Baylor Scott & White Health
Community Health Needs Assessment

Brazos Valley Health Community

Baylor Scott & White Medical Center - Brenham
Baylor Scott & White Medical Center - College Station

Approved by: Baylor Scott & White Health – Central Texas Operating, Policy and Procedure Board on May 17, 2019
Baylor Scott & White Medical Center – Brenham Board of Directors on April 25, 2019

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

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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.


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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 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. Two hospitals with overlapping communities have collaborated to conduct this joint community health needs assessment. This joint community health needs assessment applies to the following BSWH hospital facilities:

- Baylor Scott & White Medical Center – Brenham
- Baylor Scott & White Medical Center – College Station

For the 2019 assessment, the community served by these hospital facilities includes Brazos, Washington, Grimes, Burleson, and Waller counties. BSWH has at least one hospital facility or a provider-based clinic in each of these counties and together they comprise where the majority of the hospitals' admitted patients live. These hospital facilities collaborated to conduct a joint CHNA report in accordance with Treasury Regulations and 501(r) of the Internal Revenue Code. All of the collaborating hospital facilities included in this joint CHNA report define their community, for purposes of the CHNA report, to be the same.

The Hospital facilities 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, focus groups and key informant interviews were conducted. 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 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 that 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	Disconnected youth	SDH - Social Isolation
2	Elderly isolation: 65+ Householder Living Alone	SDH - Social Isolation
3	Ratio of Population to One Primary Care Physician	Access to Care
4	Ratio of Population to One Mental Health Provider	Mental Health
5	Ratio of Population to One Non-Physician Primary Care Provider	Access to Care
6	Ratio of Population to One Dentist	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 2016 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

BSWH 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.

Collaboration

BSWH owns and operates multiple individually licensed hospital facilities serving the residents of north and central Texas. Two hospital facilities with overlapping communities have collaborated to conduct this joint community health needs assessment. This joint community health needs assessment applies to the following BSWH hospital facilities:

- Baylor Scott & White Medical Center – Brenham
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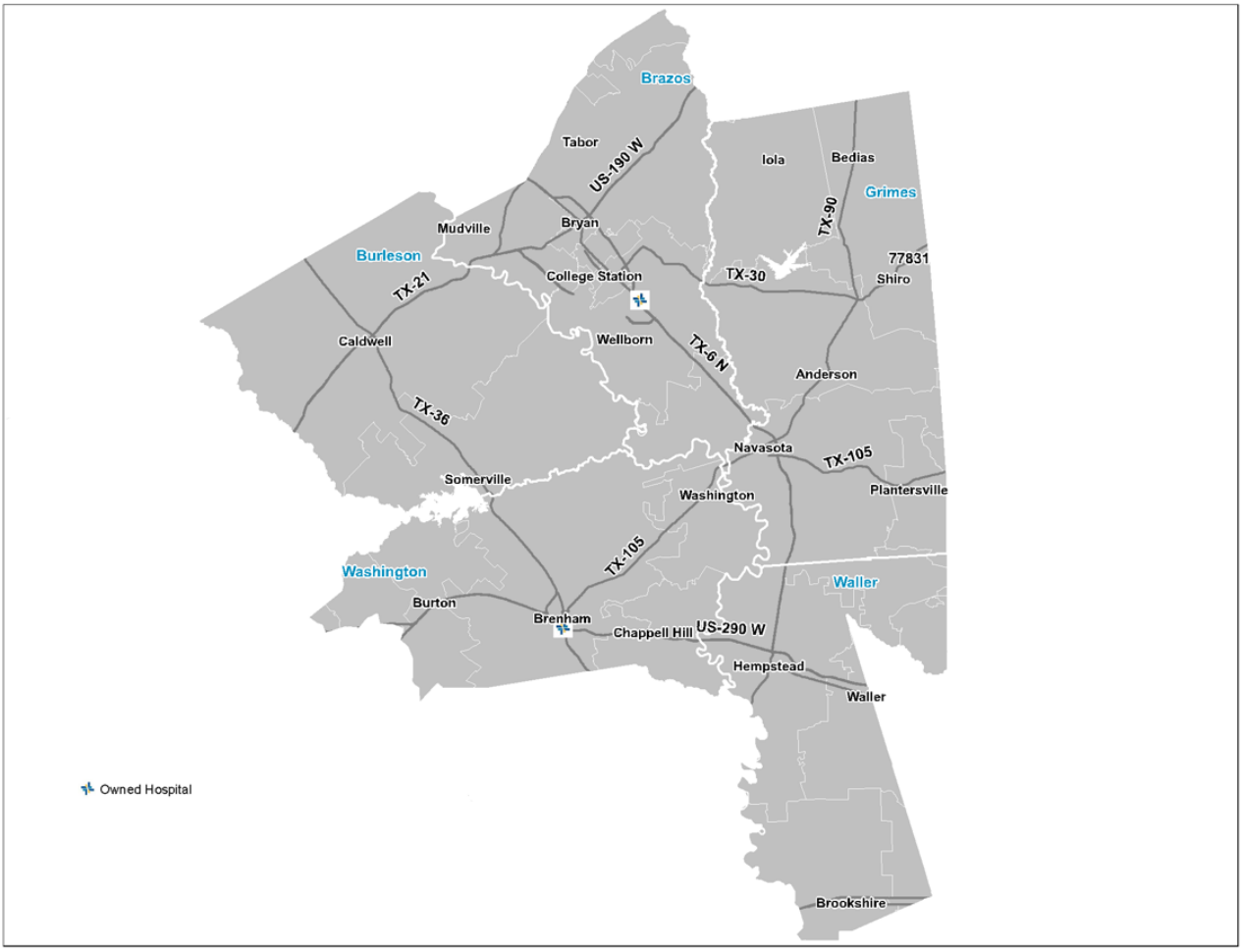
Community Served Definition

The community served by the collaborating BSWH hospital facilities includes Brazos, Washington, Grimes, Burleson and Waller counties. Baylor Scott & White has at least one hospital facility or provider-based clinic in each of these counties, and together they comprise where the majority of the hospitals' admitted patients live.

BSWH Community Health Needs Assessment
Brazos Valley 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**.

