, the rate of diabetes in the CSMHS PSA (13.4%) is higher than the rate in Texas (12.7%), Arkansas (11.3%) and the entire CHRISTUS Health service area (13.1%). Chronic kidney disease affects just under 3.5% of the population in the service area, which is slightly above the other benchmarks (Figure 34). Lastly, about 10.0% of the population lives with asthma (Figure 35). This is slightly higher than rate as the full CHRISTUS Health service area (9.1%), Texas (8.1%) and Arkansas (9.9%) (Figure 35). The following figures and tables illustrate these disease conditions.

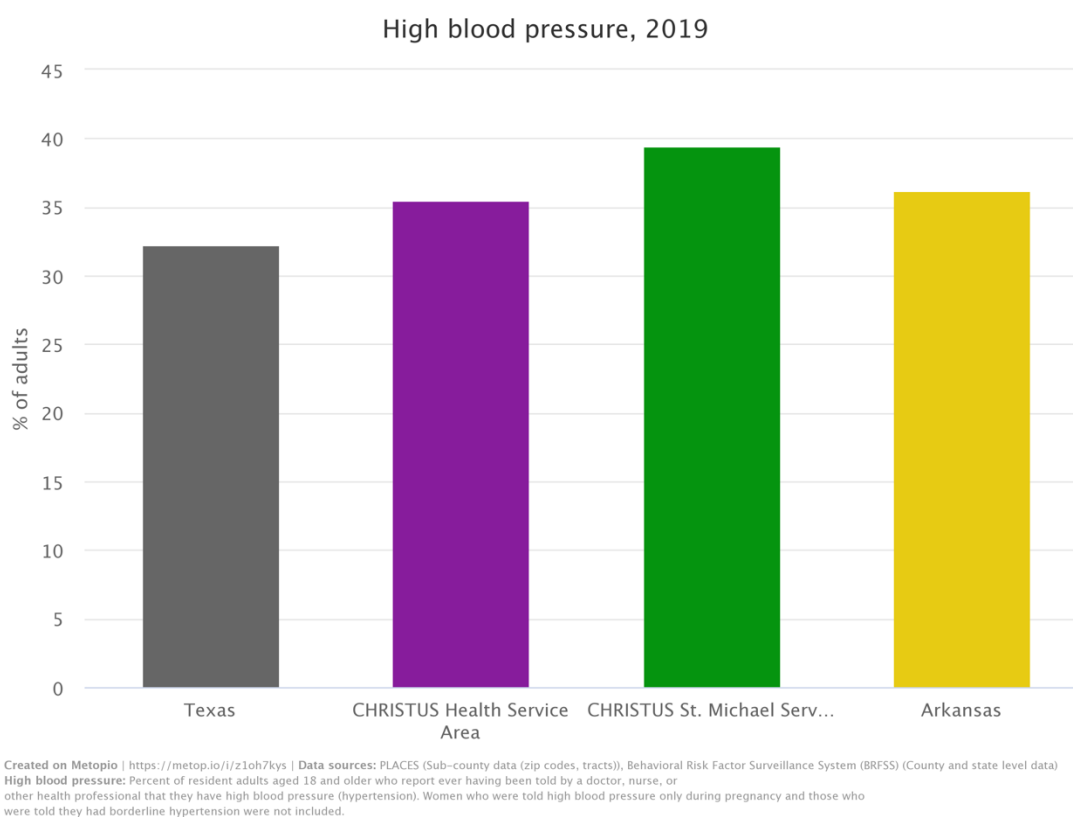


Figure 32. High Blood Pressure in the CHRISTUS St. Michael Health System PSA

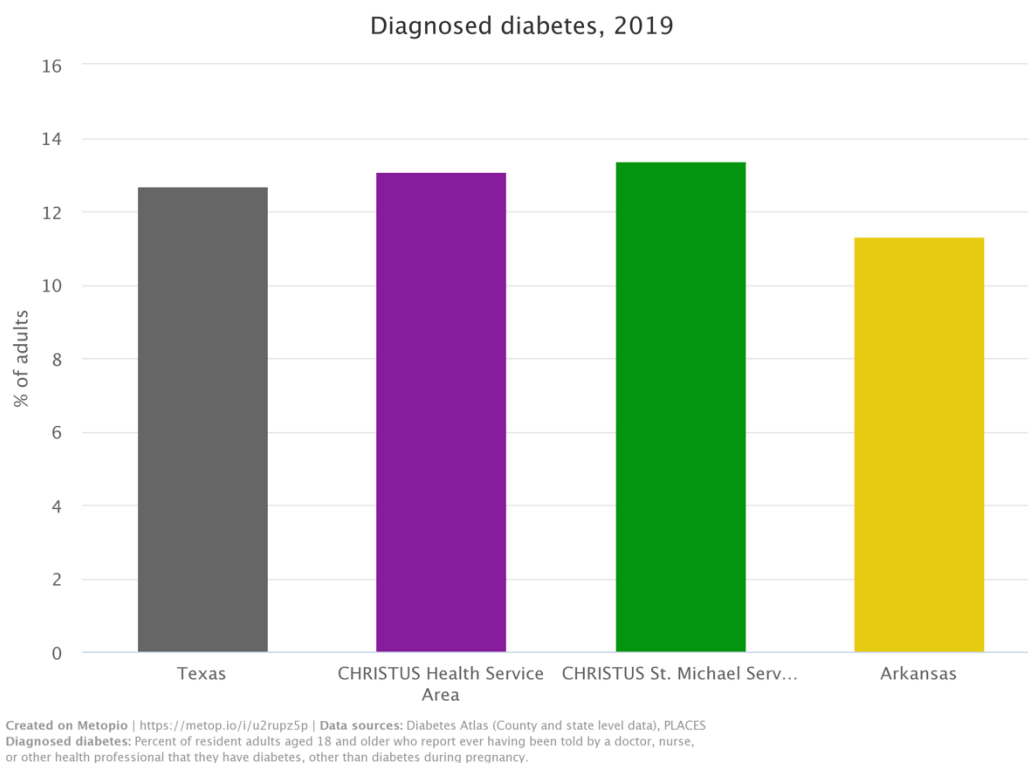


Figure 33. Diagnosed Diabetes in the CHRISTUS St. Michael Health System PSA

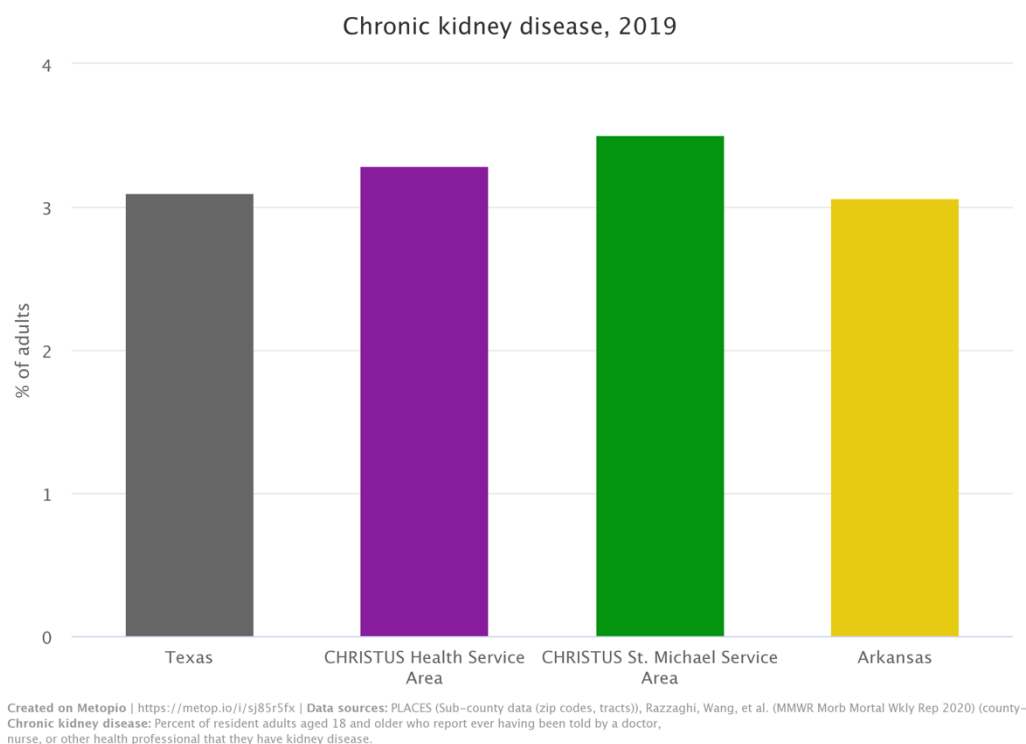
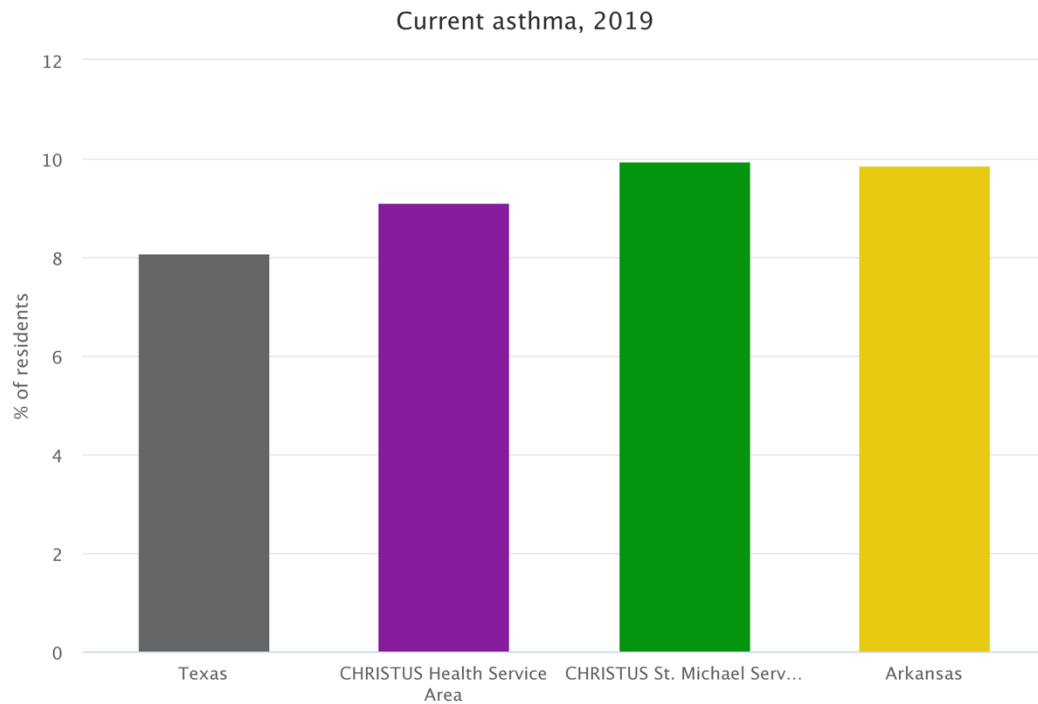


Figure 34. Chronic Kidney Disease in the CHRISTUS St. Michael Health System PSA



Created on Metopio | <https://metop.io/i/xfb3nvof> | Data sources: PLACES (Sub-county data (zip codes, tracts)), Behavioral Risk Factor Surveillance System (BRFSS) (County and state
Current asthma: Percent of residents (civilian, non-institutionalized population) who answer "yes" both to both of the following questions: "Have you ever been told by a doctor, nurse, or other health professional that you have asthma?" and the question "Do you still have asthma?"

Figure 35. Residents with Asthma in the CHRISTUS St. Michael Health System PSA

Topic	Bowie County, TX	Cass County, TX	Hempstead County, AR	Howard County, AR	Little River County, AR	Miller County, AR	Sevier County, AR
High blood pressure % of adults, 2019	36.00	36.30	38.40	38.20	37.70	38.10	36.40
Diagnosed diabetes % of adults, 2019	12.1	12.0	13.7	12.7	11.9	12.4	13.3
Coronary heart disease % of adults, 2019	6.20	6.60	7.10	7.20	6.90	7.00	7.30
Chronic kidney disease % of adults, 2019	3.1	3.2	3.5	3.4	3.2	3.3	3.4
Current asthma % of residents, 2019	9.30	9.80	10.30	10.40	10.30	10.20	9.20
Obesity % of adults, 2019	37.3	36.6	39.3	42.3	38.9	38.8	39.0

Table 10. Chronic Disease Indicators by County in the CHRISTUS St. Michael Health System PSA

Maternal Health

As shown in Figure 36, the CSMHS PSA experiences a similar number of preterm births (12.3% of live births) as Texas (12.3%) and Arkansas (12.7%). This is particularly an issue for Non-Hispanic Black people in the service area, who experience preterm births in 20.7% of live births, which is much higher than any the Non-Hispanic White population. It should be noted that the most recent data for the CSMHS PSA was from 2013, so these rates may be different today. The teen birth rate in the service area (20.9 births per 1,000 women) is about the same as that of the CHRISTUS service area (22.1), Texas (17.1) and Arkansas (20.7). As illustrated in Figure 37, the teen birth rate has significantly decreased in the PSA over the past two decades.

