Baylor Scott & White Health
Community Health Needs Assessment

Sherman Health Community

Baylor Scott & White Surgical Hospital at Sherman

Approved by: Baylor Scott & White Health – North Texas Operating, Policy and Procedure Board on June 25, 2019

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Table of Contents

Baylor Scott & White Health Mission Statement 4
Executive Summary 6
Community Health Needs Assessment Requirement 8
CHNA Overview, Methodology and Approach 9
Consultant Qualifications & Collaboration 9
Community Served Definition 10
Assessment of Health Needs 11
Quantitative Assessment of Health Needs – Methodology and Data Sources 11
Qualitative Assessment of Health Needs and Community Input – Approach 12
Methodology for Defining Community Need 14
Information Gaps 14
Approach to Identify and Prioritize Significant Health Needs 15
Existing Resources to Address Health Needs 16
Sherman Health Community CHNA 17
Demographic and Socioeconomic Summary 17
Public Health Indicators 27
Watson Health Community Data 27
Interviews 27
Community Health Needs Identified 28
Prioritized Significant Health Needs 29
Description of Health Needs 29
Primary Care Physician Providers 29
Intentional Self Harm: Suicide 30
Uninsured Children 30
Health Care Costs 31
Hospital Stays for Ambulatory-Care Sensitive Conditions - Medicare 32
Summary 32
Appendix A: Key Health Indicator Sources 33
Appendix B: Community Resources Identified to Potentially Address Significant Health Needs 38
Resources Identified 38
Community Healthcare Facilities 39
Appendix C: Federally Designated Health Professional Shortage Areas and Medically Underserved Areas and Populations 40

Appendix D: Public Health Indicators Showing Greater Need When Compared to State Benchmark 41

Appendix E: Watson Health Community Data 43

Appendix F: Evaluation of Prior Implementation Strategy Impact..... 47

Baylor Scott & White Health Mission Statement

Our Mission

Founded as a Christian ministry of healing, Baylor Scott & White Health promotes the well-being of all individuals, families and communities.

Our Ambition

To be the trusted leader, educator and innovator in value-based care delivery, customer experience and affordability.

Our Values

- We serve faithfully
- We act honestly
- We never settle
- We are in it together

Our Strategies

- Health – Transform into an integrated network that ambitiously and consistently provides exceptional quality care
- Experience – Achieve the market-leading brand by empowering our people to design and deliver a customer-for-life experience
- Affordability – Continuously improve our cost discipline to invest in our Mission and reduce the financial burden on our customers
- Alignment – Ensure consistent results through a streamlined leadership approach and unified operating model
- Growth – Pursue sustainable growth initiatives that support our Mission, Ambition, and Strategy

WHO WE ARE

As the largest not-for-profit healthcare system in Texas and one of the largest in the United States, Baylor Scott & White Health was born from the 2013 combination of Baylor Health Care System and Scott & White Healthcare. Today, Baylor Scott & White includes 50 hospitals, more than 900 patient care sites, more than 7,500 active physicians, and over 47,000 employees and the Scott & White Health Plan.


Founded as a Christian ministry of healing, Baylor Scott & White Health promotes the well-being of all individuals, families and communities.
Mission
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Executive Summary

As the largest not-for-profit health care system in Texas, Baylor Scott & White Health (BSWH) understands the importance of serving the health needs of its communities. In order to do that successfully, we must first take a comprehensive look at the systemic and local issues our patients, their families and neighbors face when it comes to having the best possible health outcomes and well-being.

Beginning in June of 2018, a BSWH task force led by the Community Health, Tax Services, and Marketing Research departments began the process of assessing the current health needs of the communities served for all BSWH hospital facilities. IBM Watson Health (formerly Truven Health Analytics) collected and analyzed the data for this process and compiled a final report made publicly available in June of 2019.

BSWH owns and operates multiple individual licensed hospital facilities serving the residents of north and central Texas. This community health needs assessment applies to the following BSHW hospital facility:

- Baylor Scott & White Surgical Hospital at Sherman.

For the 2019 assessment, the community served includes the geographic area where at least 75% of the hospital facilities' admitted patients live and includes Grayson County.

The hospital facility and IBM Watson Health (Watson Health) examined over 102 public health indicators and conducted a benchmark analysis of the data comparing the community to overall state of Texas and United States (U.S.) values. A qualitative analysis included direct input from the community through focus groups and key informant interviews. Interviews included input from state, local, or regional governmental public health departments (or equivalent department or agency) with knowledge, information, or expertise relevant to the health needs of the community, and individuals or organizations serving or representing the interests of medically underserved, low-income, and minority populations in the community.

Needs were first identified when an indicator for the community served was worse than the Texas state benchmark. A need differential analysis conducted on all the low performing indicators determined relative severity by using the percent difference from benchmark. The outcome of this quantitative analysis aligned with the qualitative findings of the community input sessions to create a list of health needs in the community. Each health need received assignment into one of four quadrants in a health needs matrix, this clarified the assignment of severity rankings to the needs. The matrix shows the convergence of needs identified in the qualitative data (interview and focus group feedback) and quantitative data (health indicators) and identifies the top health needs for this community.

Hospital clinical leadership and/or other invited community leaders reviewed the top health needs in a meeting to select and prioritize the list of significant needs in this health community. The meeting, moderated by Watson Health, included an overview of the CHNA process for BSWH, the methodology for determining the top health needs, the BSWH prioritization approach, and discussion of the top health needs identified for the community.

Participants identified the significant health needs through review of data driven criteria for the top health needs, discussion, and a multi-voting process. Once the significant health needs were established, participants rated the needs using prioritization criteria recommended by the focus groups. The sum of the criteria scores for each need created an overall score became the basis of the prioritized order of significant health needs. The resulting prioritized health needs for this community include

Priority	Need	Category of Need
1	Ratio of Population to One Primary Care Physician	Access to Care
2	Hospital Stays for Ambulatory-Care Sensitive Conditions- Medicare	Access to Care
3	Health Care Costs (Price-Adjusted Medicare Reimbursements (Parts A and B) Per Enrollee)	Access to Care
4	Intentional Self-Harm; Suicide	Mental Health
5	Uninsured Children	Access to Care

The assessment process identified and included community resources able to address significant needs in the community. These resources, located in the appendix of this report, will be included in the formal implementation strategy to address needs identified in this assessment. The approved report is publicly available by the 15th day of the 5th month following the end of the tax year.

An evaluation of the impact and effectiveness of interventions and activities outlined in the implementation strategy drafted after the prior assessment is also included in **Appendix F** of this document.

The prioritized list of significant health needs approved by the hospitals' governing body and the full assessment is available to anyone at no cost. To download a copy, visit **BSWHealth.com/CommunityNeeds**.

This assessment and corresponding implementation strategy meet the requirements for community benefit planning and reporting as set forth in state and federal laws, including but not limited to: Texas Health and Safety Code Chapter 311 and Internal Revenue Code Section 501(r).

Community Health Needs Assessment Requirement

As a result of the Patient Protection and Affordable Care Act (PPACA), all tax-exempt organizations operating hospital facilities are required to assess the health needs of their community through a Community Health Needs Assessment (CHNA) once every three years.

The written CHNA Report must include descriptions of the following:

- The community served and how the community was determined
- The process and methods used to conduct the assessment including sources and dates of the data and other information as well as the analytical methods applied to identify significant community health needs
- How the organization took into account input from persons representing the broad interests of the community served by the hospital, including a description of when and how the hospital consulted with these persons or the organizations they represent
- The prioritized significant health needs identified through the CHNA as well as a description of the process and criteria used in prioritizing the identified significant needs
- The existing healthcare facilities, organizations, and other resources within the community available to meet the significant community health needs
- An evaluation of the impact of any actions that were taken, since the hospital facility(s) most recent CHNA, to address the significant health needs identified in that last CHNA

PPACA requires hospitals to adopt an Implementation Strategy to address prioritized community health needs identified through the assessment. An Implementation Strategy is a written plan addressing each of the significant community health needs identified through the CHNA in a separate but related document to the CHNA report.

The written Implementation Strategy must include the following:

- List of the prioritized needs the hospital plans to address and the rationale for not addressing other significant health needs identified
- Actions the hospital intends to take to address the chosen health needs
- The anticipated impact of these actions and the plan to evaluate such impact (e.g. identify data sources that will be used to track the plan's impact)
- Identify programs and resources the hospital plans to commit to address the health needs
- Describe any planned collaboration between the hospital and other facilities or organizations in addressing the health needs

CHNA Overview, Methodology and Approach

BSHW began the 2019 CHNA process in June of 2018; the following is an overview of the timeline and major milestones.

BSWH partnered with Watson Health to complete a CHNA for qualifying BSWH hospital facilities.

Consultant Qualifications & Collaboration

Watson Health delivers analytic tools, benchmarks, and strategic consulting services to the healthcare industry, combining rich data analytics in demographics, including the Community Needs Index, planning, and disease prevalence estimates, with experienced strategic consultants delivering comprehensive and actionable Community Health Needs Assessments.

Community Served Definition

Based on the review of patient admission records, the hospital facility has defined its community to include Grayson County. The community served includes the geographic area where at least 75% of the hospital facilities' admitted patients live.

BSWH Community Health Needs Assessment
Sherman Health Community Map

Source: Baylor Scott & White Health, 2019

Assessment of Health Needs

To identify the health needs of the community, the hospital facility established a comprehensive method of accounting for all available relevant data including community input. The basis of identification of community health needs was the weight of qualitative and quantitative data obtained when assessing the community. Surveyors conducted interviews and focus groups with individuals representing public health, community leaders/groups, public organizations, and other providers. In addition, data collected from several public sources compared to the state benchmark indicated the level of severity.

Quantitative Assessment of Health Needs – Methodology and Data Sources

Quantitative data collection and analysis in the form of public health indicators assessed community health needs, including collection of 102 data elements grouped into 11 categories, and evaluated for the counties where data was available. Since 2016, the identification of several new indicators included: addressing mental health, health care costs, opioids, and social determinants of health. The categories and indicators are included in the table below, the sources are in **Appendix A**.

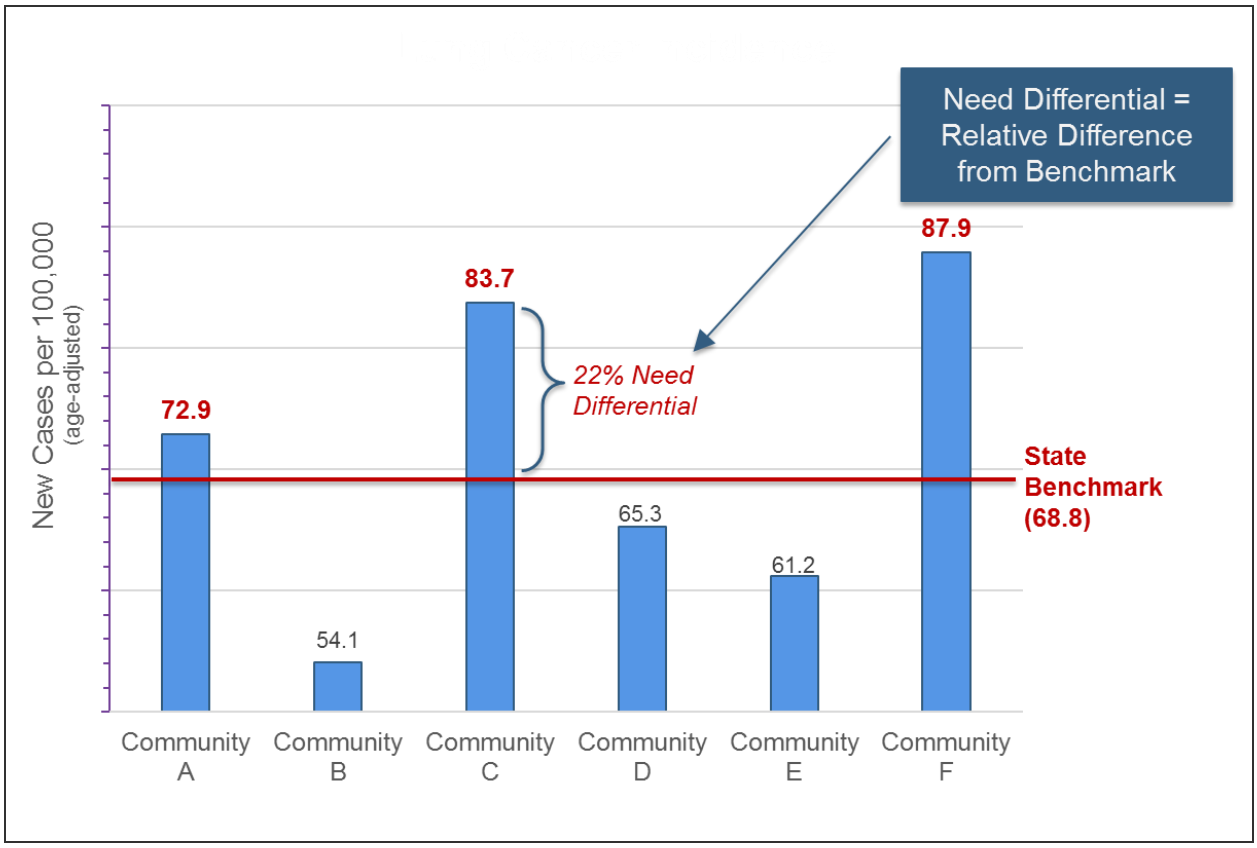
A benchmark analysis conducted for each indicator collected for the community served, determined which public health indicators demonstrated a community health need from a quantitative perspective. Benchmark health indicators included (when available): overall U.S. values; state of Texas values; and goal setting benchmarks such as Healthy People 2020.