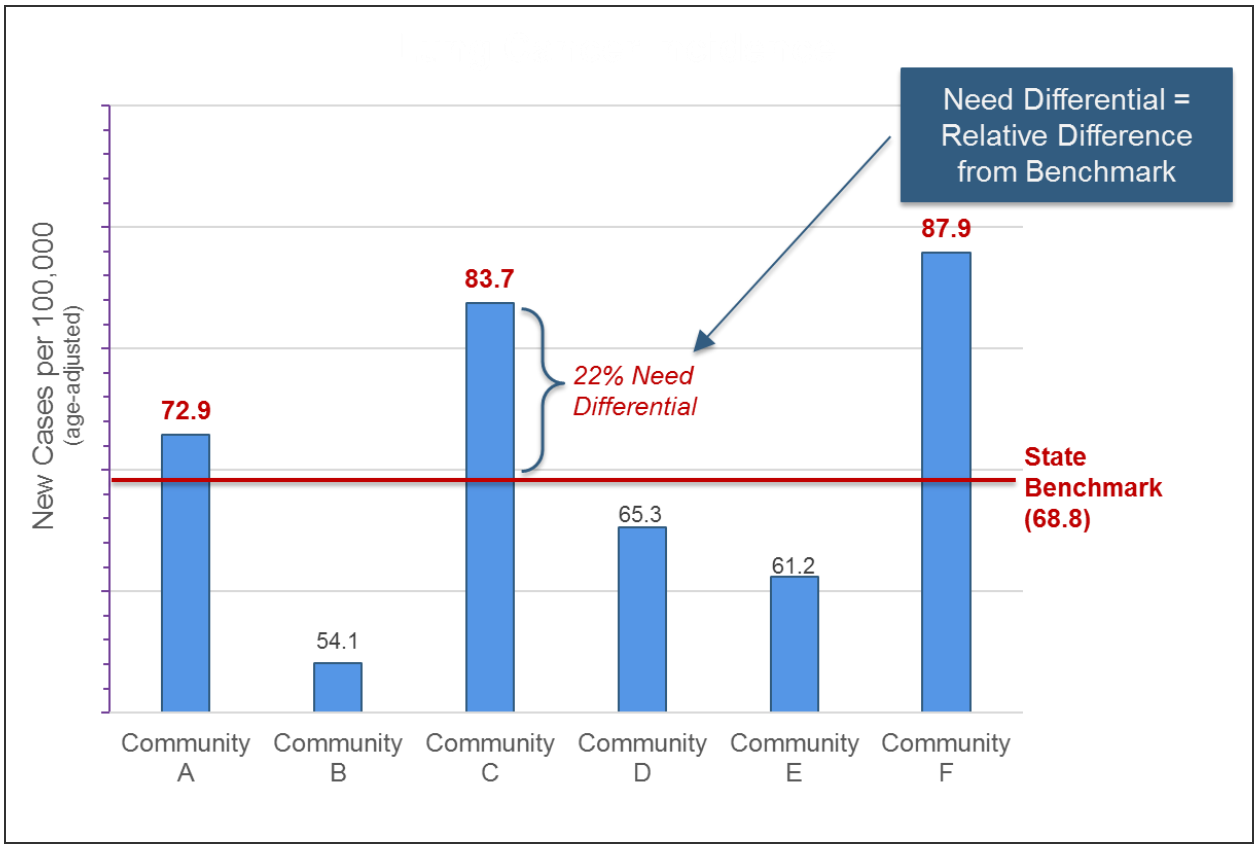
A benchmark analysis conducted for each indicator collected for the community served, determined which public health indicators demonstrated a community health need from a quantitative perspective. Benchmark health indicators collected included (when available); overall U.S. values, State of Texas values, 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, focus groups and key informant interviews were conducted to take into account the input of persons representing the broad interests of the community served. The focus groups and 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.

Focus groups familiarized participants with the CHNA process and solicited input to understand health needs from the community's perspective. Focus groups, formatted for individual as well as small group feedback, helped identify barriers and social determinants influencing the community's health needs. Barriers and social determinants were new topics added to the 2019 community input sessions.

Watson Health conducted key informant interviews for the community served by the hospital facilities. 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 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 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 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
Agrilife Extension - Washington County							
Baylor Scott & White Health	X	X	X	X	X		
Brazos Maternal & Child Health Clinic, Inc (The Prenatal Clinic)		X	X				
Brazos Valley Food Bank, Inc.		X	X	X	X		X
Brazos Valley Rehabilitation Center		X	X	X			X
Brenham Clinic	X	X	X	X	X		X
Bryan ISD		X	X		X		
Central Texas Catholic Charities	X	X	X	X	X	X	X
City of Bryan					X		
College Station ISD	X	X	X	X	X		
Community Health Clinic		X	X	X	X		
Community Wellness and Diabetes Center		X		X			X
Faith Mission Brenham	X	X	X	X	X		
Family Promise of Bryan-College Station		X	X		X		
Germania Insurance Company		X	X	X	X		
MEMdata	X						

Participant Organization Name	Public Health	Medically Under-served	Low-income	Chronic Disease Needs	Minority Populations	Governmental Public --Health Dept.	Public Health Knowledge/ --Expertise
MHMR Authority of Brazos Valley	X	X	X	X		X	X
Scotty's House - Children's Advocacy Center	X						
Sexual Assault Resource Center	X	X	X		X		
Texas Department of State Health Services - HSR 7	X					X	X
United Way of Greater Houston-Waller Center		X	X	X	X		
United Way of The Brazos Valley, Inc.	X	X	X	X	X		

Note: multiple persons from the same organization may have participated

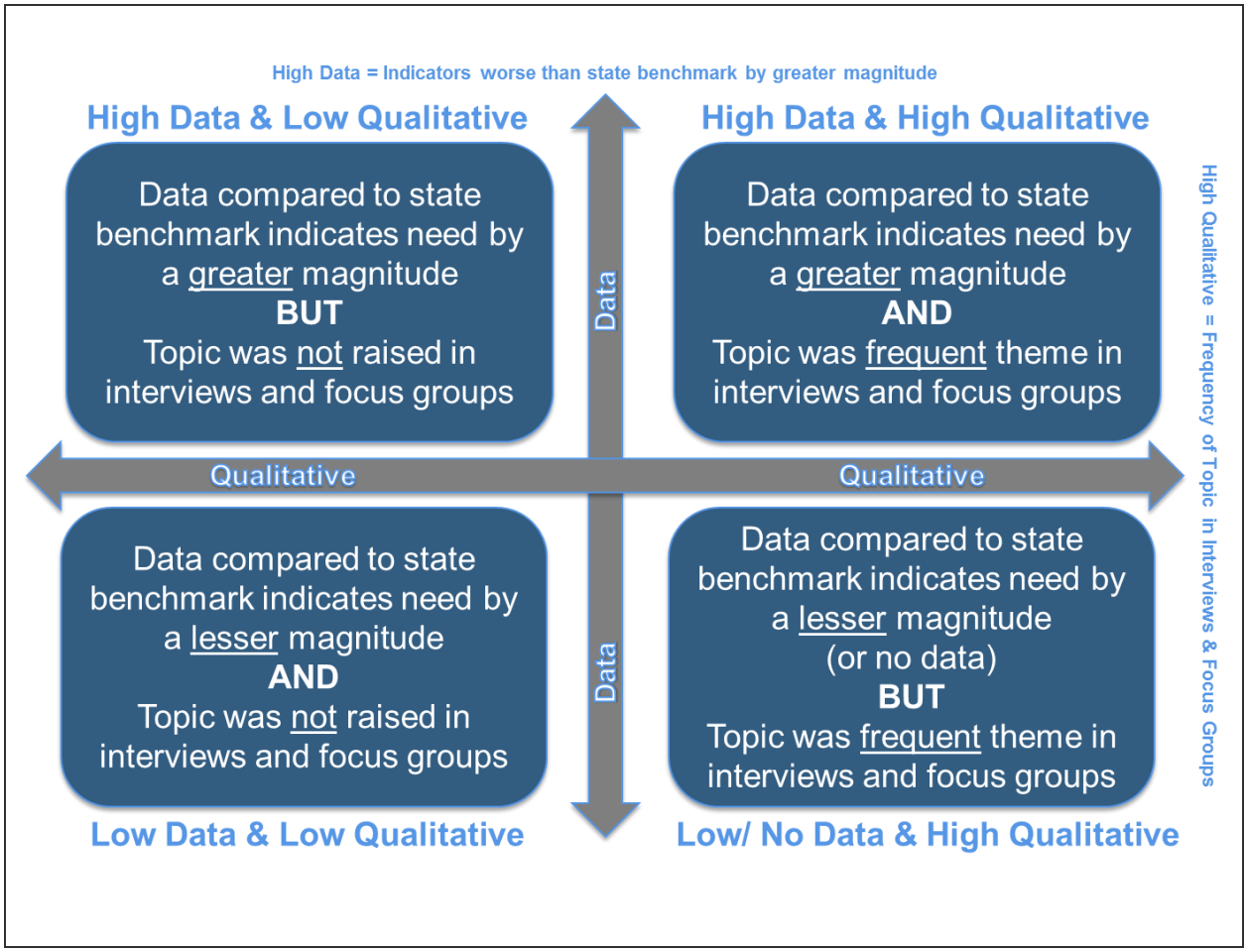
In addition to soliciting input from public health and various interests of the community, the hospital facilities were also required to consider written input received on their most recently conducted CHNA and subsequent implementation strategies. The assessment is available to receive public comment 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.