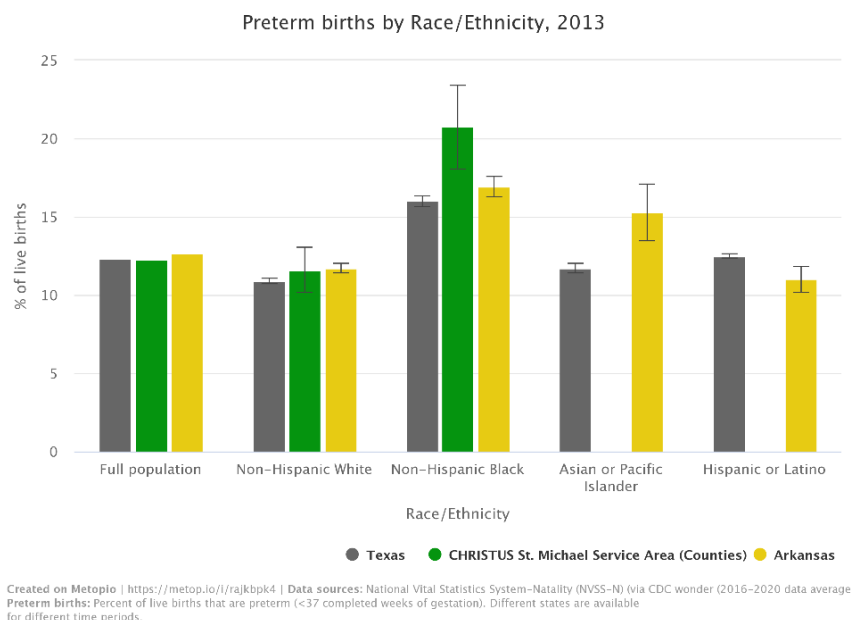


Figure 36. Percent of Births that are Preterm in the CHRISTUS St. Michael Health System PSA

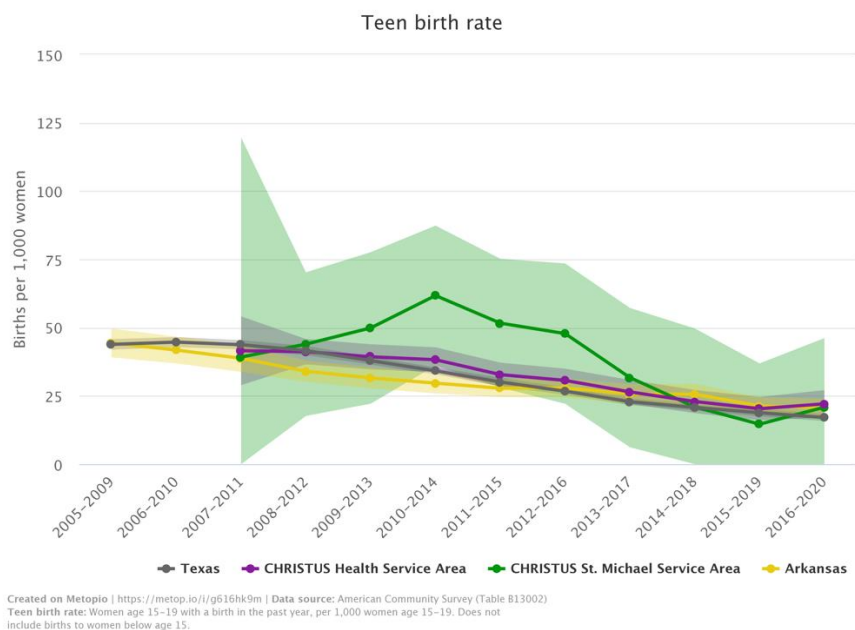


Figure 37. Teen Birth Rate in the CHRISTUS St. Michael Health System PSA

Mental Health

More than 20% of adults in the CSMHS PSA report being depressed (Figure 38), but the available data was collected before the pandemic. Based on the community survey as well as pulse surveys conducted by the American Community Survey, it is likely the percentage has increased over the last two years.

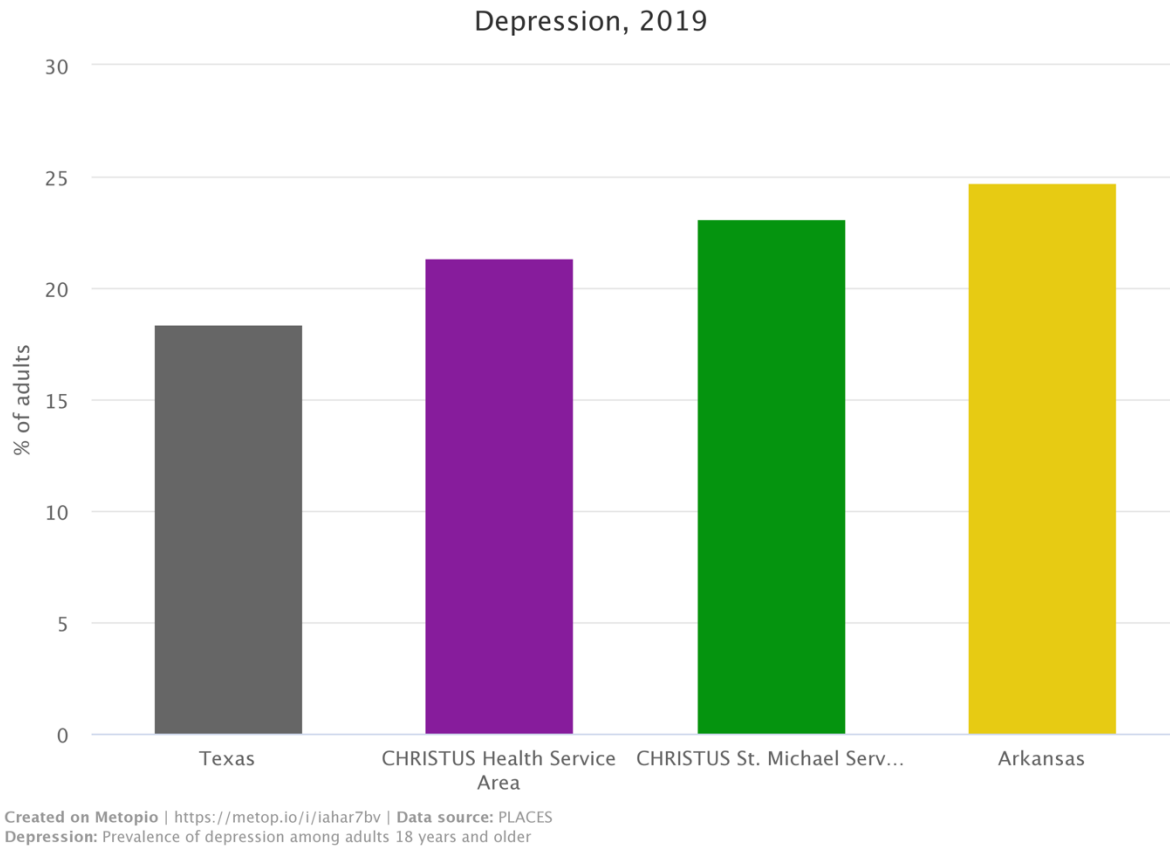


Figure 38. Depression Rate in the CHRISTUS St. Michael Health System PSA

Leading Causes of Death

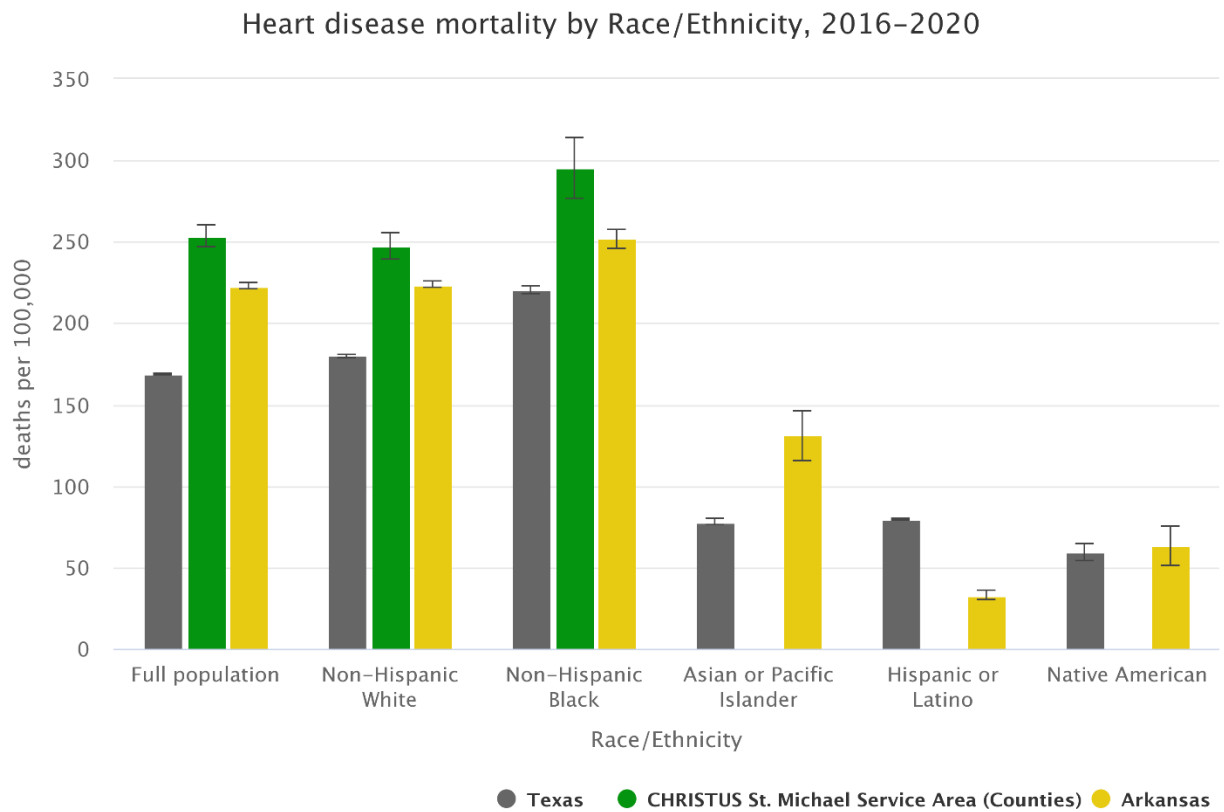
The top ten causes of death in the CSMHS PSA can be found in Table 11. The leading causes of death will be further explored in the sections below. A report by University of Texas at Tyler found that the Northeast Texas region, also known as the Texas Health Service Region 4/5N by the Texas Department of State Health Services, experiences higher mortality rates than the rest of the state or the country in each of the top five causes of death in the United States – heart disease, cancer, unintentional injury, chronic lower respiratory diseases and stroke. As seen in Table 11, disproportionate mortality rates in the St. Michael Health System PSA reflect those of the Northeast Texas region.

Topic	CHRISTUS St. Michael Service Area (Counties)	Texas	Arkansas
Heart disease mortality deaths per 100,000 , 2016 -2020	253.5	168.9	222.7
Cancer mortality deaths per 100,000 , 2016 -2020	173.4	143.7	170.1
Injury mortality deaths per 100,000 , 2016 -2020	74.9	60.4	83.4
Chronic lower respiratory disease mortality deaths per 100,000 , 2016 -2020	66.6	38.9	61.6
Stroke mortality deaths per 100,000 , 2016 -2020	56.6	40.7	43.0
Alzheimer's disease mortality deaths per 100,000 , 2016 -2020	49.1	39.7	41.0
Diabetes mortality deaths per 100,000 , 2016 -2020	30.6	22.7	30.8
Kidney disease mortality deaths per 100,000 , 2016 -2020	18.2	15.6	18.7
Influenza and pneumonia mortality deaths per 100,000 , 2016 -2020	13.8	11.8	17.9
Drug overdose mortality deaths per 100,000 , 2016 -2020	9.01	11.22	15.58

Table 11. Leading Causes of Death in the CHRISTUS St. Michael Health System PSA

Heart Disease

Coronary heart disease makes up the largest contributor to the heart disease mortality rate, accounting for 253.5 deaths per 100,000 deaths. Heart disease mortality has a disparate impact on the Black community in the CSMHS PSA (Figure 39). The mortality rate for non-Hispanic Black people is 295.6 deaths per 100,000 deaths compared to 247.3 deaths for non-Hispanic White people. These disparities contribute to the disproportionate heart disease mortality rates in the region.