According to America's Health Rankings 2018 Annual Report, Texas ranks 37th out of the 50 states. The health status of Texas compared to other states in the nation identified many opportunities to impact health within local communities, including opportunities for those communities that ranked highly. Therefore, the benchmark for the community served was set to the state value.

When the community benchmark was set to the state value, it was determined which indicators for the community did not meet the state benchmarks. This created a subset of indicators for further analysis. A need differential analysis clarified the relative severity of need for these indicators. The need differential standardized the method for evaluating the degree each indicator differed from its benchmark; this measure is called the need differential. Health community indicators with need differentials above the 50th percentile, ordered by severity, and the highest ranked indicators were the highest health needs from a quantitative perspective. These data are available to the community via an interactive Tableau dashboard at **BSWHealth.com/CommunityNeeds**.

The outcomes of the quantitative data analysis were compared to the qualitative data findings.

Health Indicator Benchmark Analysis Example



Source: IBM Watson Health, 2018

Qualitative Assessment of Health Needs and Community Input – Approach

In addition to analyzing quantitative data, four (4) key informant interviews gathered the input of persons representing the broad interests of the community served. The interviews solicited feedback from leaders and representatives who serve the community and have insight into community needs. Prioritization sessions held with hospital clinical leadership or other community leaders identified significant health needs from the assessment and prioritized them.

Watson Health conducted key informant interviews for the community served by the hospital facility. The interviews aided in gaining understanding and insight into participants concerns about the general health status of the community and the various drivers contributing to health issues.

Participation in the qualitative assessment included at least one state, local, or regional governmental public health department (or equivalent department or agency) with knowledge, information, or expertise relevant to the health needs of the community, as

well as individuals or organizations serving or representing the interests of medically underserved, low-income and minority populations in the community.

Participation from community leaders/groups, public health organizations, other healthcare organizations, and other healthcare providers (including physicians) ensured that the input received represented the broad interests of the community served. A list of the names of organizations providing input are in the table below.

Community Input Participants

Participant Organization Name	Public Health	Medically Under-served	Low-income	Chronic Disease Needs	Minority Populations	Governmental Public --Health Dept.	Public Health Knowledge --Expertise
Baylor Scott & White Health	X	X	X	X	X		X
Brason Crisis Center	X	X	X	X	X		X
Cancer Care Services	X	X	X	X	X		X
Grayson County Children's Advocacy Center		X	X		X		
Grayson County Health Department (GCHD)	X	X	X	X	X	X	X
Meals on Wheels of Texoma			X	X	X		X
Texoma Health Foundation	X	X	X	X	X		X
United Way of Grayson County			X		X		

Note: multiple persons from the same organization may have participated

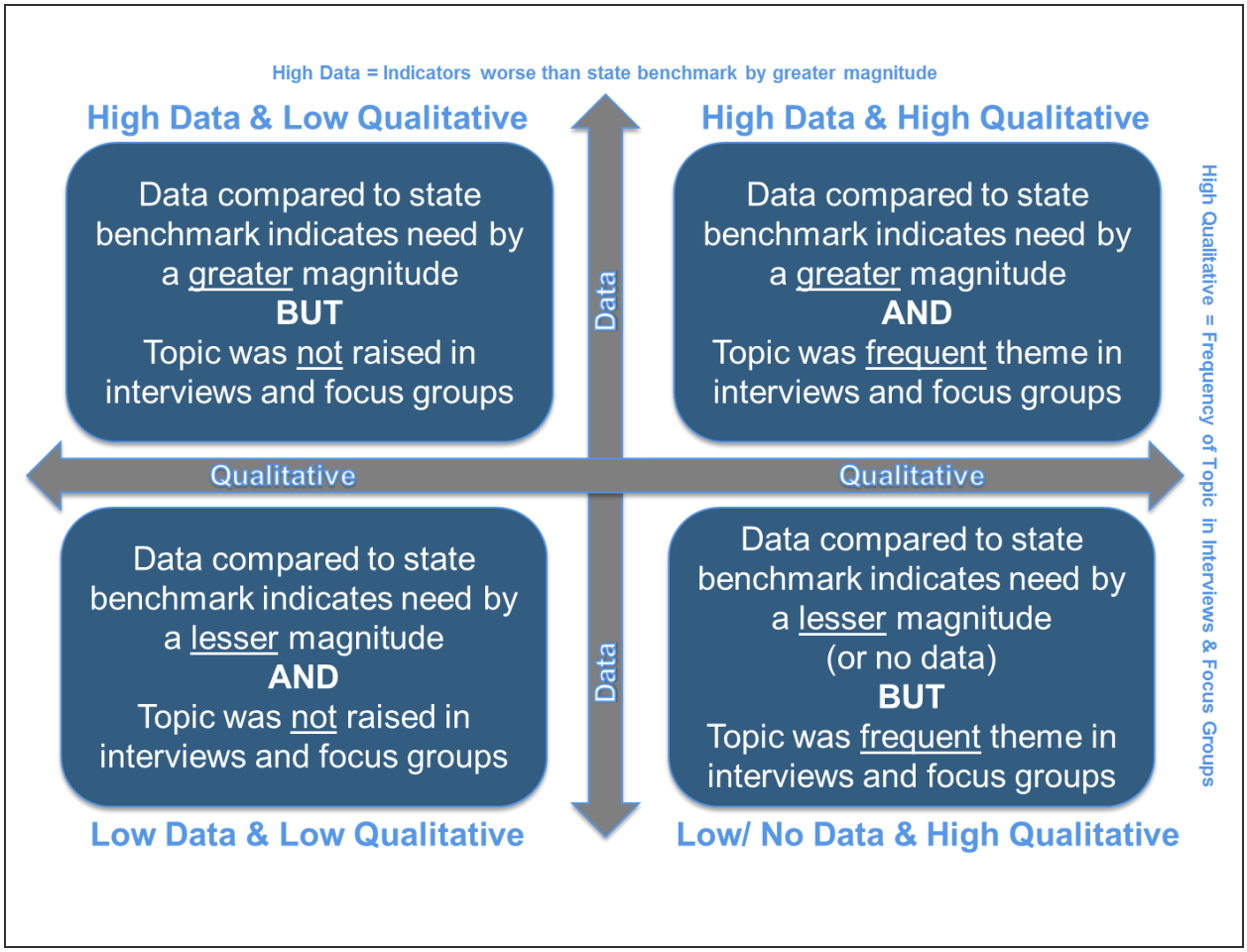
In addition to soliciting input from public health and various interests of the community, the hospital facility was required to consider written input received on their most recently conducted CHNA and subsequent implementation strategies. The assessment is available to receive public comment or feedback on the report findings on the BSWH website (**BSWHealth.com/CommunityNeeds**) or by emailing **CommunityHealth@BSWHealth.org**. To date BSWH has not received such written input but continues to welcome feedback from the community.

Community input from interviews and focus groups organized the themes around community needs and compared them to the quantitative data findings.

Methodology for Defining Community Need

Using qualitative feedback from the interviews and focus group, and the health indicator data, the consolidated issues currently affecting the community served assembled in the Health Needs Matrix below helps identify the health needs for each community. The upper right quadrant of the matrix is where the needs identified in the qualitative data (interview and focus group feedback) and quantitative data (health indicators) converge to identify the top health needs for this community.

The Health Needs Matrix



Source: IBM Watson Health, 2018

Information Gaps

In some areas of Texas, health indicators were not available due to the impact small population size has on reporting and statistical significance. Most public health indicators were available only at the county level. Evaluating data for entire counties versus more localized data made it difficult to understand the health needs for specific population pockets within a county. It could also be a challenge to tailor programs to address

community health needs, as placement and access to specific programs in one part of the county may or may not affect the population who truly need the service.

Approach to Identify and Prioritize Significant Health Needs

In a session held November 7, 2018, with Baylor Scott & White Surgical Hospital at Sherman leadership met with community leaders, and identified and prioritized significant health needs.. The meeting, moderated by Watson Health, included an overview of the CHNA process for BSWH, the methodology for determining the top health needs, the BSWH prioritization approach, and discussion of the top health needs identified for the community.

Prioritization of the health needs took place in two steps. In the first step, participants reviewed the top health needs for their community with associated data-driven criteria to evaluate. The criteria included health indicator value(s) for the community, how the indicator compared to the state benchmark, and potentially preventable ED visit rates for the community (if available). Participants then leveraged the professional experience and community knowledge of the group via discussion about which needs were most significant. With the data-driven review criteria and the discussion completed, a multi-voting method identified the significant health needs. Participants voted individually for the five (5) needs they considered as the most significant for this community. With votes tallied, five (5) identified needs ranked as significant health needs, based on the number of votes.

In the second step, participants ranked the significant health needs based on prioritization criteria recommended by the interviews conducted for this community:

1. Vulnerable Populations: there is a high need among vulnerable populations and/or vulnerable populations are adversely impacted
2. Severity: the problem results in disability or premature death or creates burdens on the community, economically or socially
3. Root Cause: the need is a root cause of other problems, thereby addressing it could possibly impact multiple issues

Through discussion and consensus, the group rated each of the five (5) significant health needs on each of the three (3) identified criteria utilizing a scale of one (low) to 10 (high). The criteria scores summed for each need, created an overall score. The criteria scores summed for each need created an overall score and became the basis for prioritizing the significant health needs. For the scores resulting in a tie, the need with the greater negative difference from the benchmark ranked above the other need. The outcome of this process, the list of prioritized health needs for this community, is located in the "**Prioritized Significant Health Needs**" section of the assessment.

The prioritized list of significant health needs approved by the hospitals' governing body and the full assessment is available to anyone at no cost. To download a copy, visit **BSWHealth.com/CommunityNeeds**.

Existing Resources to Address Health Needs

Part of the assessment process included gathering input on community resources potentially available to address the significant health needs identified through the CHNA. BSWH Community Resource Guides, and input from qualitative assessment participants, identified community resources that may assist in addressing the health needs identified for this community. A description of these resources is in **Appendix B**. An interactive asset map of various resources identified for all BSWH communities i located at: **BSWHealth.com/CommunityNeeds**.

Sherman Health Community CHNA

Demographic and Socioeconomic Summary

According to population statistics, the community served expects to have a lower population growth compared to Texas but outpace the Country. The median age is older than Texas overall and the United States. Median income is lower than both the state and the Country. The community served had fewer Medicaid beneficiaries and more uninsured individuals than Texas and the U.S...

Demographic and Socioeconomic Comparison:
Community Served and State/U.S. Benchmarks

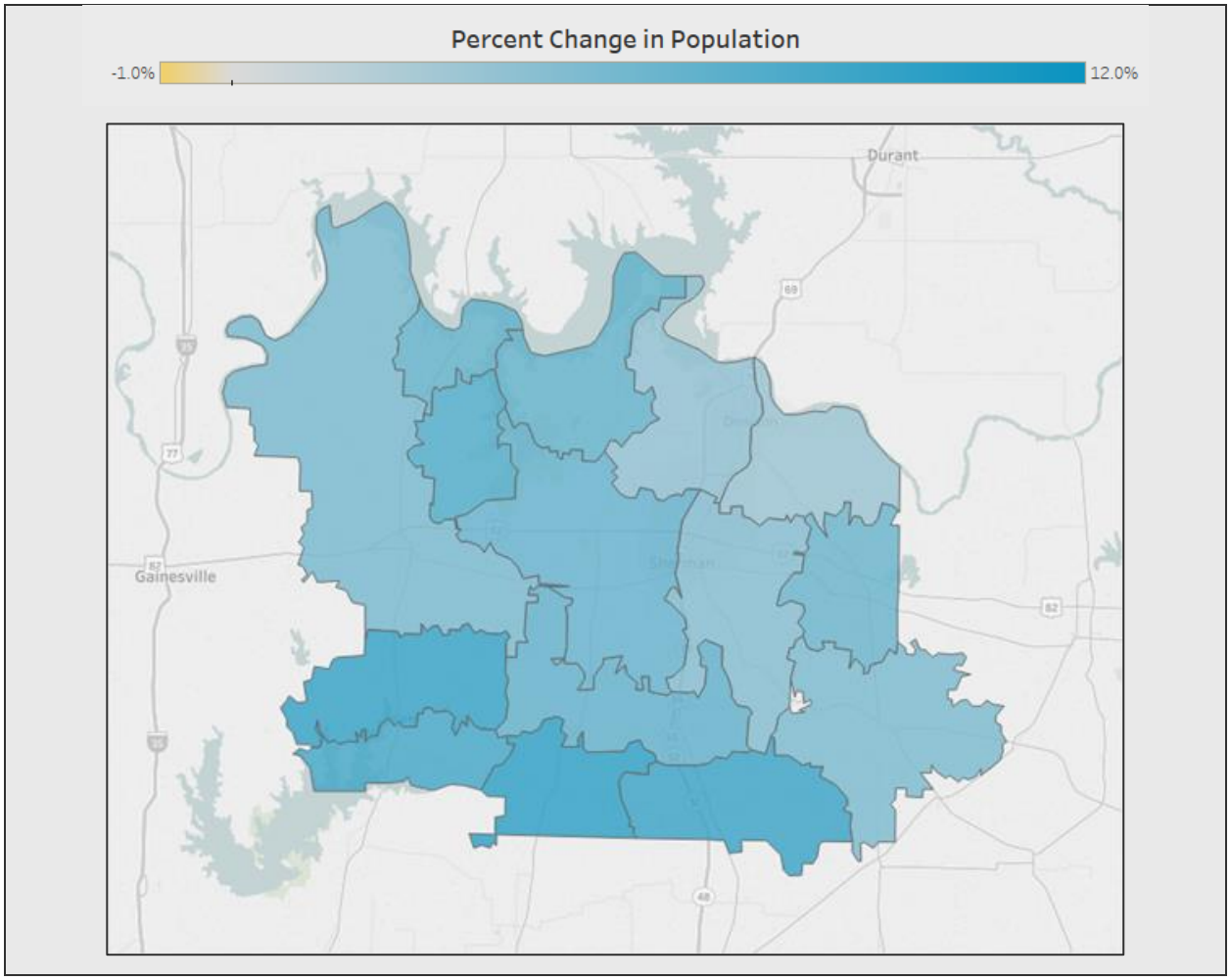
Geography		Benchmarks		Community Served
		United States	Texas	Sherman Health Community
Total Current Population		326,533,070	28,531,631	133,340
5 Yr Projected Population Change		3.5%	7.1%	5.5%
Median Age		42.0	38.9	42.6
Population 0-17		22.6%	25.9%	23.2%
Population 65+		15.9%	12.6%	18.2%
Women Age 15-44		19.6%	20.6%	18.3%
Non-White Population		30.0%	32.2%	18.5%
Hispanic Population		18.2%	39.4%	13.7%
Insurance Coverage	Uninsured	9.4%	19.0%	21.1%
	Medicaid	14.9%	13.4%	11.8%
	Private Market	9.6%	9.9%	9.4%
	Medicare	16.1%	12.5%	20.2%
	Employer	45.9%	45.3%	37.6%
Median HH Income		$61,372	$60,397	$57,249
Limited English		26.2%	39.9%	16.2%
No High School Diploma		7.4%	8.7%	8.5%
Unemployed		6.8%	5.9%	6.7%

