Baylor Scott & White Health
Community Health Needs Assessment

Tyler Health Community

Baylor Scott & White Texas Spine & Joint Hospital

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

Posted to BSWHealth.com/CommunityNeeds on June 30, 2019

Table of Contents

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
Strategies
Health
Experience
Affordability
Alignment
Growth
We serve faithfully
We act honestly
We never settle
We are in it together
Values
To be the trusted leader, educator and innovator in value-based care delivery, customer experience and affordability.
Ambition

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 known as Truven Health Analytics) was engaged to help collect and analyze the data for this process and to compile 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 BSWH hospital facility:

- Baylor Scott & White Texas Spine & Joint Hospital.

For the 2019 assessment, the community served by this hospital facility includes the geographic area where at least 75% of the hospital facilities' admitted patients live.

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. For a qualitative analysis, and in order to get input directly from the community, IBM Watson conducted key informant interviews. Community input was solicited 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 as well as individuals or organizations serving and/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 and clarified the assignment of severity rankings of 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 that was 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 Mental Health Provider	Access to Care
2	Food Insecure	Environment - Food
3	Ratio of Population to One Non-Physician Primary Care Provider	Access to Care
4	Ratio of Population to One Dentist	Access to Care
5	No Vehicle Available	Access to Care

As part of the assessment process, community resources were identified, including facilities/organizations that may be available to address the significant needs in the community. These resources are located in the appendix of this report and will be included in the formal implementation strategy to address needs identified in this assessment, approved and made 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 also requires hospitals to adopt an Implementation Strategy to address prioritized community health needs identified through the assessment. An Implementation Strategy is a written plan that addresses each of the significant community health needs identified through the CHNA and is 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.

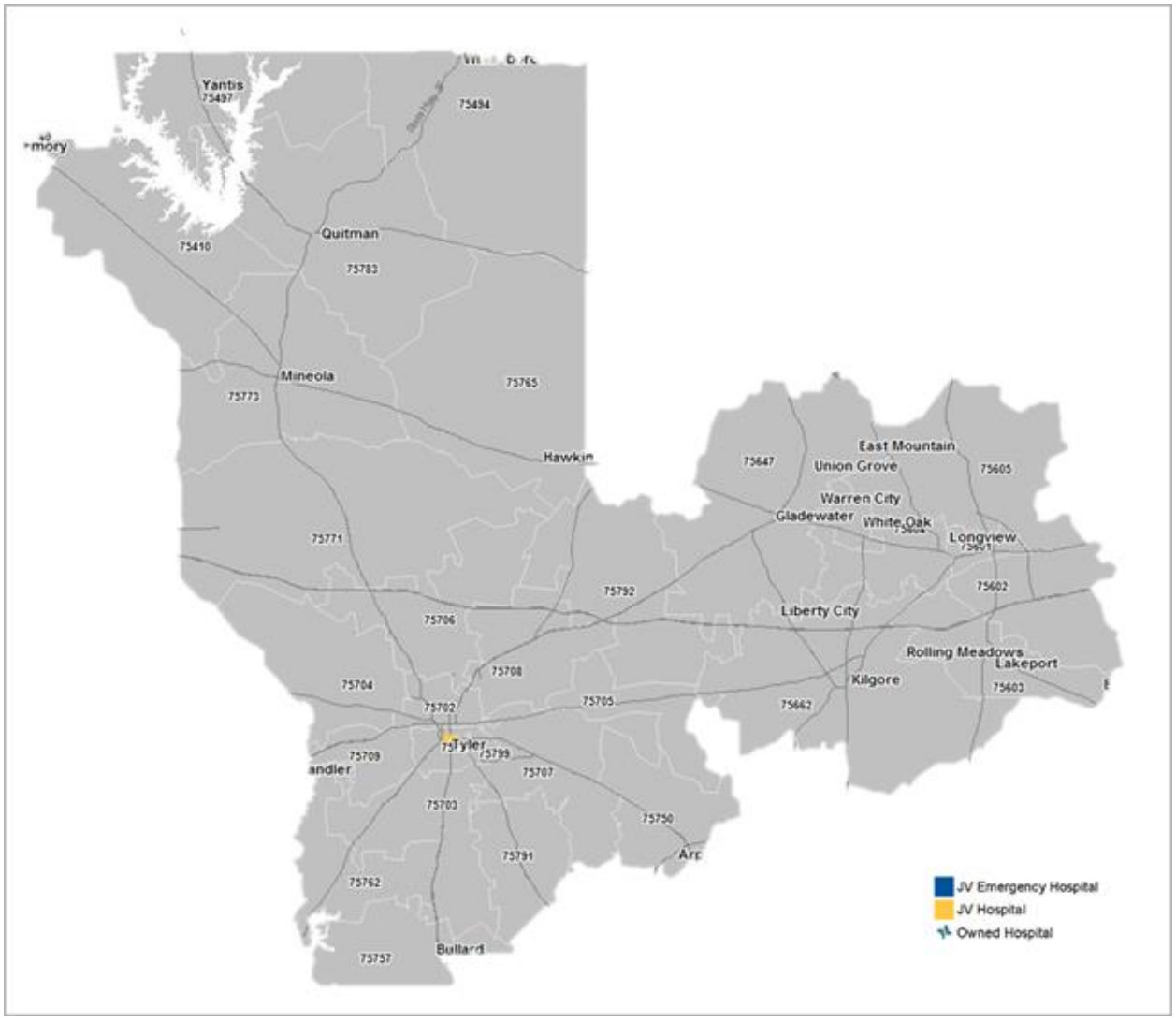
Consultant Qualifications & Collaboration

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 to deliver 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 the counties of Gregg, Smith and Wood Counties. The community served includes the geographic area where at least 75% of the hospital facility's admitted patients live.

BSWH Community Health Needs Assessment
Tyler 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 taking into account 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**.

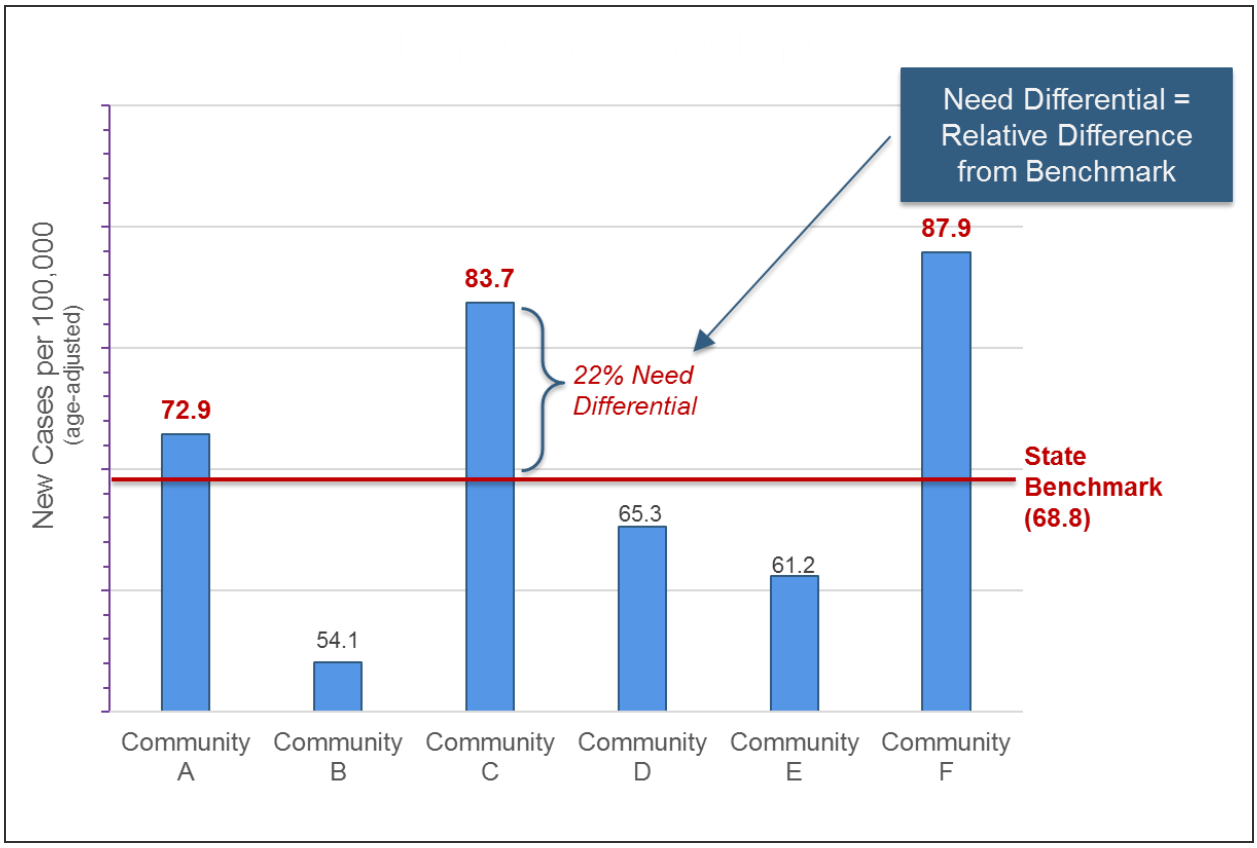
A benchmark analysis conducted for each indicator collected for the community served, determined which public health indicators demonstrated a community health need from a quantitative perspective. Benchmark health indicators collected included (when available): overall U.S. values; state of Texas values;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

Once 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 was conducted to understand the relative severity of need for these indicators. The need differential established a standardized way to evaluate 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, two (2) key informant interviews, were conducted to take into account 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 were also held with hospital clinical leadership and/or other community leaders to identify significant health needs from the assessment and prioritize 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 that contributed to health issues.