Created on Metopio | <https://metop.io/i/frv5qx2h> | Data sources: National Vital Statistics System–Mortality (NVSS–M) (Via <http://healthindicators.gov>), Chicago Heart disease mortality: Deaths per 100,000 residents with an underlying cause of heart disease (ICD–10 codes I00–I09, I11, I13, I20–I51).

Figure 39. Heart Disease Mortality with Stratifications in the CHRISTUS St. Michael Health System PSA

Cancer

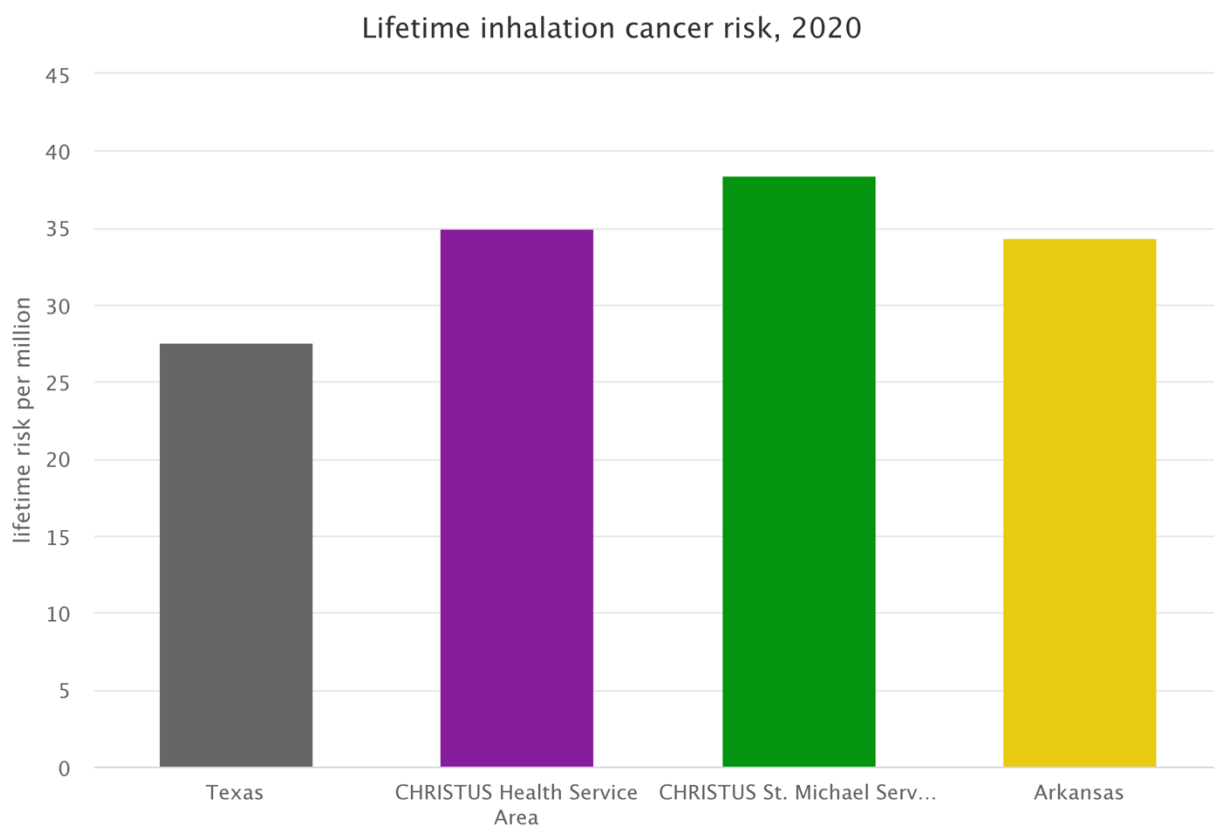
Cancer represents the second leading cause of death in the CHRISTUS St. Michael Health System PSA. Lung, trachea and bronchus cancers make up the largest portion of cancer deaths, causing 49.9 out of 100,000 deaths. The second largest cause of cancer mortality in the PSA comes from colorectal cancer, causing 17.5 out of 100,000 deaths.

Leading types of cancer found in the CSMHS PSA can be found in Table 12. In the CHRISTUS St. Michael Health System PSA, there is a higher rate of cervical cancer (14.8 diagnoses per 100,000 residents) than both Texas (9.30) and Arkansas (9.50). Rates of breast cancer and prostate cancer in the CSMHS PSA are lower than the rates in Texas and Arkansas. All other cancer diagnosis rates lie somewhere between the two other benchmarks.

Topic	CHRISTUS St. Michael Service Area (Counties)	Texas	Arkansas
Cancer diagnosis rate per 100,000 residents, 2014-2018	418.66	411.20	479.00
Invasive breast cancer diagnosis rate per 100,000 female residents, 2014-2018	109.56	114.20	119.50
Prostate cancer diagnosis rate per 100,000 male residents, 2014-2018	83.28	97.60	117.10
Lung cancer diagnosis rate per 100,000 residents, 2014-2018	74.33	49.50	76.50
Colorectal cancer diagnosis rate per 100,000 residents, 2014-2018	39.93	37.80	44.00
Non-invasive breast cancer diagnosis rate per 100,000 female residents, 2014-2018	21.26	22.20	27.30
Cervical cancer diagnosis rate per 100,000 female residents, 2014-2018	14.80	9.30	9.50
Oral cancer diagnosis rate per 100,000 residents, 2014-2018	12.29	11.20	14.00

Table 12. Cancer Diagnosis Rates in the CHRISTUS St. Michael Health System PSA

Although the lung cancer rate in the PSA (74.3 diagnoses per 100,000 people) is lower than the rate in Arkansas (76.5), it is still much higher than the rate in Texas (49.5). Environmental factors may contribute to the lung cancer burden in the CSMHS PSA. The Lifetime Inhalation Cancer Risk of the Environmental Protection Agency's Environmental Justice Index is a weighted index of vulnerability to lifetime inhalation cancer risk. It measures estimated lifetime risk of developing cancer as a result of inhaling carcinogenic compounds in the environment, per million people. The Lifetime Inhalation Cancer Risk is higher in the PSA, measuring 38.4 lifetime risk per million, compared to the full CHRISTUS Health service area (35.0 lifetime risk), Texas (27.6 lifetime risk) and Arkansas (34.3 lifetime risk) (Figure 40).



Created on Metopio | <https://metop.io/i/hj494kft> | Data source: EJScreen: Environmental Justice Screening (EJSCREEN, via National-Scale Air Toxics Assessment)
 Lifetime inhalation cancer risk: Estimated lifetime risk of developing cancer as a result of inhaling carcinogenic compounds in the environment, per million people.

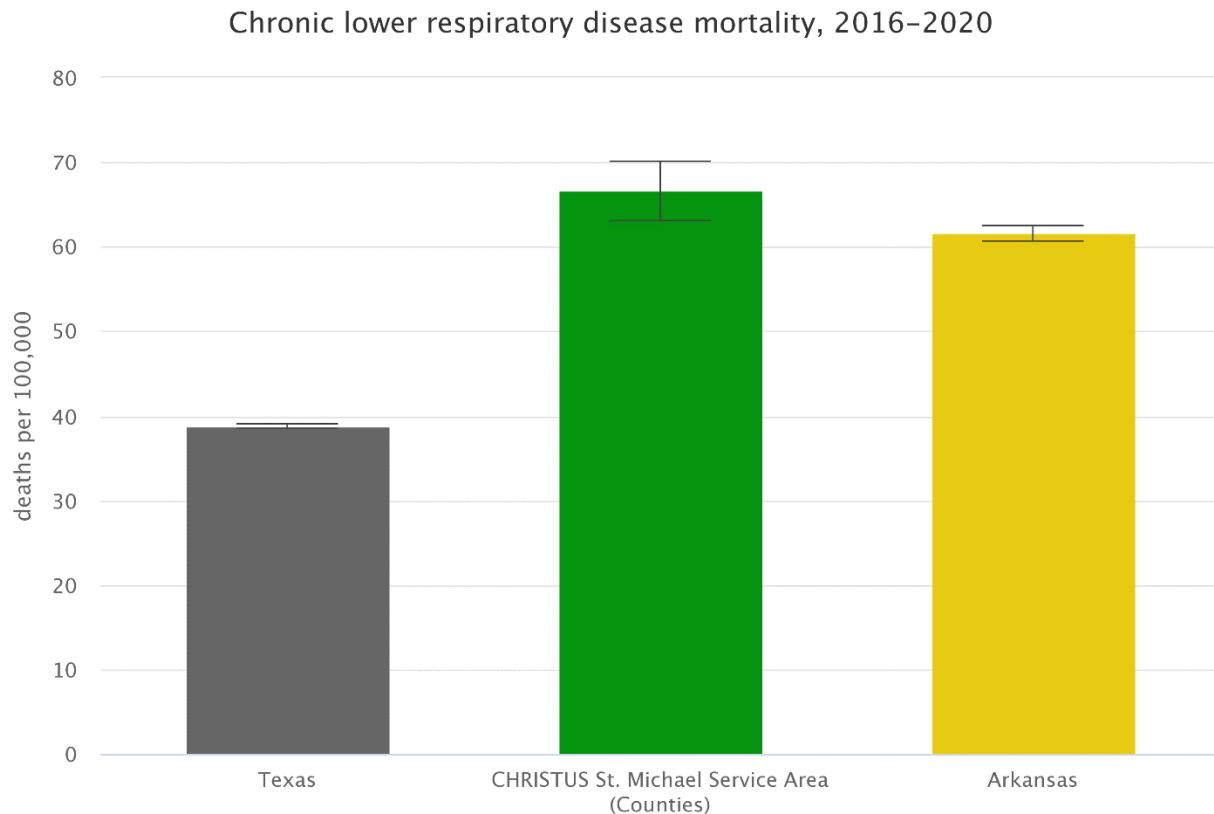
Figure 40. Lifetime Inhalation Cancer Risk in the CHRISTUS St. Michael Health System PSA

Injury

Injuries account for the third highest cause of death in the CHRISTUS St. Michael Health System PSA. This is, in part, because this category includes many kinds of injury. Within the injury category, 47.2 out of 100,000 deaths come from unintentional injury, 22.5 from motor vehicle traffic, 18.8 from firearm-related deaths, 19.7 deaths by suicide and 4.4 deaths from falls.

Chronic Lower Respiratory Disease

This is a roll up of four major respiratory diseases—chronic obstructive pulmonary disease (COPD), chronic bronchitis, emphysema and asthma. As demonstrated in Figure 41, there appears to be a significant disparity with this cause of mortality when comparing the service area (66.6 deaths per 100,000) to Texas (38.9 deaths) and Arkansas (62.0 deaths).

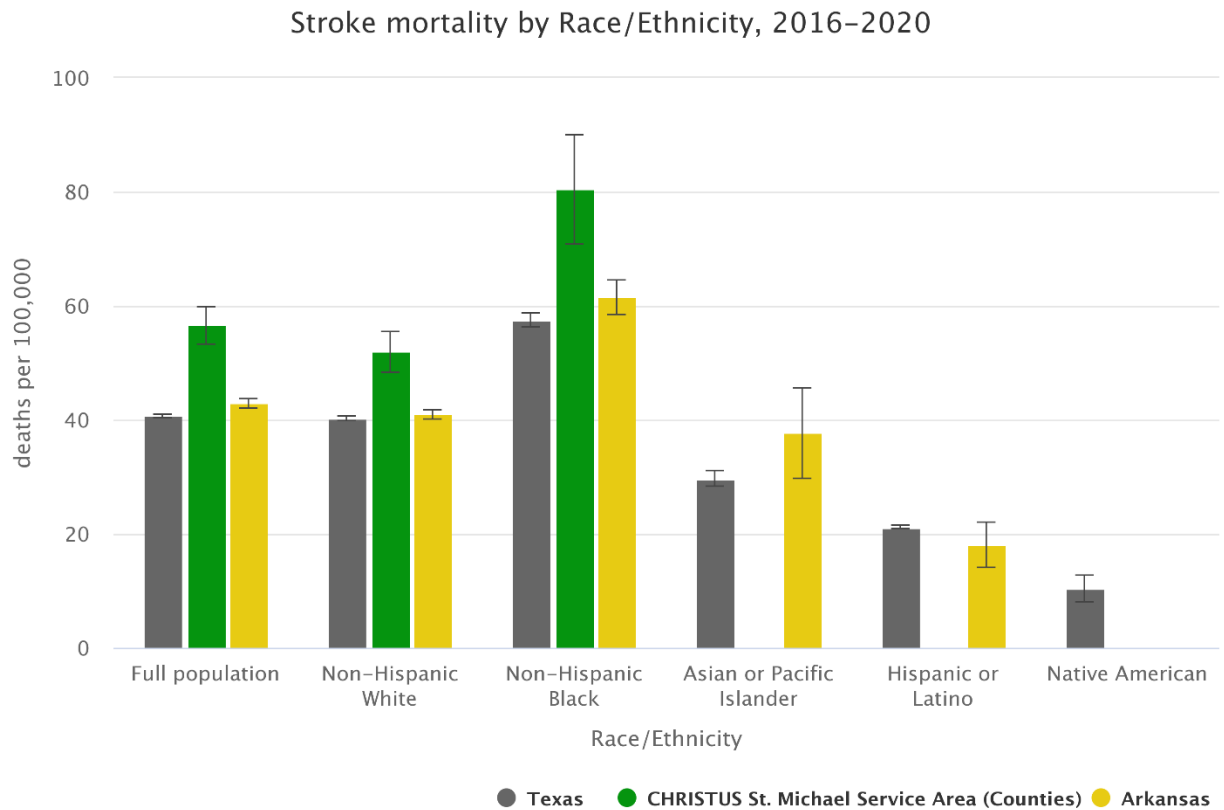


Created on Metopio | <https://metop.io/i/im8htanj> | Data sources: National Vital Statistics System–Mortality (NVSS–M) (Via <http://healthindicators.gov>), Chicago Department of Public Health (CDPH) (Via <http://data.cdh.state.il.us>)
Chronic lower respiratory disease mortality: Deaths per 100,000 residents due to chronic lower respiratory disease (ICD–10 codes J40–J47). The primary disease in this category is chronic obstructive pulmonary disease (COPD), which includes emphysema and chronic bronchitis. Also includes asthma and bronchiectasis.

