# COMMUNITY HEALTH NEEDS ASSESSMENT





## **Table of Contents**

Executive Summary	4
IRS Form 990, Schedule H Compliance	5
Health Need Priorities	6
Introduction: What is a Community Health Needs Assessment?	8
CHRISTUS Southeast Texas Health System Overview	
Community Benefit	
CHRISTUS Southeast Texas Health System Service Area	10
CHNA Process	
Stakeholder Engagement	13
Data Collection	14
Community Resident Surveys	14
Community Focus Groups and Key Informant Interviews	17
Secondary Data	18
Data Needs and Limitations	
Consideration of COVID-19	19
CHNA Results	
Demographic Characteristics	22
Overall Community Input	
Social and Structural Determinants of Health	29
Access to Care	
Food Access	41
Violence and Community Safety	
Health Data Analysis	45
Health Outcomes: Morbidity and Mortality	45
Chronic Disease	45
Maternal Health	
Mental Health	
Leading Causes of Death	
Hospital Utilization	
Conclusion	
Appendix 1: Evaluation of Community Health Improvement Plan (CHIP) Activities	
Appendix 2: Primary Data Tools	69
Appendix 3: Data Sources	
Appendix 4: Community Resources	82









## EXECUTIVE SUMMARY



## **Executive Summary**

CHRISTUS Southeast Texas Health System (CSETHS) is a non-profit, Catholic integrated health care delivery system that includes acute care hospitals and inpatient facilities in four counties in southeastern Texas. Dedicated staff at CSETHS provides specialty care tailored to the individual needs of every patient, aiming to deliver high quality services with excellent clinical outcomes.

CHRISTUS Southeast Texas Health System (CSETHS) conducted a Community Health Needs Assessment (CHNA) to assess areas of greatest need, which guides the hospital on selecting priority health areas and where to commit resources that can most effectively improve community members' health and wellness. CHRISTUS Dubuis Hospital of Beaumont, a long-term acute care hospital operated by LHC Group of Lafayette, participated in the CHNA to better understand and address the unique needs of its patient population. To complete the 2023-2025 CHNA, CSETHS 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 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	9
Part V Section B Line 3b	Demographics of the community	22
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	38
Part V Section B Line 3d	How data was obtained	13
Part V Section B Line 3e	The significant health needs of the community addressed	6
Part V Section B Line 3f	Primary and chronic disease needs and other health issues of uninsured persons, low-income persons, and minority groups	45
Part V Section B Line 3g	The process for identifying and prioritizing community health needs and services to meet the community health needs	12
Part V Section B Line 3h	The process for consulting with persons representing the community's interests	17
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)	64

### Health Need Priorities

Based on community input and analysis of a myriad of data, the priorities for the communities served by CSETHS 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
  - Specialty care and chronic conditions
    - » Diabetes
    - » Heart disease
    - » Obesity
  - Behavioral Health
    - » Mental health
    - » Substance abuse
- 2. Build resilient communities and improve social determinants by
  - Improving food access
  - Increasing physical activity
  - Reducing smoking and vaping



Figure 1. CHRISTUS Southeast Texas Health System and CHRISTUS Dubuis Hospital of Beaumont Priority Areas

This report provides an overview of the CSETHS process involved in the CHNA, including data collection methods, sources, and CSETHS's primary service area (PSA). 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



## 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 CSETHS. In this process, CSETHS directly engages community members and stakeholders to identify the issues of greatest need as well as the largest impediments to health. With this information, CSETHS can better allocate resources towards efforts to improve community health and wellness.

Directing resources toward the greatest needs in the community is critical to CSETHS'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 CSETHS, to conduct a CHNA every three years. CSETHS completed similar needs assessments in 2013, 2016 and 2019.

The process CSETHS 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 CSETHS'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 CSETHS'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 CSETHS's service area.

Included in Appendix 1 is an evaluation of CSETHS's efforts to address the community needs identified in the 2020–2022 CHNA.

### CHRISTUS Southeast Texas Health System Overview

Setting the standard for progressive health care in Southeast Texas, CHRISTUS Southeast Texas Health System, is a Catholic, not-for-profit health care system and has been serving the needs of its communities for more than 120 years. The fully integrated health care delivery system including two inpatient hospitals, an outpatient surgery orthopedic hospital, and 40 additional points of access ranging from outpatient care to long term facilities, are recognized as the regional leader in outpatient services, cardiology, oncology, neurology, orthopedics, sports medicine, pediatrics, general surgery, robotic surgery, bariatrics, plastic and reconstructive surgery, birthing, neonatal care, cardiac rehabilitation, imaging, and emergency services, while CHRISTUS Southeast Texas – St. Elizabeth is designated as the area's only Level III Trauma Center. The system continues to adapt and change to meet the needs of the community, following the values and mission of the founding Sisters of Charity of the Incarnate Word of Houston and San Antonio– to extend the healing ministry of Jesus Christ.

#### CHRISTUS Southeast Texas – St. Elizabeth

The 400+ bed acute care hospital is the regional leader in outpatient services, cardiology, oncology, neurology, orthopedics, sports medicine, pediatrics, general surgery, robotic surgery, bariatrics, plastic and reconstructive surgery, birthing, neonatal care, cardiac rehabilitation, imaging, and emergency services, and is designated as the area's only Level III Trauma Center.

#### CHRISTUS Southeast Texas – Orthopedic Specialty Center/Beaumont Bone & Joint Institute

The partnership between *CHRISTUS Southeast Texas Orthopedic Specialty Center* and the *Beaumont Bone & Joint Institute* means no more driving miles away to see an orthopedic specialist or waiting weeks for treatment. We now offer same-day or next-day appointments with one of our board certified, fellowship-trained orthopedists who are with you from the start of your care to the end of your care. Our orthopedic specialists provide a full range of exceptional care with access to most advanced imaging and surgical technology in the region. Why wait or drive long distances when the advanced orthopedic care you need is right here? Right now. Here, our surgeons treat a full range of orthopedic conditions and injuries. Our surgeons have trained at world-renowned centers, mastering the treatment of muscle and skeletal related injuries, and we bring that expertise to you here in Southeast Texas. Our Specialties include:

- Ankle/foot care
- Elbow/shoulder surgery
- Fracture care
- General orthopedics
- Hand/wrist surgery
- Hip replacement
- Joint injections
- Knee replacement
- Physical therapy & rehabilitation
- Shoulder replacement
- Trauma care & post trauma limb reconstruction

#### CHRISTUS St. Mary Outpatient Center Mid County

CHRISTUS St. Mary Outpatient Center Mid County features a high-tech imaging center and in-house laboratories, a women's center and the area's only certified concussion center focused on sports rehabilitative therapy. With an emergency center that is open 24 hours, seven days a week, patients can be evaluated and treated quickly with the comfort of knowing they will receive the highest quality of care. The Hyperbaric and Wound Center at CHRISTUS St. Mary Outpatient Center Mid County offers advanced assessment and treatment options for wounds resulting from diabetic ulcers and slow-healing surgical wounds. The Susie Roebuck Mammography Center provides women with groundbreaking 3D digital mammography service, which allows South County residents to get the most advanced breast imaging techniques available, without having to travel. The center also provides a number of outpatient therapy services including speech, occupational and physical therapy, along with orthopedic surgical recovery.

#### CHRISTUS Southeast Texas Jasper Memorial

CHRISTUS Southeast Texas Jasper Memorial is a 59-bed medical facility that serves approximately 45,000 East Texas residents. Located approximately 65 miles north of Beaumont and 60 miles south of Lufkin, Jasper Memorial is a general medical/surgical hospital with medical imaging, laboratory services, and outpatient services.

#### **CHRISTUS** Dubuis Hospital of Beaumont

CHRISTUS Dubuis Hospital of Beaumont is a long-term acute care hospital (LTACH) located on the 4th flood of CHRISTUS Southeast Texas St. Elizabeth Hospital, operated by the LHC Group of Lafayette, Louisiana.

#### **CHRISTUS Health**

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 Southeast Texas 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**

CSETHS implements strategies to promote health in the community and provide equitable care in the hospital. CSETHS 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 Southeast Texas Health System Service Area

Following IRS guidelines, 501(r) rules as required by the Affordable Care Act, CSETHS's CHNA service area includes 21 zip codes covering almost 400,000 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: Hardin, Jasper, Jefferson and Orange (Figure 2).

While the hospital is dedicated to providing exceptional care to all of the residents in Southeast Texas, CSETHS will use the information in this assessment to strategically establish priorities and commit resources to address the key health issues for the cities and municipalities that comprise the regio

CHRISTUS SOUTHEAST TEXAS HEALTH SYSTEM PSA	

Hardin County, TX	Jasper County, TX	Jefferson County, TX	Orange County, TX
77625	75951	77619, 77627, 77640,	77630
77656	75956	77642, 77701, 77702	77632
77657	77612	77703, 77705, 77706	77662
		77707, 77708, 77713,	





Figure 2. Primary Service Area for CSETHS

## CHNA PROCESS



## **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, CSETHS 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 CSETHS guided the strategic direction of Metopio through roles on various committees and workgroups.