Approach to Identify and Prioritize Significant Health Needs

In a session held with hospital clinical leadership and/or other community leaders on November 27, 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 and were presented 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, six (6) 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 focus groups conducted for this community:

1. Community Strength: extent to which initiatives that address the health issue can build on community existing strengths and resources
2. Drive/Will of the Community: the issue is important to the community and there is a willingness to address the issue; will be able to convene resources around initiatives
3. Vulnerable Populations: there is a high need among vulnerable populations and/or vulnerable populations are adversely impacted

Through discussion and consensus, the group rated each of the six (6) 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. For the scores that resulted in a tie, the need with the greater negative difference from the benchmark was 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**. In addition, an interactive asset map of various resources identified for all BSWH communities is located at: **BSWHealth.com/CommunityNeeds**

Brazos Valley Health Community CHNA

Demographic and Socioeconomic Summary

According to population statistics, the community served is similar to Texas in terms of projected population growth; both outpace the country. The median age is older than Texas overall but younger than the United States. Median income is below both the state and the country. The community served has fewer Medicaid beneficiaries and more uninsured individuals than Texas and the U.S...

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

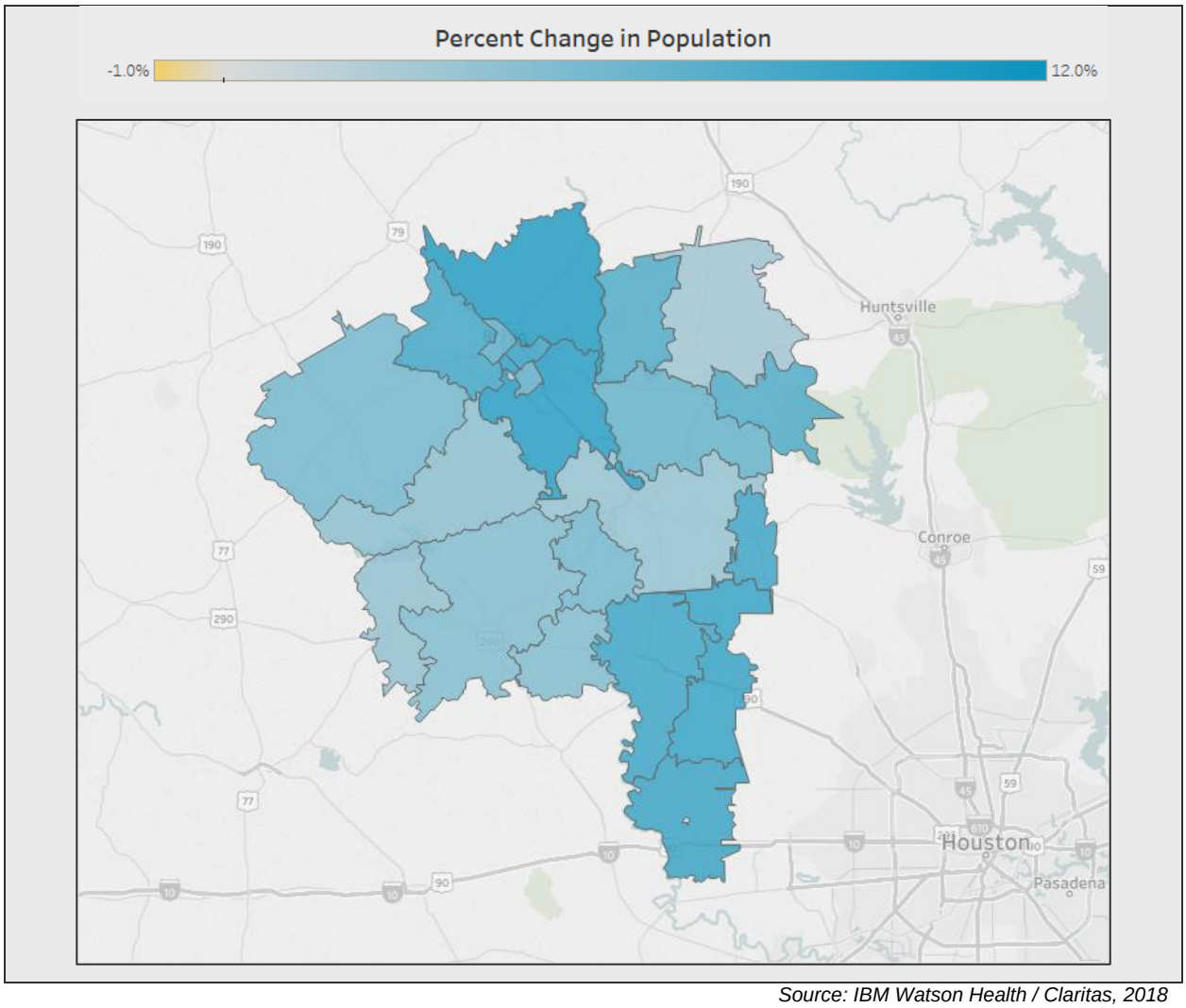
Geography		Benchmarks		Community Served
		United States	Texas	Brazos Valley Health Community
Total Current Population		326,533,070	28,531,631	358,396
5 Yr Projected Population Change		3.5%	7.1%	7.5%
Median Age		42.0	38.9	36.7
Population 0-17		22.6%	25.9%	21.7%
Population 65+		15.9%	12.6%	12.0%
Women Age 15-44		19.6%	20.6%	24.1%
Non-White Population		30.0%	32.2%	30.9%
Hispanic Population		18.2%	39.4%	25.3%
Insurance Coverage	Uninsured	9.4%	19.0%	29.5%
	Medicaid	14.9%	13.4%	10.6%
	Private Market	9.6%	9.9%	10.4%
	Medicare	16.1%	12.5%	11.6%
	Employer	45.9%	45.3%	37.9%
Median HH Income		$61,372	$60,397	$53,161
Limited English		26.2%	39.9%	26.6%
No High School Diploma		7.4%	8.7%	8.9%
Unemployed		6.8%	5.9%	5.0%

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

The community served expects to grow 7.5% by 2023, an increase by more than 27,000 people. The 7.5% projected population growth is slightly higher 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 expected to experience the most growth in five years are:

- 77845 College Station (Southside) – 6,165 people
- 77840 College Station (A&M) – 3,985 people