Figure 41. Chronic Lower Respiratory Disease Mortality in the CHRISTUS St. Michael Health System PSA

Stroke

The mortality rate for stroke is higher in the service area (56.6 deaths per 100,000) than either benchmark. When looking at race/ethnicity stratifications, death by strokes is much more common in the Non-Hispanic Black population (80.5 deaths) compared to the Non-Hispanic White population (51.9) (Figure 42).

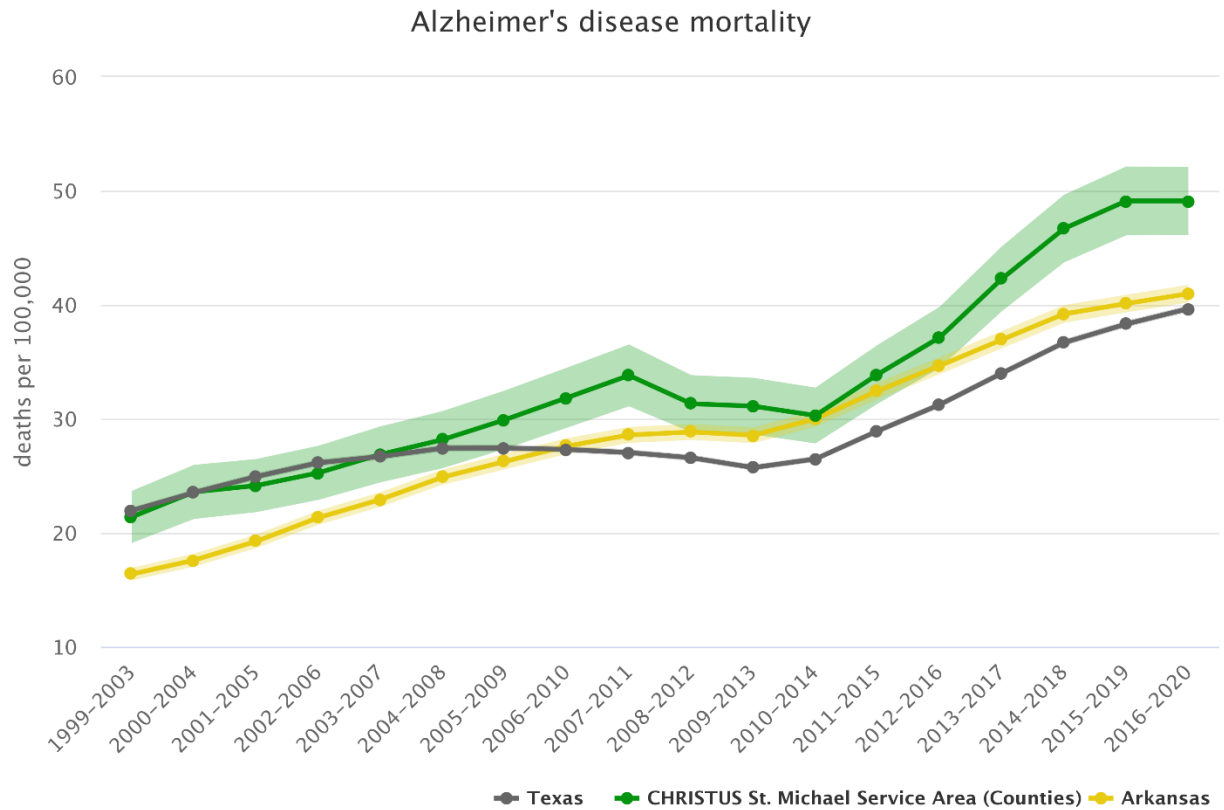


Created on Metopio | <https://metop.io/i/r1se1o5v> | Data sources: National Vital Statistics System–Mortality (NVSS–M) (Via <http://healthindicators.gov>), Chicago
Stroke mortality: Deaths per 100,000 residents due to stroke (ICD–10 codes I60–I69).

Figure 42. Stroke Mortality with Stratifications in the CHRISTUS St. Michael Health System PSA

Alzheimer's Disease

The mortality rate for Alzheimer's has been on a general incline over the last 20 years in the service area. It is higher than the rate in other benchmark locations (49.1 deaths per 100,000) in the PSA versus Texas (39.7) and Arkansas (41.0) (Figure 43).

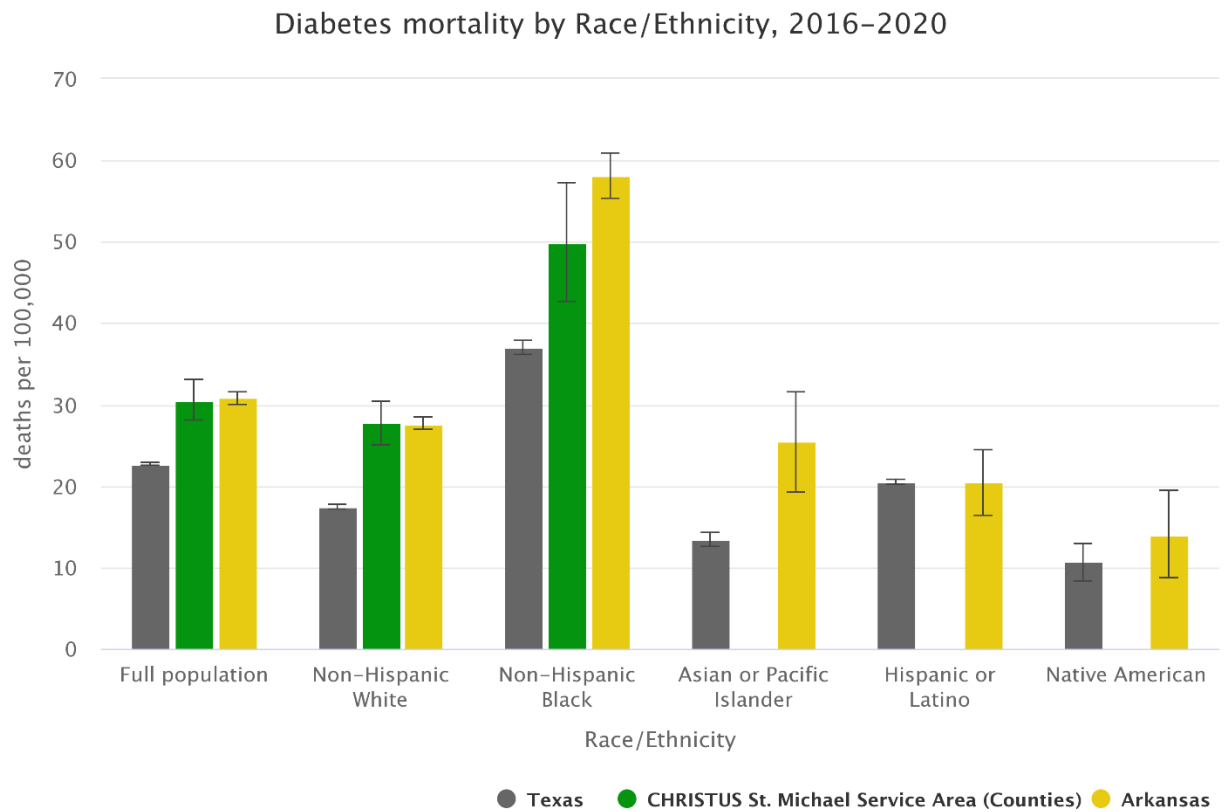


Created on Metopio | <https://metop.io/i/r9gznc8d> | Data sources: National Vital Statistics System-Mortality (NVSS-M) (Via <http://healthindicators.gov>), Chicago Alzheimer's disease mortality: Deaths per 100,000 residents due to Alzheimer's disease (ICD-10 code G30).

Figure 43. Alzheimer's Disease Mortality in the CHRISTUS St. Michael Health System PSA

Diabetes

The rate of mortality for diabetes in the CSMHS PSA overall (30.6 deaths per 100,000) is higher than that of the Texas (22.7 deaths), but slightly lower than Arkansas (30.8 deaths) (Figure 44). This is similar to the pattern in the Northeast Texas region. As illustrated in Figure 44, Non-Hispanic Black people face the greatest burden for diabetes mortality rates (49.9 deaths versus 27.7 deaths in Non-Hispanic White people).

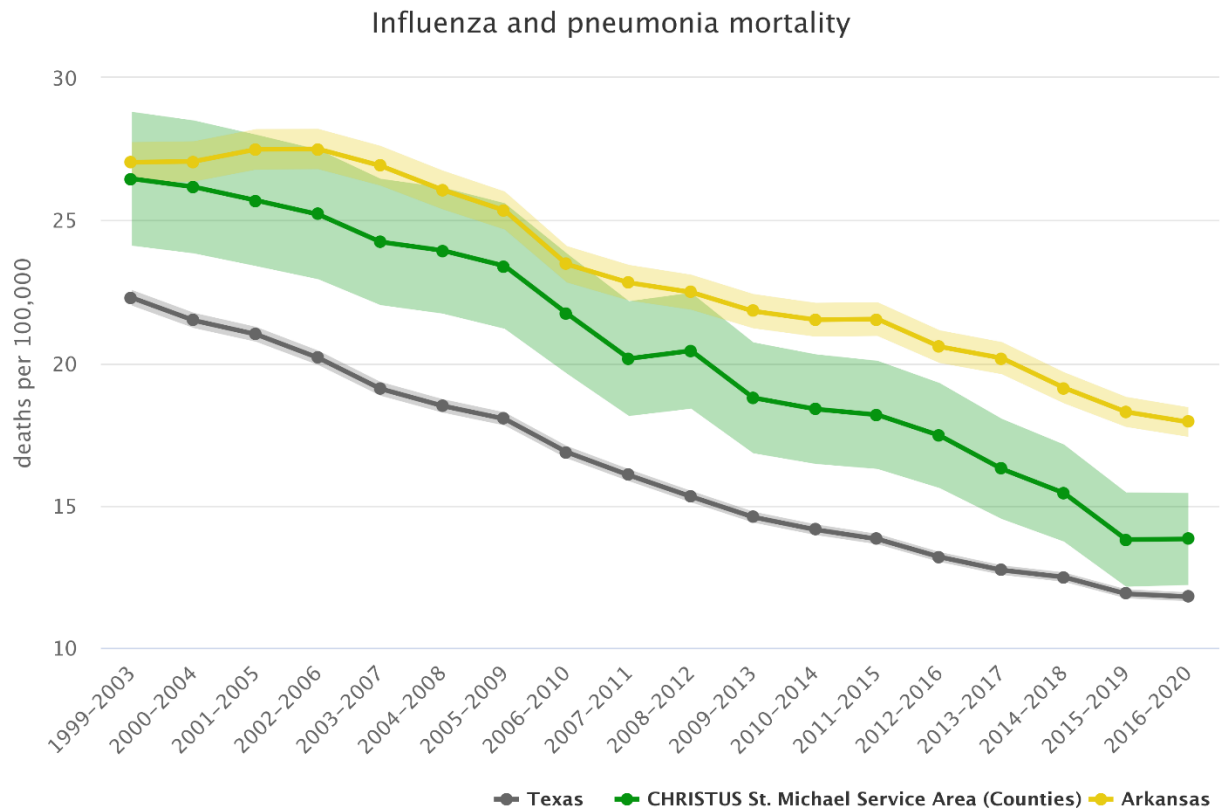


Created on Metopio | <https://metop.io/i/po3w262k> | Data sources: National Vital Statistics System–Mortality (NVSS–M) (CDC Wonder), Chicago Department of Public Health. Diabetes mortality: Deaths per 100,000 residents with an underlying cause of diabetes (ICD–10 codes E10–E14).