CSETHS 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 CSETHS 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 and provides feedback on community engagement activities.

Input from community stakeholders was also gathered from CSETHS'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 CSETHS 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

CSETHS 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 focus groups
- Community resident surveys
- 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, 337 residents in the CSETHS 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 CSETHS and its community partners. The survey sought input from priority populations in the CSETHS 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 CSETHS PSA.

DEMOGRAPHIC	%
Age (N=230)	
18-24	2.2
25-44	18.7
45-64	55.7
65 and older	23.4
Gender (N=222)	
Male	22.1
Female	76.1
Other	0.9
Decline to answer	0.9
Orientation (N=230)	
Straight or heterosexual	93.0
Bisexual	3.0
Other	0.9
Decline to answer	3.0
Race (N=233 (multiple answers allowed))	
American Indian or Alaska Native	1.7
Asian	1.3
Black or African American	16.6
Choose to not disclose	7.4
Hispanic/Latino(a)	4.4
White	74.7
Education (N=228)	
Some high school	0.9
High school graduate or GED	10.1
Vocational or technical school	8.3
Some college, no degree	18.9
College graduate	39.0
Advanced degree	22.8
Current living arrangements (N=225)	
Own my home	84.4
Rent my home	10.7
Living with a friend or family	4.4
Other	0.4
Disability in household (N=224)	35.7

Income (N=210)		
Less than \$10,000	1.9	
\$10,000 to \$19,999	4.8	
\$20,000 to \$39,999	11.0	
\$40,000 to \$59,999	15.2	
\$60,000 to \$79,999	14.3	
\$80,000 to \$99,999	14.6	
Over \$100,000	21.4	
Average number of children in home (#) (N=223)	0.5	

Table 2. Demographics of Community Resident Survey Respondents in CSETHS 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 CSETHS PSA. This was done through focus groups and key informant interviews.

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

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

Due to the COVID-19 pandemic, CSETHS conducted its focus groups virtually over Zoom. Focus groups lasted 90 minutes and had up to 12 community members participate in each group. The following community members participated in the focus groups:

ORGANIZATION	ROLE
CHRISTUS Southeast Texas Health System	Regional VP, Mission
Southeast Texas Community	Community Members
Genesis Learning Center	Executive Director
Port Arthur Independent School District	Social Worker
The Saluation Army Beaumont Corps	Case Manager
CHRISTUS Southeast Texas Health System	Certified Nurse – Midwife
Legacy Community Health Central Beaumont	Patient
Port Arthur Independent School District	Student Success Instructor
The Saluation Army Beaumont Corps	Corps Officer
Family Services of Southeast Texas, Inc.	Executive Director
Legacy Community Health Central Beaumont	OB/GYN Physician

Table 3. Focus Group Participants

In addition to the focus groups, ten key informants were identified by CSETHS 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

CSETHS used a common set of health indicators to understand the prevalence of morbidity and mortality in the CSETHS 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, CSETHS used data with stratifications so that health inequities could be explored and better articulated. Given the community input on economic conditions and community safety, CSETHS 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

CSETHS 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, CSETHS, 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 CSETHS 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 CSETHS PSA including a lack of access to care, higher rates of chronic disease, employment as an "essential worker" who might experience adverse working conditions 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

"The biggest strength of our community is its resiliency. We have survived Hurricane Harvey and COVID-19 because of our unity and willingness to help others."

- Focus Group Participant

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.

DURING THE PANDEMIC (MARCH 2020-PRESENT) HAVE YOU HAD ANY OF THE FOLLOWING (PLEASE CHECK ALL THAT APPLY):	% OF RESPONDENTS
Visited a physician for a routine checkup or physical	85.2%
Dental exam	63.0%
Mammogram	41.2%
Pap test/Pap smear	28.2%
Sigmoidoscopy or colonoscopy to test for colorectal cancer	16.2%
Flu shot	63.0%
Prostate screening	5.1%
COVID-19 vaccine	80.6%
BECAUSE OF THE PANDEMIC, DID YOU DELAY OR AVOID MEDICAL CARE? Yes	45.3%
No	45.3% 54.7%
No	154 /%
DURING THIS TIME PERIOD, HOW OFTEN HAVE YOU BEEN BOTHERED BY FEELING DOWN, DEPRESSED, OR HOPELESS?	
DURING THIS TIME PERIOD, HOW OFTEN HAVE YOU BEEN BOTHERED BY FEELING DOWN, DEPRESSED, OR HOPELESS? Not at all	40.1%
DURING THIS TIME PERIOD, HOW OFTEN HAVE YOU BEEN BOTHERED BY FEELING DOWN, DEPRESSED, OR HOPELESS? Not at all Several days every month	40.1% 36.9%
DURING THIS TIME PERIOD, HOW OFTEN HAVE YOU BEEN BOTHERED BY FEELING DOWN, DEPRESSED, OR HOPELESS? Not at all Several days every month More than half the days every month	40.1% 36.9% 15.8%
DURING THIS TIME PERIOD, HOW OFTEN HAVE YOU BEEN BOTHERED BY FEELING DOWN, DEPRESSED, OR HOPELESS? Not at all	40.1% 36.9%
DURING THIS TIME PERIOD, HOW OFTEN HAVE YOU BEEN BOTHERED BY FEELING DOWN, DEPRESSED, OR HOPELESS? Not at all Several days every month More than half the days every month	40.1% 36.9% 15.8%
DURING THIS TIME PERIOD, HOW OFTEN HAVE YOU BEEN BOTHERED BY FEELING DOWN, DEPRESSED, OR HOPELESS? Not at all Several days every month More than half the days every month Nearly every day WHAT IS THE MOST DIFFICULT ISSUE YOUR COMMUNITY	40.1% 36.9% 15.8%
DURING THIS TIME PERIOD, HOW OFTEN HAVE YOU BEEN BOTHERED BY FEELING DOWN, DEPRESSED, OR HOPELESS? Not at all Several days every month More than half the days every month Nearly every day WHAT IS THE MOST DIFFICULT ISSUE YOUR COMMUNITY HAS FACED DURING THIS TIME PERIOD? COVID-19	40.1% 36.9% 15.8% 7.2%
DURING THIS TIME PERIOD, HOW OFTEN HAVE YOU BEEN BOTHERED BY FEELING DOWN, DEPRESSED, OR HOPELESS? Not at all Several days every month More than half the days every month Nearly every day WHAT IS THE MOST DIFFICULT ISSUE YOUR COMMUNITY HAS FACED DURING THIS TIME PERIOD?	40.1% 36.9% 15.8% 7.2% 61.4%
DURING THIS TIME PERIOD, HOW OFTEN HAVE YOU BEEN BOTHERED BY FEELING DOWN, DEPRESSED, OR HOPELESS? Not at all Several days every month More than half the days every month 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)	40.1% 36.9% 15.8% 7.2% 61.4% 25.6%

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

## CHNA RESULTS



## **CHNA** Results

### Demographic Characteristics

Over the past decade, the CSETHS PSA has not experienced significant changes in population. Changes between the 2010 and 2020 Census show that the population in the CSETH PSA grew by 1.9% over this period (Figure 4). The entire CHRISTUS Health service area and Texas had larger population growth rates of 10.5% and 15.9%, respectively (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, 443,618 people live in the CSETHS PSA.







Non-Hispanic White individuals make up the majority of the CSETHS PSA population at 57.3%. In the CSETHS PSA, the second most prevalent racial/ethnic demographic is non-Hispanic Black people at 23.4% of the population. This differs from the demographics of the CHRISTUS Health service area and Texas where the second most populous group are Hispanic or Latino people who make up 39.0% and 39.5% of the population, respectively. In the CSETHS PSA, Hispanic and Latino people make up 15.1% of the population. Asian or Pacific Islander individuals make up 2.6% of the CSETHS PSA, compared to 1.9% of the CHRISTUS Health service area and 5.0% of the Texas population. People who report belonging to two or more races make up 1.4% of the CSETHS PSA, 1.8% of the CHRISTUS Health service area and 2.0% of the Texas population. Native Americans account for 0.2% of the CHSETHS PSA, 0.4% of the CHRISTUS Health service area and 0.2% of the population in Texas (Figure 5).



Created on Metopio | https://metop.io/i/7x8bvi4e | Data source: American Community Survey (Table 801001) 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 CSETHS PSA



Demographics by Sex, 2015-2019

Created on Metopio | https://metop.io/i/wweycc4z | 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 CSETHS PSA

Females represent 49.7% of the CSETHS PSA population and males represent 50.3%. This ratio is similar to the entire CHRISTUS Health service area with 50.6% female and 49.4% male residents and Texas with 50.3% female and 49.7% male residents (Figure 6). The median age in the CSETHS PSA is 37.6 years old, which is slightly higher than the full CHRISTUS Health service area (36.4 years old) and Texas overall (34.8 years old) (Figure 7).