Source: IBM Watson Health / Claritas, 2018; US Census Bureau 2017 (U.S. Median Income)

The community served projects a 5.5% growth by 2023, an increase of more than 7,200 people. The projected population growth is lower than the state's 5-year projected growth rate (7.1%) and higher compared to the national projected growth rate (3.5%). The ZIP Codes expecting the most growth in five years are:

- 75092 Sherman – 1,536 people
- 75090 Sherman – 1,100 people

2018 - 2023 Total Population Projected Change by ZIP Code

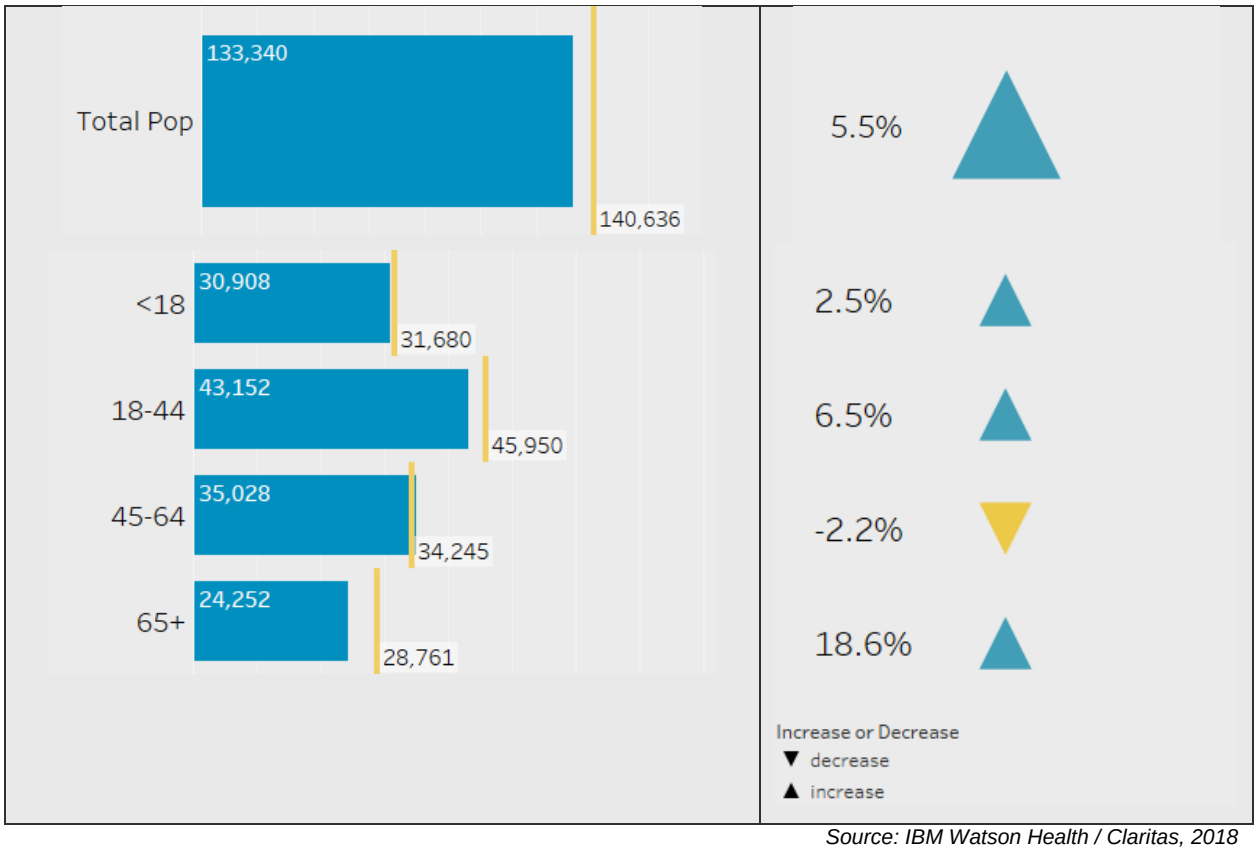


Source: IBM Watson Health / Claritas, 2018

The community's population skewed younger with 32.4% of the population ages 18-44 and 23.2% under age 18. The largest cohort (ages 18-44) projects to grow by 2,798 people by 2023. The age 65 plus cohort was the smallest (18.2%) but should experience the fastest growth (18.6%) over the next five years, adding 4,509 seniors to the community. Growth in the senior population will likely contribute to increased utilization of services as the population continues to age.

Population Distribution by Age

2018 Population by Age Cohort *Percent Change by 2023*

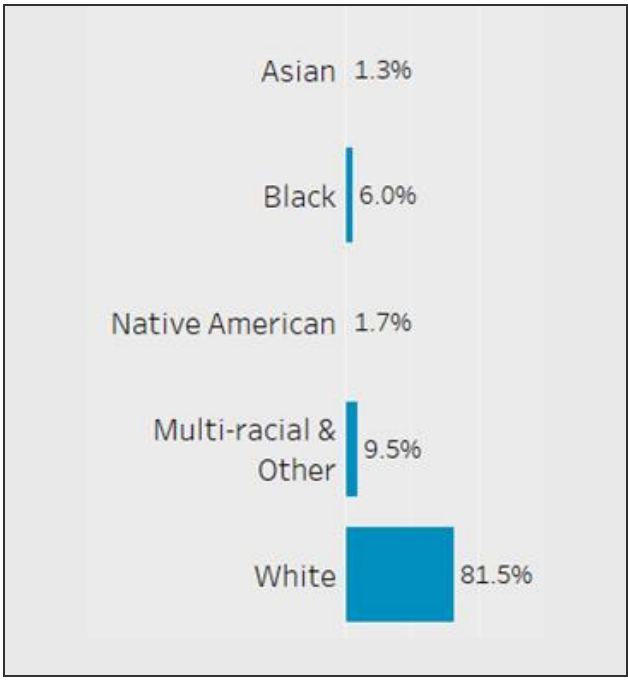


Source: IBM Watson Health / Claritas, 2018

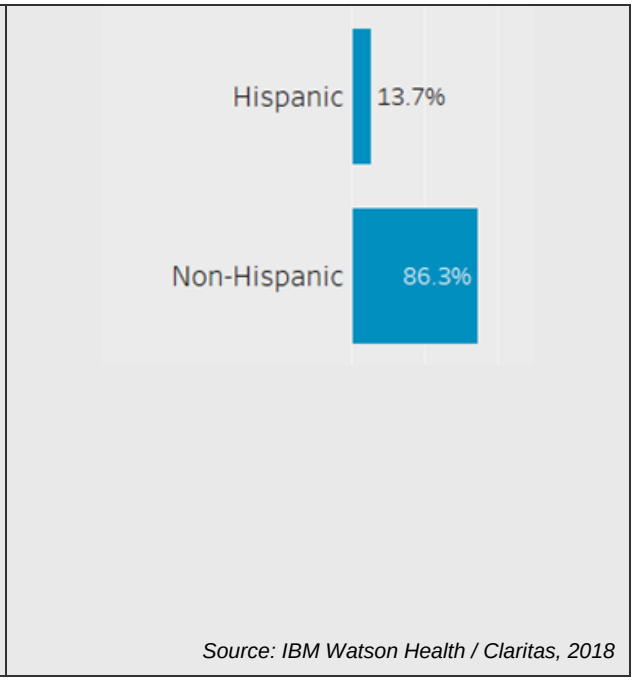
Population statistics are analyzed by race and by Hispanic ethnicity. The community was primarily white and non-Hispanic (75.2%) and diversity with minimal increases due to the projected growth of minority populations over the next five years. The non-Hispanic white and black populations project the slowest growth (1.2% and 7.7% respectively). The non-Hispanic Asian / Pacific Islander populations project to experience the fastest growth (27.3%) adding 472 people in the next 5 years.