2018 - 2023 Total Population Projected Change by ZIP Code

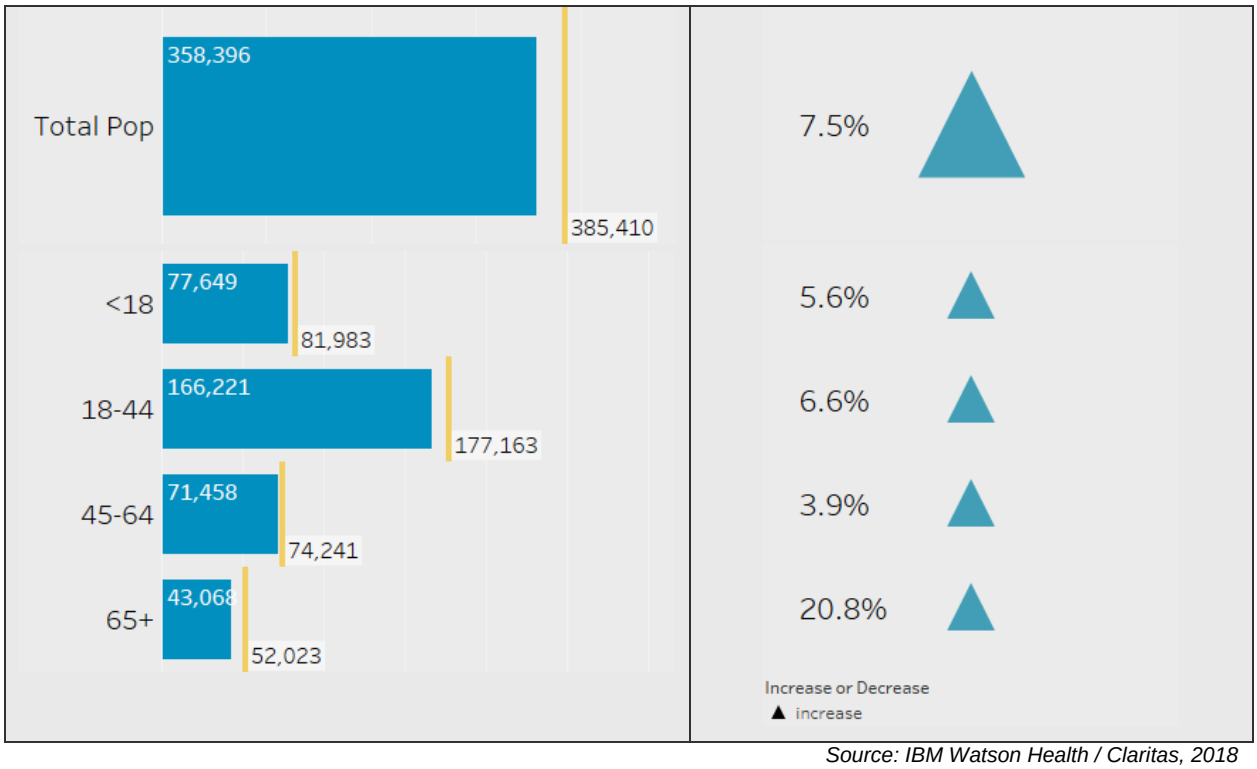


Source: IBM Watson Health / Claritas, 2018

The community's population skewed younger with 46.0% of the population ages 18-44 and 21.2% under age 18. The largest cohort (18-44) is expected to grow by 10,942 people by 2023. The age 65 plus cohort was the smallest but is expected to experience the fastest growth (20.8%) over the next five years, adding almost as many seniors to the community (8,955). 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*

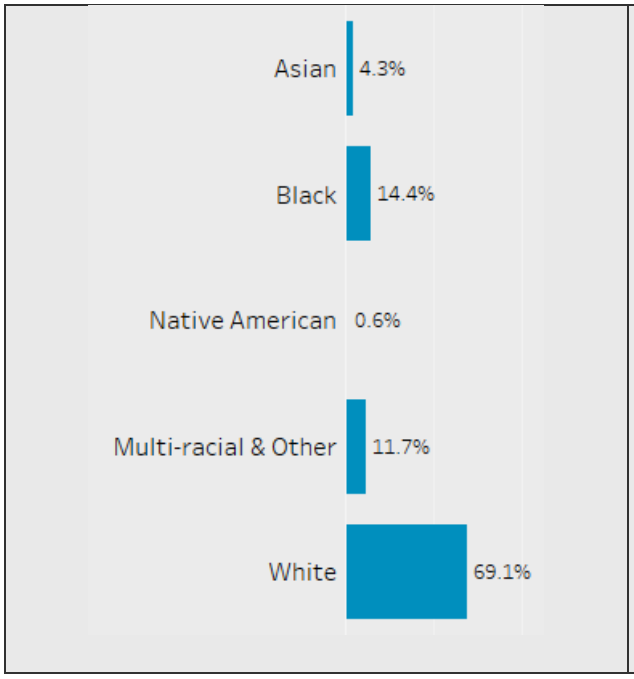


Source: IBM Watson Health / Claritas, 2018

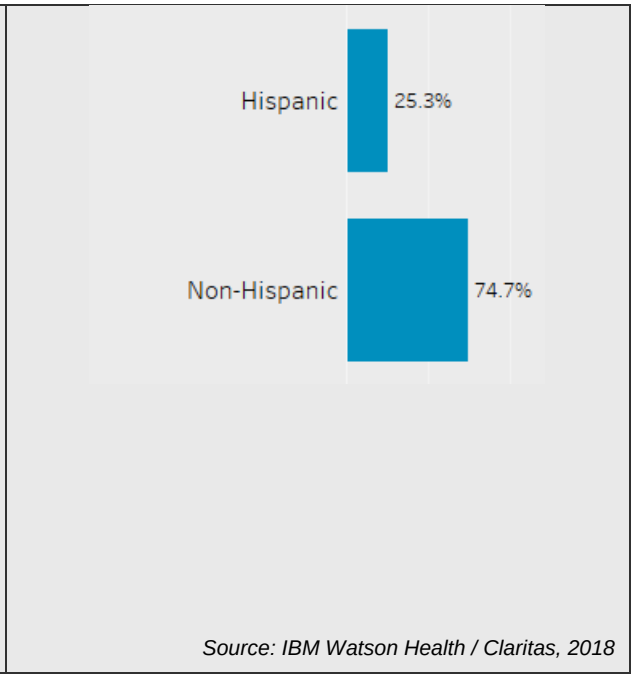
Population statistics are analyzed by race and by Hispanic ethnicity. The community was primarily white and non-Hispanic, but diversity in the community will increase due to the projected growth of minority populations over the next five years. The expected growth rate of the Hispanic population (all races) is over 13,000 people (14.4%) by 2023. The non-Hispanic white and black populations are expected to have the slowest growth (2.9% and 5.3% respectively) while the non-Hispanic Asian/Pacific Islander, multi-racial, and American Indian/Native American populations are expected to experience a total growth of 19.3% or 4,221 people in the next five years.