In the CSETHS PSA, 3.43% of residents have limited English proficiency. This is similar to the full CHRISTUS Health service area, where 3.77% of residents have limited English proficiency (Figure 8). Both of these regions are much lower than the 6.9% of residents throughout Texas (Figure 8). The number of limited English residents has been increasing in the CSETHS PSA since at least 2014. These residents are mostly concentrated in two zip codes: 77642 (12.1%) and 77701 (11.2%).



Created on Metopio | https://metop.io/i/mws53khd | Data source: American Community Survey (Table B16004) Limited English proficiency: Percentage of residents 5 years and older who do not speak English "very well".



Figure 8. Limited English Proficiency Chart and Map for the CSETHS PSA

The CSETHS PSA has a higher percentage of residents with a disability (16.0%) than the whole CHRISTUS Health service area (14.8%) and the state (11.5%) (Figure 9). Disability here is defined as one or more sensory disabilities or difficulties with everyday tasks.



Created on Metopio | https://metop.io/i/f8nfavhi | 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 9. Disability in CSETHS PSA

### Overall Community Input

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

- Access to care was a major issue that came up across the focus groups. Participants reported few public transportation options, particularly in rural areas of the PSA. They also noted limited options for medical home visits and home monitoring. Additionally, focus group participants shared that neither patients nor providers were aware of available services in the area. Part of inaccessible care in the PSA comes from a lack of knowledge of what is out there.
- Focus group participants shared that there is a large need for mental health care in the PSA. These issues have become more pronounced since the pandemic, especially for seniors living alone. Despite this need, there is still a cultural stigma around seeking treatment for mental health. Participants shared a specific need for more substance use treatment options.
- Economic opportunity and poverty came up as an area of need. Participants felt that the area is not growing economically and that there is a need for more technical training so that residents without college degrees can find good jobs. They shared that it has been difficult to meet financial demands from inflation.
- Focus groups shared that elements of the built environment make it difficult to be healthy. They believe that chemical plants in the area impact health outcomes. The reported limited access to places to exercise outdoors and that rising crime and homelessness makes them hesitant to take advantage of the areas that do exist.

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	65.4%
Mental health	60.3%
Heart disease	58.8%
Cancer(s)	57.8%
Diabetes	56.1%
Drug, alcohol, and substance abuse	54.6%
Chronic pain	54.2%
Smoking and vaping	47.4%
Healthy eating	46.0%
Exercise and physical activity	42.7%

Table 5. Ranking of Health Issues by Survey Respondents

The primary data covered many health issues that community members see in the CSETHS PSA, but data collection also included strengths that residents see in the community. Throughout the focus groups, residents shared that there is a feeling of unity and a general willingness to help others. They reported that the disasters of Hurricane Harvey and COVID-19 during the evaluation period brought out the generosity and resiliency of the community.

Additionally, survey respondents were asked to select all things which they thought contributed to health and were available in the community. Top responses can be found in Figure 10. These represent the assets that community members take advantage of to maintain their health during challenging times.



Figure 10. Survey Responses of Community 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.

#### 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 CSETHS PSA is 55.9 (Figure 11), which is comparable to the measure of the full CHRISTUS Health service area (60.6) and Texas (55.8). Within the CSETHS PSA, hardship indicators are concentrated in the following zip codes: 77703 (83.9), 77624 (83.6), 77701 (80.8), and 77640 (79.7).



Figure 11. Hardship Index in CSETHS PSA

#### Poverty

Poverty and its corollary effects are present throughout the CSETHS PSA. The median household income is \$57,136 and the poverty rate is 18.3% (Figure 12; Figure 13). In comparison, the full CHRISTUS Health service area has a median household income of \$59,184 and 18.5% of residents living in poverty, and Texas, \$67,267 and 16.7%, respectively (Figure 13). The poverty rate in CSETHS PSA is even more pronounced for people of color. Poverty rates for non-Hispanic Black (26.9%), Asian or Pacific Islander (23.5%) and Hispanic or Latino people (18.7%) are much higher than those of non-Hispanic White people (11.4%) (Figure 12). In the focus groups community members shared that current inflation rates make it difficult for them to afford medication, food, utilities, and health care expenses. Residents with lower household incomes will have a more difficult time staying afloat during difficult economic times.

"There shouldn't be any underserved communities. There should be equity in all communities."

- Maternal and Child Health Focus Group Participant



Created on Metopio | https://metop.io/i/3bezwpra | Data source: American Community Survey (Table B17001) Poverty rate: Percent of residents in families that are in poverty (below the Federal Poverty Level).

Figure 12. Poverty Rate in CSETHS PSA



Figure 13. Median Household Income in CSETHS PSA

Median household income



Figure 14. Housing Cost Burden in the CSETHS PSA

#### Unemployment

The overall unemployment rate in the CSETHS PSA (5.9%) is similar to the rate of the CHRISTUS Health service area (5.9%) and Texas (5.3%) (Figure 15). However, when this data is stratified by race/ethnicity, there are some disparities in unemployment rates. In particular, Asian or Pacific Islanders (10.6%) and non-Hispanic Blacks (7.0%) have higher rates of unemployment than non-Hispanic Whites (4.9%) and Hispanic or Latinos (5.5%) (Figure 16). In focus groups, residents shared that there is a need for more good jobs in the region. They feel that it is difficult to "move up" in the community as it stands. Over the past decade, the region had generally seen a decline in the unemployment rate until the 2016-2020 data period, which is likely due to the pandemic.



Figure 15. Unemployment Rate in CSETHS PSA



Figure 16. Unemployment Rate with Stratifications in CSETHS PSA

Another measure of potential economic stress is disconnected youth, defined as residents aged 16–19 who are neither in school nor employed. For the CSETHS PSA, the percentage is 11.6% compared to 10.3% in the whole CHRISTUS Health service area, and 7.9% in Texas (there is a significant margin of error with this dataset). Parents in the focus groups shared that kids need to be engaged in extra curriculars to stay out of trouble, but this can be difficult to do when parents are stretched thin to meet their needs.

In the focus groups, community members noted that there are many students who hold jobs while they are in school to help their families. This reflects the strength of the community to care for each other, but it also affects the well-being and school performance of the students who maintain both work and education.



Figure 17. Disconnected Youth in CSETHS PSA

#### Education

The high school graduation rate in the CSETHS PSA is 85.0%, which is in line with the entire CHRISTUS Health service area and Texas (84.8% and 84.4% respectively) (Figure 18). Within the CSETHS PSA, there is some inequity in high school graduation rates for Asian or Pacific Islanders (74.5%) and Hispanic and Latinos (65%) when compared to the overall population (Figure 18). Differences between the CSETHS PSA and other locations also emerge when looking at post-secondary education. For residents 25 or older with any post-secondary education, the higher degree graduation rate in the CSETHS PSA is 26.4% compared to 31.8% in the CHRISTUS Health service area and 38.1% in Texas (Figure 19).

Education came up as an issue in the focus group. Community members reflected that more technical skills training is needed so that people without college degrees can find good jobs. Parents in the Maternal and Child Health focus group also shared that limited childcare in the area makes it difficult for them to pursue higher education.



Created on Metopio | https://metop.io/i/dxvhkoo5 | 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 18. High School Graduation Rate in CSETHS PSA


Created on Metopio | https://metop.io/ii/fihp6wmk | Data source: American Community Survey (Table 815002) Higher degree graduation rate: Residents 25 or older with any post-secondary degree, such as an Associates or bachelor's degree or higher

#### Figure 19. Higher Graduation Rate in CHRISTUS CSETHS

## 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. The uninsured rate in the CSETHS PSA (18.67%) is higher than the CHRISTUS Health service area (15.1%) and Texas (17.2%) (Figure 20). This rate is especially higher in the Hispanic or Latino population (33.4%) (Figure 20).



Uninsured rate by Race/Ethnicity, 2015-2019

Figure 20. Uninsured Rate with Stratifications in CSETHS PSA

The percentage of residents covered by Medicaid in the CSETHS PSA (21.1%) is greater than Texas (16.5%), but less than the full CHRISTUS Health service area (16.5%) (Figure 21). When combined with the uninsured rate, nearly 40% of residents in the service area either have no coverage or limited coverage through Medicaid.







#### Medicaid coverage by Age, CHRISTUS Southeast Texas Service Area (Counties)

Created on Metopio | https://metop.io/i/uant4r3m | Data source: American Community Survey (Tables S2704, S2701, and B27010) Medicald coverage: Percent of residents covered by Medicald, a state-administered health insurance program for residents meeting certain income limits and other eligibility standards that vary by state.



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 6 below shows the per capita rate for types of mental health providers in the CSETHS PSA compared to the full CHRISTUS Health service area and Texas. Across all three categories the CSETHS PSA is severely lacking.