Participation in the qualitative assessment was solicited from 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 who served and/or represented 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 Interview and Focus Group Participants

Participant Organization Name	Public Health	Medically Under-served	Low-income	Chronic Disease Needs	Minority Populations	Governmental Public --Health Dept.	Public Health Knowledge --Expertise
Azsalea Orthopedics		X	X	X	X		
Baylor Scott & White	X	X	X	X	X		X
Bethesda Health Clinic	X	X	X	X	X		
Cancer Care Services	X	X	X	X	X		X
Texas Economic Development Corporation		X	X		X		
United Way of Smith County		X	X		X		X
University of Texas at Tyler		X	X		X		

Note: multiple persons from the same organization may have participated

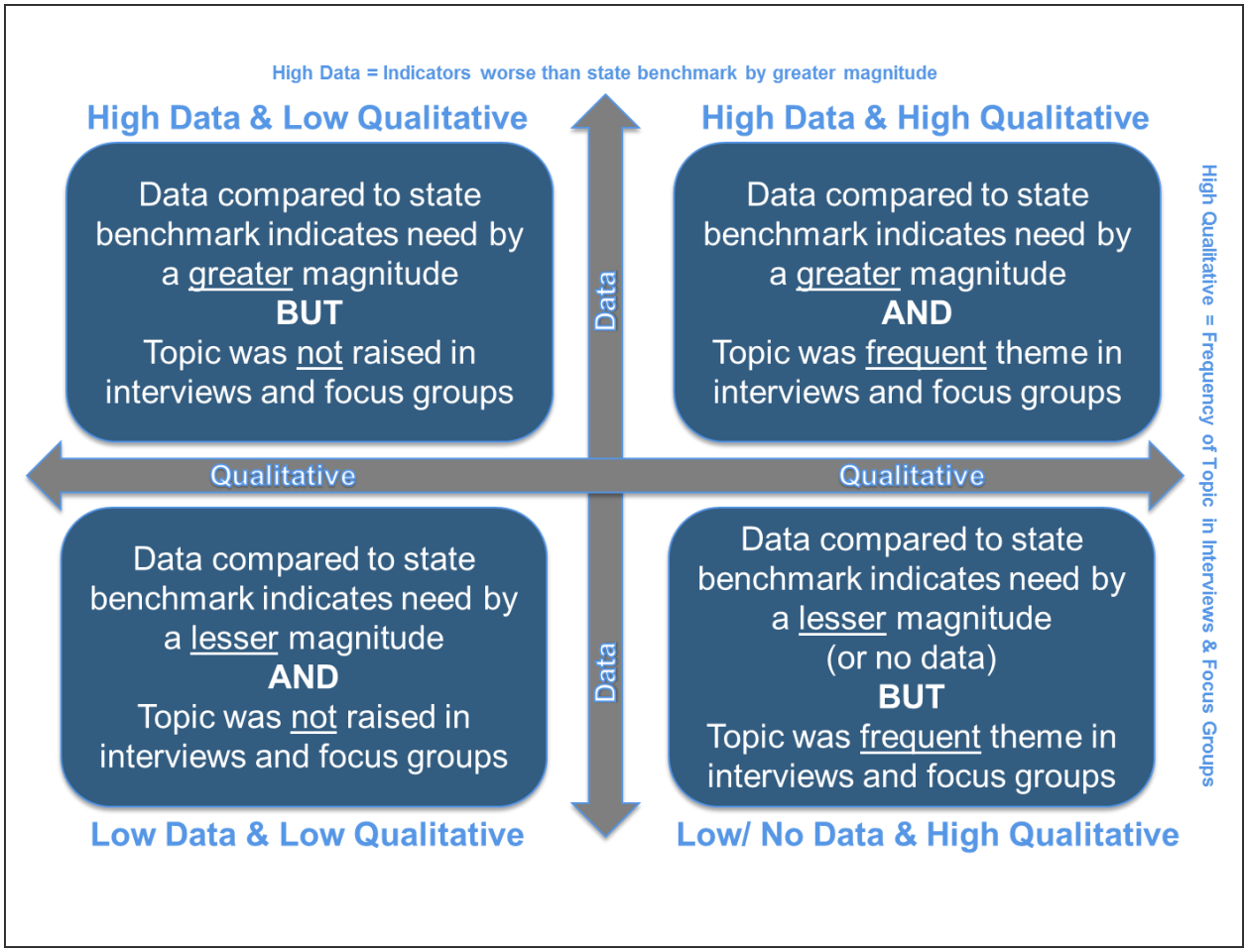
In addition to soliciting input from public health and various interests of the community, the hospital facility was also required to consider written input received on their most recently conducted CHNA and subsequent implementation strategies. The assessment is available to receive public comment or 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. These themes were compared to the quantitative data findings.

Methodology for Defining Community Need

Using qualitative feedback from the interviews and focus group, as well as the health indicator data, the consolidated issues currently affecting the community served assembled in the Health Needs Matrix below help 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. Additionally, most public health indicators were available only at the county level. In evaluating data for entire counties versus more localized data, it was 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 actually affect the population who truly need the service.

Additional information gaps include community input, despite attempts to solicit such input. The counties which comprise this community (Gregg, Smith, and Wood) do not have local health departments. Hunt County provides the county health services to Smith County. In August 2018, Hunt County Health Department Nursing was invited via a phone conversation to participate in a key informant interview to discuss the needs of this community. Follow-up emails to arrange a date and time to conduct the interview did not receive replies. In August – September 2018 invitations to participate in key informant interviews were also extended via email to Wood County Indigent Health Care, Wood County Veteran's Services, Alzheimer's Alliance of Smith County, Meals on Wheels Ministry East Texas, East Texas Crisis Center, Longview Emergency Dental Outreach, and Longview Community Ministries but attempts to solicit input from these organizations were not successful.

Approach to Identify and Prioritize Significant Health Needs

In a session held with Baylor Scott & White Texas Spine & Joint Hospital leadership and community leaders on November 8, 2018, significant health needs were identified and prioritized.. 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 community input participants across north Texas:

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 1 (low) to 10 (high). The criteria scores summed for each need, created an overall score. The list of significant health needs was then prioritized based on the overall scores. 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**. In addition, an interactive asset map of various resources identified for all BSWH communities are located at: **BSWHealth.com/CommunityNeeds**.

Tyler Health Community CHNA

Demographic and Socioeconomic Summary

According to population statistics, the community served was expected to have slower population growth than Texas but still outpace the United States. The median age was only slightly younger than Texas overall but several years younger than the country. Median income was below both the state and the U.S.. The community served had about the same proportion of uninsured as Texas overall, but both the community and Texas had significantly higher proportion of uninsured than the nation.

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

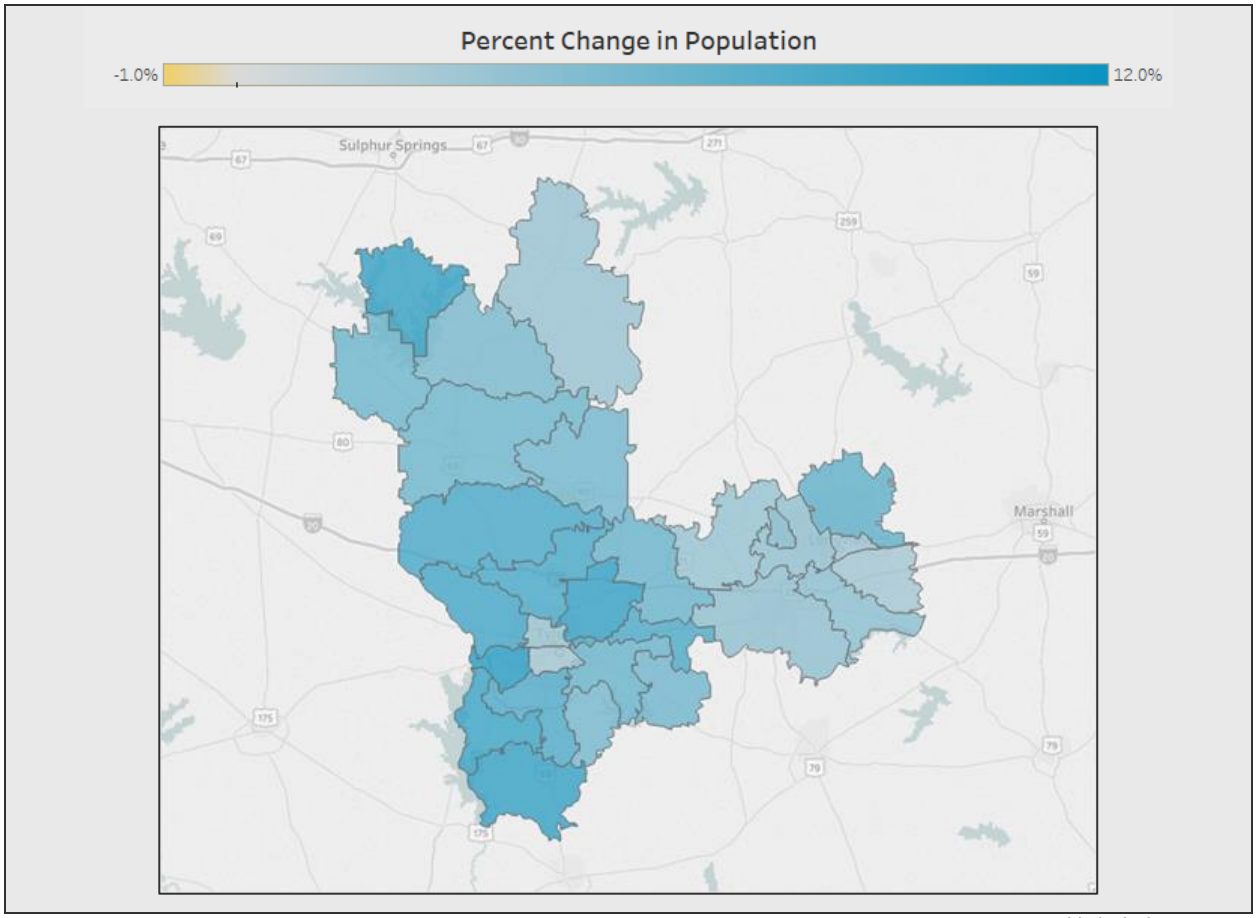
Geography		Benchmarks		Community Served
		United States	Texas	Tyler Health Community
Total Current Population		326,533,070	28,531,631	425,821
5 Yr Projected Population Change		3.5%	7.1%	5.2%
Median Age		42.0	38.9	38.6
Population 0-17		22.6%	25.9%	24.4%
Population 65+		15.9%	12.6%	17.3%
Women Age 15-44		19.6%	20.6%	19.3%
Non-White Population		30.0%	32.2%	29.7%
Hispanic Population		18.2%	39.4%	18.3%
Insurance Coverage	Uninsured	9.4%	19.0%	19.1%
	Medicaid	14.9%	13.4%	14.0%
	Private Market	9.6%	9.9%	10.5%
	Medicare	16.1%	12.5%	20.2%
	Employer	45.9%	45.3%	36.2%
Median HH Income		$61,372	$60,397	$52,407
Limited English		26.2%	39.9%	21.3%
No High School Diploma		7.4%	8.7%	10.1%
Unemployed		6.8%	5.9%	5.7%