Population Distribution by Race and Ethnicity

2018 Population by Race

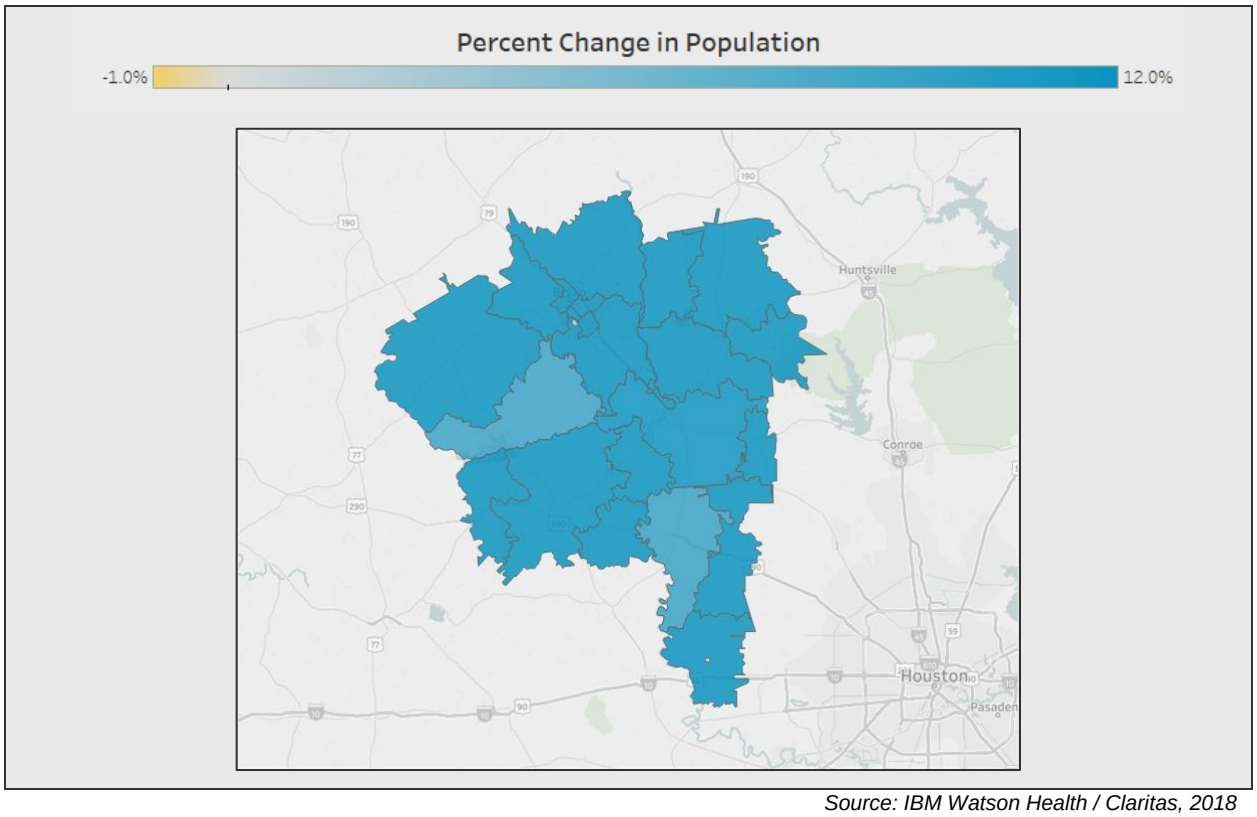


2018 Population by Ethnicity



Source: IBM Watson Health / Claritas, 2018

2018 - 2023 Hispanic Population Projected Change by ZIP Code

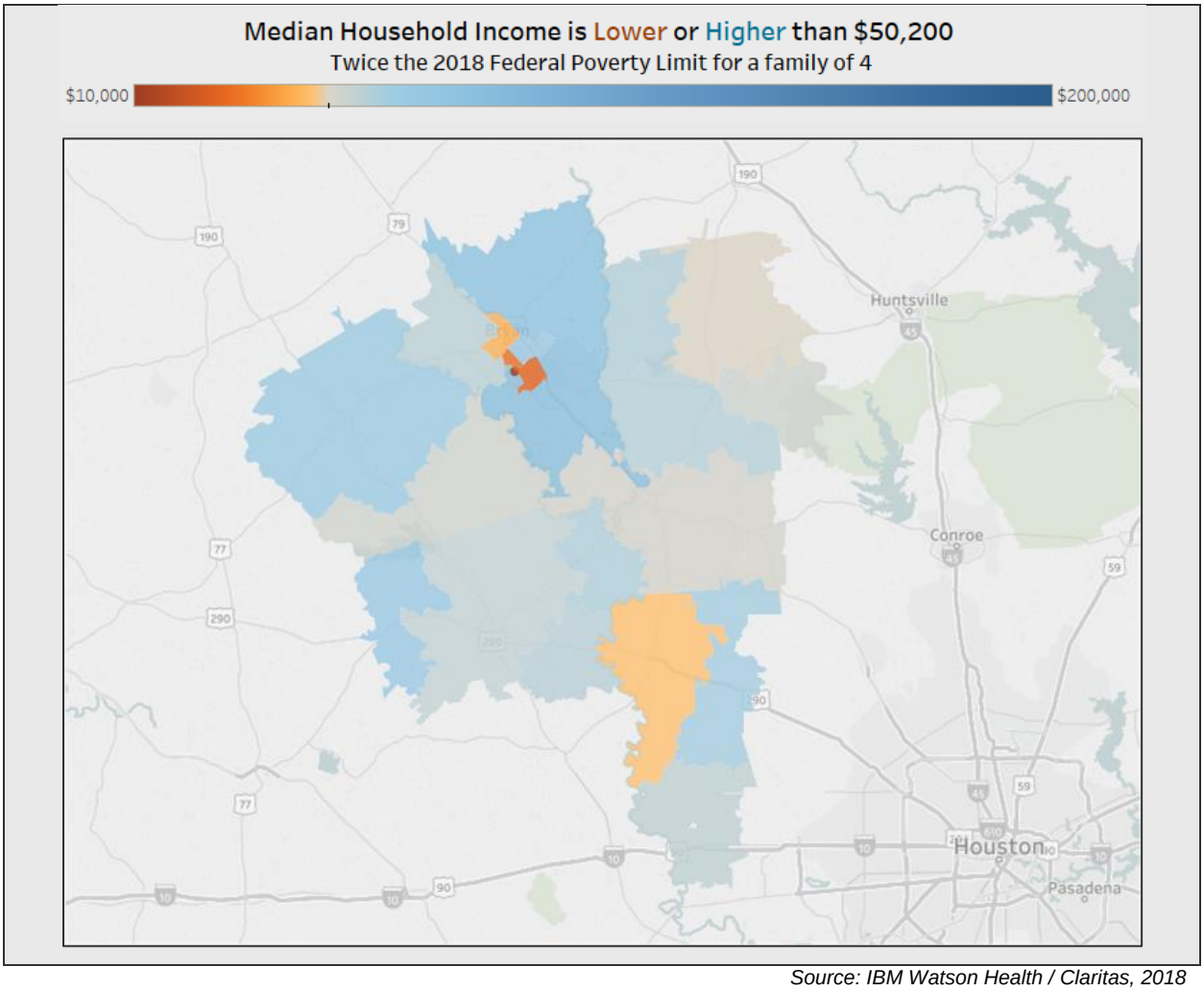


Source: IBM Watson Health / Claritas, 2018

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 $26,736 for 77840 – College Station (A&M) to $81,106 for 77845 – College Station (Southside). There were five (5) ZIP Codes with median household incomes less than $50,200 – twice the 2018 Federal Poverty Limit for a family of four.