Торіс		CHRISTUS Southeast Texas Service Area	CHRISTUS Health Service Area	Texas
Mental health providers per capita providers per 100,000 residents, 2021	8	98.3	266.7	171.0
Clinical social workers physicians, 2021	6	34	1,804	8,038
Psychiatry physicians per capita physicians per 100,000 residents, 2021	6	9	16	16

Table 6. Access to Mental Health Providers in CSETHS PSA

Many low-income residents in the CSETHS PSA rely on Federally qualified health centers (FQHCs) for their care in addition to hospitals, outpatient centers and primary care offices. There are 11 FQHCs in the PSA with most concentrated in Beaumont and Port Arthur (Figure 23).



Figure 23. Heat Map of Federally Qualified Health Centers (FQHCs)

## 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 7.79% of residents in the CSETHS 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 24). Without easy access to fresh, healthy foods, people sometimes rely on fast food and other unhealthy options. The map below shows a concentration of food deserts to the north and east of Beaumont. In addition to food deserts, 20.5% of residents are considered food insecure in the CSETHS PSA, which is an indicator that incorporates both economic and social barriers to food access (Figure 25).



Figure 24. Map of Residents Living in Food Deserts in CSETHS PSA



Created on Metopio | https://metop.io/i/8qme78hu | 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 25. Percent of Residents who are Food Insecure in CSETHS PSA

## Violence and Community Safety

The rate of property crimes in CSETHS PSA (2395.0 crimes per 100,000 residents), which includes burglary, larceny, motor vehicle theft, and arson crimes, is comparable to the rate in Texas (2468.4 crimes) and the United States (2222.6 crimes) (Figure 26). However, crimes related to violence, including homicide, criminal sexual assault, robbery, aggravated assault, and aggravated battery, are much higher in CSETHS PSA (555.1 crimes per 100,000 residents) than Texas (430.5 crimes) and the United States (391.0 crimes) (Figure 27).



Property crime, 2016–2020

Figure 26. Property Crime Rate in CSETHS PSA



Violent crime, 2016–2020

Created on Metopio | https://metop.io/l/7zn785y2 | Data sources: FBI Crime Data Explorer, New York City Police Department (NYPD), Crime data portal Violent crime: Crimes related to violence (yearly rate). Includes homicide, criminal sexual assault, robbery, aggravated assault, and aggravated battery.

Figure 27. Violent Crime Rate in CSETHS PSA

Created on Metopio | https://metop.io/i/7wbo33d2 | Data sources: FBI Crime Data Explorer, New York City Police Department (NYPD), Crime data portal Property crime: Property crimes (yearly rate). Includes burglary, larceny, motor vehicle theft, and arson crimes.

# HEALTH DATA ANALYSIS



# 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 is significantly higher in the CSETHS PSA (39.3%) than the full CHRISTUS Health (35.5%) service area and Texas (32.2%), as illustrated in Figure 28. And more than 1 in 10 adults has diabetes in the CSETHS PSA (Figure 29). The rate of diabetes in the CSETHS PSA (13.2%) is similar to the rate in the whole CHRISTUS Health service area (13.1%) and Texas (12.7%) (Figure 29). Chronic kidney disease affects just under 3.5% of the population in the service area, which is slightly above both benchmarks (Figure 30). Lastly, about 9.5% of the population lives with asthma (Figure 31). This is about 0.5 percentage points higher than the full CHRISTUS Health service area but 1.5 percentage points higher than the Texas average (Figure 31). The following charts and line graphs illustrate these disease conditions.



Created on Metopio | https://metop.io/i/dnq6iuhd | Data sources: PLACES (Sub-county data (zip codes, tracts)), Behavioral Risk Factor Surveillance System (BRFSS) (County and state level data High blood pressure: Percent of resident adults aged 18 and older who report ever having been told by a doctor, nurse, or other health professional that they have high blood pressure (hypertension). Women who were told high blood pressure only during pregnancy and those who were told hey had borderline hypertension were not included.

Figure 28. High Blood Pressure in CSETHS PSA



Created on Metopio | https://metop.io/i/em7xn8ni | Data sources: Diabetes Atlas (County and state level data), PLACES Diagnosed diabetes: Percent of resident adults aged 18 and older who report ever having been told by a doctor, nurse, or other health professional that they have diabetes, other than diabetes during pregnancy.

#### Figure 29. Diagnosed Diabetes in CSETHS PSA



Created on Metopio | https://metop.io/ii/c8gwq21h | Data sources: PLACES (Sub-county data (zip codes, tracts)), Razzaghi, Wang, et al. (MMWR Morb Mortal Wkly Rep 2020) (count Chronic kidney disease: Percent of resident adults aged 18 and older who report ever having been told by a doctor, nurse, or other health professional that they have kidney disease.

Figure 30. Chronic Kidney Disease in CSETHS PSA



Figure 31. Current Asthma in CSETHS PSA

## Maternal Health

Over the last five years, the CSETHS PSA has had a higher percentage of preterm births (13.1%) compared to Texas (12.0%) and the United States (12.0%) (Figure 32). In the CSETHS PSA, a higher percentage of births to mothers with at least one maternal risk factor occur in the non-Hispanic White and non-Hispanic Black populations when compared to the state and the country (Figure 33). Lastly, the teen birth rate in CSETHS PSA (13.9%) has been declining over the last decade and is lower than the full CHRISTUS Health service area (22.1%) and Texas (17.1%) (Figure 34).



Created on Metopio | https://metop.io/i/cnqyw7dh | Data sources: National Vital Statistics System-Natality (NVSS-N) (via CDC wonder (2016-2020 data averag-Preterm births: Percent of live births that are preterm (<37 completed weeks of gestation). Different states are available for different time periods.

Figure 32. Percent of Births that are Preterm in CSETHS PSA



#### Births with at least one maternal risk factor by Race/Ethnicity, 2016-2020

Created on Metopio | https://metop.io/1/i2dha5b2 | Data source: National Vital Statistics System-Natality (NVSS-N) (via CDC Wonder, 5 year data) Births with at least one maternal risk factor: Births where the mother has at least one of the following conditions: Chronic Hypertension, Eclampsia, Diabetes, Tobacco use, or Pregnancy-associated hypertension



Figure 33. Percent of Births with at Least One Maternal Risk Factor in CSETHS PSA

Created on Metopio | https://metop.io/ii/fac4rayg | Data source: American Community Survey (Table B13002) Teen birth rate: Women age 15–19 with a birth in the past year, per 1,000 women age 15–19. Does not include births to women below age 15.

Figure 34. Teen Birth Rate in CSETHS PSA

## Mental Health

More than 20% of adults in the CSETHS PSA report being depressed, but the available data was collected before the pandemic (Figure 35). 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.



Created on Metopio | https://metop.io/i/6bry1j6t | Data source: PLACES Depression: Prevalence of depression among adults 18 years and older



## Leading Causes of Death

The top ten causes of death in the CSETHS PSA can be found in Table 7. The leading causes of death will be further explored in the sections below.

Торіс		CHRISTUS Southeast Texas Service Area (Counties)	Texas	United States
Heart disease mortality deaths per 100,000, 2016-2020	6	<b>252.2</b> ±5.3	$\textbf{168.9} \pm 0.6$	$\textbf{164.8} \pm 0.2$
Cancer mortality deaths per 100,000, 2016-2020	6	<b>162.8</b> ± 4.2	$\textbf{143.7}\pm0.5$	$\textbf{149.4} \pm 0.1$
Injury mortality deaths per 100,000, 2016-2020	6	<b>81.2</b> ± 3.3	$\textbf{60.4} \pm 0.3$	<b>72.6</b> ± 0.1
Chronic lower respiratory disease mortality deaths per 100,000, 2016-2020	6	<b>65.0</b> ± 2.6	$\textbf{38.9}\pm0.3$	<b>39.1</b> ±0.1
Alzheimer's disease mortality deaths per 100,000, 2016-2020	6	<b>57.2</b> ± 2.5	$\textbf{39.7}\pm0.3$	$\textbf{30.8} \pm 0.1$
Kidney disease mortality deaths per 100,000, 2016-2020	6	<b>17.2</b> ± 1.4	$\textbf{15.6}\pm0.2$	<b>12.9</b> ± 0.0
Diabetes mortality deaths per 100,000, 2016-2020	6	<b>22.9</b> ± 1.6	$\textbf{22.7}\pm0.2$	$\textbf{22.1}\pm0.1$
Drug overdose mortality deaths per 100,000, 2016-2020	6	<b>15.41</b> ± 1.43	$11.22\pm0.15$	$\textbf{22.43} \pm 0.06$
Septicemia (sepsis) mortality deaths per 100,000, 2016-2020	6	13.5 ± 1.2	$\textbf{13.9}\pm0.2$	$\textbf{10.1}\pm0.0$

Table 7. Leading Causes of Death in CSETHS PSA

#### Heart Disease

Coronary heart disease makes up the largest contributor to the heart disease mortality rate, accounting for 119.0 deaths per 100,000 out of the total 252.9 per 100,000 deaths for heart disease overall. Heart disease mortality has a disparate impact on the Black community in the CSETHS PSA. The mortality rate for non-Hispanic Black people is 310.8 deaths per 100,000 deaths compared to 252.2 deaths for non-Hispanic White people (Figure 36). Asian and Pacific Islanders and Hispanic or Latinos experience lower heart disease mortality rates at 130.2 deaths and 106.9 deaths per 100,000 deaths, respectively (Figure 36). However, the heart disease mortality rates in CSETHS PSA are much higher than in Texas and the United States.