Population Distribution by Race and Ethnicity

2018 Population by Race

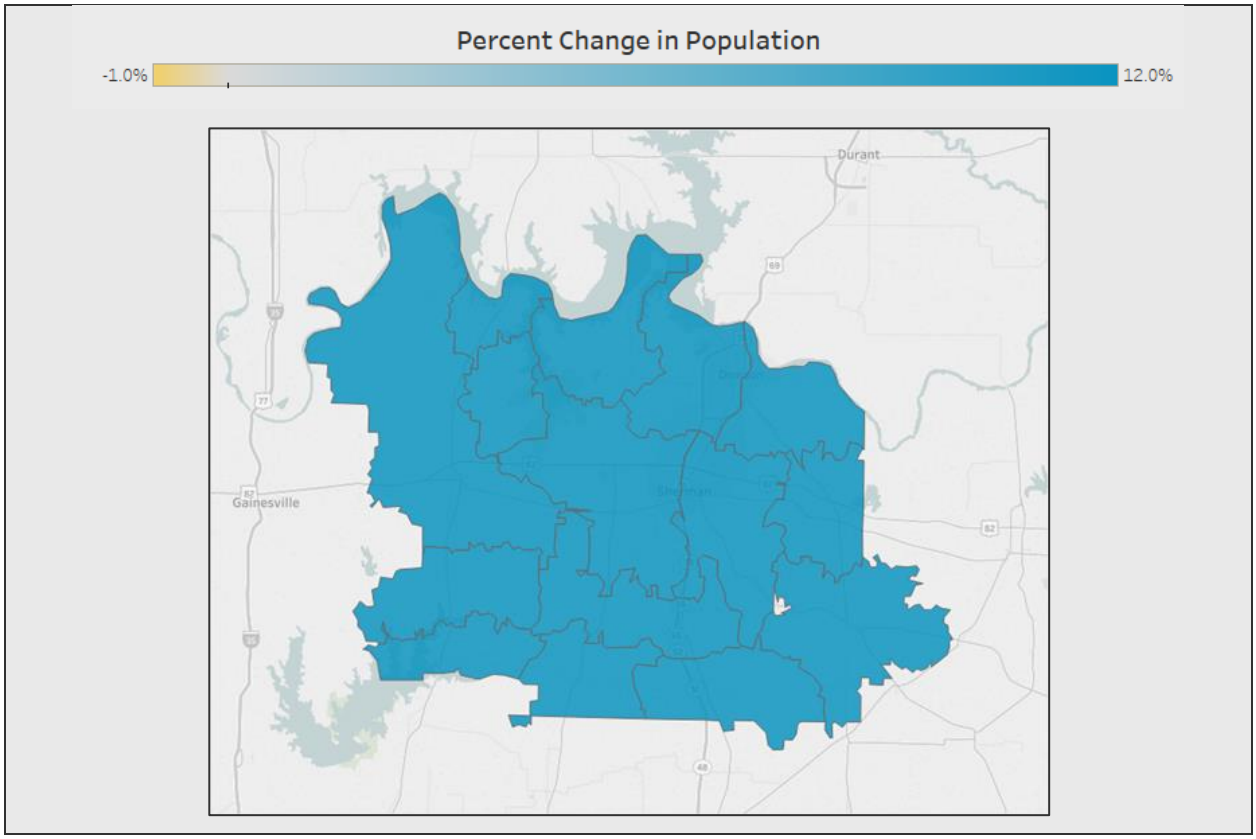


2018 Population by Ethnicity



Source: IBM Watson Health / Claritas, 2018

2018 - 2023 Hispanic Population Projected Change by ZIP Code

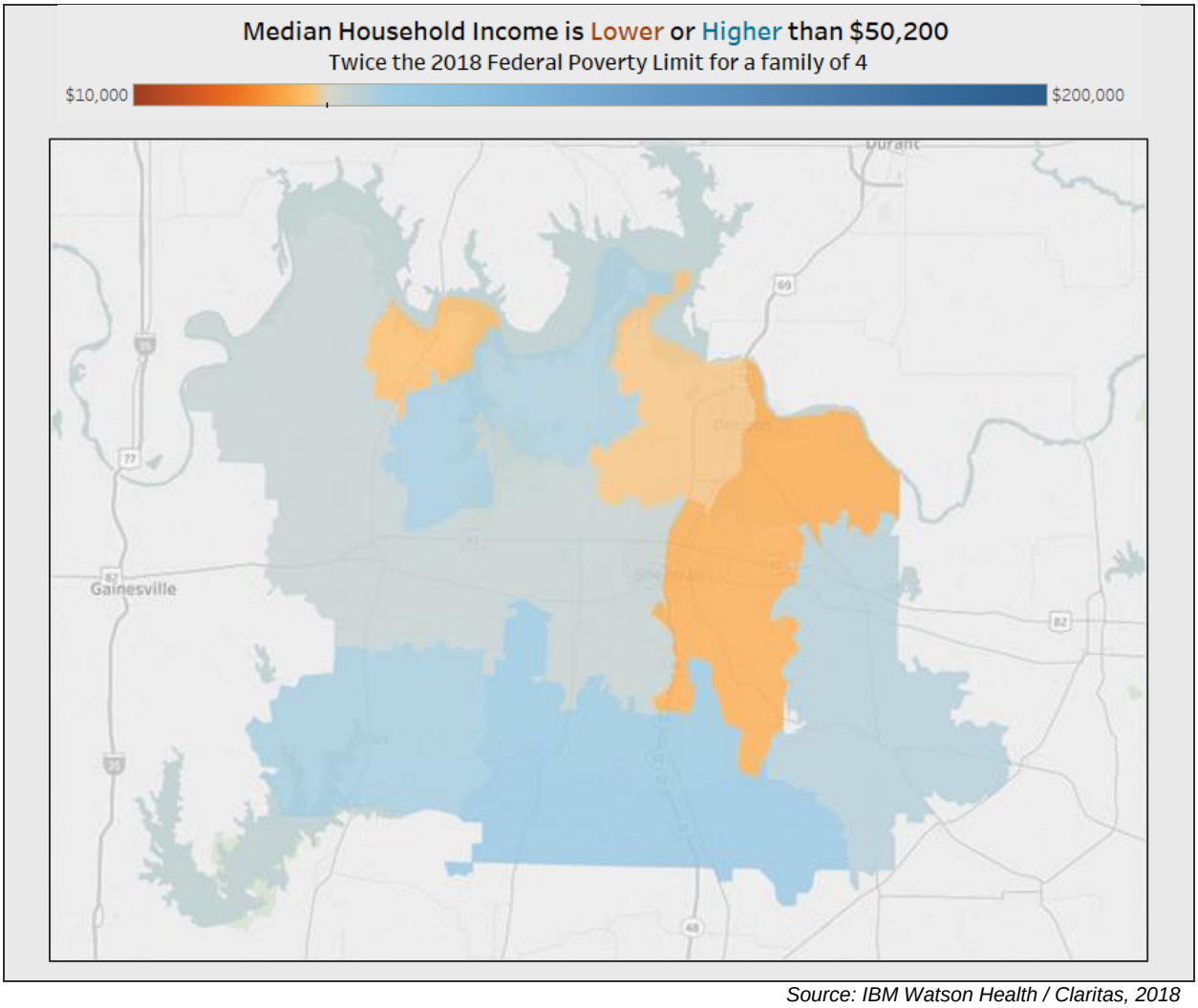


Source: IBM Watson Health / Claritas, 2018

The 2018 median household income for the United States was $61,372 and $60,397 for the state of Texas. The median household income for the ZIP codes within this community ranged from $41,500 for 75021 – Denison to $71,022 for 75058 – Gunter. Four ZIP Codes had median household incomes less than $50,200 – twice the 2018 Federal Poverty Limit for a family of four:

- 75021 Denison – $41,500
- 75090 Sherman – $42,298
- 76245 Gordonville – $45,758
- 75020 Denison – $47,242

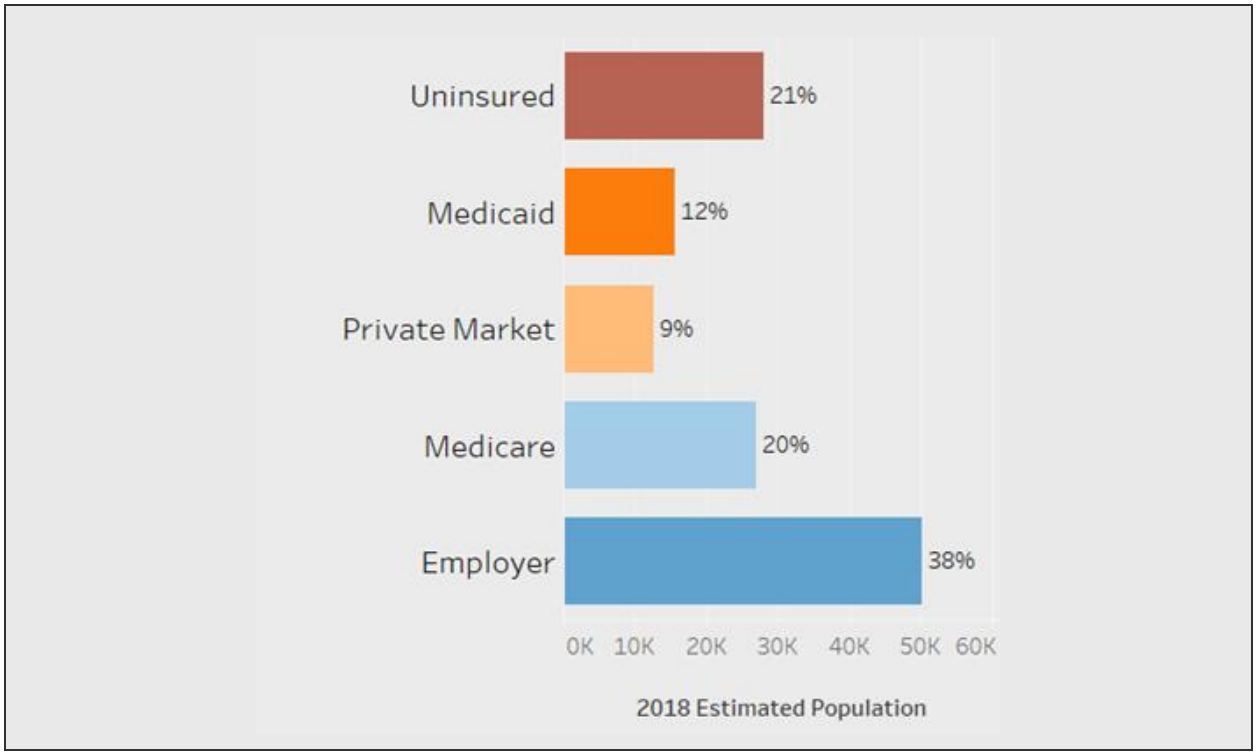
2018 Median Household Income by ZIP Code



Source: IBM Watson Health / Claritas, 2018

A majority of the population (38%) received insurance through employer sponsored health coverage. More than twenty percent of the population does not have health insurance. The remainder of the population was fairly equally divided between Medicaid (12%), Medicare (20%), and private market (the purchasers of coverage directly or through the health insurance marketplace).

2018 Estimated Distribution of Covered Lives by Insurance Category



Source: IBM Watson Health / Claritas, 2018

The community includes two (2) Health Professional Shortage Areas and two (2) Medically Underserved Areas designated by the U.S. Department of Health and Human Services Health Resources Services Administration.[1] **Appendix C** includes the details on each of these designations.

Health Professional Shortage Areas and Medically Underserved Areas and Populations

	Health Professional Shortage Areas (HPSA)				Medically Underserved Area/Population (MUA/P)
NTX Sherman Health Community	**Dental Health**	**Mental Health**	**Primary Care**	**Grand Total**	**MUA/P**
Grayson	0	1	1	2	2
Total	**0**	**1**	**1**	**2**	**2**

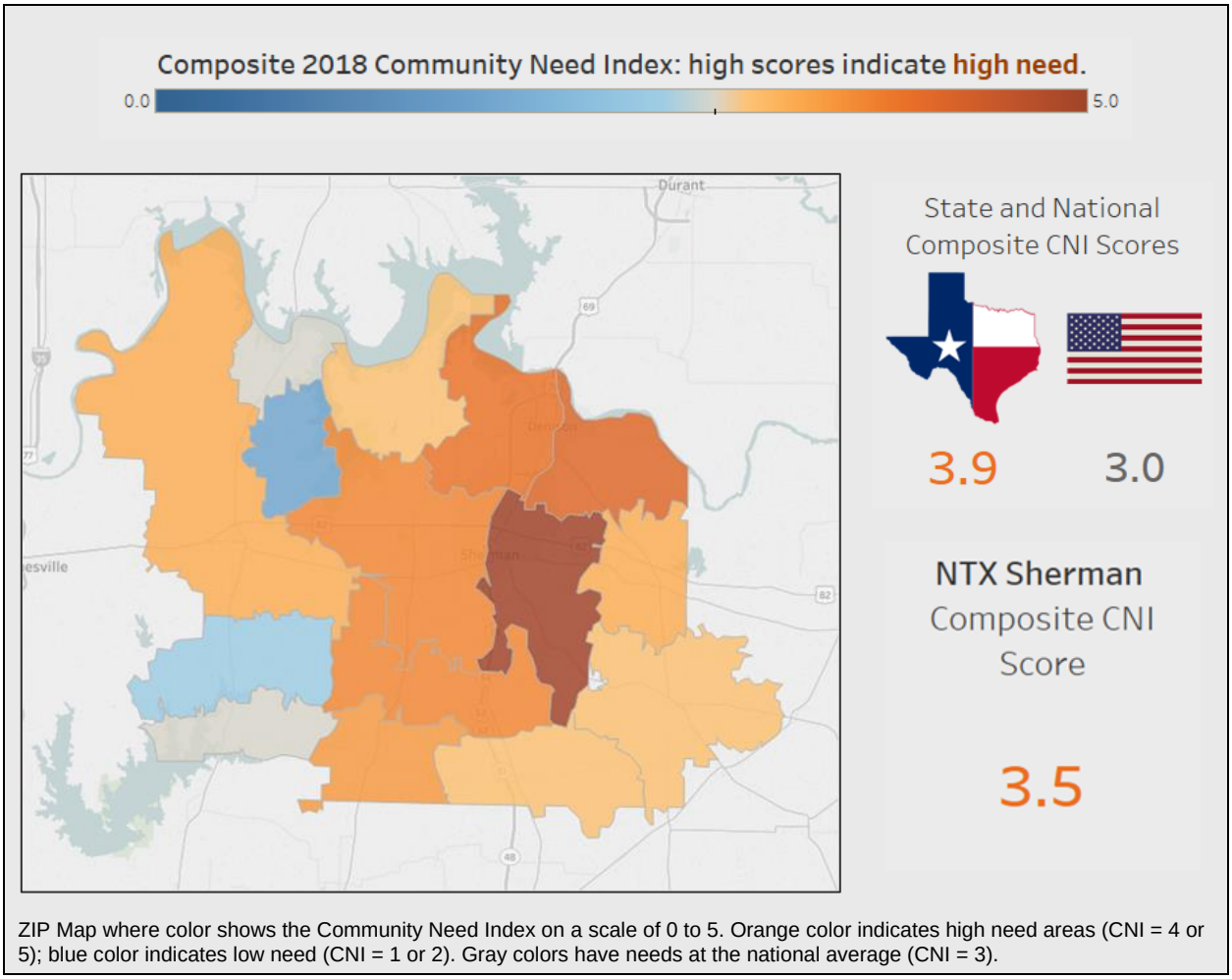
Source: U.S. Department of Health and Human Services, Health Resources and Services Administration, 2018

[1] U.S. Department of Health and Human Services, Health Resources and Services Administration, 2018

The Watson Health Community Need Index (CNI) is a statistical approach to identifying areas within a community where health disparities may exist. The CNI accounts for vital socio-economic factors (income, cultural, education, insurance and housing) about a community to generate a CNI score for every populated ZIP code in the United States. The CNI strongly links to differences in community healthcare needs and is an indicator of a community's demand for various healthcare services. The CNI score by ZIP code identifies specific areas within a community where healthcare needs may be greater.

Overall, the CNI score for the community served was 3.5, higher than the CNI national average of 3.0, potentially indicating greater health care needs in this community. In portions of the community (Sherman) the CNI score was greater than 4.5, pointing to potentially more significant health needs among the population.

2018 Community Need Index by ZIP Code



ZIP Map where color shows the Community Need Index on a scale of 0 to 5. Orange color indicates high need areas (CNI = 4 or 5); blue color indicates low need (CNI = 1 or 2). Gray colors have needs at the national average (CNI = 3).

CNI High Need ZIP Codes

City	Community	County	ZIP Code	2018 CNI Score
Sherman	Sherman	Grayson	75090	5.0
Denison	Denison	Grayson	75021	4.2
Denison	Denison	Grayson	75020	4.0

Source: IBM Watson Health / Claritas, 2018

Public Health Indicators

The analysis of public health indicators assessed community health needs for the community served used 102 indicators. For each health indicator, a comparison between the most recently available community data and benchmarks for the same/similar indicator was made. The basis of benchmarks was available data for the U.S. and the state of Texas.

Where the community indicators showed greater need when compared to the state of Texas comparative benchmark, the difference between the community values and the state benchmark was calculated (need differential). Those highest ranked indicators with need differentials in the 50th percentile of greater severity pinpointed community health needs from a quantitative perspective. These indicators are located in **Appendix D**.