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

The population of the community served is expected to grow 5.2% by 2023, an increase by more than 22,000 people. The 5.2% projected population growth is slightly less than the state's 5-year projected growth rate (7.1%) but higher when compared to the national projected growth rate (3.5%). The ZIP codes expected to experience the most growth in five years are:

- 75703 Tyler - 3,073 people
- 75605 Longview - 1,919 people
- 75771 Lindale - 1,584 people

2018 - 2023 Total Population Projected Change by ZIP Code

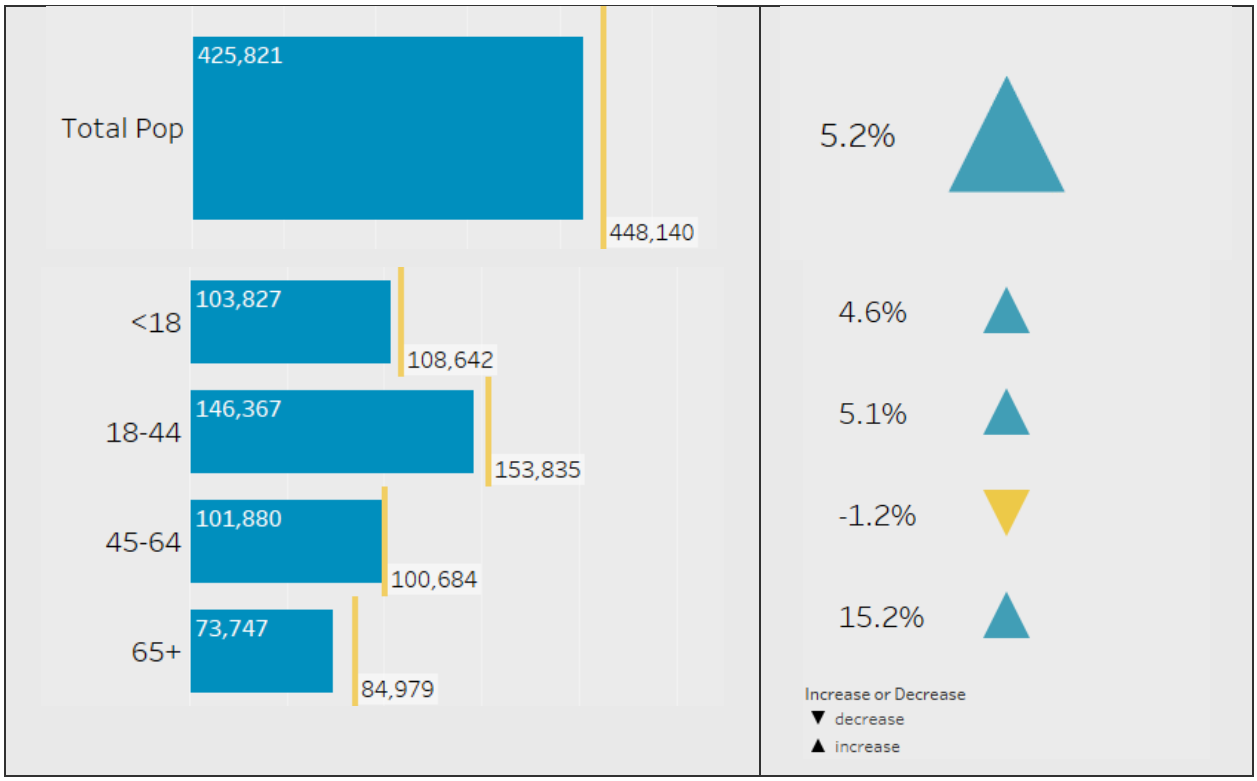


Source: IBM Watson Health / Claritas, 2018

The community's population skewed younger with 34.4% of the population ages 18-44 and 24.4% under age 18. The largest cohort (18-44) is expected to grow by 7,468 people (5.1%) by 2023. The age 65 plus cohort, while the smallest, is expected to experience the fastest growth (15.2%) over the next five years, adding 11,232 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*

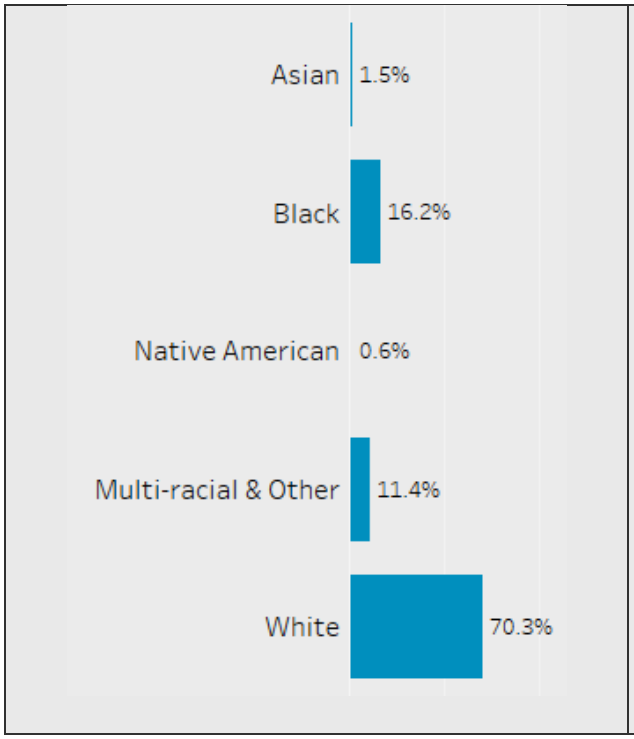


Source: IBM Watson Health / Claritas, 2018

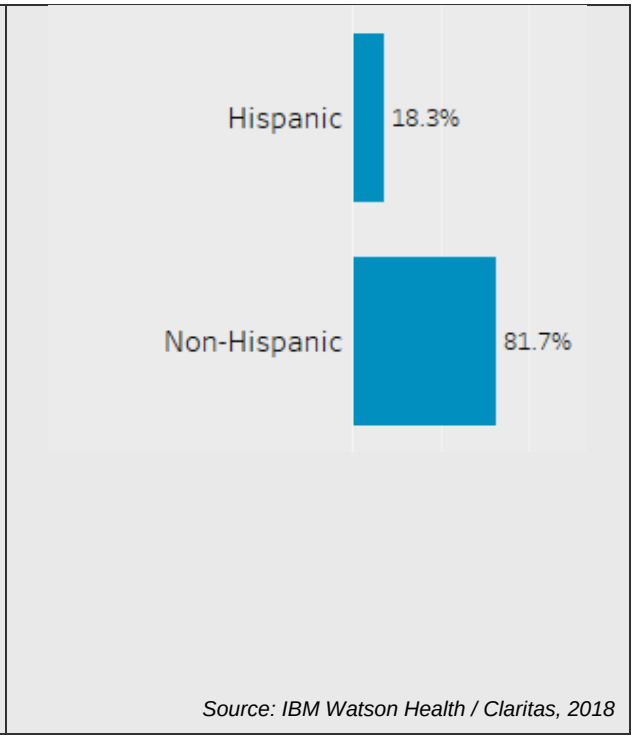
Population statistics are analyzed by race and by Hispanic ethnicity. The community's population was primarily White and non-Hispanic (62.2%). The Hispanic population (all races) is the next largest group comprising 18.3% of the community, followed by the non-Hispanic Black population (16.0%). This will change over the next five years with the Hispanic population expected to increase by 12,137 people (15.6%) by 2023.