Heart disease mortality by Race/Ethnicity, 2016-2020

Created on Metopio | https://metop.io/i/xowflcgd | Data sources: National Vital Statistics System-Mortality (NVSS-M) (Via http://healthindicators.gov), Chicage Heart disease mortality: Deaths per 100,000 residents with an underlying cause of heart disease (ICD-10 codes 100-109, 111, 113, 120-151).

Figure 36. Heart Disease Mortality with Stratifications in CSETHS PSA

### Cancer

Cancer represents the second leading cause of death in the CSETHS PSA. Lung, trachea, and bronchus cancer make up a large portion of cancer deaths, causing 39.3 out of 100,000 deaths. The second largest cause of cancer mortality in the PSA comes from colorectal cancer, causing 16.1 out of 100,000 deaths.

Leading types of cancer found in the CSETHS PSA can be found in Table 8. Cancer diagnosis rates in the CSETHS PSA are, for the most part, similar to the rates in Texas and the United States as a whole. Lung cancer diagnosis rates in the PSA are much higher than the rates in Texas – 62.5 per 100,000 residents in the CSETHS PSA compared to 49.5 in Texas.

Торіс	CHRISTUS Southeast Texas Service Area (Counties)	Texas	United States
Cancer diagnosis rate per 100,000 residents, 2014-2018	432.91	411.20	448.60
Invasive breast cancer diagnosis rate per 100,000 female residents, 2014-2018	111.74	114.20	126.80
Non-invasive breast cancer diagnosis rate per 100,000 female residents, 2014-2018	17.02	22.20	29.40
Prostate cancer diagnosis rate ger 100,000 male residents, 2014-2018	101.19	97.60	106.20
Lung cancer diagnosis rate per 100,000 residents, 2014-2018	62.33	49.50	57.30
Colorectal cancer diagnosis rate per 100,000 residents, 2014-2018	42.98	37.80	38.00
Oral cancer diagnosis rate ger 100,000 residents, 2014-2018	11.86	11.20	11.90
Cervical cancer diagnosis rate per 100,000 female residents, 2014-2018	10.37	9.30	7.70

#### Table 8. Cancer Diagnosis Rate in CSETHS PSA

Environmental factors may contribute to the lung cancer burden in the CSETHS 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 CSETHS PSA falls within the top 5% of all recorded counties for Lifetime Inhalation Cancer Risk. The Lifetime Inhalation Cancer Risk is also higher in the CSETHS PSA, measuring 43.8 lifetime risk per million, compared to the full CHRISTUS Health service area (35.2 lifetime risk) and Texas (27.6 lifetime risk) (Figure 37).



Figure 37. Lifetime Inhalation Cancer Risk in CSETHS PSA

#### Injury

Injuries account for the third highest cause of death in the CSETHS PSA. This is, in part, because this category includes many kinds of injury. Within the injury category, 51.1 out of 100,000 deaths come from unintentional injury, 20.0 from motor vehicle traffic, 18.5 from firearm-related deaths, and 16.4 deaths by suicide.

### Chronic Lower Respiratory Disease

This is a roll up of four major respiratory diseases—chronic obstructive pulmonary disease (COPD), chronic bronchitis, emphysema, and asthma. There appears to be a significant disparity with this cause of mortality when comparing the CSETHS PSA (65.6%) to Texas (39.9%) and the U.S. (40.2%) (Figure 38). The rate is not only higher for the full population, but significantly higher when analyzed through racial and ethnic stratifications, mostly notably with the Black and Hispanic or Latino populations (Figure 38).



Chronic lower respiratory disease mortality by Race/Ethnicity, 2015-2019

Created on Metopio | https://metop.io/l/ptcrdxtv | Data sources: National Vital Statistics System-Mortality (NVSS-M) (Via http://healthindicators.gov), Chicago Department of Pub 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 bronchiettasis.

Figure 38. Chronic Lower Respiratory Disease Mortality Rate with Stratifications in CSETHS PSA

### Alzheimer's Disease

The mortality rate for Alzheimer's has been steadily increasing over the last 20 years in the CSETHS PSA. The Alzheimer's mortality rate in the CSETHS PSA was 57.2%, which is significantly higher than the rates in Texas (39.7%) and the United States (30.8%) (Figure 39).



Figure 39. Alzheimer's Mortality Rate in CSETHS PSA

#### Stroke

The stroke mortality rate is higher in the CSETHS PSA (46.1%) than either benchmark (Figure 40). When looking at race/ethnicity stratifications the rate, at first, appears much higher for the Black and Hispanic or Latino populations, but there is a wide margin of error due to smaller sample sizes (Figure 40).



Stroke mortality by Race/Ethnicity, 2016-2020

Created on Metopio | https://metop.io/i/892jr8x8 | Data sources: National Vital Statistics System-Mortality (NVSS-M) (Via http://healthindicators.gov), Chicage Stroke mortality: Deaths per 100,000 residents due to stroke (ICD-10 codes I60-I69).

Figure 40. Stroke Mortality Rate with Stratifications in CSETHS PSA

### Kidney Disease

Death from kidney disease in the CSETHS PSA (17.2%) is higher than both benchmarks. It has been trending upward despite being steady in Texas and even declining in the U.S. (Figure 41). As is highlighted in the next section on hospital utilization data, kidney disease and corresponding conditions are a major reason for inpatient admissions.



Figure 41. Kidney Disease Mortality Rate in CSETHS PSA

#### Diabetes

The diabetes mortality rate had a sharp decline in the late aughts and had been on a straight line over the past decade. However, the most recent data demonstrates a slight increase (Figure 42).



Figure 42. Diabetes Mortality Rate in CSETHS PSA

### Drug Overdose

Death from drug overdoses has been a national story for several years. The rate has been increasing since about 2015 and took an even sharper upward turn at the beginning of the pandemic. While the national rate (22.4%) is much higher than that in the CSETHS PSA (15.4%) the rate jumped considerably between 2019 and 2020 (Figure 43).



Figure 43. Drug Overdose Mortality Rate in CSETHS PSA

#### Sepsis

The sepsis mortality rate in CSETHS PSA (13.5%) is lower than in Texas (12.9%), but higher than the United States (10.1%) (Figure 44).



Septicemia (sepsis) mortality by Race/Ethnicity, 2016-2020

Created on Metopio | https://metop.io/i/b22ran85 | Data source: National Vital Statistics System-Mortality (NVS5–M) (Via http://healthindicators.gov) Septicemia (sepsis) mortality: Deaths per 100,000 residents due to septicemia or sepsis (blood poisoning) (ICD–10 codes A40–A41).

Figure 44. Sepsis Mortality Rate with Stratifications in CSETHS PSA

## Hospital Utilization

For this CHNA, CSETHS looked at three years of utilization data (2019–2021). During the course of the COVID-19 pandemic, the health system saw utilization decline at both hospitals – St. Elizabeth (–7%) and Jasper Memorial (–23%). Interestingly the drop in utilization was most pronounced with the Emergency Department and Outpatient services. Generally, Inpatient volumes declined but only by a small amount over the three-year period (Figure 45; Figure 46).



Figure 45. Inpatient Admissions at CSETHS



Figure 46. Emergency Department Utilization at CSETHS

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.

Regarding inpatient utilization, COVID-19 became the number three reason for admission in 2020 and 2021. The top cause was labor and delivery. Following COVID-19, the majority of the remaining top 10 are related to heart conditions, kidney disease or respiratory issue. Note that the number six reason for hospital admission is morbid obesity (Table 9; Table 10).

## TOP INPATIENT CASES - ST. ELIZABETH

Single liveborn infant delivered

Sepsis unspecified organism

COVID-19

Maternal care from previous cesarean delivery

Hypertensive heart disease with heart failure

Morbid obesity due to excess calories

Hypertensive heart and chronic kidney disease

Acute kidney failure unspecified

Non-ST elevation (NSTEMI) myocardial infarction

Pneumonia unspecified organism

Table 9. Primary Diagnoses at St. Elizabeth

At Jasper Memorial, COVID-19 was the top reason for an inpatient admission during the last two years. This was followed by two respiratory conditions—COPD and pneumonia. Similar to St. Elizabeth, a number of heart and kidney conditions are also present in the top 10.