- 77840 College Station (A&M) – $26,736
- 77801 Bryan (Central) – $30,067
- 77803 Bryan (Central) – $43,411
- 77445 Hempstead – $46,640
- 77831 Bedias (north Grimes County) – $50,096

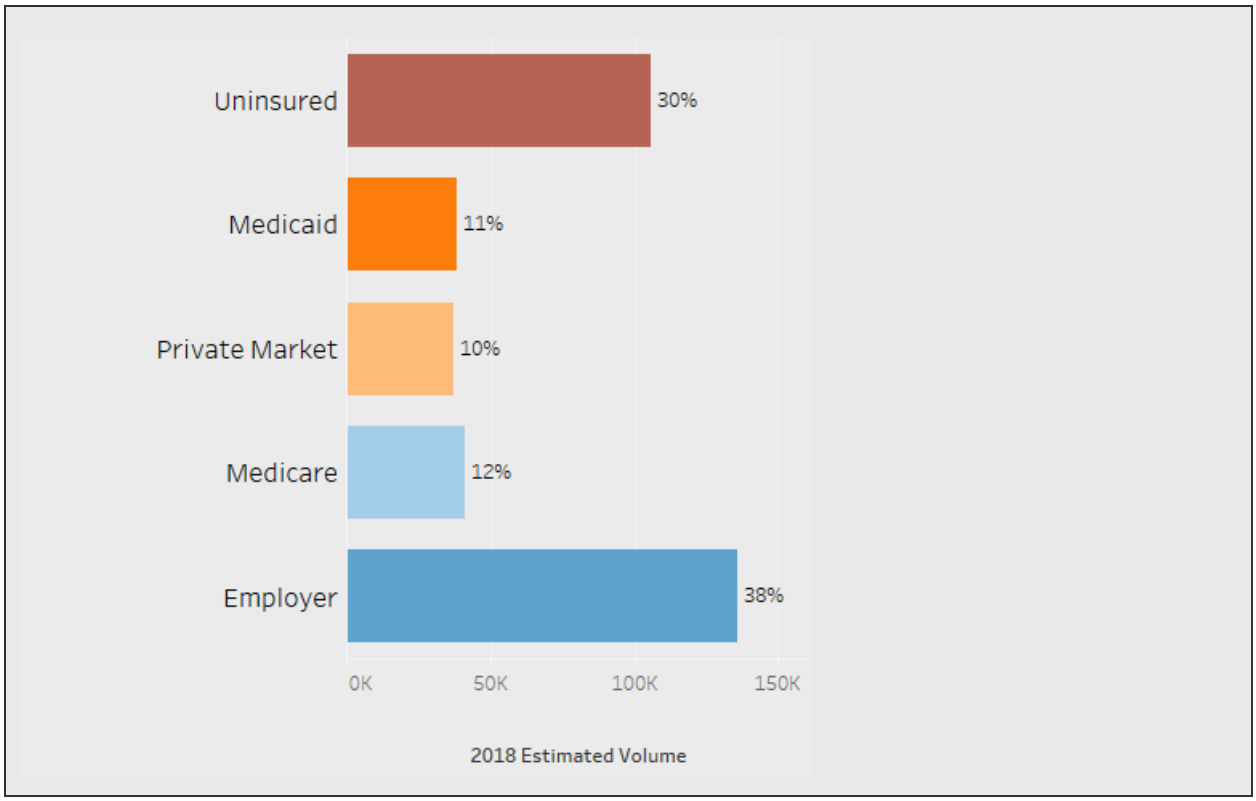
2018 Median Household Income by ZIP Code



Source: IBM Watson Health / Claritas, 2018

A majority of the population (38%) were insured through employer sponsored health coverage, closely followed by those without health insurance (30%). The remainder of the population was fairly equally divided between Medicaid, Medicare, 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 eighteen (18) Health Professional Shortage Areas and five (5) 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.

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

Health Professional Shortage Areas and Medically Underserved Areas and Populations

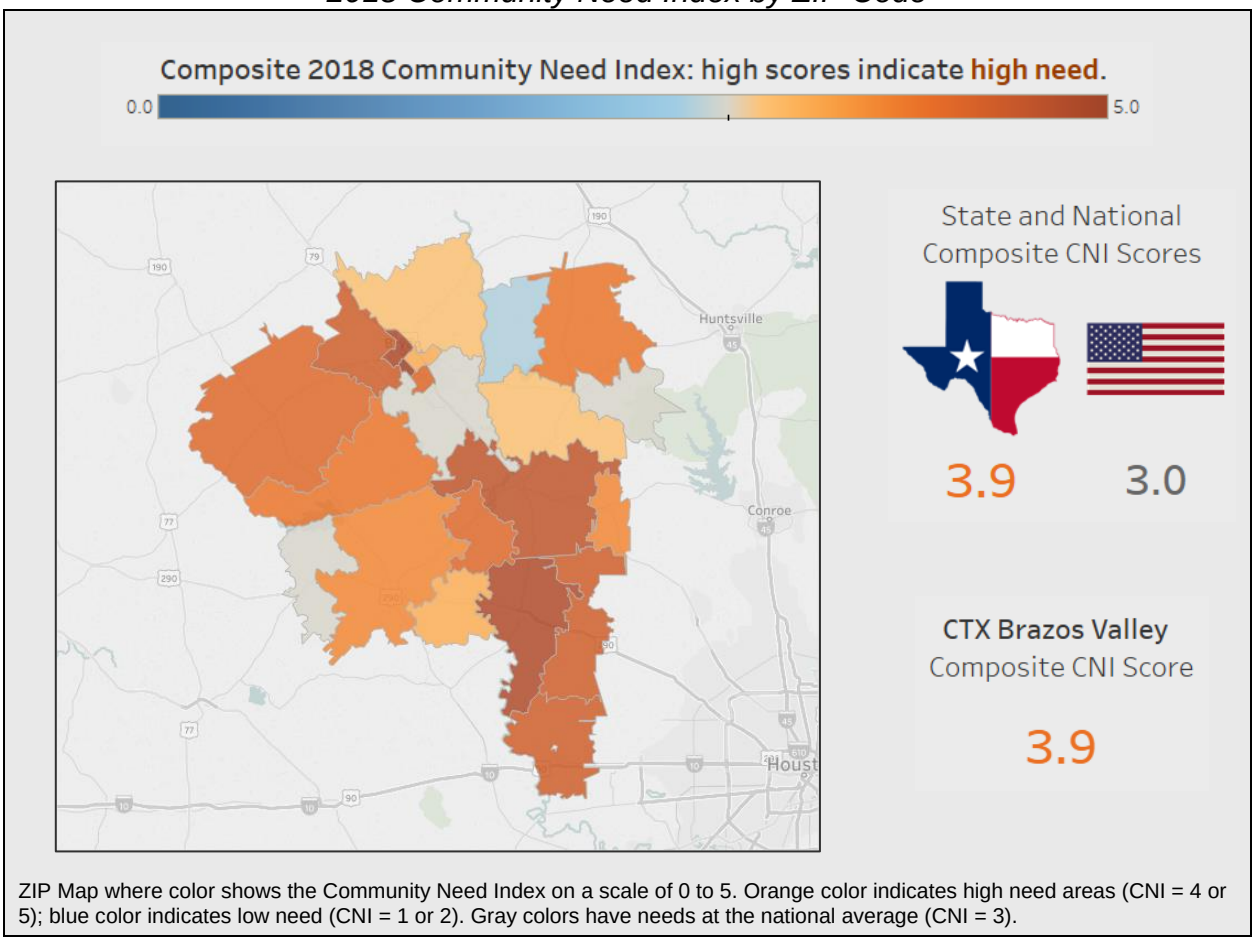
	Health Professional Shortage Areas (HPSA)				Medically Underserved Area/Population (MUA/P)
CTX Brazos Valley Health Community	Dental Health	Mental Health	Primary Care	Grand Total	MUA/P
Brazos	1	1	2	4	1
Burleson	1	1	1	3	1
Grimes	2	2	3	7	1
Waller		1	1	2	1
Washington		1	1	2	1
Total	**4**	**6**	**8**	**18**	**5**