Population Distribution by Race and Ethnicity

2018 Population by Race

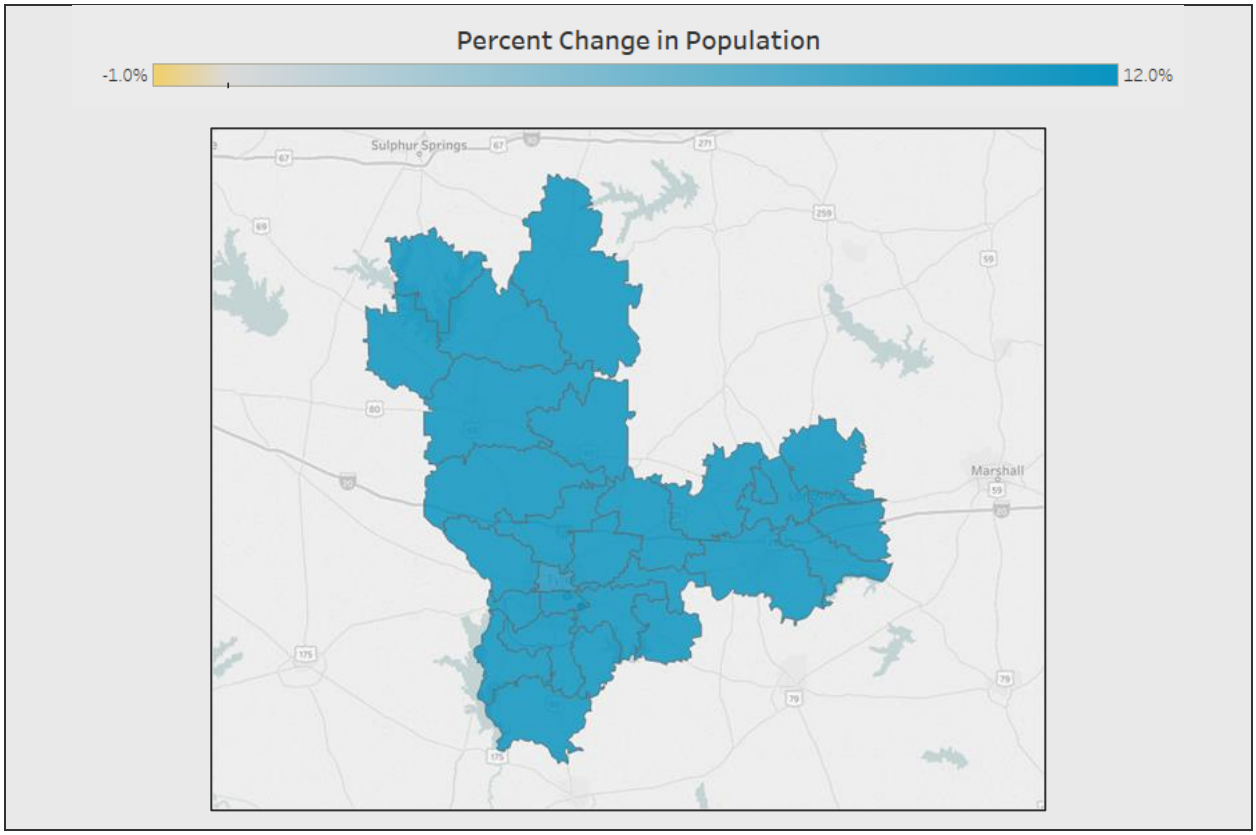


2018 Population by Ethnicity



Source: IBM Watson Health / Claritas, 2018

2018 - 2023 Hispanic Population Projected Change by ZIP Code

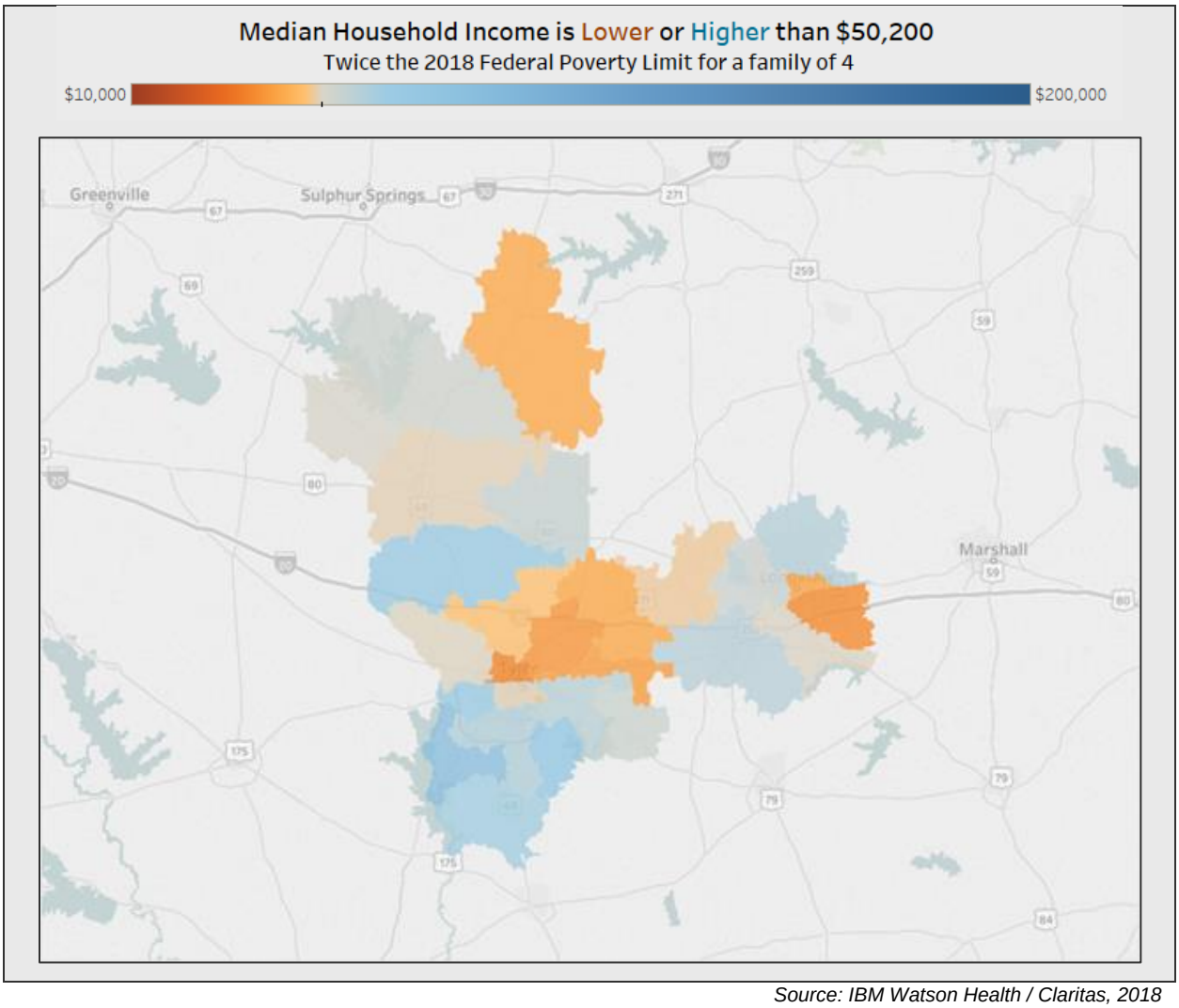


Source: IBM Watson Health / Claritas, 2018

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 $35,036 for 75702 – Forest Hills to $80,073 for 75762 – Flint. There were fourteen ZIP Codes with median household incomes less than $50,200 – twice the 2018 Federal Poverty Limit for a family of four:

- 75603 Longview - $50,000
- 75704 Tyler - $49,844
- 75773 Mineola - $49,400
- 75701 Tyler - $49,380
- 75647 Gladewater - $48,357
- 75706 Tyler - $46,663
- 75494 Winnsboro - $42,011
- 75792 Winona - $41,636
- 75601 Longview - $40,896
- 75799 Tyler - $40,714
- 75705 Tyler - $39,364
- 75708 Tyler - $38,199
- 75602 Longview - $35,957
- 75702 Forest Hills - $35,036

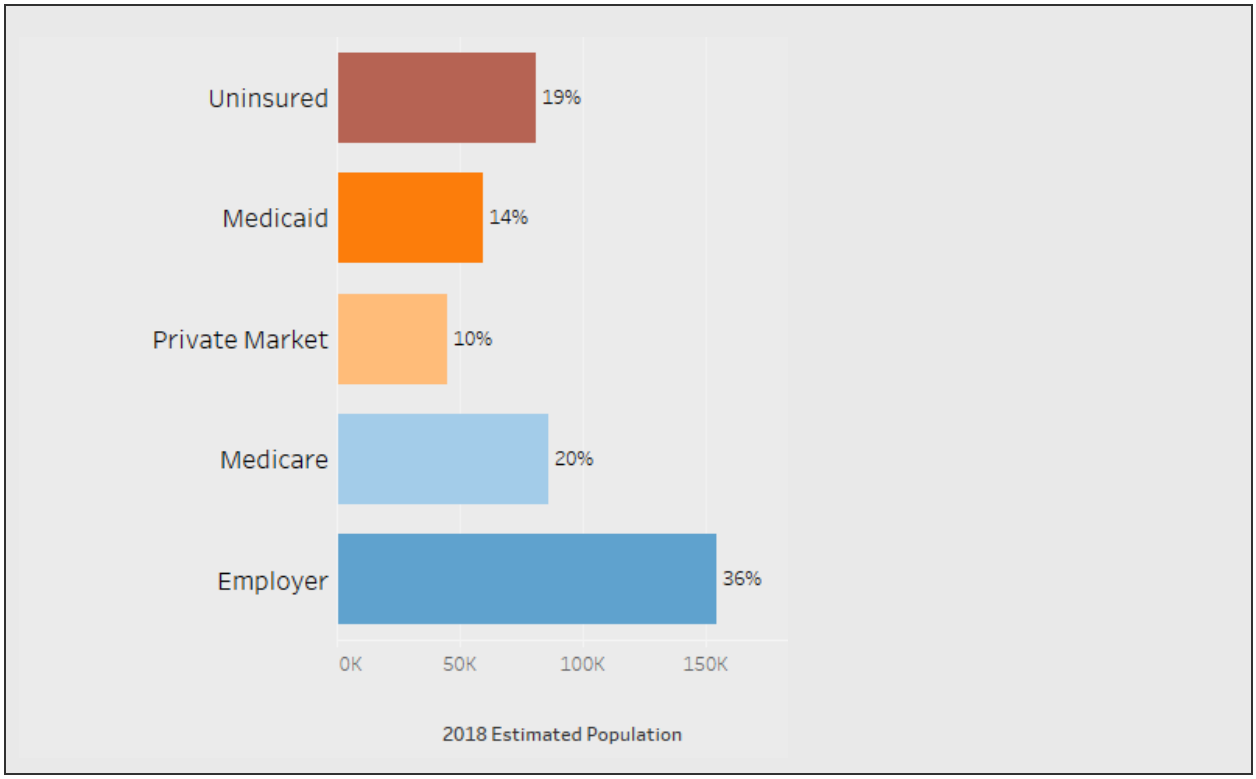
2018 Median Household Income by ZIP Code