## TOP INPATIENT CASES - JASPER MEMORIAL

COVID-19

Chronic obstructive pulmonary disease

Pneumonia unspecified organism

Urinary tract infection site not specified

Sepsis unspecified organism

Single liveborn infant delivered

Acute kidney failure

Hypertensive heart disease with heart failure

Hypertensive heart and chronic kidney disease

Single liveborn infant delivered by cesarean

Table 10. Primary Diagnoses at Jasper Memorial

# CONCLUSION



# Conclusion

The Mission 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 11). The highestscoring 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?	Mission team
INFLUENCE	How much can CSETX affect change?	Mission team
VALUES	Does the community care about it?	Survey, Focus Groups, Key Informant Interviews
ROOT CAUSES	What are the community conditions?	Mission team

Table 11. Prioritization Framework

## CHRISTUS Southeast Texas Health System Selected FY 2023 - 2025 Health Priority Areas

For this cycle, CSETHS is using a new structure for its identified needs, categorizing them under two domains with the overarching goal of achieving health equity. While the prioritization structure is new, CSETHS retained two of the primary health priority issues from the 2020-2022 CHNA: mental health, and food insecurities. CSETHS added six new issues in response to the needs assessment results. The newly identified priority issues include diabetes, heart disease, obesity, substance abuse, physical activity and smoking and vaping.



Figure 47. CHRISTUS Southeast Texas Health System and CHRISTUS Dubuis Hospital of Beaumont Priority Areas

These domains and corresponding issues will serve as the designated issue areas for official reporting and are the principal health concerns that CSETHS 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 April 28, 2022.

# APPENDIX



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

This evaluation is meant to capture the programmatic efforts undertaken by CHRISTUS Southeast Texas Health System to meet priority health area goals and intended outcomes as outlined in the 2020–2022 Community Health Improvement Plan (CHIP).

Identified programs and services will share specific process and outcome metrics that demonstrate impact on the priority health areas and goals outlined in the table below.

## CHRISTUS Southeast Texas Health System Priority Health Area Goals (2020-2022)

PRIORITY	Access to Mental and Behavioral Health
PRIORITY	Access to Primary Care
PRIORITY	Transportation
PRIORITY	Health Care Disparities
PRIORITY	Food Insecurity

Because of the varied program structures and approaches, it is recommended that the community benefits team use three overarching areas to organize data sources and reporting mechanisms. These include:

### Community Based Program Data

• Data includes process and outcome level measures, often captured through activity logs, standard or customized designed reporting templates, surveys, and qualitative reports.

## CHRISTUS Captured Data

• CHRISTUS staff utilize databases and internal tracking templates to document and report programs and services. These include CBISA, EMRs and other program dashboards.

### Engagement Data

• Engagement data are largely qualitative including Board presentations, community reports, participant interviews and program manager feedback sessions.

GOAL	Increase access to mental and behavioral health
OBJECTIVES	<ul> <li>Collaborate with local mental and behavioral health providers to reduce barriers to care.</li> <li>Increase emergency room resources to be better equipped for mental and behavioral health.</li> <li>Provide education to emergency room and other department's staff for mental and behavioral health.</li> </ul>
IMPACT	In addition to collaborating with other providers as a point of progress, the pandemic encouraged the increased use of telemedicine and this helped with assessments. Safe rooms, safe protocols and training for de-escalation in the Emergency Room saw progress. Incidents of violence in the ED have been reduced as a result. From 2020 to 2022 the number of patients presenting to the emergency department with acute mental health issues has increased by 35%. Much of this increase can be attributed to community awareness of mental health services. Through collaboration with the Community Advisory Committee, CHRISTUS St. Elizabeth and other stakeholders have been able to inform the community of the services available to them. Emergency Department leadership works collaboratively with other organizations to increase access to mental and behavioral health services by sharing information, resources, and ideas to improve services for our community. As part of this improvement process, the emergency department designed safe spaces for securing violent/aggressive patients. These spaces are designed with patient safety, reduction of harmful stimuli, and improved quality of care delivery in mind. Additionally, standards of care for the behavioral health patient in the emergency department have been implemented to increase safety for staff and patients, improve interventions, and timely promotion of the healing process while patients are awaiting placement in an inpatient facility or preparing for discharge home. Emergency department Associates receive training on trauma- informed care and care of behavioral health patients at new hire orientation and annually. Continuous process and quality improvement assessments are performed to identify opportunities and promote best practices. Since 2020, CHRISTUS St. Elizabeth emergency department has been able to provide safe, effective care to over 3000 patients with mental and behavioral health needs.