Source: 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 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. In portions of the community (Bryan- Central, Hempstead, and Navasota) 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
Bryan	Bryan - Central	Brazos	77801	5.0
Bryan	Bryan - Central	Brazos	77803	4.8
Hempstead	Hempstead	Waller	77445	4.8
Navasota	Navasota	Grimes	77868	4.6
Brookshire	Brookshire	Waller	77423	4.4
Bryan	Bryan - Westside	Brazos	77807	4.4
Waller	Waller	Waller	77484	4.4
Caldwell	Caldwell	Burleson	77836	4.2
College Station	College Station - A&M	Brazos	77840	4.2
Washington	Brenham	Washington	77880	4.2
Bedias	North Grimes County	Grimes	77831	4.0
Somerville	Somerville	Burleson	77879	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**.

Focus Groups & Interviews

In the focus group sessions and 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 two focus group sessions with a total of 23 participants and five (5) interviews were conducted July through September 2018.

For the community served, the top health needs identified in these discussions included:

- Access to mental health services
- Cost of healthcare and cost transparency
- Income gap
- Transportation
- Lack of motivation around health
- Food culture/lifestyle changes
- Lack of a licensed clinical social worker for care coordination and support

There were two focus groups in the Brazos Valley Health Community that reflected the diverse makeup of the defined geography. Participants described Brenham as a very tightknit town with rural outskirts, whereas the description for Bryan and College Station was as a growing community with diversity in ethnic background, politics, and economics. An increasing number of retirees, students, and families moved into the area for employment, and the area around Texas A&M University was highly student focused. The description of the entire health community was increasingly diverse and contains a divided population, ethnically and socioeconomically. Major health challenges identified

stemmed from the growth of the community and the dichotomy of being both rural and urban, with different infrastructure and access issues.

The top health needs of the community comprised many areas, including access to health care, health literacy and lifestyle, environmental factors, and personal barriers to seeking and receiving care. The population lacked access to care due to insufficient public transportation, insurance, and availability of providers. Health literacy and environmental factors contributed to poor health in the community. Behavioral healthcare was stigmatized and insufficient.

The Brenham area focus group emphasized that the area had no mass transit, and patients without a car were unable to get to healthcare appointments or have prescriptions filled. The Brenham participants also shared that many medical specialties were unavailable locally, and even the insured population found the distance to in-network providers prohibitive. Affordability and lack of insurance were issues for all regions of this health community, and significant barriers that prevented people from getting care.

The College Station focus group noted a high prevalence of chronic illness in the community, especially in the low-income population. Participants highlighted diabetes, hypertension, and obesity as high need areas. The community faced a variety of access to care issues, perhaps contributing to the high prevalence of chronic illness. The group noted that physician shortages in the area, especially in the rural parts of the community, were primarily due to challenges in recruiting and retaining top talent. Types of providers that were particularly lacking included mental/behavioral health, maternal, and child health specialists. In addition to specialty care gaps, there were gaps in coverage for primary care. The participants suggested additional bilingual providers and translation services will help meet the needs of this growing population.

Dental and vision care were unaffordable for the uninsured population. Participants noted there were not enough local pediatric providers, especially specialists. The population was aging, with more resources toward serving the senior population, resulting in fewer resources for pediatric patients.

Participants referred to the mental health care system as “broken.” The community had few resources for those experiencing a mental health crisis. Access to pediatric mental health care was especially limited. Available services focused on treating acute conditions and crisis management, leaving a gap in counseling and preventive services. There was a lack of care coordination between primary care providers and mental health professionals that led to poor follow-up care and high rates of relapse.

The group discussed a variety of infrastructure issues faced by the community due to a lack of sidewalks for pedestrians and no public transit options, this leads to social isolation and limits access to services. Patients were reliant on having a vehicle to access healthcare resources and those that lacked vehicles had fewer options. The community had few affordable recreation and exercise facilities and low availability of affordable healthy food options. The group believed these environmental factors contributed to the prevalence of chronic illness in the community

In addition to access issues, the participants commented there were a variety of personal barriers that prevented some patients from seeking and receiving healthcare. Health literacy in the community was low due to lack of health education and under-utilization of

available educational resources according to the group. Motivation to seek care was at times low for patients who prioritized basic needs over preventive healthcare. Undocumented and non-English speaking residents faced additional language and cultural barriers to access health resources due to fear, mistrust, and services primarily available in English.

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

Brazos Valley Health Community		
Top Needs Identified	Category of Need	Public Health Indicator
Disconnected youth	SDH - Social Isolation	2010-2014 Disconnected youth are teenagers and young adults between the ages of 16 and 24 who are neither working nor in school.
Elderly isolation. 65+ Householder living alone	SDH - Social Isolation	2012 Percent of Non-family households - Householder living alone - 65 years and over
Individuals Living Below Poverty Level	SDH - Income	2012-2016 American Community Survey 5-Year Estimates, Individuals below poverty level
Limited Access to Healthy Foods (Percent of Low Income)	Environment - Food	2015 Percentage of Population Who are Low-Income and Do Not Live Close to a Grocery Store
Population with Adequate Access to Locations for Physical Activity	Health Behaviors - Exercise	2010 & 2016 Percentage of Population with Adequate Access to Locations for Physical Activity
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
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
Unemployment	SDH - Income	2016 Percentage of Population Ages 16 and Older Unemployed but Seeking Work
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	Disconnected youth	SDH - Social Isolation
2	Elderly isolation: 65+ Householder Living Alone	SDH - Social Isolation
3	Ratio of Population to One Primary Care Physician	Access to Care
4	Ratio of Population to one Mental Health Provider	Mental Health
5	Ratio of Population to One Non-Physician Primary Care Provider	Access to Care
6	Ratio of Population to One Dentist	Access to Care

Description of Health Needs

Brazos Valley focus groups identified two major health concerns in their communities: social isolation and access to care. Regionalized health needs affected all age levels to some degree; however, often the most vulnerable populations are negatively impacted. Community health gaps helped to define the resources and access to care within the county or region. Both ends of the age continuum, youths 16-24 years old and elderly living alone, had priority health needs. Health and social concerns received validation through key informant interviews, focus groups and county data. Access to care, specifically primary care providers, mental health providers, non-physician providers and dentists were significant areas of concern.