Figure 44. Diabetes Mortality with Stratifications in the CHRISTUS St. Michael Health System PSA

Influenza and Pneumonia

Death from influenza and pneumonia had been on a steady decline across all benchmark regions over time (Figure 45). In the most recent data collection period, influenza and pneumonia mortality rates in the PSA (13.8 deaths per 100,000) surpassed the average rate in Texas (11.8 deaths), but it still remains below the rate of Arkansas (17.9 deaths).

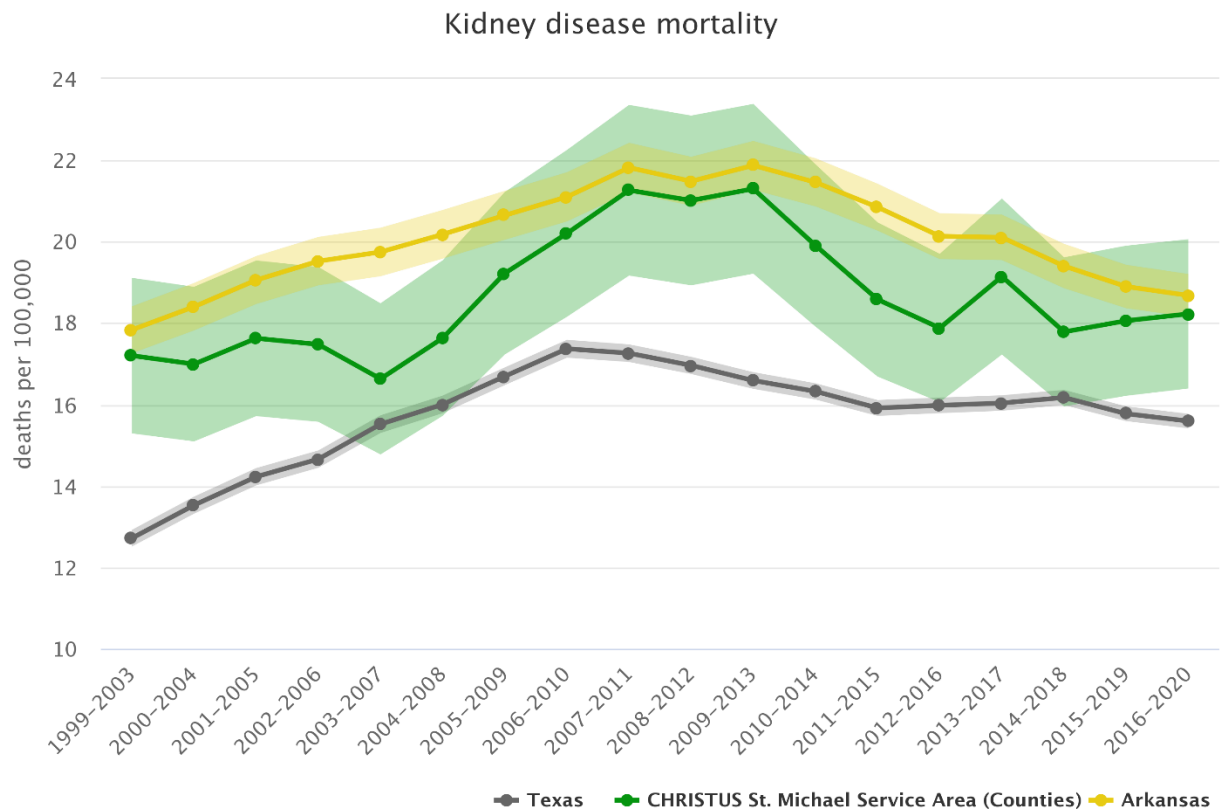


Created on Metopio | <https://metop.io/i/du3ngc8k> | Data source: National Vital Statistics System–Mortality (NVSS–M) (CDC Wonder)
Influenza and pneumonia mortality: Deaths per 100,000 residents due to influenza and pneumonia. These diseases are frequent causes of death especially among the elderly because they spread widely and tend to be complications from other conditions. The flu can change quite a bit from one year to another, affecting which populations are most vulnerable to it. Age-adjusted.

Figure 45. Influenza and Pneumonia Mortality in the CHRISTUS St. Michael Health System PSA

Kidney Disease

As shown in Figure 46, death from kidney disease in the CSMHS PSA (18.2 deaths per 100,000) lower than the rate in Arkansas (18.7 deaths), but higher than Texas (15.6 deaths). It is currently on a downward trend, but rates in the CSMHS PSA over the past twenty years have remained stable. As is highlighted in the next section on hospital utilization data, kidney disease and corresponding conditions are a major reason for inpatient admissions.

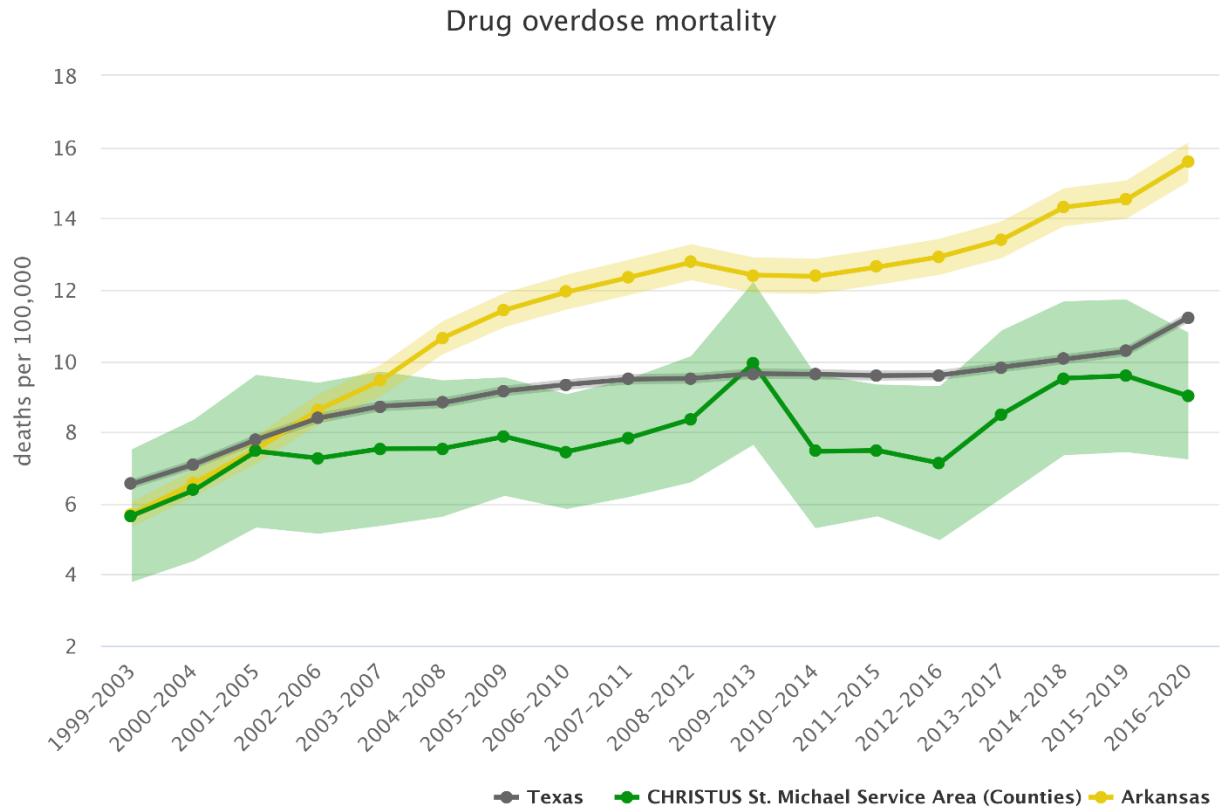


Created on Metopio | <https://metop.io/i/qjifzr5> | Data sources: National Vital Statistics System–Mortality (NVSS–M) (CDC Wonder), Chicago Department of Public Health (Epidemiol
Kidney disease mortality: Deaths per 100,000 residents with an underlying cause of death of kidney diseases (ICD–10 codes N00–N07, N17–N19, N25–N27). Includes nephritis, nephrotic syndrome, and nephrosis.

Figure 46. Kidney Disease Mortality in the CHRISTUS St. Michael Health System PSA

Drug Overdose

Death from drug overdoses, particularly opioids, has been a national story for several years. The overall rate has been on a slow increase since the early aughts (Figure 47). Overdose rate in the CSMHS PSA (9.01 deaths per 100,000) is lower than both Texas (11.4 deaths) and Arkansas (15.6 deaths).



Created on Metopio | <https://metop.io/i/9287577j> | Data sources: National Vital Statistics System—Mortality (NVSS-M) (CDC Wonder), Chicago Department of Public Health (Epidem
Drug overdose mortality: Deaths per 100,000 residents due to drug poisoning (such as overdose), whether accidental or intentional. The increase during the 2010s is largely due to the opioid overdose epidemic, but other drugs are also included here. Age-adjusted.

Figure 47. Drug Overdose Mortality in the CHRISTUS St. Michael Health System PSA

Hospital Utilization

For this CHNA, CHRISTUS St. Michael Health System looked at three years of utilization data (2019-2021). During the course of the COVID-19 pandemic, the health system saw Emergency Department utilization decline year over year (Figure 48). In fact, usage declined by 13% in Texarkana between 2020 and 2021 and 8% in Atlanta.

Inpatient cases in Texarkana had only a small change between 2020 and 2021 after declining 4% between 2019 and 2020 (Figure 49). Inpatient utilization actually increased in Atlanta between 2019 and 2020 but declined by 18% in 2021.

This drop in utilization follows national patterns. Many residents delayed care or sought services via telehealth during the height of COVID-19. What remains to be seen, and is not apparent yet in the data, is if issues will be more severe due to delayed care as more people return to the system for care.

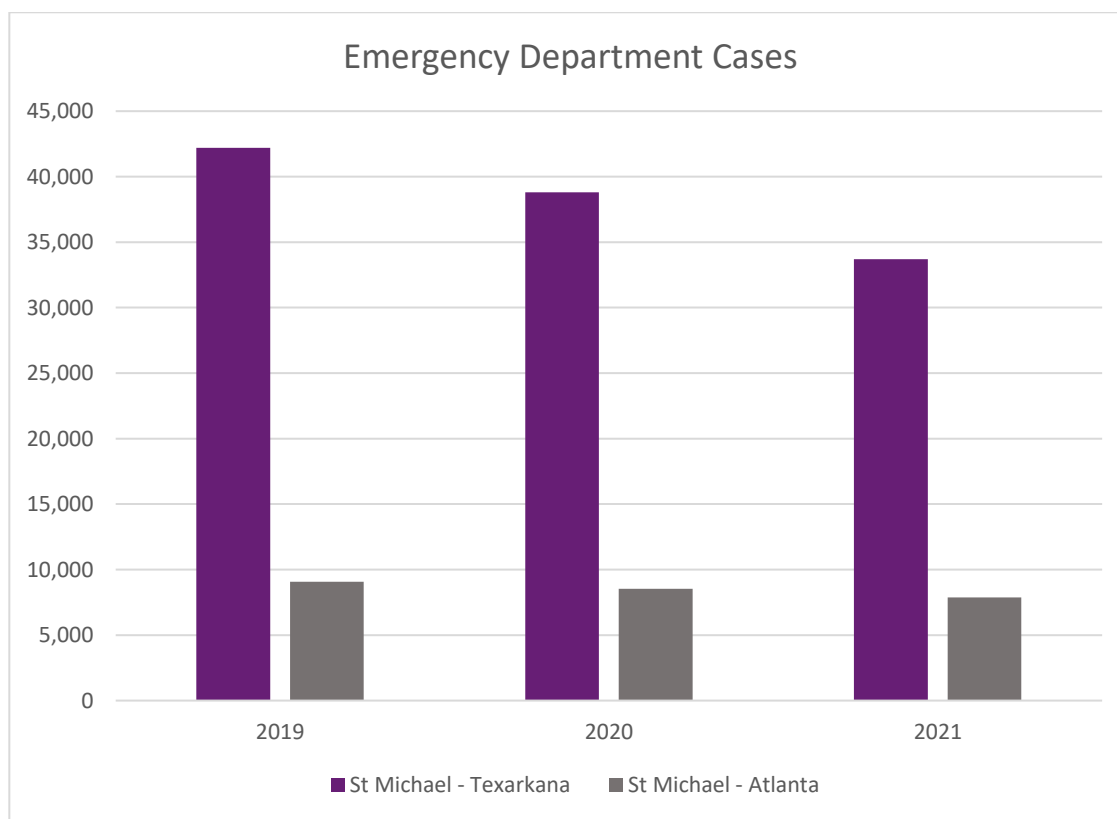


Figure 48. Emergency Department Utilization in the CHRISTUS St. Michael Health System PSA