Watson Health Community Data

Watson Health supplemented the publicly available data with estimates of localized disease prevalence of heart disease and cancer and emergency department visit estimates. This information is located in **Appendix E**.

Interviews

In the interviews, participants identified and discussed factors contributing to the current health status of the community, and identified the greatest barriers and strengths that contributed to the overall health of the community. For this community there were four (4) interviews conducted July through September 2018.

The Sherman Health Community as described by participants is a historical railroad town recovering from economic downturn. Parks, additional walking trails, and a new sports complex of new infrastructure provide for a healthier lifestyle. Diversity increased with a Burmese population employed at the Tyson food plant. Interviewees described this community as rural with many seniors, and the top health needs revolved around access to care, availability of services, and mental health needs.

The group identified seniors as the vulnerable population most acutely affected by the local barriers to accessing services: limited social services, stigma of using social programs, lack of transportation, and limited physicians willing to accept Medicare & Medicaid. Many homebound seniors are unable to make regular physician visits without public transportation. As a result, many used the emergency department for every type of visit including non-critical conditions. Participants believed that more access to preventive services would decrease long-term chronic diseases.

Access to care was the most frequently discussed barrier. Participants discussed the lack of services, and noted shortages of pediatricians, specialists, oncologists, and women's health services. Many also discussed the challenges of funding and affordability of care because few local doctors accepted Medicaid since they were at capacity; many residents had to travel out of the area for services. This gap in affordable services was especially acute for the low income and underinsured populations. The more remote areas had no health services.

One of the most acute shortages was mental health services for children, and insufficient resources for behavioral health overall. Substance abuse in the community links to ER abuse, especially opioids, alcohol, and meth, and there were few rehabilitative drug resources available. Discussion centered on general access to mental health facilities and treatment gaps as a high need, especially for low-income residents. The incarcerated population had a contract for care, but the wait time was months to see a mental health provider.

Participants discussed the anti-vaccine campaign increasing in Texas, and that the health departments had limited staff and money to deal with outbreaks. There was need to help educate residents about vaccines.

Community Health Needs Identified

A Health Needs Matrix identified the health needs that resulted from the community health needs assessment (see Methodology for Defining Community Need section). The matrix shows the convergence of needs identified in the qualitative data (interview and focus group feedback) and quantitative data (health indicators) and identifies the top health needs for this community.

Top Community Health Needs Identified

Sherman Health Community		
Top Needs Identified	Category of Need	Public Health Indicator
Health care costs	Access To Care	2015 Health Care Costs are the price-adjusted Medicare reimbursements (Parts A and B) per enrollee.
Hospital Stays for Ambulatory-Care Sensitive Conditions- Medicare	Access To Care	2015 Number of Hospital Stays for Ambulatory-Care Sensitive Conditions per 1,000 Medicare Enrollees
Intentional Self-Harm; Suicide	Mental Health	2015 International Self-Harm (Suicide) (X60-X84, Y87.0)
Price-Adjusted Medicare Reimbursements per Enrollee	Access To Care	2015 Amount of Price-Adjusted Medicare Reimbursements per Enrollee
Ratio of Population to One Primary Care Physician	Access To Care	2015 Number of Individuals Served by One Physician in a County, if the Population was Equally Distributed Across Physicians
Uninsured Children	Access To Care	2015 Percentage of Children Under Age 19 Without Health Insurance

Note: Listed alphabetically, not in order of significance

Source: IBM Watson Health, 2018

Prioritized Significant Health Needs

Using the prioritization approach outlined in the overview section of this report, the following needs from the proceeding list were determined to be significant and then prioritized.

The resulting prioritized health needs for this community were:

Priority	Need	Category of Need
1	Ratio of Population to One Primary Care Physician	Access to Care
2	Hospital Stays for Ambulatory-Care Sensitive Conditions-Medicare	Access to Care
3	Health Care Costs (Price-Adjusted Medicare Reimbursements (Parts A and B) Per Enrollee)	Access to Care
4	Intentional Self-Harm; Suicide	Mental Health
5	Uninsured Children	Access to Care

Description of Health Needs

A CHNA for the Sherman Health Community, including Grayson County, identified several significant community health needs categorized as issues related to access to care as well as mental health. Regionalized health needs affect all age levels to some degree; however, often it is the most vulnerable populations who are negatively affected. Identified health gaps assist community leaders to define resources and access to care within the county and/or region. Health and social concerns received validation through key informant interviews, focus groups and county data. Identified and significant areas of concern around access to care included primary care availability, preventable hospital stays, health care costs and uninsured children as well as suicide and are of note in the data results for Grayson County.

Note: The difference between county and state values are relative. The calculation is (county-state)/state. This creates a standard comparison across indicators for the county relative to the state.

<u>Primary Care Physician Providers</u>

Primary care includes family medicine, internal medicine, nursing, nurse practitioners, pharmacy, pediatrics, general obstetrics/gynecology, gerontology, behavioral health, community health, and the other people and professions who fulfill the general medical needs of patient populations.

Primary care professionals serve on the front lines of healthcare. For many individuals, they are the first point of contact with the healthcare system. They are often the first to recognize signs of depression, early signs of cancer or chronic disease, and other health concerns. Primary care providers ensure patients receive the right care, in the right setting, by the most appropriate provider, and in a manner consistent with the patient's desires and values. Primary care is also important because it lowers costs. Access to

primary care helps to keep people out of emergency rooms, where care costs are much higher than other outpatient care. Annual check-ups can catch and treat problems earlier and is less costly than treating severe or advanced illness.[2]

The focus group participants expressed perceived lack of primary care providers within the Sherman Health Community. The community was largely comprised of rural components that could present additional challenges to access to care. Transportation to disparate care sites across the county may have been difficult, if not impossible. The ability to coordinate and co-mingle both access to care and social agencies would bolster the healthcare needs of the community.

Grayson County had primary care physician access of one physician to every 1,992 residents as compared to the overall Texas ratio of one primary care physician to every 1,670 residents. This represented a difference of 19.3% relative to the state value (relative difference).[3] Due to the length of time, effort and expense in recruiting physicians, it would serve the community well to pro-actively identify physicians over 50 years old and then develop a comprehensive physician succession plan.

Intentional Self Harm: Suicide

According to the National Institutes of Health, suicide is a major public health concern. Suicide is among the leading causes of death in the United States. Based on recent nationwide surveys, suicide in some populations is on the rise. Suicide was the second leading cause of death among individuals between the ages of 10 and 34, and the fourth leading cause of death among individuals between the ages of 35 and 54.[4] Suicide and the associated mental health issues are a prevalent concern across the U.S...

The suicide rate was the ranked need in the Sherman Health Community. The rate for Grayson County was 9.6 per 100,000 deaths compared to the Texas rate of 5.1 per 100,000 deaths. This represented a difference of 89.1% relative to the state value.[5]

Texas has specific programs to aide both educators and health professionals, to identify and assist the population at risk. Two populations that presented the highest risk were veterans/active military, teens and young adults.[6] Communities that implement pro-active policies and intervention programs that assist residents at risk for suicide, provide a platform for support along with prevention.

Uninsured Children

Lack of health insurance coverage is a significant barrier to accessing needed health care services and to maintaining financial security. Dependent groups, such as children, are often the most vulnerable and at risk to changes in financial situations and most affected by lack of insurance, transportation, parental knowledge, and secure housing. Lack of

[2] **Primary Care Progress**, The Case for Primary Care, 2019
[3] Area Health Resource File/American Medical Association, County Health Rankings & Roadmaps, 2018
[4] National Institute of Mental Health, **Suicide**, 2019
[5] Texas Health Data Center for Health Statistics, 2015
[6] **Texas Suicide Prevention**, 2019

preventative care often places children in precarious and dangerous healthcare situations.

The Kaiser Family Foundation released a report in 2017 concerning the uninsured crisis facing the nation. One key finding was that "Going without coverage can have serious health consequences for the uninsured because they receive less preventative care, and delayed care often results in serious illness or other health problems. Being uninsured can also have serious financial consequences, with many unable to pay their medical bills, resulting in medical debt."[7] The focus group participants discussed an increase in undocumented residents in the community. These groups often do not qualify for at risk programs and parents fear contact with healthcare entities, due to their status. Growing populations of uninsured in any community can easily stress social agencies and healthcare providers. Schools often become de facto primary care healthcare providers; this taxes the school system and its health care staff.

The group identified uninsured as an important need for this health community based on an analysis of public indicator data and community input. The percentage of uninsured children in Grayson County was 11.4%; this was 13.9% greater relative to the Texas state benchmark of 10.0%.[8] Children educated about health, nutrition and on maintaining their health are more likely to carry on those healthy habits as adults.

Health Care Costs

Nationally, the subject of health care costs is a topic of concern and ultimately affects all age ranges. The burden of rising healthcare costs on populations with limited incomes and resources is a global issue. Communities with growth in the elderly population should proactively manage future economic and social crisis. The number of Americans aged 65 and older projects to more than double, from 46 million in 2016 to over 98 million by 2060 across the United States.[9] Growth in the senior population will likely contribute to increased utilization of healthcare services and to the national total of health care costs as the population continues to age.

Data on the cost of health care for the overall population can be difficult to gather. In some instances, only information about a subset of the population is available, but for this community, reliable data about health care costs is available for the Medicare population. For the purposes of understanding health care costs, the CHNA utilized price-adjusted Medicare reimbursements (Parts A and B) per enrollee to understand the impact of health care costs. Health Care costs per Medicare enrollee in Grayson County was $13,103, this was 7.5% higher relative to the overall Texas per enrollee costs of $11,121.[10] The U.S. median value was $9,279.[11]

[7] Kaiser Family Foundation. The Uninsured: A Primer - Key Facts about Health Insurance and the Uninsured Under the Affordable Care Act. December 2017.
[8] Small Area Health Insurance Estimates (SAHIE), United States Census Bureau; County Health Rankings & Roadmaps, 2018
[9] **Population Reference Bureau**, 2016
[10] Dartmouth Atlas of Health Care, CMS; County Health Rankings & Roadmaps, 2018
[11] County Health Rankings & Roadmaps, 2018

These costs may be particularly impactful on the Sherman Health Community. The community is experiencing population growth, which projects to continue through 2023. In 2018, the community estimated that 18% of its population is covered by Medicare and that population projects to have the most profound growth in the next five years. People over age 65 (those primarily enrolled in Medicare) expect to grow by 32.2% or almost 45,000 people by 2023.[12]

Hospital Stays for Ambulatory-Care Sensitive Conditions - Medicare

Preventable Hospital Stays are included in the broader measure of access to care. In communities where access to care is a problematic, whether they are physical, economic or lack of providers the result is an increase in medical/psychological conditions, diseases and hospitalizations. This indicator measures the hospital discharge rate for ambulatory care-sensitive conditions per 1,000 fee-for-service Medicare enrollees and is age adjusted across different counties. Aging increases the risk of preventable hospital stays, especially among older individuals. Higher rates of preventable hospital stays are more likely in counties with older populations than in counties with younger populations. Age adjustment removes the effect of differently aged populations as a risk factor for preventable hospital stays. Without adjustment, the determination of differences in preventable hospital stays across counties would simply be due to differently aged populations.

Preventable hospital stays for ambulatory sensitive conditions examines people admitted to the hospital for conditions that, with appropriate care, are managed in the ambulatory care setting. While not exclusive, examples of these conditions include convulsions, chronic obstructive pulmonary disease, pneumonia, asthma, congestive heart failure, hypertension, angina, cellulitis, diabetes, gastroenteritis, kidney/urinary infection, and dehydration.

Grayson County had 64.4 hospitalizations per 1,000 population compared to the Texas benchmark of 53.2 hospitalizations per 1,000 residents. This was a difference of 21.0% relative to the state.[13] The U.S. benchmark was 49 hospitalizations per 1,000 population.[14] Thus, there was a greater need and a more vulnerable population within Grayson County.

Summary

BSWH conducted its Community Health Needs Assessments beginning June 2018 to identify and begin addressing the health needs of the communities they serve. Using both qualitative community feedback and publicly available and proprietary health indicators, BSWH identified and prioritized community health needs for their healthcare system. With the goal of improving the health of the community, implementation plans with specific tactics and time frames will be developed for the health needs BSWH chooses to address for the community served.