<ul> <li>OBJECTIVES</li> <li>Collaborate with local providers to reduce barriers to care.</li> <li>Increased use of bilingual community outreach worker with potential for more added</li> <li>CHRISTUS Physicians Group medical centers to expand.</li> </ul> IMPACT The local FQHCs are a great resource for access to primary care, along with the efforts of CHRISTUS Health to extend the physician office network. Prior to the pandemic, CHRIST was targeting those who presented in the ED with hypertension in order to follow up wit them and provide a medical home. The efforts would be further enhanced by a software platform collaboration with local FQHCs that was intended to allow data sharing. This was help alleviate patients from "falling through the cracks" when they could be tracked to determine if they were getting the care they needed. The pandemic greatly affected these efforts that were otherwise on track. Recruiting physicians to Beaumont for both primar care and specialties was increasingly difficult in southeast Texas, especially after the add of the pandemic. We try very hard to refer all of our inpatient self-pay patients to a feder funded clinic. The majority do get referred. We give them the resource information they need. 75% of our self-pay patients get referred to a medical home. We provide referral information with our discharges. The discharge will either include a referral to follow up with the patient's PCP or federally funded clinics. We provide resource information for available clinics, physicians, etc. For FY 22 we made 2801 referrals to Legacy, 22 to		Increase access to primary care
<ul> <li>IMPACT</li> <li>Increased use of bilingual community outreach worker with potential for more added</li> <li>CHRISTUS Physicians Group medical centers to expand.</li> <li>IMPACT</li> <li>The local FQHCs are a great resource for access to primary care, along with the efforts of CHRISTUS Health to extend the physician office network. Prior to the pandemic, CHRIST was targeting those who presented in the ED with hypertension in order to follow up wit them and provide a medical home. The efforts would be further enhanced by a software platform collaboration with local FQHCs that was intended to allow data sharing. This would help alleviate patients from "falling through the cracks" when they could be tracked to determine if they were getting the care they needed. The pandemic greatly affected these efforts that were otherwise on track. Recruiting physicians to Beaumont for both primar care and specialties was increasingly difficult in southeast Texas, especially after the add of the pandemic. We try very hard to refer all of our inpatient self-pay patients to a federa funded clinic. The majority do get referred. We give them the resource information they need. 75% of our self-pay patients get referred to a medical home. We provide referral information with our discharges. The discharge will either include a referral to follow up with the patient's PCP or federally funded clinics. We provide resource information for available clinics, physicians, etc. For FY 22 we made 2801 referrals to Legacy, 22 to</li> </ul>	GOAL	increase access to primary care
<ul> <li>IMPACT</li> <li>Increased use of bilingual community outreach worker with potential for more added</li> <li>CHRISTUS Physicians Group medical centers to expand.</li> <li>IMPACT</li> <li>The local FQHCs are a great resource for access to primary care, along with the efforts of CHRISTUS Health to extend the physician office network. Prior to the pandemic, CHRIST was targeting those who presented in the ED with hypertension in order to follow up wit them and provide a medical home. The efforts would be further enhanced by a software platform collaboration with local FQHCs that was intended to allow data sharing. This would help alleviate patients from "falling through the cracks" when they could be tracked to determine if they were getting the care they needed. The pandemic greatly affected these efforts that were otherwise on track. Recruiting physicians to Beaumont for both primar care and specialties was increasingly difficult in southeast Texas, especially after the add of the pandemic. We try very hard to refer all of our inpatient self-pay patients to a federa funded clinic. The majority do get referred. We give them the resource information they need. 75% of our self-pay patients get referred to a medical home. We provide referral information with our discharges. The discharge will either include a referral to follow up with the patient's PCP or federally funded clinics. We provide resource information for available clinics, physicians, etc. For FY 22 we made 2801 referrals to Legacy, 22 to</li> </ul>		Collaborate with local providers to reduce barriers to care.
<ul> <li>CHRISTUS Physicians Group medical centers to expand.</li> <li>IMPACT</li> <li>The local FQHCs are a great resource for access to primary care, along with the efforts of CHRISTUS Health to extend the physician office network. Prior to the pandemic, CHRIS' was targeting those who presented in the ED with hypertension in order to follow up with them and provide a medical home. The efforts would be further enhanced by a software platform collaboration with local FQHCs that was intended to allow data sharing. This would help alleviate patients from "falling through the cracks" when they could be tracked to determine if they were getting the care they needed. The pandemic greatly affected these efforts that were otherwise on track. Recruiting physicians to Beaumont for both primar care and specialties was increasingly difficult in southeast Texas, especially after the add of the pandemic. We try very hard to refer all of our inpatient self-pay patients to a feder funded clinic. The majority do get referred. We give them the resource information they need. 75% of our self-pay patients get referred to a medical home. We provide referral information with our discharges. The discharge will either include a referral to follow up with the patient's PCP or federally funded clinics. We provide resource information for available clinics, physicians, etc. For FY 22 we made 2801 referrals to Legacy, 22 to</li> </ul>	OBJECTIVES	•
IMPACTThe local FQHCs are a great resource for access to primary care, along with the efforts of CHRISTUS Health to extend the physician office network. Prior to the pandemic, CHRIS' was targeting those who presented in the ED with hypertension in order to follow up wit them and provide a medical home. The efforts would be further enhanced by a software platform collaboration with local FQHCs that was intended to allow data sharing. This we help alleviate patients from "falling through the cracks" when they could be tracked to determine if they were getting the care they needed. The pandemic greatly affected these efforts that were otherwise on track. Recruiting physicians to Beaumont for both primar care and specialties was increasingly difficult in southeast Texas, especially after the ad- of the pandemic. We try very hard to refer all of our inpatient self-pay patients to a feder funded clinic. The majority do get referred. We give them the resource information they need. 75% of our self-pay patients get referred to a medical home. We provide referral information with our discharges. The discharge will either include a referral to follow up with the patient's PCP or federally funded clinics. We provide resource information for available clinics, physicians, etc. For FY 22 we made 2801 referrals to Legacy, 22 to		
CHRISTUS Health to extend the physician office network. Prior to the pandemic, CHRIST was targeting those who presented in the ED with hypertension in order to follow up with them and provide a medical home. The efforts would be further enhanced by a software platform collaboration with local FQHCs that was intended to allow data sharing. This we help alleviate patients from "falling through the cracks" when they could be tracked to determine if they were getting the care they needed. The pandemic greatly affected these efforts that were otherwise on track. Recruiting physicians to Beaumont for both primar care and specialties was increasingly difficult in southeast Texas, especially after the ad- of the pandemic. We try very hard to refer all of our inpatient self-pay patients to a feder funded clinic. The majority do get referred. We give them the resource information they need. 75% of our self-pay patients get referred to a medical home. We provide referral information with our discharges. The discharge will either include a referral to follow up with the patient's PCP or federally funded clinics. We provide resource information for available clinics, physicians, etc. For FY 22 we made 2801 referrals to Legacy, 22 to		CHRISTOS Physicians Group medical centers to expand.
<ul> <li>continued to work to recruit clinicians to the market to expand primary care access. We assisted Beaumont Internal Medicine &amp; Geriatric Association in the recruitment of Rawa Musa, MD (Internal Medicine) to the group in January 2000. We've also worked with our employed physician entity, now called CHRISTUS Trinity Clinic ("CTC"), to expand prima care access in the community with the addition of Osazee Ovaiwe, MD (Family Medicine) CTC-Preventive Medicine location in August 2021, Will Pickard, MD (Family Medicine) CTC-Port Arthur location in September 2021, and Rebecca Schneider, MD (Family Medicine to CHRISTUS Jasper Rural Health Clinic in December 2021. CTC is also finalizing an agreement to bring a new Internal Medicine physician to CTC-Beaumont Adult Medicin location in January 2023.</li> <li>CHRISTUS has also increased access for women's services in Southeast Texas with the</li> </ul>	IMPACT	CHRISTUS Health to extend the physician office network. Prior to the pandemic, CHRISTUS was targeting those who presented in the ED with hypertension in order to follow up with them and provide a medical home. The efforts would be further enhanced by a software platform collaboration with local FGHCs that was intended to allow data sharing. This would help alleviate patients from "falling through the cracks" when they could be tracked to determine if they were getting the care they needed. The pandemic greatly affected these efforts that were otherwise on track. Recruiting physicians to Beaumont for both primary care and specialties was increasingly difficult in southeast Texas, especially after the advent of the pandemic. We try very hard to refer all of our inpatient self-pay patients to a federally funded clinic. The majority do get referred. We give them the resource information they need. 75% of our self-pay patients get referred to a medical home. We provide referral information with our discharges. The discharge will either include a referral to follow up with the patient's PCP or federally funded clinics. We provide resource information for available clinics, physicians, etc. For FY 22 we made 2801 referrals to Legacy, 22 to Southeast Texas Community Clinic, and 9 to Jefferson County Public Health. CHRISTUS has continued to work to recruit clinicians to the market to expand primary care access. We assisted Beaumont Internal Medicine & Geriatric Association in the recruitment of Rawan Musa, MD (Internal Medicine) to the group in January 2000. We've also worked with our employed physician entity, now called CHRISTUS Trinity Clinic ("CTC"), to expand primary care access in the community with the addition of Osazee Ovaiwe, MD (Family Medicine) to CTC-Porentive Medicine location in August 2021, Will Pickard, MD (Family Medicine) to CTC-Port Arthur location in September 2021, and Rebecca Schneider, MD (Family Medicine) to CTC-Port Arthur location in September 2021, and Rebecca Schneider, MD (Family Medicine)

initiative to provide inpatient pediatric coverage in the hospital to improve access to care

and decrease the burden on community pediatricians.

GOAL	Increase access to transportation
OBJECTIVES	• Publish a brochure available to patients and families to access various forms of transportation.
	<ul> <li>Make use of healthy beaumont website to provide information on transportation available.</li> </ul>
	• Do an analysis of a financial agreement to provide a van between fqhcs and other providers.
IMPACT	Due to the pandemic, public transportation with its close and crowded environment became an unfavorable option. These goals thus needed to be put on hold.

GOAL	Address health inequities / health care disparities
OBJECTIVES	<ul> <li>Patients presenting in the emergency room with primary diagnosis of hypertension to be targeted.</li> <li>Community health worker will call and sometimes visit with patients in need of follow up care.</li> <li>When sufficient data is obtained, an analysis will be done to determine needs of underserved patients.</li> </ul>
IMPACT	62% of all patients presenting in the Emergency Room with a primary diagnosis of Hypertension were followed up on for a referral to a program to address their hypertension. Patients were invited to establish a medical home with a local FQHC as well as follow up in our Center for Health Management. The Center provided regular BP monitoring, diet monitoring and advice and exercise equipment with training. The follow up also allowed for integrating the social determinants of health into the clinical process and care management. Care management was then responsible through the Community Health Worker for coordinating appropriate resources to assist patients in managing their chronic conditions. Individuals from minority communities are disproportionately impacted by ambulatory care sensitive conditions such as hypertension. The chronic disease clinics, Center for Health Management, have helped to address that by treating hundreds of Medicaid or low-income patients with intensive follow up for their chronic disease. Diabetes, hypertension, COPD, obesity and smoking cessation programs have been effective primarily because the caregivers provide the extra attention needed to get these patients on track. The previously mentioned hypertension patients are referred there as part of the follow up. The Maternal Child Care Clinic for prenatal care was established to address the needs of the most vulnerable among underserved low-income minority expectant mothers. The clinic has done an outstanding job helping primarily Medicaid patients, staying open even during the worst of the pandemic challenges to address the needs. They also screen for mental health issues during the stressful perinatal timeline, and this helps to address that other prioritized need.

GOAL	Address food insecurity
OBJECTIVES	<ul> <li>Partner with Southeast Texas Food Bank to provide food for discharged patients.</li> <li>Provide diabetic appropriate food boxes to discharged patients; collaborate with senior nutrition services.</li> <li>Outpatients and family members at Anayat House will receive cafeteria vouchers.</li> </ul>
IMPACT	Anayat House, our Medical House of Hospitality for traveling patients and families in need of temporary housing, received enough vouchers to the hospital cafeteria to provide food for all guests in need. Additionally, CHRISTUS Health assisted in supporting Market to H.O.P.E., the new Catholic Charities food bank that provides a grocery store experience and fresh produce. Both in-kind donations and over \$140,000 in grants were provided to address Food Insecurity in Southeast Texas through their program and that of the Southeast Texas Food Bank.

# **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				
Welcome to the CHRISTUS Health Community Health Needs Assessment Survey.				
This survey will only take about 10 minutes. V needs of your community. The information we				
<ul> <li>Identify health problems that affect the people in your community.</li> </ul>				
Understand the needs of your community.				
Work together to find a solution.				
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.				
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.				
We thank you for your help.				
Your Information				
Your home zip code:	How many years have you lived here?			

#### Community Health Needs Assessment Survey

**Community Health Questions** 

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?

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.

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.