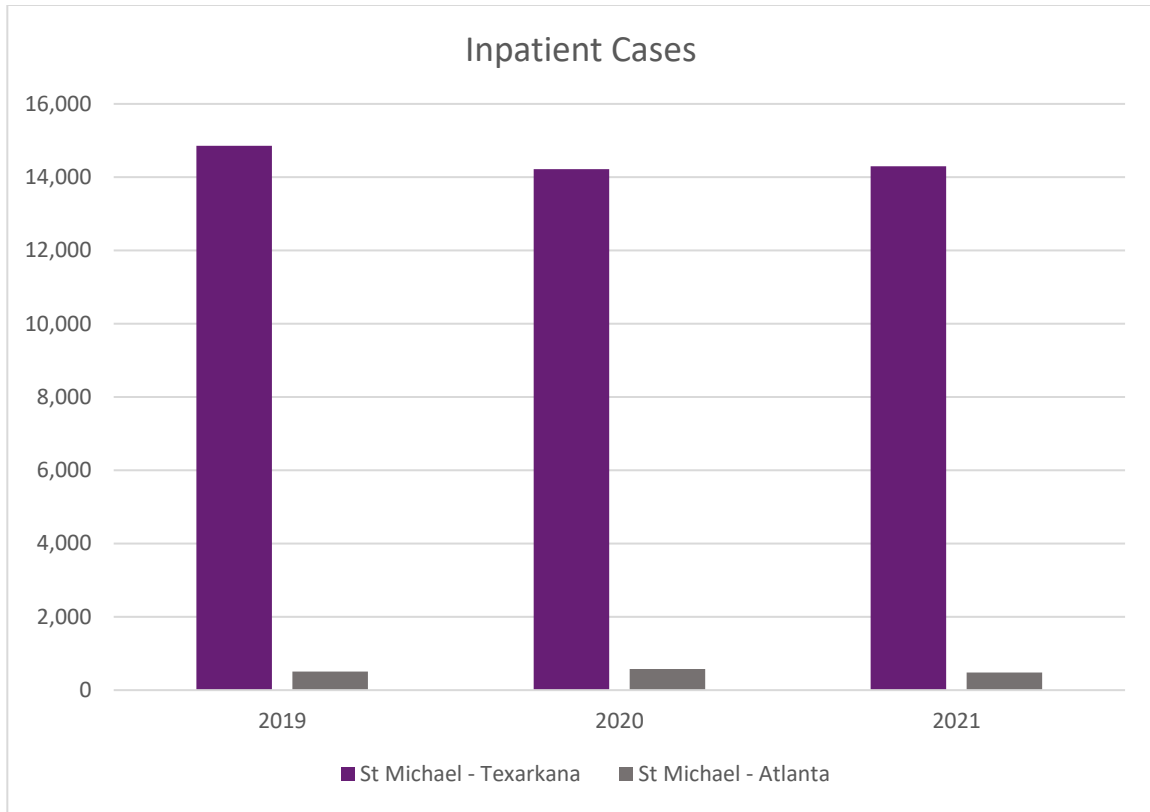


Figure 49. Inpatient Admissions in the CHRISTUS St. Michael Health System PSA

Regarding inpatient utilization, COVID-19 became the number three reason for admission in 2020 and 2021 in Texarkana and number six in Atlanta (Table 13). The top cause for inpatient admissions was labor and delivery in Texarkana and sepsis in Atlanta. In addition to COVID-19, the majority of the remaining top 10 are related to heart conditions, kidney disease or respiratory issues.

Top Inpatient Primary Diagnoses—Texarkana

1. Single liveborn infant delivered
2. Sepsis
3. COVID-19
4. Hypertensive heart disease with heart failure
5. Non-ST elevation (NSTEMI) myocardial infarction
6. Hypertensive heart and chronic kidney disease with heart failure
7. Acute kidney failure
8. Cerebral infarction
9. Maternal care for low transverse scar from previous cesarean delivery
10. Pneumonia

Top Inpatient Primary Diagnoses—Atlanta

1. Sepsis
2. Pneumonia
3. Hypertensive heart disease with heart failure
4. Chronic obstructive pulmonary disease
5. Hypertensive heart and chronic kidney disease
6. COVID-19
7. Acute kidney failure unspecified
8. Acute and chronic respiratory failure
9. Type 1 diabetes mellitus
10. Non-ST elevation (NSTEMI) myocardial infarction

Table 13. Primary Diagnoses by Hospital

Conclusion

The Community Benefit team worked with the hospital leadership and community partners to prioritize the health issues of community benefit programming for fiscal years 2023-2025. These groups of internal and external stakeholders were selected for their knowledge and expertise of community needs. Using a prioritization framework guided by the MAPP framework, the process included a multi-pronged approach to determine health issue prioritization.

1. The team reviewed health issue data selected by the community survey respondents.
2. The team scored the most severe indicators by considering existing programs and resources.
3. The team assigned scores to the health issue based on the Prioritization Framework (Table 14). The highest-scoring health issues were reconciled with previous cycles' selected priorities for a final determination of priority health issues.
4. The team discussed the rankings and community conditions that led to the health issues.

Size	How many people are affected?	Secondary Data
Seriousness	Deaths, hospitalizations, disability	Secondary Data
Equity	Are some groups affected more?	Secondary Data
Trends	Is it getting better or worse?	Secondary Data
Intervention	Is there a proven strategy?	Community Benefit team
Influence	How much can St. Michael Health System affect change?	Community Benefit team
Values	Does the community care about it?	Survey, Focus Groups, Key Informant Interviews
Root Causes	What are the community conditions?	Community Benefit team

Table 14. Prioritization Framework

CHRISTUS St. Michael Health System Selected FY 2023 - 2025 Health Priority Areas

For this cycle, CHRISTUS St. Michael Health System is using a new structure for its identified needs, categorizing them under two domains with the overarching goal of achieving health equity (Figure 50). While the prioritization structure is new, CHRISTUS St. Michael Health System retained mental health as a priority issue from the previous CHNA. In the previous CHNA, CHRISTUS St. Michael Health System identified chronic illness as a priority. In this cycle, CHRISTUS St. Michael Health System unpacked “chronic illness” and specifically calls out cancer, heart disease, diabetes and obesity. Newly identified issues include substance abuse, food access and smoking and vaping.

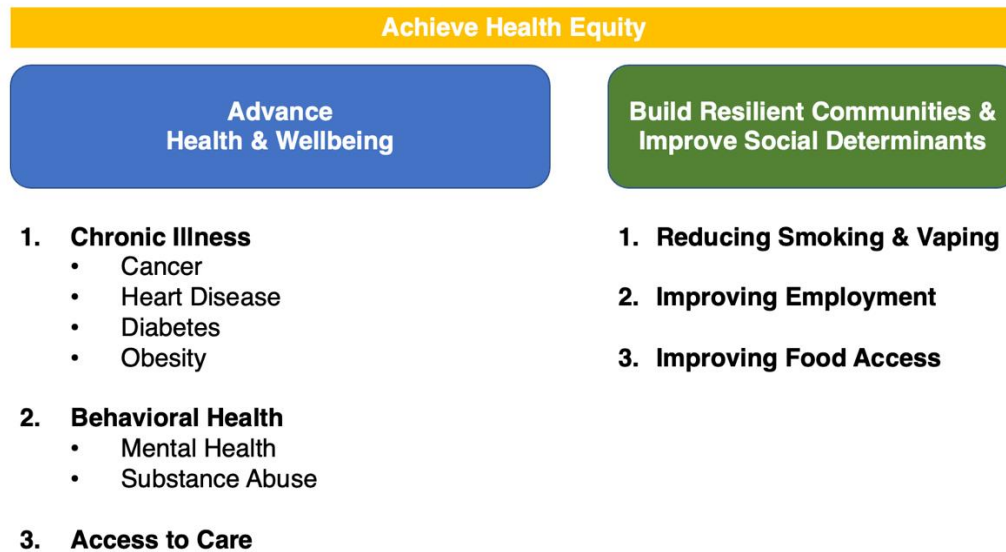


Figure 50. CHRISTUS St. Michael Health System Priority Areas

These domains and corresponding issues will serve as the designated issue areas for official reporting and are the principal health concerns that CHRISTUS St. Michael Health System community efforts will target.

ADOPTION BY THE BOARD

The Board of Directors received the 2023-2025 CHNA report for review and formally approved the documents on June 9th, 2022.

Appendix 1: Evaluation of Community Health Improvement Plan (CHIP) Activities

Evaluation of actions taken to address the significant health needs identified in the 2020-2022 CHNA

PRIORITY STRATEGY STATEMENT: #1. Mental Health

Improve access to mental health services.

Major Actions	Sub-actions
#1.: Sustain and enhance collaborations and referral relationships with local mental/behavioral health service providers	<p>1. Collaborate with local mental/behavioral health providers for patient assessments and referrals to community-based services for mental health crisis, chronic mental illness, and/or substance use disorders.</p> <p><i>Anticipated Outcome:</i> CSMHS will coordinate monthly meetings with area community agencies involved in providing mental/behavioral services.</p> <p>Outcomes: FY 2020: Monthly in-person meetings included health providers and behavioral health professionals and other community members occurred until early March 2020. Due to COVID-19, meetings were conducted via Zoom. Financial transportation support is coordinated with local EMS provider to assist in transferring patients based on needed behavioral services. FY 2021: Monthly meetings continue to be conducted via Zoom due to COVID-19. Financial transportation support is coordinated with local EMS provider to assist in transferring patients based on needed behavioral services. FY 2022: Monthly meetings continue to be conducted via Zoom. Financial transportation support is coordinated with local EMS provider to assist in transferring patients based on needed behavioral services. SAMA and De-escalation training was provided to 969 associates during FY 2022.</p>

PRIORITY STRATEGY STATEMENT: #2. Chronic Illness

Improve understanding and management of chronic disease.

Major Actions	Sub-actions
#2a.: Collaborate with Transitional Care program to reduce readmissions.	<p>1. Collaborate with Transitional Care program partner to expand program to for all diseases.</p>

	<p><i>Anticipated Outcome:</i> CSMHS will work with Transitional Care program partner to continue program resulting in decreased readmissions by 2% at end of FY 2022.</p> <p>Outcomes: FY 2020: Average 30-day readmission rate for all diagnosis is 7.3% for CHF, COPD, MI and PNA. FY 2021: Average 30-day readmission rate for all diagnosis is 9.7%. Expanded diagnosis to include CABG, Elective Joint, CVA and COVID-19. COVID-19 impacted the re-admission rate. FY 2022: Primary focus includes CHF, COPD, MI, CABG, PNA, Elective Joint, CVA and COVID-19 (became a primary focus during the surges in August/September and January/February FY 2022).</p> <ul style="list-style-type: none"> • COVID patients enrolled FY22; Enrolled 220 patients; of those only 13 COVID patients experienced a 30-day readmission (5.91%) • Increased annual enrollment by 71% <ul style="list-style-type: none"> ○ FY21: 868 ○ FY22: 1,491 • Increased RPMS enrollment by 56.8% <ul style="list-style-type: none"> ○ FY21: 828 ○ FY22: 1,299 • Increased patient screening by 292% <ul style="list-style-type: none"> ○ FY21: 3,518 ○ FY22: 13,805 • Lowered 30-day average readmission rate by 48% (all diagnosis and all payers) <ul style="list-style-type: none"> ○ FY21: 9.72% ○ FY22: 5.03%
Major Actions	Sub-actions
#2b.: Collaborate with Genesis Primecare to provide diabetes care services and management of patients with hypertension.	<p>1. Collaborate with Genesis Primecare (FQHC) to continue providing Diabetes care services and education.</p> <p><i>Anticipated Outcome:</i> CSMHS will work with Genesis Primecare to provide diabetes care services; to include eye exam, foot exam, HbA1c, blood pressure monitoring and control and ED visits and education; resulting in improvement of diabetes outcomes and hypertension patients at end of FY 2022.</p> <p>Outcomes: FY 2020: Total patients seen are 759.</p>

	<p>Eye exam – 422; Foot exam –433; HbA1c – 220 tested >9%; Blood pressure control – 727 had B/P less than 140/90; and ED visits were 53 for the patient group.</p> <p>FY 2021: Total patients seen are 1,239.</p> <p>Eye exam – 894; Foot exam –1,009; HbA1c – 319 tested >9%; Blood pressure control – 722 had B/P less than 140/90; and ED visits were 97 for the patient group</p> <p>FY 2022: Total patients seen (FYTD Dec) are 503.</p> <p>Eye exam – 112; Foot exam – 174; HbA1c – 263 tested >9%; Blood pressure control – 431 had B/P less than 140/90; and ED visits were 61 for the patient group. (Note: This collaboration ended in December 2021.)</p>
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Major Actions	Sub-actions
#2c.: CANCER OUTREACH	<p>1. CSMHS will continue to provide and support cancer care services collaborating with Komen Foundation and American Cancer Society and others.</p> <p><i>Anticipated Outcome:</i> CSMHS continue to provide and support cancer services through direct care and education and collaboration with other providers/agencies, resulting in an increased number of clients receiving cancer care services at end of FY 2022.</p> <p>Outcomes:</p> <p>FY 2020: 124 patients were served but the number was lower due to decreased access to outpatient services related COVID-19 and decreased Komen funding for three months.</p> <p>FY 2021: 191 patients have been assisted for breast cancer services.</p> <p>FY 2022: Breast care navigators have navigated 488 patients from screening to diagnostic breast imaging and 218 patients were navigated from diagnostic services to biopsy. Seventy patients were found to have breast cancer and navigated to treatment. Seventy-two patients were navigated through breast MRI process and sixty-three patients were assisted to have a SAVI Scout placed by navigation services. One hundred and three of the above patients have been assisted with no cost to patient breast cancer services via Tough Kookie, Texas Breast and Cervical Care Services and Komen.</p> <p>Each patient that enters the breast care continuum receives education regarding breast care. The breast navigator attended and provided education via a zoom meeting with the Dunbar Early education group, attended the Tough Kookie Breast Cancer</p>

	Race, an Atlanta ISD parents and faculty meeting, and the Northeast Texas Regional Resource Fair, providing education for approximately 1,150 individuals regarding breast and cervical cancer education.
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PRIORITY STRATEGY STATEMENT: #3. Health System Performance

Improve access to health care and promote healthy behaviors in the community.