[12] IBM Watson Health / Claritas, 2018
[13] Area Health Resource File/American Medical Association, County Health Rankings & Roadmaps, 2018
[14] County Health Rankings & Roadmaps, 2018

Appendix A: Key Health Indicator Sources

Category	Public Health Indicator	Source
Access to Care	Hospital Stays for Ambulatory-Care Sensitive Conditions- Medicare	2018 County Health Rankings & Roadmaps; Dartmouth Atlas of Health Care, CMS
	Percentage of Population under age 65 without Health Insurance	2018 County Health Rankings & Roadmaps; Small Area Health Insurance Estimates (SAHIE), United States Census Bureau
	Price-Adjusted Medicare Reimbursements per Enrollee **NEW 2019**	2018 County Health Rankings & Roadmaps; Dartmouth Atlas of Health Care, CMS
	Ratio of Population to One Dentist	2018 County Health Rankings & Roadmaps; Area Health Resource File/National Provider Identification file (CMS)
	Ratio of Population to One Non-Physician Primary Care Provider	2018 County Health Rankings & Roadmaps; CMS, National Provider Identification Registry (NPPES)
	Ratio of Population to One Primary Care Physician	2018 County Health Rankings & Roadmaps; Area Health Resource File/American Medical Association
	Uninsured Children	2018 County Health Rankings & Roadmaps; Small Area Health Insurance Estimates (SAHIE), United States Census Bureau
Conditions/Diseases	Adult Obesity (Percent)	2018 County Health Rankings & Roadmaps; CDC Diabetes Interactive Atlas, The National Diabetes Surveillance System
	Arthritis in Medicare Population	CMS.gov Chronic conditions 2007-2015
	Atrial Fibrillation in Medicare Population	CMS.gov Chronic conditions 2007-2015
	Cancer Incidence - All Causes	2011-2015 State Cancer Profiles, National Cancer Institute (CDC)
	Cancer Incidence - Colon	2011-2015 State Cancer Profiles, National Cancer Institute (CDC)
	Cancer Incidence - Female Breast	2011-2015 State Cancer Profiles, National Cancer Institute (CDC)
	Cancer Incidence - Lung	2011-2015 State Cancer Profiles, National Cancer Institute (CDC)
	Cancer Incidence - Prostate	2011-2015 State Cancer Profiles, National Cancer Institute (CDC)
	Chronic Kidney Disease in Medicare Population	CMS.gov Chronic conditions 2007-2015
	COPD in Medicare Population	CMS.gov Chronic conditions 2007-2015
	Diabetes Diagnoses in Adults	CMS.gov Chronic conditions 2007-2015
	Diabetes prevalence	2018 County Health Rankings (CDC Diabetes Interactive Atlas)
	Frequent physical distress	2016 Behavioral Risk Factor Surveillance System (BRFSS)
	Heart Failure in Medicare Population	CMS.gov Chronic conditions 2007-2015
	HIV Prevalence	2018 County Health Rankings & Roadmaps; National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention (NCHHSTP)
	Hyperlipidemia in Medicare Population	CMS.gov Chronic conditions 2007-2015
	Hypertension in Medicare Population	CMS.gov Chronic conditions 2007-2015
	Ischemic Heart Disease in Medicare Population	CMS.gov Chronic conditions 2007-2015
	Osteoporosis in Medicare Population	CMS.gov Chronic conditions 2007-2015
	Stroke in Medicare Population	CMS.gov Chronic conditions 2007-2015

Category	Public Health Indicator	Source
Environment	Air Pollution - Particulate Matter daily density	2018 County Health Rankings & Roadmaps; Environmental Public Health Tracking Network (CDC)
	Drinking Water Violations (Percent of Population Exposed)	2018 County Health Rankings & Roadmaps; Safe Drinking Water Information System (SDWIS), United States Environmental Protection Agency (EPA)
	Driving Alone to Work	2018 County Health Rankings & Roadmaps; American Community Survey, 5-Year Estimates, United States Census Bureau
	Elderly isolation. 65+ Householder living alone **NEW 2019**	U.S. Census Bureau, 2012-2016 American Community Survey 5-Year Estimates
	Food Environment Index	2018 County Health Rankings & Roadmaps; USDA Food Environment Atlas, Map the Meal Gap from Feeding America, United States Department of Agriculture (USDA)
	Food Insecure	2018 County Health Rankings & Roadmaps; Map the Meal Gap, Feeding America
	Limited Access to Healthy Foods (Percent of Low Income)	2018 County Health Rankings & Roadmaps; USDA Food Environment Atlas, United States Department of Agriculture (USDA)
	Long Commute Alone	2018 County Health Rankings & Roadmaps; American Community Survey, 5-Year Estimates, United States Census Bureau
	No vehicle available **NEW 2019**	U.S. Census Bureau, 2017 American Community Survey 1-Year Estimates
	Population with Adequate Access to Locations for Physical Activity	2018 County Health Rankings & Roadmaps; Business Analyst, Delorme map data, ESRI, & US Census Tigerline Files (ArcGIS)
	Renter-occupied housing **NEW 2019**	U.S. Census Bureau, 2017 American Community Survey 1-Year Estimates
	Residential segregation - black/white **NEW 2019**	2018 County Health Rankings (American Community Survey, 5-year estimates)
	Residential segregation - non-white/white **NEW 2019**	2018.County Health Rankings (American Community Survey, 5-year estimates)
	Severe Housing Problems	2018 County Health Rankings & Roadmaps; Comprehensive Housing Affordability Strategy (CHAS) data, U.S. Department of Housing and Urban Development (HUD)
Health Behaviors	Adult Smoking	2018 County Health Rankings & Roadmaps; The Behavioral Risk Factor Surveillance System (BRFSS)
	Adults Engaging in Binge Drinking During the Past 30 Days	2018 County Health Rankings & Roadmaps; The Behavioral Risk Factor Surveillance System (BRFSS)
	Disconnected youth **NEW 2019**	2018 County Health Rankings (Measure of America)
	Drug Poisoning Deaths Rate	2018 County Health Rankings & Roadmaps, CDC WONDER Mortality Data
	Insufficient sleep **NEW 2019**	2016 Behavioral Risk Factor Surveillance System (BRFSS)
	Motor Vehicle Driving Deaths with Alcohol Involvement	2018 County Health Rankings & Roadmaps; Fatality Analysis Reporting System (FARS)
	Physical Inactivity	2018 County Health Rankings & Roadmaps; CDC Diabetes Interactive Atlas, The National Diabetes Surveillance System
	Sexually Transmitted Infection Incidence	2018 County Health Rankings & Roadmaps; National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention (NCHHSTP)
	Teen Birth Rate per 1,000 Female Population, Ages 15-19	2018 County Health Rankings & Roadmaps; National Center for Health Statistics - Natality files, National Vital Statistics System (NVSS)
Health Status	Adults Reporting Fair or Poor Health	2018 County Health Rankings & Roadmaps; The Behavioral Risk Factor Surveillance System (BRFSS)
	Average Number of Physically Unhealthy Days Reported in Past 30 days (Age-Adjusted)	2018 County Health Rankings & Roadmaps; The Behavioral Risk Factor Surveillance System (BRFSS)

Category	Public Health Indicator	Source
Injury & Death	Cancer Mortality Rate	2013 Texas Health Data, Center for Health Statistics, Texas Department of State Health Services
	Child Mortality Rate	2018 County Health Rankings & Roadmaps, CDC WONDER Mortality Data
	Chronic Lower Respiratory Disease (CLRD) Mortality Rate	2013 'Texas Health Data, Center for Health Statistics, Texas Department of State Health Services
	Death rate due to firearms **NEW 2019**	2018 County Health Rankings (CDC WONDER Environmental Data)
	Heart Disease Mortality Rate	2013 Texas Health Data, Center for Health Statistics, Texas Department of State Health Services
	Infant Mortality Rate	2018 County Health Rankings & Roadmaps, CDC WONDER Mortality Data
	Motor Vehicle Crash Mortality Rate	2018 County Health Rankings & Roadmaps, CDC WONDER Mortality Data
	Number of deaths due to injury **NEW 2019**	2018 County Health Rankings & Roadmaps, CDC WONDER Mortality Data
	Premature Death (Potential Years Lost)	2018 County Health Rankings & Roadmaps; National Center for Health Statistics - Mortality Files, National Vital Statistics System (NVSS)
	Stroke Mortality Rate	2013 Texas Health Data, Center for Health Statistics, Texas Department of State Health Services
Maternal & Child Health	First Trimester Entry into Prenatal Care	2016 Texas Health and Human Services - Vital statistics annual report
	Low Birth Weight Percent	2018 County Health Rankings & Roadmaps; National Center for Health Statistics - Natality files, National Vital Statistics System (NVSS)
	Low Birth Weight Rate	2016 Texas Health and Human Services - Vital statistics annual report - Preventable Hospitalizations
	Preterm Births <37 Weeks Gestation	2015 Kids Discount Data Center
	Very Low Birth Weight (VLBW)	Centers for Disease Control and Prevention WONDER
Mental Health	Accidental poisoning deaths where opioids were involved **NEW 2019**	U.S. Census Bureau, Population Division and 2015 Texas Health and Human Services Center for Health Statistics Opioid related deaths in Texas
	Alzheimer's Disease/Dementia in Medicare Population	CMS.gov Chronic conditions 2007-2015
	Average Number of Mentally Unhealthy Days Reported in Past 30 days (Age-Adjusted)	2018 County Health Rankings & Roadmaps; The Behavioral Risk Factor Surveillance System (BRFSS)
	Depression in Medicare Population	CMS.gov Chronic conditions 2007-2015
	Frequent mental distress	2016 Behavioral Risk Factor Surveillance System (BRFSS)
	Intentional Self-Harm; Suicide **NEW 2019**	2015 Texas Health Data Center for Health Statistics
	Ratio of Population to one Mental Health Provider	2018 County Health Rankings & Roadmaps; CMS, National Provider Identification Registry (NPPES)
	Schizophrenia and Other Psychotic Disorders in Medicare Population	CMS.gov Chronic conditions 2007-2015

Category	Public Health Indicator	Source
Population	Children Eligible for Free Lunch Enrolled in Public Schools	2018 County Health Rankings & Roadmaps, The National Center for Education Statistics (NCES)
	Children in Poverty	2018 County Health Rankings & Roadmaps; Small Area Health Insurance Estimates (SAHIE), United States Census Bureau
	Children in Single-Parent Households	2018 County Health Rankings & Roadmaps; American Community Survey (ACS), 5 Year Estimates (United States Census Bureau)
	Civilian veteran population 18+ **NEW 2019**	U.S. Census Bureau, 2012-2016 American Community Survey 5-Year Estimates
	Disabled population, civilian noninstitutionalized	U.S. Census Bureau, 2012-2016 American Community Survey 5-Year Estimates
	High School Dropout	2016 Texas Education Agency
	High School Graduation	2017 Texas Education Agency
	Homicides	2018 County Health Rankings & Roadmaps, CDC WONDER Mortality Data
	Household income, median **NEW 2019**	2018 County Health Rankings (2016 Small Area Income and Poverty Estimates)
	Income Inequality	2018 County Health Rankings & Roadmaps; American Community Survey (ACS), 5 Year Estimates (United States Census Bureau)
	Individuals Living Below Poverty Level	2012-2016 US Census Bureau - American FactFinder
	Individuals Who Report Being Disabled	2012-2016 US Census Bureau - American FactFinder
	Non-English-speaking households **NEW 2019**	U.S. Census Bureau, 2012-2016 American Community Survey 5-Year Estimates
	Social/Membership Associations	2018 County Health Rankings & Roadmaps; 2015 County Business Patterns, United States Census Bureau
	Some College	2018 County Health Rankings & Roadmaps; American Community Survey (ACS), 5 Year Estimates (United States Census Bureau)
	Unemployment	2018 County Health Rankings & Roadmaps; Local Area Unemployment Statistics (LAUS), Bureau of Labor Statistics
	Violent Crime Offenses	2018 County Health Rankings & Roadmaps; Uniform Crime Reporting (UCR) Program, United States Department of Justice, Federal Bureau of Investigation (FBI)
Preventable Hospitalizations	Asthma Admission: Pediatric (Risk-Adjusted-Rate)	2016 Texas Health and Human Services Center for Health Statistics Preventable Hospitalizations
	Diabetes Lower-Extremity Amputation Admission: Adult (Risk-Adjusted-Rate)	2016 Texas Health and Human Services Center for Health Statistics Preventable Hospitalizations
	Diabetes Short-term Complications Admission: Pediatric (Risk-Adjusted-Rate)	2016 Texas Health and Human Services Center for Health Statistics Preventable Hospitalizations
	Gastroenteritis Admission: Pediatric (Risk-Adjusted-Rate)	2016 Texas Health and Human Services Center for Health Statistics Preventable Hospitalizations
	Perforated Appendix Admission: Adult (Risk-Adjusted-Rate per 100 Admissions for Appendicitis)	2016 Texas Health and Human Services Center for Health Statistics Preventable Hospitalizations
	Perforated Appendix Admission: Pediatric (Risk-Adjusted-Rate for Appendicitis)	2016 Texas Health and Human Services Center for Health Statistics Preventable Hospitalizations
	Uncontrolled Diabetes Admission: Adult (Risk-Adjusted-Rate)	2016 Texas Health and Human Services Center for Health Statistics Preventable Hospitalizations
	Urinary Tract Infection Admission: Pediatric (Risk-Adjusted-Rate)	2016 Texas Health and Human Services Center for Health Statistics Preventable Hospitalizations

Category	Public Health Indicator	Source
Prevention	Diabetic Monitoring in Medicare Enrollees	2018 County Health Rankings & Roadmaps; Dartmouth Atlas of Health Care, CMS
	Mammography Screening in Medicare Enrollees	2018 County Health Rankings & Roadmaps; Dartmouth Atlas of Health Care, CMS

Appendix B: Community Resources Identified to Potentially Address Significant Health Needs

Below is a list of resources available in the community with the ability to address the significant health needs identified in the assessment. For a continually updated list of the resources available to address these needs as well as other social determinants of health, please visit our website (**BSWHealth.com/CommunityNeeds)**.