- Community services, such as resources for housing
- Access to health care
- Medication Assistance
- Health support services (diabetes, cancer, diet, nutrition, weight management, quit smoking, end of life care)
- Affordable and healthy food (fresh fruits and vegetables)
- Mental health services
- Technology (internet, email, social media)
- Transportation
- □ Affordable childcare
- Affordable housing
- Arts and cultural events
- Clean environment and healthy air
- Fitness (gyms place to work out)
- Good schools

- Inclusive and equal care for all people whatever race, gender identity or sexual orientation (LGBTQ)
- □ Life skill training (cooking, how to budget)
- Parks and recreation
- Cancer Screening (mammograms, colon cancer, HPV vaccine/Pap smear, prostate cancer)
- Quality Job Opportunities and Workforce Development
- Racial Equity (The elimination of policies, practices, attitudes, and cultural messages that reinforce differential outcomes by race)
- Religion or spirituality
- □ Safety and low crime
- Strong community cohesion and social network opportunities (reword – Welcoming community and opportunities to join support groups)
- □ Strong family life
- 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?
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?					
□ 18-24 □	35-44		55-64		75-84
□ 25-34 □	45-54		65-74		85 and older
What is your gender?					
	_				
Female		Choose not to	disclose		
□ Male	Ц	Comments:			
Do you think of yourself as?					
Straight or heterosexual		Choose not to	disclose		
Bisexual		Other, please	specify:		
Lesbian or gay or homosexual					
Do you consider yourself Hispanic or Latino?					
Hispanic or Latino: A per	•		Puerto Rica	n, South or C	entral American,
or other Spanish culture	or other Spanish culture or origin, regardless of race.				
	······································				
Decline to answer: A per	Decline to answer: A person who is unwilling to choose/provide from the categories available				

E

	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.						
	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							
		ur home?					
If	Yes □ No <b>f Yes</b> : What language(s) other than English a						
	Yes □ No <b>f Yes</b> : What language(s) other than English a	are spoken in your home? □ Other, please specify:					

Community Health Needs Assessment Survey				
Household Questions				
What are your current living arrangements?				
<ul> <li>Own my home</li> <li>Living with a friend or family</li> <li>Rent my home</li> <li>Living outside (e.g., unsheltered, car, tent, abandoned building)</li> <li>Living in emergency or transitional shelter</li> </ul>				
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? <ul> <li>Always</li> <li>Often</li> <li>Sometimes</li> <li>Very Rare</li> <li>Never</li> </ul>				
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)         Less than \$10,000       \$60,000 to \$79,999         \$10,000 - \$19,999       \$80,000 to \$99,999         \$20,000 to \$39,999       Over \$100,000         \$40,000 to \$59,999       \$40,000 to \$59,999				

Community Health Needs Assessment Survey		
Questions about Your Health		
Are you currently covered by health insurance? □ Yes □ No		
Do you have a medical or healthcare professional that you see regularly (primary care provider/doctor/pediatrician/cardiologist, etc.)?		
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):		
Visited a doctor for a routine checkup or physical? (not an exam for a specific injury, illness or condition)?		
Dental exam		
Mammogram     Pap test/pap smear		
<ul> <li>Sigmoidoscopy or colonoscopy to test for colorectal cancer</li> <li>Flu shot</li> </ul>		
Prostate screening		
COVID-19 vaccine		
Because of the pandemic did you delay or avoid medical care?		
During this time period, how often have you been bothered by feeling down, depressed, or hopeless? (Check only one answer).		
Several days every month		
<ul> <li>More than half the days every month</li> </ul>		
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.
  - o Keep personal stories "in the room".
  - o Everyone's ideas will be respected.
  - o One person talks at a time.
  - o It's okay to take a break if needed or help yourself to food or drink (if provided).
  - o Everyone has the right to talk.
  - o 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?
    - o 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 prove on what are the specific challenges (i.e., managing diabetes, accessing medicine, getting screened, etc.)
  - o 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?
  - o Do they have a primary care provider?
  - o Can they access Behavioral Health services?
  - Are they able to get cancer screenings and vaccinations?
  - o 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?
  - o 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?
    - o 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.)
  - o For cancer ask about specifics
  - o 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
- United States Department of Agriculture: Food Access Research Atlas
- University of Texas at Tyler, The Health Status of Northeast Texas, 2021 report

## **Appendix 4: Community Resources**

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

NAME	DESCRIPTION
CHRISTUS Southeast Texas Health System	Three acute care facilities, long term care facility, several outpatient facilities, trauma center, and rural health clinics.
Baptist Hospitals of Southeast Texas	Two hospitals, cancer center, and family medicine clinic.
United Way	Two operating: Beaumont and North Jefferson County and Mid-South Jefferson County. Partner with local nonprofits, business, and government to address community needs, including health needs.
Legacy Community Health	Federally qualified health center providing primary care, pediatrics, dental, vision, behavioral health, OB/GYN, vaccinations, health promotion, community outreach and more.
Gulf Coast Health Center, Inc.	Federally qualified health center providing comprehensive primary care, medical, dental, pharmacy, enrollment assistance, health fairs, and more.
Beaumont Bone and Joint Institute	A CHRISTUS Orthopedic Specialty Center partner. Full range of orthopedic services, including diagnostic services, imaging, surgery, and physical therapy/rehabilitation.
YMCA of Southeast Texas	Two locations in Port Arthur. Healthy living programs and community education focused on chronic disease prevention and offering opportunities for physical activity for all ages.
Gift of Life	Offers free cancer screenings to medically underserved persons, including mammograms for women and prostate exams for men. Conducts community outreach and education, and hosts events to raise cancer awareness.

Port Arthur Health Department	The mission of the Port Arthur City Health Department is to: Prevent communicable and vaccine-preventable diseases Promote health and wellness through health promotion, education, nutritional food and counseling Educate and prepare the community for natural or bioterrorism disasters Maintain an overall maximum well status To link clients with appropriate health and social services.
Burke Mental Health Services	Burke provides complete mental health services to adults and children in East Texas. From our 24 Hour Crisis Line and innovative counseling and treatment interventions to our state-of-the-art mental health emergency center in Lufkin, we have the facilities, resources, and staff to help East Texans in need.
Southeast Texas Food Bank	At the Southeast Texas Food Bank, our staff is passionate about our mission. Our management team, program staff, transportation crew, and warehouse workers are committed to finding innovative ways to increase the quantity and improve the quality of food available to our partner agencies. We also strive to raise public awareness of issues related to hunger in our area.
Communities in Schools	The mission of Communities In Schools of Southeast Texas is to surround students with a community of support empowering them to stay in school and achieve in life.
Southeast Texas Council on Alcohol and Drug Abuse (SETCADA)	To advocate and provide necessary substance abuse prevention, intervention, and treatment services for the community at large.
Golden Triangle Minority Business Council (GTMBC)	GTMBC is proud to be the leading small business advocate helping build a stronger, more equitable society by supporting and promoting diversity and inclusion.
Help!I'M Hurting! INC.	Non-profit aimed at assisting those affected by Hurricane Harvey.
The Medical Center of Southeast Texas	The Medical Center of Southeast Texas Beaumont Campus is dedicated to providing leading–edge, exceptional surgical and diagnostic services to the Southeast Texas community.
UT Physicians	Through UT Physicians Multispecialty – Beaumont, you will have access to our full practice of more than 1,000 physicians certified in 80 medical specialties and subspecialties. UT Physicians Multispecialty – Beaumont will offer primary and specialty care for children, adolescents, and adults. Specialties include behavioral health, family medicine, obstetrics & gynecology and pediatrics.

Mental Health America of Southeast Texas	Our mission is to promote the mental wellness of our region and enhance the lives of all individuals impacted by mental illness through community collaboration, education, and advocacy.
Beaumont Healthy Living Foundation/Healthy Southeast Texas	Connects southeast Texas residents with resources to promote physical activity and healthy eating habits.
Texas A&M AgriLife Extension County Offices	Provide citizens with education and access to resources on health topics such as diabetes prevention, healthy eating and nutrition, food safety, and more.
Spindletop Center	Local mental health authority. Psychiatric care, crisis assessment, and community support services for people with serious mental illness, substance use disorders, people experiencing emotional crisis, and people with functional difficulties related to mental health problems.
Beaumont Public Health Department	Health promotion services including presentations to community groups on chronic and infectious disease, emergency preparedness, safety, and prevention. Hosts community health fairs. Operates immunization clinics, STD clinics and tuberculosis clinics.
Smart Health Clinic at Baptist Hospitals of Southeast Texas	Follows up with high-risk, medically complex emergency department users to help them manage health outside hospitals and prevent readmissions.
Jefferson County Public Health Department	Provides excellence in individual and community health care while promoting healthy lifestyles and preserving a healthy environment for the citizens of Jefferson County. This includes but is not limited to a prescription assistance program, basic needs program, transportation services and pharmacy services.
Saluation Army	Provides the following services: Worship Services, Emergency Shelter, Emergency Financial Assistance, Casework Services, Transitional Housing, Men's Ministries, Women's Ministries, Boys' & Girls' Club.