Major Actions	Sub-actions
#3a.: Collaborate with Genesis Primecare to provide primary care services.	<p>1. Collaborate with Genesis Primecare (FQHC) to continue to provide primary care services.</p> <p><i>Anticipated Outcome:</i> CSMHS will work with Genesis Primecare to continue to provide primary care services, resulting in increased number of clients receiving primary care services by 5% at end of FY 2022.</p> <p>Outcomes: FY 2020: Total patients served are 87,006. FY 2021: Total patients served are 91,029 FY 2022: Total patients served are 94,533. Increase of primary services has exceeded 5% goal.</p>
Major Actions	Sub-actions
#3b.: Collaborate with Catholic Charities of East Texas to expand the Parish Nurse Program.	<p>1. Collaborate with Catholic Charities of East Texas to provide Parish Nurse Program.</p> <p><i>Anticipated Outcome:</i> CSMHS will provide support of Parish Nurse Program, resulting in increased number of churches participating in the program at end of FY 2022.</p> <p>2. Continue to support Parish Nurse Program in participating churches.</p> <p><i>Anticipated Outcome:</i> CSMHS will provide support of Parish Nurse Program to provide screenings, health education and fitness activities with members of participating churches, resulting in increased services provided to members. Free screenings and education provide vital information to those with limited access to care.</p> <p>Outcomes: FY 2020: Texarkana Region- 2 nurses serving 3 parishes; Longview Region-4 nurses serving 4 parishes; Tyler-5 nurses; 5 parishes; Catholic Schools- (Tyler, Longview, Lufkin) 3 nurses serving 3</p>

	<p>schools; and Diocese-2 Priest nurses (16 Total Nurses). Virtual visits implemented and nurses gather monthly in Zoom call to continue collaboration and share the work in each ministry. Notes* Nurse Coordinator, Infant Safety nurse retired due to COVID concerns; also 1 nurse deceased. (17 total nurses for a total of 14, 036 client contacts.)</p> <p>FY 2021: Texarkana Region- 2 nurses serving 3 parishes; Longview Region-3 nurses serving 4 parishes; Tyler-4 nurses; 4 parishes (*Need to hire one outreach nurse); Catholic Schools- (Tyler, Lufkin) 2 nurses serving 2 schools (* Need to hire one additional school nurse); and Diocese-2 Priest nurses. (13 total nurses for a total of 4,888 client contacts in past 6-month period.</p> <p>FY 2022: Texarkana Region- 2 nurses serving 2 parishes; Longview Region-2 nurses serving 2 parishes; Tyler-6 nurses; 5 parishes Catholic Schools- (Tyler, Lufkin) 2 nurses serving 2 schools and Diocese-2 Priest nurses. 13 total nurses for a total of 12,174 client contacts from June 2021 until May 2022.</p>
Major Actions	Sub-actions
<p>#3c.: Collaborate with area school districts to increase physical activity.</p>	<p>1. Collaborate with area school districts to utilize Go Noodle resources.</p> <p><i>Anticipated Outcome:</i> CSMHS will provide support of Go Noodle resources in area school districts, resulting in increased number of school districts participating, resulting in increased use of resources.</p> <p>Outcomes:</p> <p>FY 2020: Financial support provided from CSMHS to continue services. There were 614 active teachers utilizing resources from Go Noodle.</p> <p>FY 2021: Financial support provided from CSMHS to continue services. There were 742 active teachers utilizing resources from Go Noodle. Schools were open during this school year.</p> <p>FY 2022: Financial support provided from CSMHS to continue services. There were 503 active registered teachers utilizing resources from Go Noodle along with 3,510 unregistered teachers also accessing the resources.</p>
	<p>2. Continue to support Go Noodle resources in area school districts.</p>

	<p><i>Anticipated Outcome:</i> CSMHS will provide support of Go Noodle resources in area school districts, resulting in increased minutes of student physical activity by 3% from baseline by end of school year 2022.</p> <p>Outcomes: FY 2020: Number of students participating are 14,029 with 2,101,437 student activity minutes. Lower activity minutes due to school closures/virtual school days as related to COVID-19 impact. FY 2021: Number of students participating are 15,996 with 3,066,159 student activity minutes. FY 2022: Number of students participating are 11,156 with 1,913,057 student minutes. There were staffing changes locally which affected the outcomes for FY 2022.</p>
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PRIORITY STRATEGY STATEMENT: #4. Aging Population

Improve access to health care and provide health education for the aging population in the community.

Major Actions	Sub-actions
#4.: Sustain and enhance health care for the aging population.	<p>1. CSMHS will continue to operate the CSM Senior Health Center to provide primary care services to patients age 65 and older.</p> <p><i>Anticipated Outcome:</i> CSMHS will track its efforts to provide primary care services to patients age 65 and older.</p> <p>Outcomes: FY 2020: Clinic services provided to 4,414 patients. FY 2021: Clinic services provided to 3,644 patients. Decreased volumes due to COVID-19. FY 2022: This clinic was closed due to low volume, high cost and inability to recruit gerontologist and there was excess capacity in our primary care clinics with existing providers who served patients age 65 and older.</p>
	<p>2. Collaborate in annual senior area event and other community activities to provide education and free health screens.</p> <p><i>Anticipated Outcome:</i> CSMHS will track participation in community events focused on the aging population.</p> <p>Outcomes: FY 2020: Virtual community event due to COVID-19 concerns. Unable to determine true impact of individuals impacted. FY 2021: Virtual community event due to COVID-19 concerns. Unable to determine true impact of individuals impacted.</p>

	FY 2022: Mobile health staff participated in area health fairs promoting point of care testing for glucose and cholesterol, education information and blood pressure screening. Other community events are being planned for early fall 2022.
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PRIORITY STRATEGY STATEMENT: #5. Lack of Employment Opportunities

Assist with job creation and other economic development opportunities.

Major Actions	Sub-actions
#5.: Collaborate with the AR-TX Regional Economic Development Incorporation.	<p>1. Collaborate with AR-TX REDI organization to create job opportunities and other economic development.</p> <p><i>Anticipated Outcome:</i> CSMHS will continue to provide financial support and participate in area agency activities with AR-TX REDI to assist in job creation/development opportunities.</p> <p>Outcomes: FY 2020: Financial support provided by CSMHS to AR-TX REDI. FY 2021: Financial support provided by CSMHS to AR-TX REDI. FY 2022: Financial commitment by CSMHS has been accomplished. Recent projects awarded include 120 additional jobs and capital investment greater than \$200 Million. Texarkana AR was designated as an Arkansas Competitive Community and REDI Arkansas Manufacturing Center site certification. Numerous projects in pipeline with potential of 14,000+ potential jobs in our community.</p>

Appendix 2: Primary Data Tools

Primary data was collected through the main channels—community surveys, focus groups and key informant interviews. The instruments used for each are included in this appendix.

Community Survey

Community Health Needs Assessment Survey	
<p>Welcome to the CHRISTUS Health Community Health Needs Assessment Survey.</p> <p>This survey will only take about 10 minutes. We will ask you questions about the health needs of your community. The information we get from the survey will help us:</p> <ul style="list-style-type: none">• Identify health problems that affect the people in your community.• Understand the needs of your community.• Work together to find a solution. <p>The survey is voluntary and you do not have to participate. You can also skip any questions you do not want to answer or end the survey at any time.</p> <p>The answers you give are very important to us. Your answers will be private (we will not know who gave the answers) and we will protect the information you are giving. We will not share your personal information or survey answers to anyone outside of CHRISTUS Health.</p> <p>We thank you for your help.</p>	
Your Information	
Your home zip code: _____	How many years have you lived here? _____

Community Health Needs Assessment Survey	
Community Health Questions	
<p>Thinking about where you live (zip code, neighborhood, town), on a scale of 1 - 5 (with 1 - being not at all and 5- being serious), how much of a problem are each of the following health concerns?</p> <p>Please consider how any of these issues affect you or a family member personally, impact others you know, or deal with in your profession. If you don't know, please leave blank/skip.</p>	
HEALTH CONCERN	RATING (1-5)
Abuse (child, emotional or physical abuse; neglect, sexual assault, domestic violence)	
Access to healthy food items	
Access to prenatal care (including insurance, medical provider, transportation)	
Alzheimer's and Dementia	
Arthritis	
Cancer (s)	
Chronic pain	
Dental disease (Dental Problems)	
Diabetes (high blood sugar)	
Drug, Alcohol and Substance Abuse (Prescription, Illegal Drugs)	
Healthy Eating (including preparing meals and cooking)	
Exercise and physical activity	
Hearing and vision loss	
Heart disease (hypertension, high blood pressure, heart attack, stroke)	
Infectious diseases (hepatitis, tuberculosis or TB, flu, COVID-19)	
Lung disease (asthma, chronic obstructive pulmonary disease or COPD)	
Maternal and child health (preterm birth, gestational diabetes, maternal hypertension, preeclampsia, maternal death, infant mortality)	
Mental health (ADHD, depression, anxiety, post-traumatic stress disorder or	
Motor vehicle crash injuries	
Obesity (Overweight)	
Property crime (theft, burglary and robbery, motor vehicle theft)	
Sexually Transmitted Infections (STIs and STDs), including Human Immunodeficiency virus (HIV), acquired immunodeficiency syndrome (AIDS)	
Smoking and vaping	
Teen Pregnancy	

Other than those included in the previous question, are there any additional concerns that you feel affect the health of our community?

If you, family members or others who you are in frequent contact with are impacted by any of these health concerns, please share the age group and the impact. (e.g., I am the primary caregiver for my aging parent who has Alzheimer's)

Community Health Needs Assessment Survey	
Community Resources Questions	
What strengths and/or resources do you believe are available in your community? Check all that apply.	
<input type="checkbox"/> Community services, such as resources for housing <input type="checkbox"/> Access to health care <input type="checkbox"/> Medication Assistance <input type="checkbox"/> Health support services (diabetes, cancer, diet, nutrition, weight management, quit smoking, end of life care) <input type="checkbox"/> Affordable and healthy food (fresh fruits and vegetables) <input type="checkbox"/> Mental health services <input type="checkbox"/> Technology (internet, email, social media) <input type="checkbox"/> Transportation <input type="checkbox"/> Affordable childcare <input type="checkbox"/> Affordable housing <input type="checkbox"/> Arts and cultural events <input type="checkbox"/> Clean environment and healthy air <input type="checkbox"/> Fitness (gyms place to work out) <input type="checkbox"/> Good schools	<input type="checkbox"/> Inclusive and equal care for all people whatever race, gender identity or sexual orientation (LGBTQ) <input type="checkbox"/> Life skill training (cooking, how to budget) <input type="checkbox"/> Parks and recreation <input type="checkbox"/> Cancer Screening (mammograms, colon cancer, HPV vaccine/Pap smear, prostate cancer) <input type="checkbox"/> Quality Job Opportunities and Workforce Development <input type="checkbox"/> Racial Equity (The elimination of policies, practices, attitudes, and cultural messages that reinforce differential outcomes by race) <input type="checkbox"/> Religion or spirituality <input type="checkbox"/> Safety and low crime <input type="checkbox"/> Strong community cohesion and social network opportunities (reword – Welcoming community and opportunities to join support groups) <input type="checkbox"/> Strong family life <input type="checkbox"/> Other, please specify: _____
Are there any additional services or resources that you would like to see in our community that would help residents maintain or improve their health?	
<div style="border: 1px solid black; height: 100px; width: 100%;"></div>	

Community Health Needs Assessment Survey

Questions About You

These questions are used to provide context to your previous answers and will not be used to identify individual survey takers.