Source: IBM Watson Health / Claritas, 2018

A majority of the population (36%) were insured through employer sponsored health coverage, with the second two tiers of coverage being Medicare (20%) and people without health insurance (19%). The remainder of the population was fairly equally divided between Medicaid 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 seventeen (17) Health Professional Shortage Areas and six (6) Medically Underserved Areas as 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 Tyler Health Community	Dental Health	Mental Health	Primary Care	Grand Total	MUA/P
Gregg	2	2	2	6	2
Smith	1	2	1	4	3
Wood	2	3	2	7	1
Total	**5**	**7**	**5**	**17**	**6**

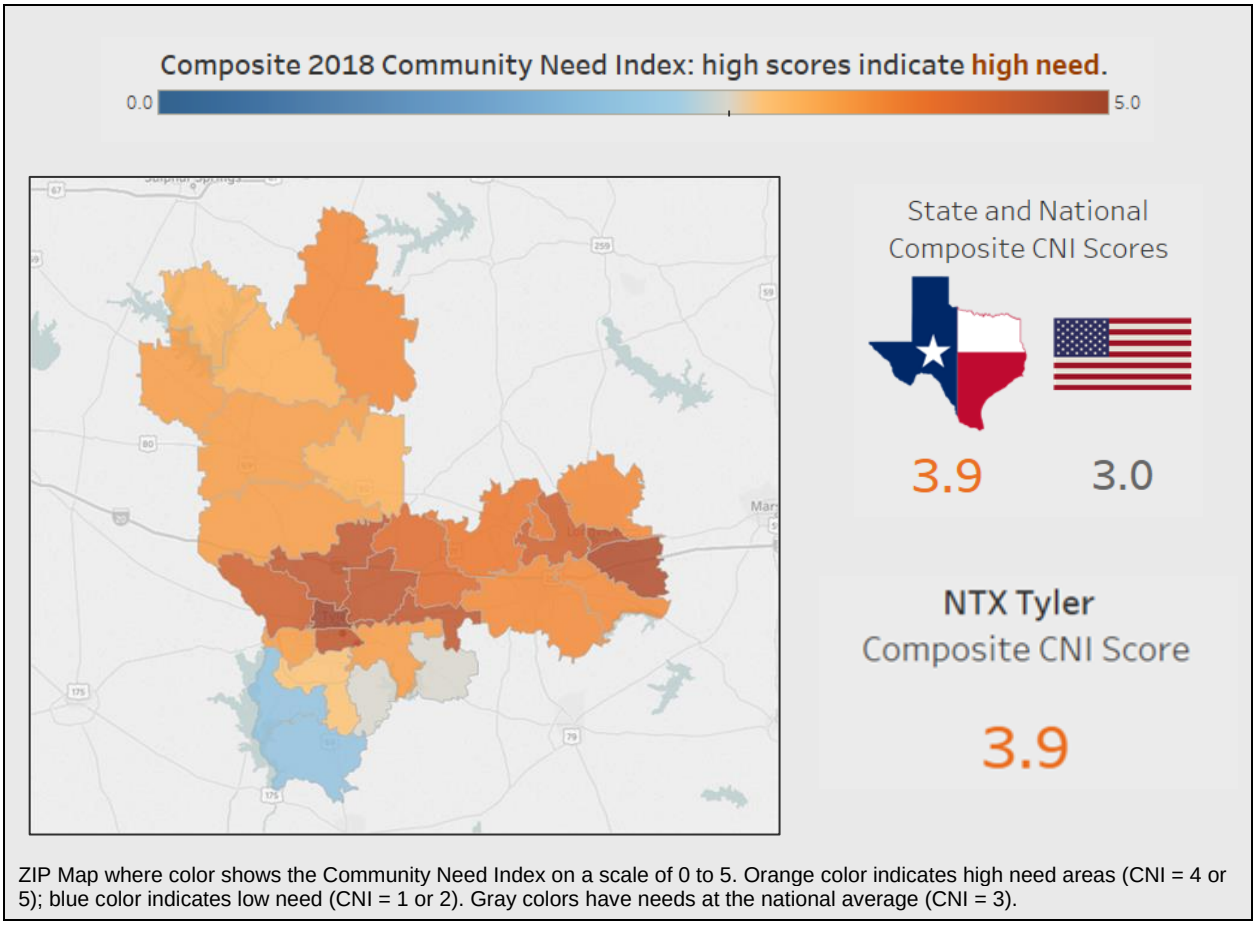
Source: U.S. Department of Health and Human Services, Health Resources and Services Administration, 2018

[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 takes into account 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 linked to variations 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 3.9, higher than the CNI national average of 3.0, potentially indicating greater health care needs in this community. There were portions of the community (Forest Hills, Longview, and Tyler) where the CNI score was greater than 4.5, pointing to potentially more significant health needs among those populations.

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
Tyler	Forest Hills	Smith	75702	5.0
Longview	Longview	Gregg	75602	4.8
Tyler	Tyler	Smith	75798	4.8
Longview	Longview	Gregg	75601	4.6
Tyler	Tyler	Smith	75701	4.6
Tyler	Tyler	Smith	75705	4.6
Tyler	Tyler	Smith	75706	4.6
Tyler	Tyler	Smith	75708	4.6
Longview	Greggton	Gregg	75604	4.4
Tyler	Tyler	Smith	75704	4.4
Tyler	Tyler	Smith	75799	4.2
Winona	Winona	Smith	75792	4.2
Gladewater	Gladewater	Gregg	75647	4.0
White Oak	White Oak	Gregg	75693	4.0

Source: IBM Watson Health / Claritas, 2018

Public Health Indicators

Public health indicators were collected and analyzed to assess community health needs. Evaluation 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 as well as emergency department visit estimates. This information is located in **Appendix E**.

Interviews

In the interviews, participants identified and discussed the factors that contribute to the current health status of the community, and then identified the greatest barriers and strengths that contribute to the overall health of the community. For this community there were two (2) interviews conducted July through September 2018.

Participants in this health community discussed that the lack of affordable services, access to specialists, cheaper healthy food options, and health education were the top barriers to better health in the community. There are good hospitals and projects to create more walking trails, but historical bad habits and cultural barriers still caused many to eat unhealthily and rely on the emergency department for care.

Discrepancies in income levels led to discrepancy in quality of care. Residents with lower income levels and the undocumented population were especially at risk with limited public transportation and healthy food options. Participants discussed that barriers to good health in this community included health education, many people rely on friends and family for care and information, and emergency department services were used instead of planned preventive and primary care.

Mental health was mentioned as a health need in this health community. There were not enough psychiatric services other than inpatient care, and participants believed that more assessment centers and practitioners were needed. The health community also needed better support around mental health issues, including education and awareness to reduce stigma for diagnosis and treatment, and more providers to reduce the long wait list.

Participants discussed that access to providers was a challenge. There are limited affordable ancillary services, specialty care access (especially neurologists, urologists, and gastroenterologists), and not enough options for the uninsured. Residents overused

the emergency department out of habit, inability to pay, and convenience. Participants suggested increasing access to preventive services and health education.

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

Tyler Health Community		
Top Needs Identified	Category of Need	Public Health Indicator
Food Insecure	Environment - Food	2015 Percentage of Population Who Lack Adequate Access to Food During the Past Year
No vehicle available	Access To Care	2017 Households with no vehicle available (percent of households)
Ratio of Population to One Dentist	Access To Care	2016 Ratio of Population to Dentists
Ratio of Population to one Mental Health Provider	Mental Health	2017 Ratio of Population to Mental Health Providers
Ratio of Population to One Non-Physician Primary Care Provider	Access To Care	2017 Ratio of Population to Primary Care Providers Other than Physicians
Unemployment	SDH - Income	2016 Percentage of Population Ages 16 and Older Unemployed but Seeking Work

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 Mental Health Provider	Access to Care
2	Food Insecure	Environment - Food
3	Ratio of Population to One Non-Physician Primary Care Provider	Access to Care
4	Ratio of Population to One Dentist	Access to Care
5	No Vehicle Available	Access to Care

Description of Health Needs

A CHNA for the Tyler Health Community identified several significant community health needs that can be categorized as issues related to access to care as well as food insecurity. Regionalized health needs affect all age levels to some degree; however, it is often the most vulnerable populations that are negatively affected. Community health gaps help to define the resources and access to care within the county or region. Health and social concerns were validated through key informant interviews, focus groups and county data. Access to care; specifically, provider availability was identified as a significant area of concern and noted in the data results for Wood County. Access to care due to lack of transportation and food insecurity were identified as significant areas of concern and noted in the data results for Gregg County.

<u>Mental Health Provider Access</u>

Access to mental health providers and services is an issue nationally. Nine million adults (or 1 in 5) report having an unmet mental health need and mental health provider shortages across the country continue to exist.[2]

Rural areas have challenges with accessing mental health care services. Primary Care Providers (PCPs) are often relied upon to treat patients with mental health needs. These providers come across expertise, time, and financial reimbursement constraints. Communities that have a lack of primary care providers are even more vulnerable.

According to the CMS National Provider Identification File, the ratio of individuals in Wood County served by each mental health provider was 3,159 compared to 1,012 residents per provider for the state of Texas overall, and 470 individuals per provider for the U.S.

[2] **Mental Health America**, 2019

overall.[3] Wood county had considerable opportunity for improvement given the mental health provider to population ratio was more than three times higher than the state ratio and almost seven times higher than the U.S. benchmark.

Non-Physician Primary Care Providers

There is a nationwide scarcity of physicians, particularly in small towns and cities. This shortage is accentuated in rural areas across the country. Only about 11% of the nation's physicians work in rural areas, despite nearly 20% of Americans living there.[4] Demographic shifts, such as growth in the elderly or near elderly populations increase the need for primary care access. Estimates of the scope of the provider shortage in rural America vary; however, it is generally agreed upon that thousands of additional Primary Care Providers are needed to meet the current demand in rural America and that tens of thousands of additional caregivers will be needed to meet the growing rural population. Recruiting physicians to rural areas is particularly challenging and it could take years to secure a vacant position.