Resources Identified

Community Health Need	Category	Facility Name	Address	City	Phone Number
Uninsured Children	Financial	Texoma Council of Governments	1117 Gallagher Drive	Sherman	903-893-2161
Hospital Stays for Ambulatory-Care Sensitive Conditions-Medicare	Health	Aging and Disability Resource Center of Texoma	1117 Gallagher Dr	Sherman	903-893-2161
Ratio of Population to One Primary Care Physician	Health	Aging and Disability Resource Center of Texoma	1117 Gallagher Dr	Sherman	903-893-2161
Ratio of Population to One Primary Care Physician	Health	Grayson County Health Department	515 North Walnut St.	Sherman	903-893-0131
Ratio of Population to One Primary Care Physician	Health	Greater Texoma Health Clinic	900 N. Armstrong Ave.	Denison	903-465-2440

Community Healthcare Facilities

Facility Name	Type	System	Street Address	City	State	ZIP
Baylor Scott & White Surgical Hospital At Sherman	ST	Baylor Scott & White	3601 N Calais Street	Sherman	TX	75090
Carrus Specialty Hospital	LT	Carrus	1810 US Hwy 82 West Ste 200	Sherman	TX	75092
Reba McEntire Center For Rehabilitation	LT	Universal Health Services	1200 Reba McEntire Lane	Denison	TX	75020
Red River ER	ED	Nutex Health	2022 N Hwy 75	Sherman	TX	75090
Select ER	ED	Freestanding	4226 US Highway 75 North	Sherman	TX	75090
Texoma Medical Center	ST	Universal Health Services	5016 South US Highway 75	Denison	TX	75020
The Emergency Center Of North Texas	ED	Freestanding	115 W Travis St	Sherman	TX	75092
TMC Behavioral Health Center	LT	Universal Health Services	2601 Cornerstone Drive	Sherman	TX	75090
Wilson N Jones Regional Medical Center	ST	Alecto Healthcare	500 North Highland Avenue	Sherman	TX	75092

**Type: ST=short-term; LT=long-term, PSY=psychiatric, KID = pediatric, ED = Freestanding ED*

Appendix C: Federally Designated Health Professional Shortage Areas and Medically Underserved Areas and Populations

Health Professional Shortage Areas (HPSA)[15]

County Name	HPSA ID	HPSA Name	HPSA Discipline Class	Designation Type
Grayson	1485849525	Low Income - Grayson County	Primary Care	Low Income Population HPSA
Grayson	7486326205	Grayson County	Mental Health	Geographic HPSA

Medically Underserved Areas and Populations (MUA/P)[16]

County Name	MUA/P Source Identification Number	Service Area Name	Designation Type	Rural Status
Grayson	7693	Grayson 5.01, 5.02, 7, 6, 2, 14, 16.01, 16.02, 17	MUP Low Income	Non-Rural
Grayson	3530	Grayson Service Area	Medically Underserved Area	Non-Rural

[15] U.S. Department of Health and Human Services, Health Resources and Services Administration, 2018
[16] U.S. Department of Health and Human Services, Health Resources and Services Administration, 2018

Appendix D: Public Health Indicators Showing Greater Need When Compared to State Benchmark

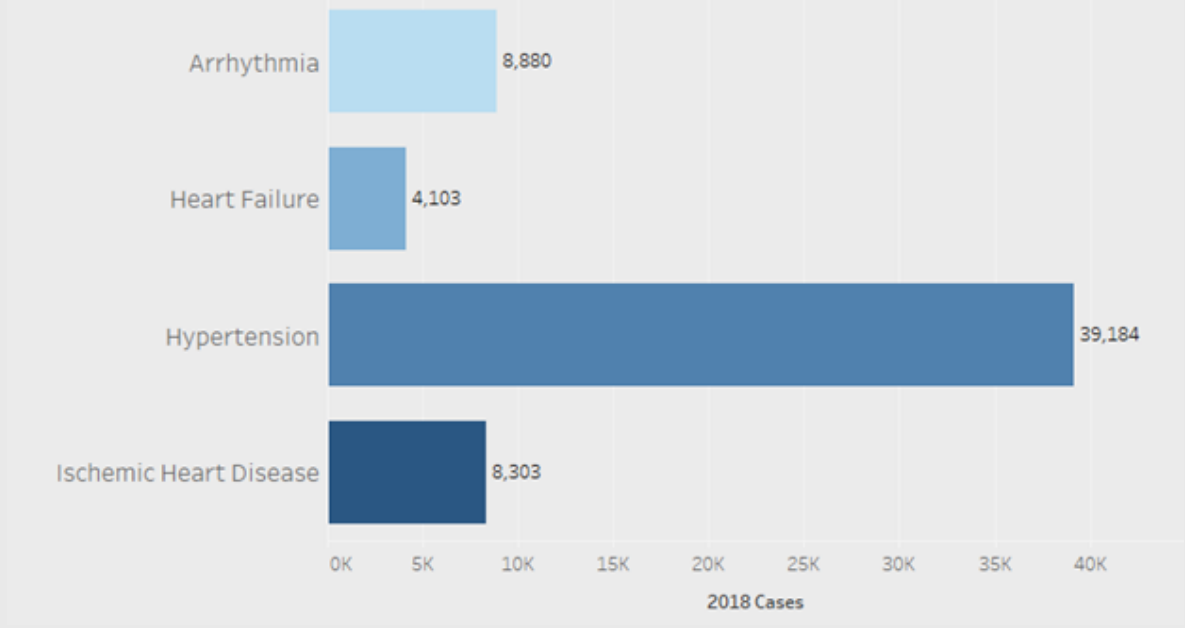
Sherman Health Community		
Public Health Indicator	Category	Indicator Definition
Intentional Self-Harm; Suicide	Mental Health	2015 International Self-Harm (Suicide) (X60-X84, Y87.0)
Chronic Lower Respiratory Disease (CLRD) Mortality Rate	Injury & Death	2013 Chronic Lower Respiratory Disease (CLRD) Age Adjusted Death Rate (per 100,000 - All Ages. Age-adjusted using the 2000 U.S. Standard Population)
Uncontrolled Diabetes Admission: Adult (Risk-Adjusted-Rate)	Preventable Hospitalizations	2016 Number Observed / Adult Population Age 18 and older
COPD in Medicare Population	Conditions/Diseases	2007-2015 Prevalence of chronic condition across all Medicare beneficiaries
Stroke in Medicare Population	Conditions/Diseases	2007-2015 Prevalence of chronic condition across all Medicare beneficiaries
Motor Vehicle Crash Mortality Rate	Injury & Death	2010-2016 Number of Motor Vehicle Crash Deaths per 100,000 Population
Diabetes Short-term Complications Admission: Pediatric (Risk-Adjusted-Rate)	Preventable Hospitalizations	2016 Number Observed / Pediatric Population Under Age 18
Elderly isolation. 65+ Householder living alone	Environment	2012 Percent of Non-family households - Householder living alone - 65 years and over
Individuals Who Report Being Disabled	Population	2012-2016 American Community Survey 5-Year Estimates, Population 65+ US
Disabled population, civilian noninstitutionalized	Population	2012 Percent Total Civilian Non-institutionalized Population with a disability
Cancer Incidence - Lung	Conditions/Diseases	2011-2015 Age-Adjusted Lung & Bronchus Cancer Incidence Rate Cases per 100,000.
Civilian veteran population 18+	Population	2012 Percent of population 18 years and over - Civilian veterans
Premature Death (Potential Years Lost)	Injury & Death	2014-2016 Premature Death; Years of Potential Life Lost Before Age 75 per 100,000 Population (Age-Adjusted)
Heart Failure in Medicare Population	Conditions/Diseases	2007-2015 Prevalence of chronic condition across all Medicare beneficiaries
Number of deaths due to injury	Injury & Death	2010-2016 Number of Motor Vehicle Crash Deaths per 100,000 Population

Sherman Health Community		
Public Health Indicator	Category	Indicator Definition
Air Pollution - Particulate Matter daily density	Environment	2012 Average Daily Density of Fine Particulate Matter in Micrograms per Cubic Meter (PM2.5)
Atrial Fibrillation in Medicare Population	Conditions/Diseases	2007-2015 Prevalence of chronic condition across all Medicare beneficiaries
Cancer Incidence - Colon	Conditions/Diseases	2011-2015 Age-Adjusted Colon & Rectum Cancer Incidence Rate Cases per 100,000
Ischemic Heart Disease in Medicare Population	Conditions/Diseases	2007-2015 Prevalence of chronic condition across all Medicare beneficiaries
Food Insecure	Environment	2015 Percentage of Population Who Lack Adequate Access to Food During the Past Year
Hospital Stays for Ambulatory-Care Sensitive Conditions- Medicare	Access To Care	2015 Number of Hospital Stays for Ambulatory-Care Sensitive Conditions per 1,000 Medicare Enrollees
Ratio of Population to One Primary Care Physician	Access To Care	2015 Ratio of Population to Primary Care Providers
Arthritis in Medicare Population	Conditions/Diseases	2007-2015 Prevalence of chronic condition across all Medicare beneficiaries
Price-Adjusted Medicare Reimbursements per Enrollee	Access To Care	2015 Amount of Price-Adjusted Medicare Reimbursements (Part A and B) per Enrollee
Perforated Appendix Admission: Adult (Risk-Adjusted-Rate for Appendicitis)	Preventable Hospitalizations	2016 Number Observed / Adult Population Age 18 and older
Death rate due to firearms	Injury & Death	2012-2016 number of deaths due to firearms, per 100,000 population.
Cancer Mortality Rate	Injury & Death	2013 Cancer (All) Age Adjusted Death Rate (Per 100,000 - All Ages. Age-adjusted using the 2000 U.S. Standard Population)
Adult Smoking	Health Behaviors	2016 Percentage of the Adult Population Report Currently Smoke Every Day/Most Days and Smoked at Least 100 Cigarettes in Their Lifetime.
Cancer Incidence - All Causes	Conditions/Diseases	2011-2015 Age-Adjusted Cancer (All) Incidence Rate Cases Per 100,000.
Uninsured Children	Access To Care	2015 Percentage of Children Under Age 19 Without Health Insurance

Appendix E: Watson Health Community Data

Watson Health Heart Disease Estimates identified hypertension as the most prevalent heart disease diagnoses. There were over 39,000 estimated cases in the community overall. Denison ZIP Code 75020 had the most estimated cases of Arrhythmia, Heart Failure and Ischemic Heart Disease, while the Sherman ZIP Code 75092 had the most estimated cases of Hypertension. However, despite fewer number of cases, the 76245 ZIP code in Gordonville had some of the highest estimated prevalence rates for Arrhythmia (1,015 cases per 10,000 population), Heart Failure (481 cases per 10,000 population), Hypertension (3,937 cases per 10,000 population) and Ischemic Heart Disease (1,033 cases per 10,000 population).

2018 Estimated Heart Disease Cases



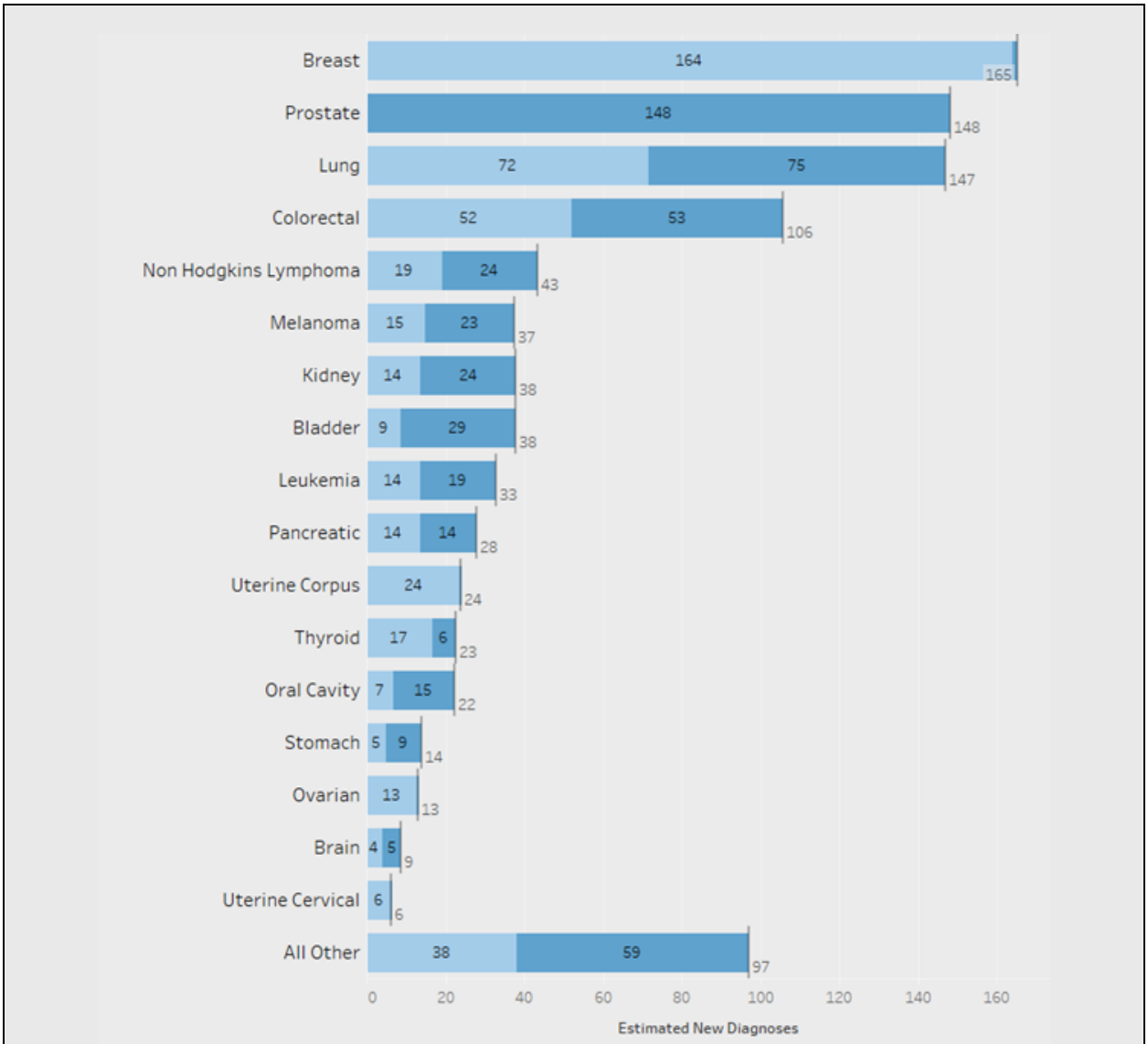
Bar chart shows total number of 2018 Estimated Heart Disease cases for each of four types: arrhythmia, heart failure, hypertension, and ischemic heart disease

Note: An individual patient may have more than one type of heart disease. Therefore the sum of all four heart disease types is not a unique count of individuals.