As a Catholic-sponsored health care ministry, we are committed to providing for the health care needs of our community, particularly of the vulnerable or underserved. The questions below are intended solely to seek information that will help us compassionately accompany and appropriately treat and care for all of God's people on their journey toward healing and wholeness.

What is your age?

- | | | | |
|--------------------------------|--------------------------------|--------------------------------|---------------------------------------|
| <input type="checkbox"/> 18-24 | <input type="checkbox"/> 35-44 | <input type="checkbox"/> 55-64 | <input type="checkbox"/> 75-84 |
| <input type="checkbox"/> 25-34 | <input type="checkbox"/> 45-54 | <input type="checkbox"/> 65-74 | <input type="checkbox"/> 85 and older |

What is your gender?

- | | |
|---------------------------------|---|
| <input type="checkbox"/> Female | <input type="checkbox"/> Choose not to disclose |
| <input type="checkbox"/> Male | <input type="checkbox"/> Comments: _____ |

Do you think of yourself as?

- | | |
|---|---|
| <input type="checkbox"/> Straight or heterosexual | <input type="checkbox"/> Choose not to disclose |
| <input type="checkbox"/> Bisexual | <input type="checkbox"/> Other, please specify: _____ |
| <input type="checkbox"/> Lesbian or gay or homosexual | |

Do you consider yourself Hispanic or Latino?

- ☐ Hispanic or Latino: A person of Cuban, Mexican, Puerto Rican, South or Central American, or other Spanish culture or origin, regardless of race.
- ☐ Not Hispanic or Latino: A person is not of Hispanic or Latino ethnicity.
- ☐ Decline to answer: A person who is unwilling to choose/provide from the categories available

Which category best describes your race? (check all that apply)

- ☐ American Indian or Alaska Native: *A person having origins in any of the original peoples of North and South America (including Central America), and who maintains tribal affiliation or community attachment.*
- ☐ Asian: *A person having origins in any of the original peoples of the Far East, Southeast Asia, or the Indian subcontinent, including, for example, Cambodia, China, India, Japan, Korea, Malaysia, Pakistan, the Philippine Islands, Thailand, and Vietnam.*
- ☐ Black or African American: *A person having origins in any of the black racial groups of Africa.*
- ☐ Native Hawaiian or Other Pacific Islander: *A person having origins in any of the original peoples of Hawaii, Guam, Samoa, or other Pacific Islands.*
- ☐ White: *A person having origins in any of the original peoples of Europe, the Middle East, or North Africa.*
- ☐ Decline to answer

Is a language other than English spoken in your home?

☐ Yes ☐ No

If Yes: What language(s) other than English are spoken in your home?

☐ Spanish ☐ Vietnamese ☐ Mandarin ☐ Other, please specify: _____

What is the highest level of education you have completed?

- | | |
|--|---|
| <input type="checkbox"/> Less than high school | <input type="checkbox"/> Vocational or technical school |
| <input type="checkbox"/> Some high school | <input type="checkbox"/> College graduate (such as AA, AS, BA, BS, etc.) |
| <input type="checkbox"/> High school graduate or graduate equivalency degree (GED) | <input type="checkbox"/> Advanced degree (such as MS, MA, MBA, MD, PhD, JD, etc.) |
| <input type="checkbox"/> Some college, no degree | |

Community Health Needs Assessment Survey

Household Questions

What are your current living arrangements?

- | | |
|--|--|
| <input type="checkbox"/> Own my home | <input type="checkbox"/> Living with a friend or family |
| <input type="checkbox"/> Rent my home | <input type="checkbox"/> Living outside (e.g., unsheltered, car, tent, abandoned building) |
| <input type="checkbox"/> Living in emergency or transitional shelter | <input type="checkbox"/> Other: _____ |

How many people live in your household? _____

How many children (less than 18 years old) live with you in your home? _____

How often do you have access to a computer or other digital device with the internet?

- ☐ Always ☐ Often ☐ Sometimes ☐ Very Rare ☐ Never

Do you or anyone in your household have a disability?

- ☐ Yes ☐ No

What is the yearly household income? (The total income before taxes are deducted, of every person in the home who financially helps)

- | | |
|---|---|
| <input type="checkbox"/> Less than \$10,000 | <input type="checkbox"/> \$60,000 to \$79,999 |
| <input type="checkbox"/> \$10,000 - \$19,999 | <input type="checkbox"/> \$80,000 to \$99,999 |
| <input type="checkbox"/> \$20,000 to \$39,999 | <input type="checkbox"/> Over \$100,000 |
| <input type="checkbox"/> \$40,000 to \$59,999 | |

Community Health Needs Assessment Survey
Questions about Your Health
Are you currently covered by health insurance? <input type="checkbox"/> Yes <input type="checkbox"/> No
Do you have a medical or healthcare professional that you see regularly (primary care provider/doctor/pediatrician/cardiologist, etc.)? <input type="checkbox"/> Yes <input type="checkbox"/> No
The following questions concern the time since the start of the pandemic (March 2020):
During this time period have you had any of the following (please check all that apply): <input type="checkbox"/> Visited a doctor for a routine checkup or physical? (not an exam for a specific injury, illness or condition)? <input type="checkbox"/> Dental exam <input type="checkbox"/> Mammogram <input type="checkbox"/> Pap test/pap smear <input type="checkbox"/> Sigmoidoscopy or colonoscopy to test for colorectal cancer <input type="checkbox"/> Flu shot <input type="checkbox"/> Prostate screening <input type="checkbox"/> COVID-19 vaccine
Because of the pandemic did you delay or avoid medical care? <input type="checkbox"/> Yes <input type="checkbox"/> No
During this time period, how often have you been bothered by feeling down, depressed, or hopeless? (Check only one answer). <input type="checkbox"/> Not at all <input type="checkbox"/> Several days every month <input type="checkbox"/> More than half the days every month <input type="checkbox"/> Nearly every day

What is the most difficult issue your community has faced during this time period?

- ☐ COVID-19
- ☐ Natural disasters (for example, hurricanes, flooding, tornadoes, fires)
- ☐ Extreme temperatures (for example, snowstorm of 2021)
- ☐ Other: _____

Other than those concerns included in the previous question, are there additional concerns that affected your community during this time period?

Focus Group Protocols

CHNA Focus Group Guide

Population:

Date and Time:

Location:

RSVPs:

FACILITATION PROTOCOLS

1. Establishing ground rules

- Establish purpose of the focus group.
 - We are meeting today to learn about your community. Specifically, we want to understand what you like about where you live and what you would like to see changed. We also want to understand the biggest health challenges your friends and families face.
 - You were selected to participate in this focus group because of the valuable insight you can provide.
 - We would like to understand how the hospital can partner to make improvements in your neighborhood.
- Establish confidentiality of participants' responses.
 - Our team will be taking notes about what is discussed, but individual names or identifying information will not be used.
- Establish guidelines for the conversation.
 - Keep personal stories "in the room".
 - Everyone's ideas will be respected.
 - One person talks at a time.
 - It's okay to take a break if needed or help yourself to food or drink (if provided).
 - Everyone has the right to talk.
 - Everyone has the right to pass a question.
 - There are no right or wrong answers.
- Explain to participants how their input will be used.
 - Your input will be part of the Community Health Needs Assessment process.
- Give participants estimated timeline of when results will be shared.
 - We expect to make the report available in 2022.
- Establish realistic expectations for what the hospitals and partners can do to address community needs.

2. Introductions

- When we speak about community, it can have different meanings. For example, it can mean your family, the people you live or go to school with, the neighborhood you live in, a group of people you belong to. We are interested in hearing about your community, no matter how you define it.
- The facilitator will go around the room and ask each participant:
 - Name?
 - How long have you lived in the community?
 - What one word would you use to describe your community?

3. Community Descriptions

- Can you describe your community?
 - What are things like?
 - What are things you would like to see changed?
 - Probe: Do you have ideas for how those things can be changed?

4. Health Questions

- What do you think are the biggest health challenges in your community?
 - Follow up on specifics – diabetes, heart disease, asthma/COPD, cancer, sickle cell, substance abuse
 - With chronic diseases answers probe on what are the specific challenges (i.e., managing diabetes, accessing medicine, getting screened, etc.)
 - If substance abuse comes up, follow up on types – alcohol, marijuana, opioids, other?
- What do you think could prevent these issues from being so challenging?
 - Follow up on specific ideas – access to preventative care? Education?
- How has COVID-19 impacted you and your community?
 - Follow up on specifics – job loss, homeschooling, severe illness, mental health, ability to access the internet and health information at home

5. Access and Education Questions

- How easy is it in your community to access health services?
 - Do they have a primary care provider?
 - Can they access Behavioral Health services?
 - Are they able to get cancer screenings and vaccinations?
 - Is telehealth an option? Why or why not?
 - Is transportation a barrier?
- How easy is it for adults in your community to maintain a healthy lifestyle?
 - Is there access to healthy foods?
 - Are there places to exercise?
 - Do you feel a sense of cohesion in your community?

6. Solutions and Strategies Questions

- What do you think a community needs to be healthy?
 - Depending on responses, follow up on specifics – jobs, housing, access to care, schools, parks, food access, etc.
- Who do you think can contribute to make a community healthy?
 - Probe: neighbors, doctors, hospitals, social service agencies, politicians, etc.

7. Final Questions

- What do you think CHRISTUS Health can do to help your community?
- Where do you get your health information now?
- What is the best way to communicate with you about health information?

8. Closing and Next Steps

- Explain how the notes will be synthesized and shared.
- Ask whether participants would like to be involved in future stages of the CHNA and set the process for continued engagement.
- Thank everyone for their participation

Key Informant Interview Protocols

CHNA Key Informant Interview Guide

FACILITATION PROTOCOLS

1. Establishing ground rules

- Establish purpose of the interview
 - CHRISTUS Health is conducting a Community Health Needs Assessment and your input is an important part of the work.
 - We have collected thousands of surveys and held over two dozen focus groups. Now we are interviewing key informants like yourself.
 - You were selected to participate in this interview because of the valuable insight you can provide.
 - We would like to understand how the hospital can partner to improve the health of the community.
- Establish confidentiality of the conversation
 - I will be taking notes about what is discussed, but your name and identifying information will not be used.
- Give participants an estimated timeline of when results will be shared.
 - We expect to make the report available later this year.

2. Introductions

- During our time together, I'm interested in learning about your work and the needs of the people you serve.
- What is your:
 - Name?
 - Organization?
 - Work you do for that organization and/or the community?

3. Survey-alignment questions

- What are strengths you see with your patients/community members right now?
- What are the challenges they face?
 - How do you think those challenges can be addressed?
- What programs or partnerships have worked well? Why?

4. Health questions

- What do you think are the biggest health challenges your patients/constituents/community members face?
 - Follow up on specifics—diabetes, heart disease, asthma/COPD, cancer, sickle cell, substance abuse, mental health
 - With chronic disease answers probe on what are the specific challenges (i.e., managing diabetes, accessing medicine, getting screened, etc.)
 - For cancer ask about specifics
 - For substance abuse follow up on types—alcohol, marijuana, opioids, other?
- How has COVID-19 impacted you and your work?

5. Social Determinant questions

- What elements in the community make it hard for people to be healthy?
 - Follow up on food access, affordable housing, childcare, crime, access to care, etc.
- How can Christus help address these issues?

6. Next Steps

- Explain how the notes will be synthesized and shared.
- Thank them for their participation.

Appendix 3: Data Sources

Secondary data that was used throughout this report was compiled from Metopio's data platform. Underneath each graphic in this report, there is a label that cites the data source for that visual. Primary sources of this data come from:

- American Community Survey
- Behavioral Risk Factor Surveillance System
- Centers for Disease Control PLACES data
- Centers for Disease Control WONDER database
- Centers for Medicare and Medicaid Services: Provider of Services Files, National Provider Identifier
- Decennial Census (2010 and 2020 census data)
- Diabetes Atlas
- Environmental Protection Agency
- FBI Crime Data Explorer
- Housing and Urban Development
- National Vital Statistics System
- The New York Times
- State health department COVID dashboards
- Texas Department of State Health Services
- University of Texas at Tyler, The Health Status of Northeast Texas, 2021 report
- United States Department of Agriculture: Food Access Research Atlas