Primary care physician extenders (e.g. nurse practitioners, physician assistants, and clinical nurse specialists) could help close the gap in access to primary care services when they are located in a community. Non-physician providers or physician extenders are typically licensed professionals such as Physician Assistants or Nurse Practitioners who treat and see patients. Dependent upon state regulations, extenders may practice independently, or in physician run practices. Physician extenders expand the scope of primary care providers within a geographic area and help to bridge the gap to both access to care and management of healthcare costs.

The non-physician primary care provider ratio of one provider per 2,010 residents in Wood County was worse than the Texas state benchmark of one provider to 1,497 residents and almost two times the overall U.S. ratio of 1,030 individuals per provider.[5]

Access to Dentists

Economic disparity, whether through poor diet, food deserts, lack of insurance or funding, may impact dental hygiene. Lack of appropriate dental hygiene and bad teeth reinforces economic disadvantage. People with poor dental hygiene find it difficult find employment or impossible to get past the interview stages. Entry-level jobs require service attitude and nice smiles; immediate and often unfavorable assumptions are made when encountering persons with poor dentition. Oral health may contribute to various diseases and conditions such as endocarditis, cardiovascular disease, premature birth, and low birth weight.[6]

According to the U.S. Census, Texas County Health Rankings and Roadmaps 2018, Wood County served 3,159 individuals per dental provider; compared to 1,790 residents served per provider for the state overall and 1,480 individuals served per provider across

[3] CMS, National Provider Identification Registry (NPPES), County Health Rankings & Roadmaps, 2018
[4] J. Cromartie, Population & Migration (Washington, D.C,: **U.S. Department of Agriculture, Economic Research Service, May 26, 2012**)
[5] CMS, National Provider Identification Registry (NPPES), County Health Rankings & Roadmaps, 2018
[6] **Mayo Clinic**, 2019

the U.S. overall.[7] Social and economic constraints, such as insurance, transportation, etc. compounded the access to dental care issue in the community.

Food Insecurity

Food insecurity is a measurement of the prevalence of hunger in the community; it reflects the percentage of the population who did not have access to a reliable source of food. The Tyler community health needs assessment identified concerns around food insecurity. Lacking consistent access to food is related to negative health outcomes such as weight-gain and premature mortality. Individuals and families with an inability to provide and eat balanced meals create additional barriers to healthy eating.[8]

It is equally important to eat a balanced diet that includes the consumption of fruits and vegetables as well as to have adequate access to a consistent supply of food. Gregg County is the second most populated county within the Tyler Health Community and showed a need related to food insecurity. Within Gregg County 21.3% of the population lacked adequate access to food during the past year, indicating a potentially larger vulnerable population when comparted to the overall Texas state benchmark at 15.7%. It is notable that the overall Texas proportion of food insecure population was also greater than the U.S. benchmark of 13%.[9]

No Vehicle Available

One issue that impacts access to care is transportation. While there are many means of transportation available to residents of a community, there is limited data on the availability and effectiveness of the various modes of transportation. One way to understand the impact of transportation on a population is to understand a household's access to a vehicle. Within the Tyler Health Community, 7.2% of Gregg County households did not have access to a vehicle, compared to 5.3% for the state of Texas.[10] While there may be other options for transportation available to those without access to a vehicle, the data findings from community input sessions validated the impact lack of adequate transportation has had on access to health care services for community residents.

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 as well as publicly available and proprietary health indicators, BSWH was able to identify and prioritize community health needs for their healthcare system. With the goal of improving the health of the community,

[7] Area Health Resource File/National Provider Identification file (CMS), County Health Rankings & Roadmaps, 2018
[8] Gundersen C, Satoh A, Dewey A, Kato M, Engelhard E. Map the Meal Gap 2015: Food Insecurity and Child Food Insecurity Estimates at the County Level. Feeding America, 2015
[9] Map the Meal Gap, Feeding America; County Health Rankings & Roadmaps, 2018
[10] U.S. Census Bureau, American Community Survey 1-Year Estimates, 2017

implementation plans with specific tactics and time frames will be developed for the health needs BSWH chooses to address for the community served.

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
Food Insecure	Food	American Red Cross Serving East Texas	320 E. Rieck Rd.	Tyler	903-581-7981
Food Insecure	Food	East Texas Food Bank	3201 Robertson Road	Tyler	903-597-3663
Food Insecure	Food	Meals on Wheels Ministry East Texas	3001 Robertson Rd	Tyler	903-593-7385
Food Insecure	Food	PATH	402 W. Front Street	Tyler	903-597-7284
Food Insecure	Food	Salvation Army Tyler	633 N. Broadway Avenue	Tyler	903-592-4361
Ratio of Population to One Dentist	Health	DORS Youth Transition Center	1125 Judson Rd Ste 153	Longview	903-803-0100
Ratio of Population to One Dentist	Health	PATH	402 W. Front Street	Tyler	903-597-7284
Ratio of Population to One Mental Health Provider	Health	Azleway	15892 CR 26	Tyler	903-566-8444
Ratio of Population to One Mental Health Provider	Health	CARE: Christ-centered Abortion Recovery & Education	401 E. Front St., Suite 245	Tyler	903-944-7852
Ratio of Population to One Mental Health Provider	Health	Champions for Children	4883 Hightech Drive	Tyler	903-592-1454

Community Health Need	Category	Facility Name	Address	City	Phone Number
Ratio of Population to One Mental Health Provider	Health	Children's Advocacy Center of Smith County	2210 Frankston Hwy	Tyler	903-533-1880
Ratio of Population to One Mental Health Provider	Health	East Texas Crisis Center	2401 Hughey Dr	Tyler	903-509-2526
Ratio of Population to One Mental Health Provider	Health	Goodwill Industries of East Texas	409 West Locust	Tyler	903-593-8438
Ratio of Population to One Mental Health Provider	Health	Next Step Community Solutions	305 S Broadway Ave	Tyler	903-939-9010
Ratio of Population to One Mental Health Provider	Health	The Arc of Smith County	5520 Old Bullard Rd, Ste. 111	Tyler	903-597-0995
Ratio of Population to One Non-Physician Primary Care Provider	Health	American Red Cross Serving East Texas	320 E. Rieck Rd.	Tyler	903-581-7981
Ratio of Population to One Non-Physician Primary Care Provider	Health	Bethesda Health Clinic	409 W. Ferguson St.	Tyler	903-596-8353
Ratio of Population to One Non-Physician Primary Care Provider	Health	Christus Trinity Mother Frances Health System	800 E. Dawson	Tyler	903-593-8441
Ratio of Population to One Non-Physician Primary Care Provider	Health	DORS Youth Transition Center	1125 Judson Rd Ste 153	Longview	903-803-0100
Ratio of Population to One Non-Physician Primary Care Provider	Health	Hope Cottage	120 W 5th St.	Tyler	903-352-9846
Ratio of Population to One Non-Physician Primary Care Provider	Health	Living Alternatives	P.O. Box 131466	Tyler	903-882-0182
Ratio of Population to One Non-Physician Primary Care Provider	Health	PATH	402 W. Front Street	Tyler	903-597-7284

Community Healthcare Facilities

Facility Name	Type	System	Street Address	City	State	ZIP
Allegiance Specialty Hospital Of Kilgore LLC	LT	Allegiance Health	1612 South Henderson	Kilgore	TX	75662
Baylor Scott & White Texas Spine & Joint Hospital	LT	Baylor Scott & White	1814 Roseland Boulevard	Tyler	TX	75701
Christus Good Shepherd Medical Center - Longview	ST	CHRISTUS	700 E Marshall Avenue	Longview	TX	75601
Christus Mother Frances Hospital - South Tyler	ST	CHRISTUS	8389 S Broadway Avenue	Tyler	TX	75703
Christus Mother Frances Hospital - Tyler	ST	CHRISTUS	800 East Dawson	Tyler	TX	75701
Christus Mother Frances Hospital - Winnsboro	ST	CHRISTUS	719 West Coke Road	Winnsboro	TX	75494
Christus Trinity Mother Frances Rehab Hosp, AFF With Healthsouth	LT	CHRISTUS	3131 Troup Highway	Tyler	TX	75701
Complete Emergency Care Momentum LLC	ED	Complete Care	5011 Troup Hwy #100	Tyler	TX	75707
East Texas Medical Center	ST	East Texas Medical Center	1000 South Beckham	Tyler	TX	75701
East Texas Medical Center - Quitman	ST	East Texas Medical Center	117 N Winnsboro Street	Quitman	TX	75783
East Texas Medical Center Behavioral Health Center	PSY	East Texas Medical Center	4101 University Boulevard	Tyler	TX	75701
East Texas Medical Center Rehabilitation Hospital	LT	East Texas Medical Center	701 Olympic Plaza Circle	Tyler	TX	75701
East Texas Medical Center Specialty Hospital	LT	East Texas Medical Center	1000 South Beckham 5th Floor	Tyler	TX	75701
Excel ER - Longview	ED	Excel ER	120 East Loop 281	Longview	TX	75605

Facility Name	Type	System	Street Address	City	State	ZIP
Hospitality Health ER	ED	Hospitality Health	3111 McCann Road	Longview	TX	75605
Hospitality Health ER	ED	Hospitality Health	3943 Old Jacksonville Highway	Tyler	TX	75701
Longview Regional Medical Center	ST	Community Health Sys	2901 North Fourth Street	Longview	TX	75605
Magnolia Behavioral Hospital Of East Texas	PSY	Oglethorpe	22 Bermuda Lane	Longview	TX	75605
Oceans Behavioral Hospital Of Longview	PSY	Oceans Healthcare	615 Clinic Drive	Longview	TX	75605
Select Specialty Hospital-Longview, Inc.	LT	Select Medical Corp	700 East Marshall Avenue 1st And Ground Floors	Longview	TX	75601
The University Of Texas Health Center At Tyler	ST	TX Dept of Health	11937 US Highway 271	Tyler	TX	75708
Tyler Complete Care	ED	Complete Care	1809 Capital Dr	Tyler	TX	75701
Tyler Continue Care Hospital	LT	Freestanding	800 E Dawson 4th Floor	Tyler	TX	75701