Source: IBM Watson Health, 2018

For this community, Watson Health's 2018 Cancer Estimates revealed the cancers projected to have the greatest rate of growth in the next five years were pancreatic, thyroid, bladder, and melanoma; based on both population changes and disease rates. The estimates for the most new cancer cases in 2018 were breast, prostate, lung and colorectal cancers.

2018 Estimated New Cancer Cases



Bar chart shows estimated new diagnoses per year for each of the 17 types of Cancer and 1 category for all other cancers. Color shows details about sex with light blue for females and dark blue for males.

Source: IBM Watson Health, 2018

Estimated Cancer Cases and Projected 5 Year Change by Type

Cancer Type	2018 Estimated New Cases	2023 Estimated New Cases	5 Year Growth (%)
Bladder	38	43	13.2%
Brain	9	10	11.1%
Breast	165	181	9.7%
Colorectal	106	100	-5.7%
Kidney	38	42	10.5%
Leukemia	33	37	12.1%
Lung	147	161	9.5%
Melanoma	37	43	16.2%
Non Hodgkins Lymphoma	43	49	14.0%
Oral Cavity	22	25	13.6%
Ovarian	13	14	7.7%
Pancreatic	28	32	14.3%
Prostate	148	151	2.0%
Stomach	14	15	7.1%
Thyroid	23	26	13.0%
Uterine Cervical	6	6	0.0%
Uterine Corpus	24	26	8.3%
All Other	97	109	12.4%
Grand Total	**991**	**1,069**	**7.9%**

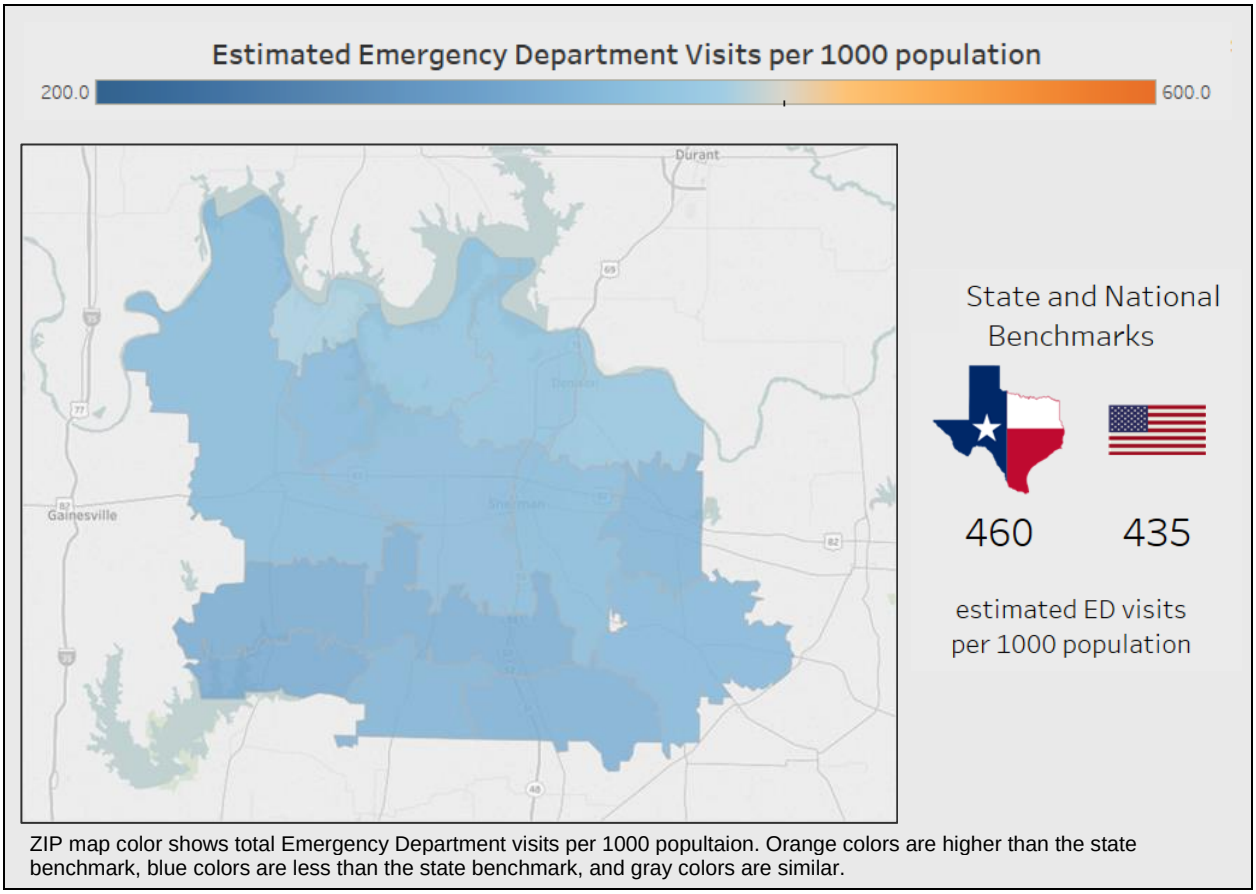
Source: IBM Watson Health, 2018

Based on population characteristics and regional utilization rates, Watson Health projected all emergency department (ED) visits in this community to increase by 8.6% over the next five years. Over one-third of ED visits were generated by the residents of Sherman ZIP Codes, but the highest estimated ED use rates were in the ZIP Code of Gordonville; 439.2 ED visits per 1,000 residents compared to the Texas state benchmark of 460 visits and the U.S. benchmark 435 visits per 1,000.

These ED visits consisted of three main types: those resulting in an inpatient admission, emergent outpatient treated and released ED visits, and non-emergent outpatient ED visits that were lower acuity. Non-emergent ED visits present to the ED but can be treated in more appropriate and less intensive outpatient settings.

Non-emergent outpatient ED visits could be an indication of systematic issues within the community regarding access to primary care, managing chronic conditions, or other access to care issues such as ability to pay. Watson Health estimated non-emergent ED visits to increase by an average of 4.7% over the next five years in this community.

Estimated 2018 Emergency Department Visit Rate

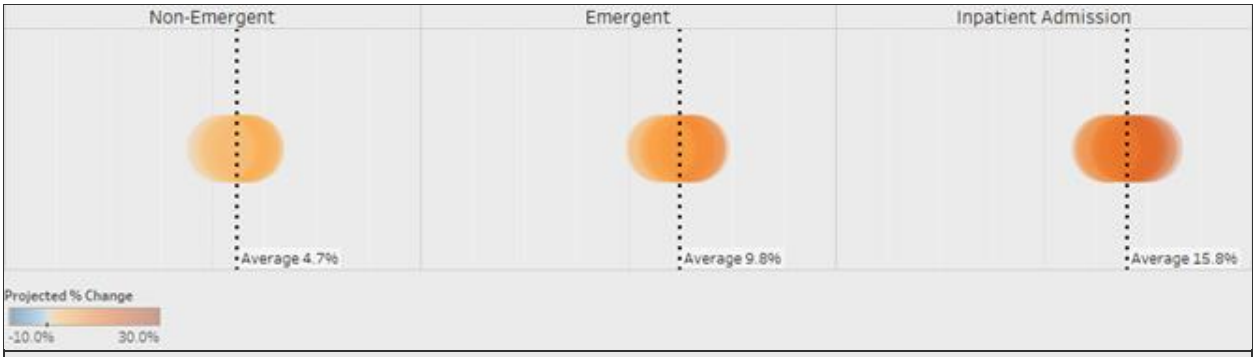


ZIP map color shows total Emergency Department visits per 1000 popultaion. Orange colors are higher than the state benchmark, blue colors are less than the state benchmark, and gray colors are similar.

Note: These are not actual BSWH ED visit rates. These are statistical estimates of ED visits for the population.

Source: IBM Watson Health, 2018

Projected 5 Year Change in Emergency Department Visits by Type and ZIP Code



Three panels show the percent change in Emergency Department visits by 2013 at the ZIP level. The average for all ZIPs in the Health Community is labeled. ED visits are defined by the presence of specific CPT® codes in claims. Non-emergency visits to the ED do not necessarily require treatment in a hospital emergency department and can potentially be reated in a fast-track ED, an uregent care treatment center, or a clinical or a physician's private office. Emergent visits require immediate treatment in a hospital emergency department due to the severity of illness. ED visits that result in inpatient admissions do not receive a CPT® code, but typically can be assumed to have resulted from an emergent encounter.

Note: These are not actual BSWH ED visit rates. These are statistical estimates of ED visits for the population.

Source: IBM Watson Health, 2018

Appendix F: Evaluation of Prior Implementation Strategy Impact

This section provides a summary of the evaluation of the impact any actions taken since the hospital finished conducting their immediately preceding CHNA

Baylor Scott & White Surgical Hospital at Sherman

Prior Significant Health Needs Addressed by Facility

Prior Identified Need Facility	Chronic Disease	Economic Status	Access to Care: Health Costs for Underserved/ Underinsured	Underserved/ Underinsured Population	Access to Primary Care Providers (Phys and Non-Phys)	Substance Abuse	Mental Heatlh	Access to Exercise
Baylor Scott & White Surgical Hospital - Sherman	√		√	√	√		√	

Total Resources Contributed to Addressing Needs: $1,760,736

Identified Need Addressed: Chronic Diseases

Program: Community Health screenings
Entity Name: Baylor Scott & White Surgical Hospital at Sherman
Description:
It is common that the pathology for one condition may also affect other body systems, resulting in co-occurrence or multiple chronic conditions (MCC). The presence of MCC's adds a layer of complexity to disease management. The Hospital conducts screenings for MCC's including body fat analysis, BMI, and injury prevention.
Impact: Screened employees on BMI and blood pressure at local health fairs. Sports Med. - Concussion prevention and testing to prevent long-term neurological issues, stretching and Athletic Trainer treatment Services to prevent chronic injuries. Community Education seminars on weight loss surgery and Urology disease diagnosis and treatment.
Committed Resources: $22,754

Identified Need Addressed: Access to Care - Healthcare Costs for the Unserved/Underinsured

Program: Charity Care
Entity Name: Baylor Scott & White Surgical Hospital at Sherman
Description:
Often, patients are unaware of the federal, state and local programs open to them for financial assistance, or they are unable to access them due to the cumbersome enrollment process required to receive these benefits. The Hospital offers assistance in enrollment to these government programs or extends financial assistance in the form of charity care through the Hospital's Financial Assistance Policy, which can be located on the Hospital's website at BaylorHealth.com/Financial Assistance.

Impact: 900 persons served; Increased access to affordable care for un-insured and under-insured individuals in the community
Committed Resources: $1,446,332 net community benefit

Program: Financial Donations
Entity Name: Baylor Scott & White Surgical Hospital at Sherman
Description:
The hospital will support community partners in developing/delivering health services that address health care costs and affordability through the provision of financial support to address health care costs and affordability in the community
Impact: increased access to affordable care for uninsured populations
Committed Resources: $42,400

Identified Need Addressed: Access to Primary Care Providers (Physician/Non-Physician)

Program: Physician Recruitment –
Entity Name: Baylor Scott & White Surgical Hospital at Sherman
Description:
The hospital is collaborating with HealthTexas Provider Network and may provide initial income guarantee support for a physician who comes from outside its market and can satisfy a community need. Recruitment of physicians for areas identified as medically underserved (MUAs) or other community needs assessment aids in relieving the burden of lack of access to care for medically under-insured or un-insured populations.
Impact: Supporting practices of 2 local PCPs to maintain continuity of service in the area. In discussions with another.
Committed Resources: $247,000

Identified Need Addressed: Mental Health

Program: Mental Health First Aid
Entity Name: Baylor Scott & White Surgical Hospital at Sherman
Description:
Holly Martin Run and Sherman Service League (supports local mental health programs)
Impact: Increased access to Mental Health care outside of clinical settings; Increased awareness of self-help Mental Health activities
Committed Resources: $2250

Identified Need Addressed: Economic Status - Poverty

Program: Health over Hunger – Cereal Drive
Entity Name: Baylor Scott & White Surgical Hospital at Sherman
Description:
HOH is an annual Cereal Drive to help provide breakfast food for food insecure children in the community.
Impact: 59,469 servings of cereal were donated through this food drive/fund raiser
Committed Resources: employee time; community partners

Needs Not Addressed:

Baylor Scott & White Surgical Hospital - Sherman is committed to serving the community by adhering to its mission, using its skills and capabilities, and remaining a strong organization providing a wide range of important health care services and community benefits. The hospital addressed significant community health needs based on the needs intersection with the hospital's stated mission and key clinical strengths. The following identified needs not addressed in the Community Benefit Implementation plan are addressed by multiple other community and state agencies whose expertise and infrastructure are better suited for addressing the needs:

- Economic status/poverty*
- Substance abuse
- Access to exercise opportunities

*See Health over Hunger event