**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)[11]

County Name	HPSA ID	HPSA Name	HPSA Discipline Class	Designation Type
Gregg	14899948C5	Longview Wellness Center	Primary Care	Federally Qualified Health Center
Gregg	14899948H6	Special Health Resources of Texas	Primary Care	Federally Qualified Health Center
Gregg	64899948H9	Longview Wellness Center	Dental Health	Federally Qualified Health Center
Gregg	64899948L3	Special Health Resources of Texas	Dental Health	Federally Qualified Health Center
Gregg	748999484J	Longview Wellness Center	Mental Health	Federally Qualified Health Center
Gregg	748999484Y	Special Health Resources of Texas	Mental Health	Federally Qualified Health Center
Smith	7481729946	Low Income - Smith County	Mental Health	Low Income Population HPSA
Smith	148999487K	Tyler Family Circle of Care	Primary Care	Federally Qualified Health Center
Smith	648999480T	Tyler Family Circle of Care	Dental Health	Federally Qualified Health Center
Smith	748999483G	Tyler Family Circle of Care	Mental Health	Federally Qualified Health Center
Wood	1482424775	Clyde M. Johnston Unit	Primary Care	Correctional Facility
Wood	6486858605	CF-Clyde M Johnston Unit	Dental Health	Correctional Facility

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

County Name	HPSA ID	HPSA Name	HPSA Discipline Class	Designation Type
Wood	7484980333	CF-Clyde M Johnston Unit	Mental Health	Correctional Facility
Wood	7487858601	Wood County	Mental Health	Geographic HPSA
Wood	14899948G8	Etmc First Physician Health Clinic	Primary Care	Rural Health Clinic
Wood	64899948K2	Etmc First Physician Health Clinic	Dental Health	Rural Health Clinic
Wood	74899948G9	Etmc First Physician Health Clinic	Mental Health	Rural Health Clinic

Medically Underserved Areas and Populations (MUA/P)[12]

County Name	MUA/P Source Identification Number	Service Area Name	Designation Type	Rural Status
Gregg	3460	Pov - Gladewater Service Area	MUA – Governor's Exception	Non-Rural
Gregg	3459	Pov - Southeast Longview Service Area	MUA – Governor's Exception	Non-Rural
Smith	7065	Northern Tyler	Medically Underserved Area	Non-Rural
Smith	3478	Smith Service Area	Medically Underserved Area	Non-Rural
Smith	3422	Troup Service Area	Medically Underserved Area	Non-Rural
Wood	3447	Wood County	Medically Underserved Area	Rural

[12] 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

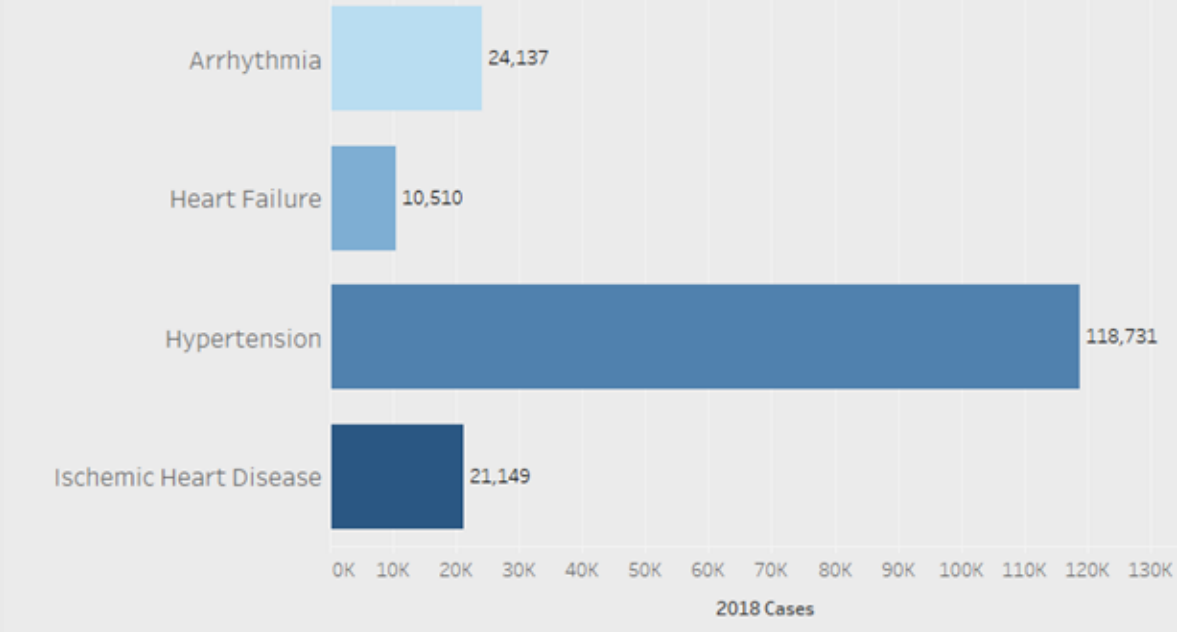
Tyler Health Community		
Public Health Indicator	Category	Indicator Definition
Ratio of Population to one Mental Health Provider	Mental Health	2017 Ratio of Population to Mental Health Providers
Motor Vehicle Crash Mortality Rate	Injury & Death	2010-2016 Number of Motor Vehicle Crash Deaths per 100,000 Population
Homicides	Population	2010-2016 Number of Deaths Due to Homicide, Defined as ICD-10 Codes X85-Y09, per 100,000 Population
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
Death rate due to firearms	Injury & Death	2012-2016 number of deaths due to firearms, per 100,000 population.
Ratio of Population to One Dentist	Access To Care	2016 Ratio of Population to Dentists
Civilian veteran population 18+	Population	2012 Percent of population 18 years and over - Civilian veterans
Number of deaths due to injury	Injury & Death	2010-2016 Number of Motor Vehicle Crash Deaths per 100,000 Population
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)
Population with Adequate Access to Locations for Physical Activity	Environment	2010 & 2016 Percentage of Population with Adequate Access to Locations for Physical Activity
Elderly isolation. 65+ Householder living alone	Environment	2012 Percent of Non-family households - Householder living alone - 65 years and over
Child Mortality Rate	Injury & Death	2013-2016 Number of Deaths Among Children under Age 18 per 100,000
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)
Perforated Appendix Admission: Adult (Risk-Adjusted-Rate per 100 Admissions for Appendicitis)	Preventable Hospitalizations	2016 Number Observed / Adult Population Age 18 and older

Tyler Health Community		
Public Health Indicator	Category	Indicator Definition
Accidental poisoning deaths where opioids were involved	Mental Health	Annual Estimates of Accidental Poisoning Deaths where Opioids Were Involved Among Resident Population: April 1, 2010 to July 1, 2017.
Teen Birth Rate per 1,000 Female Population, Ages 15-19	Health Behaviors	2010-2016 Number of Births to Females Ages 15-19 per 1,000 Females in a County.
Cancer Incidence - Lung	Conditions/Diseases	2011-2015 Age-Adjusted Lung & Bronchus Cancer Incidence Rate Cases per 100,000.
Infant Mortality Rate	Injury & Death	2010-2016 Number of All Infant Deaths (Within 1 year), per 1,000 Live Births
Sexually Transmitted Infection Incidence	Health Behaviors	2015 Number of Newly Diagnosed Chlamydia Cases per 100,000 Population
No vehicle available	Environment	2017 Households with no vehicle available (percent of households)
Food Insecure	Environment	2015 Percentage of Population Who Lack Adequate Access to Food During the Past Year
Cancer Incidence - Prostate	Conditions/Diseases	2011-2015 Age-Adjusted Prostate Cancer Incidence Rate Cases per 100,000.
Ratio of Population to One Non-Physician Primary Care Provider	Access To Care	2017 Ratio of Population to Primary Care Providers Other than Physicians
Unemployment	Population	2016 Percentage of Population Ages 16 and Older Unemployed but Seeking Work
COPD 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

Appendix E: Watson Health Community Data

Watson Health Heart Disease Estimates identified hypertension as the most prevalent heart disease diagnoses; there were over 118,000 estimated cases in the community overall. The city of Tyler had the most estimated cases of each heart disease type driven primarily by population size. The 75497 ZIP code of Yantis had the highest estimated prevalence rates for each type of heart disease: Arrhythmia (807 cases per 10,000 population), Heart Failure (401 cases per 10,000 population), Hypertension (3,502 cases per 10,000 population), and Ischemic Heart Disease (905 cases per 10,000 population).

2018 Estimated Heart Disease Cases



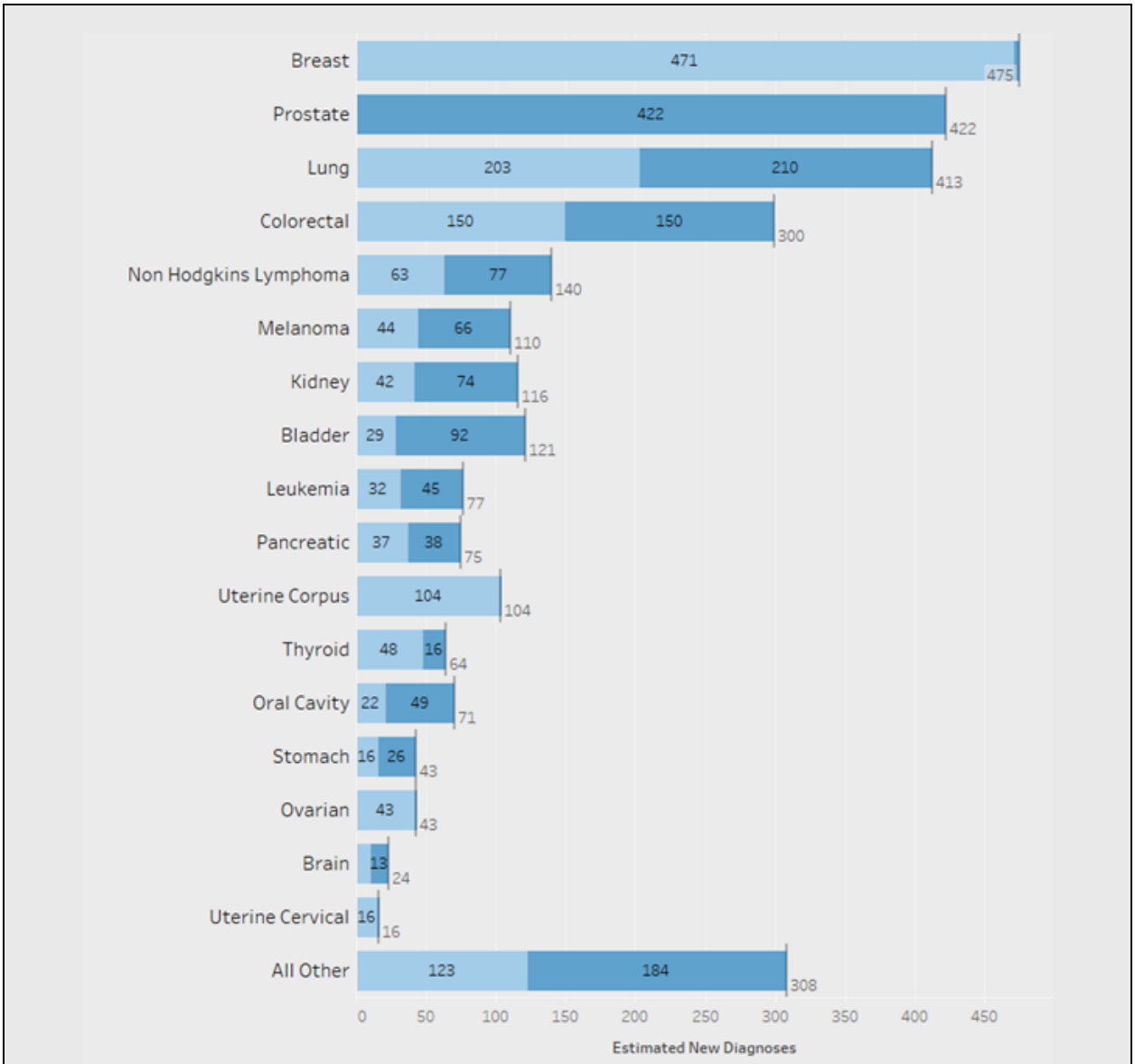
Bar chart shows total number of 2018 Estimated Heart Disease cases for each of four types: arrhythmia, heart failure, hypertension, and ischemic heart disease

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 melanoma, thyroid, pancreatic, and bladder; based on both population changes and disease rates. Most new cancer cases in 2018 were estimated to be 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	121	136	12.4%
Brain	24	25	4.2%
Breast	475	513	8.0%
Colorectal	300	281	-6.3%
Kidney	116	128	10.3%
Leukemia	77	85	10.4%
Lung	413	442	7.0%
Melanoma	110	125	13.6%
Non Hodgkins Lymphoma	140	154	10.0%
Oral Cavity	71	78	9.9%
Ovarian	43	46	7.0%
Pancreatic	75	85	13.3%
Prostate	422	423	0.2%
Stomach	43	45	4.7%
Thyroid	64	73	14.1%
Uterine Cervical	16	16	0.0%
Uterine Corpus	104	114	9.6%
All Other	308	340	10.4%
Grand Total	2,920	3,108	6.4%

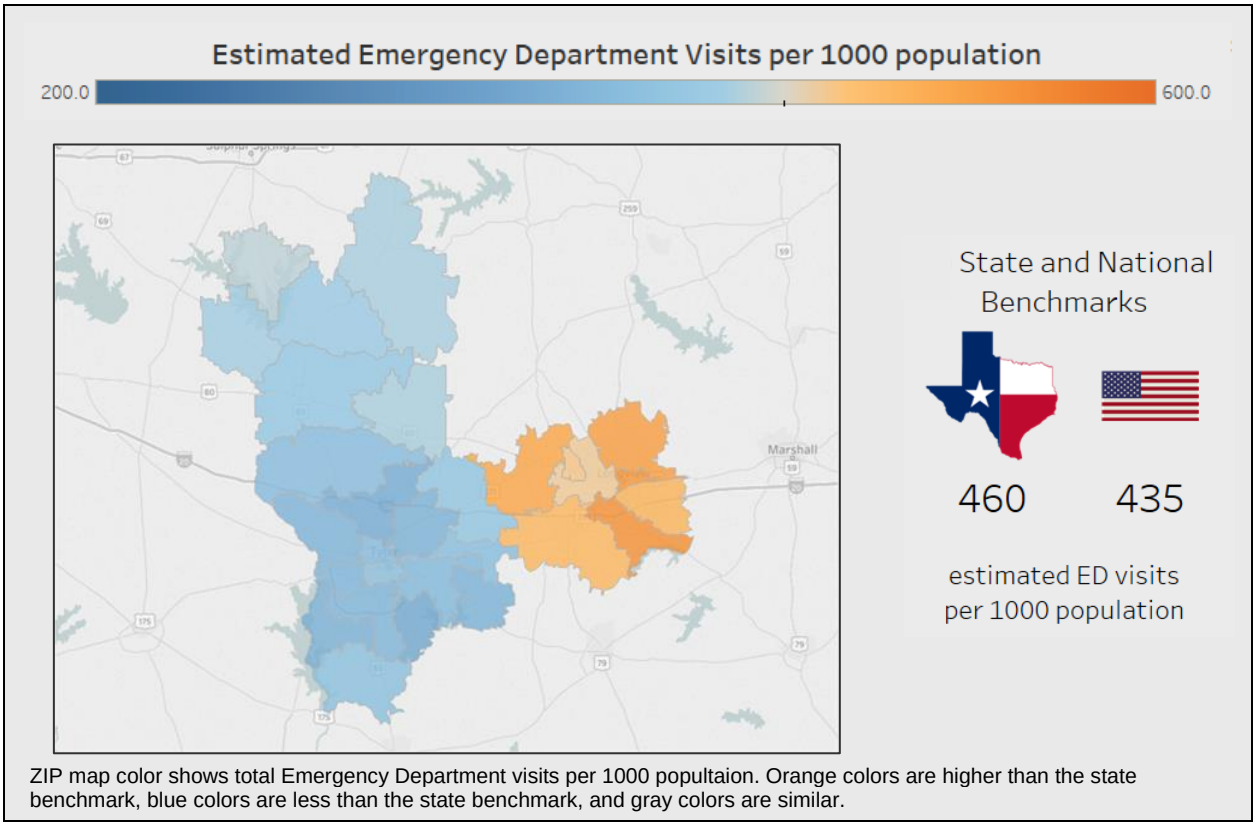
Source: IBM Watson Health, 2018

Based on population characteristics and regional utilization rates, Watson Health projected all emergency department (ED) visits in this community to increase by 6.9% over the next 5 years. The highest estimated ED use rates were in the ZIP codes of Longview; 502.6 to 548.1 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 3.6% over the next five years in this community.

Estimated 2018 Emergency Department Visit Rate

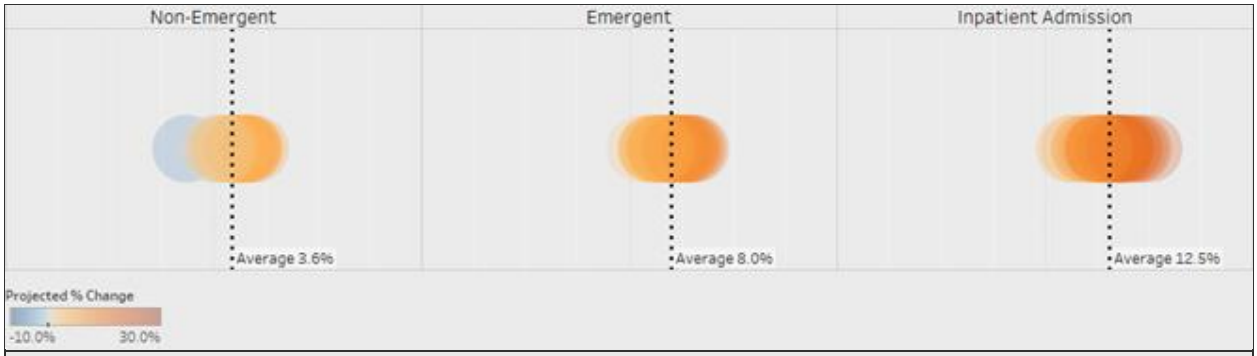


ZIP map color shows total Emergency Department visits per 1000 popultaion. Orange colors are higher than the state benchmark, blue colors are less than the state benchmark, and gray colors are similar.

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

Baylor Scott & White Texas Joint and Spine Hospital – Tyler

Evaluation of Prior CHNA Implementation

Baylor Scott & White Texas Spine & Joint Hospital is a newly acquired hospital facility and became subject to IRC Section 501(r) in August 2017. As a newly acquired hospital facility, this is the first CHNA conducted by the hospital facility that will be completed by June 30, 2019. A subsequent implementation strategy will be adopted by November 15, 2019. Because no previous CHNA or Implementation Strategy was required, or performed, there is no evaluation of a prior implementation strategy in this CHNA as described in Treas. Reg. 1.501(r)-3(b)(6)(F). An evaluation of the impact of any actions taken as outlined the implementation strategy included as part of the hospital's next community health needs assessment due to be completed by June 30, 2020.