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

<u>Disconnected Youth</u>

Disconnected youth, according to Measure of America, 2019, are youths aged 16-24 who are neither working nor in school. A fundamental indicator of societal progress and well-being is how successfully its citizens transition from one life phase to another. In the U.S. in 2016, there were 4,599,100 disconnected youths or one in nine teens and young adults.[2] Disconnected youth are at an increased risk of violent behavior, smoking, alcohol consumption and drug use, and may have emotional deficits and less cognitive and academic skill than their peers who are working, and/or in school. Rural counties have a youth disconnection rate of 19.3%, on average, compared to 12.9% in urban centers and 11.3% in suburbs. In Brazos Valley, Grimes County had a rate of disconnected youth at

[2] Opportunity Nation, **Youth Disconnection** 2019

31.0%, compared to the overall Texas benchmark rate of 15.0%. This was a difference of 106.6% relative to the state value (relative difference), and three times the national rate of top performers of 10%.[3]

Nationally, young women are slightly less likely to be disconnected, with a rate of 11.2% compared to the male rate of 12.1%. However, disconnected young women face particularly high poverty rates and unique challenges like early marriage and motherhood that merit attention and resources from communities. Youth disconnection also has economic implications. The lost revenue and social service investments for disconnected youth (ages 16-24) are estimated to cost taxpayers $93 billion a year and $1.6 trillion over their lifetimes. Community leaders and educators need to proactively identify youths that are at a higher risk of being disconnected and ensure that community resources are accessible.[4]

Lacking a stable living situation, youth often fall short on the emotional and financial support of parents or other consistent, caring adults, an additional barrier in the transition to adulthood. A community's ability to recognize youth at risk, assist them to develop support pathways beginning in elementary school, and then carry through to high school and college are essential. Recognition of signs of at-risk youth disconnection would require educators, parents and the community to have the resources and experience to assist youth and their families. The focus groups brought up the need to have a coordinated approach to family support and education beginning in elementary schools. Access to counseling resources would need to be readily available in the community to support both assessment and follow through.

Isolation of Elderly over 65 years of age

The elderly population, 65 years of age and older, are expected to experience the fastest growth (20.8%) over the next five years, adding nearly 9,000 elderly to the community.[5] Growth among this age group will likely contribute to increased utilization of healthcare services. Over time, the community must be able to provide adequate services to care for the aging population.

Elderly who live alone is a growing challenge for communities across the nation. People who are aging alone in impoverished areas with degraded social infrastructure would benefit from neighborhood revitalization, requiring considerable investment from the public and private sectors. Rural areas may have residents who would be at a higher risk of isolation. Elderly, frail, and reclusive people who live alone may require home care and specialized services such as meal delivery and social visits. Identification and support of this marginalized population is essential. Integrated social services to engage, support and positively challenge their elderly populations will improve the overall health and well-being of the community.

In three counties that make up the Brazos Valley Health Community, the percentage of elderly who lived alone indicated a significant health need. In Texas overall, the percent

[3] Measure of America, County Health Rankings and Roadmaps 2018
[4] **Corporation for National and Community Service**, 2019
[5] IBM Watson Health / Claritas, 2018

of individuals living alone that were age 65 and older was 8%. The overall value for the U.S. was 10.4%. In Burleson County the value was 13.5%, and in Grimes and Washington counties it was 13.3% each.[6]

Primary Care Physician Providers

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 for other outpatient care. Annual check-ups can catch and treat problems earlier and is less costly than treating severe or advanced illness.[7]

The focus group participants expressed a perceived shortage of health care providers including primary care physicians and non-physicians, dentists and mental health care providers within the Brazos Valley Health Community. The community has rural components that could present additional challenges to access to care. Transportation to different care sites across the counties may have been difficult, if not impossible.

While Washington and Brazos counties had primary care physician access that was better than the Texas average of one primary care physician to every 1,670 residents. Grimes, Burleson and Waller counties were significantly worse than County Health Rankings U.S. Top Performers by 1.5 to 7 times. The U.S. Top performer counties, at the 90th percentile, had one provider to 1,030 residents.[8] In contrast, the Waller County ratios were 9,731 residents to one primary care physician, Grimes County was 4,585 residents and Burleson County was 2,910 residents.

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.[9] 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

[6] U.S. Census Bureau, American Community Survey 5-Year Estimates, 2012-2016
[7] **Primary Care Progress**, The Case for Primary Care, 2019
[8] Area Health Resource File/American Medical Association, County Health Rankings and Roadmaps **National Statistics**, 2018
[9] J. Cromartie, Population & Migration (Washington, D.C,: **U.S. Department of Agriculture, Economic Research Service, May 26, 2012**)

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.

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 available in a community. Non-physician providers or physician extenders are typically licensed professionals such as Physician Assistants and Nurse Practitioners who treat and see patients, many in independent or physician run practices. Physician extenders expand the scope of primary care providers within a geographic area and help to bridge the gap for both access to care and management of healthcare costs.

Non-Physician Primary Care provider access in Waller, Burleson, Grimes, Washington and Brazos counties was worse than the Texas state threshold of one provider to 1,497 residents. The Waller County ratios of 25,058 residents to one non-physician primary care provider was the highest in the entire state of Texas. The other counties within the community had the following ratios: Burleson (3,552:1), Grimes (2,516:1), Washington (2,191:1), and Brazos (1,986:1).[10]

Mental Health Provider Access

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.[11]

Rural areas hold particular challenges with accessing mental health care services. Primary Care Providers (PCP's), often relied upon to treat patients with mental health needs, find lack of expertise, time, and financial reimbursement constraints. Communities that have a lack of primary care providers are particularly vulnerable.

According to the CMS National Provider Identification File, the number of individuals in the community served for each mental health provider was 9,224 in Grimes County; 8,880 in Burleson County; 2,948 in Waller County; and 2,062 in Washington County. This compared to 1,012 residents per provider in the state and one provider to 330 individuals among the County Health Rankings Top U.S. Performers.[12] The best performing county in this community, Brazos, was six times worse than the top U.S. performers with a ratio of 1,238 residents to one mental health provider. There was considerable opportunity for improvement, compared to state or U.S. Top Performers, in the communities served regarding access to mental health providers.

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 to find employment or impossible to get past the interview stages. Entry-level jobs require service attitude and

[10] CMS, National Provider Identification Registry (NPPES), County Health Rankings & Roadmaps, 2018
[11] **Mental Health America**, 2019
[12] CMS, National Provider Identification Registry (NPPES), County Health Rankings & Roadmaps, 2018

nice smiles, and immediate and often unfavorable assumptions are made when encountering persons with poor dentition.

According to the US Census, Texas County Health Rankings and Roadmaps 2018, challenges exist in counties within Brazos Valley regarding the numbers and access to dentists. For example, Burleson county ratios of residents to dentists was 17,760 to 1 as compared to overall Texas ratio of 1,790 to 1, and top U.S. performers of 1,280 to 1. Waller County had one dentist to every 6,264 residents, while Grimes and Washington counties had one dentist to 5,534 and 2,337 residents respectively.[13] Grimes County dentist to population ratio was three times higher than the overall Texas ratio was and four times higher than top U.S. performers. Social and economic constraints, such as insurance, transportation, etc. compounded the access to dental care issue in the community.

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

[13] Area Health Resource File/National Provider Identification file (CMS), 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

Category	Public Health Indicator	Source
	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
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)

Category	Public Health Indicator	Source
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)
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 Conditions/Diseases	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
Population	Children Eligible for Free Lunch Enrolled in Public Schools	2018 County Health Rankings & Roadmaps, The National Center for Education Statistics (NCES)

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

Category	Public Health Indicator	Source
	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	SERVICE	FACILITY NAME	ADDRESS	CITY	PHONE NUMBER
Ratio of Population to One Dentist	Access to Care	Dental Care	Blinn College Dental Office	301 Post Office Street	Bryan	979-209-7283
Ratio of Population to One Dentist	Access to Care	Dental Care	Kool Smiles	3111 Texas Ave	Bryan	979-314-1505
Ratio of Population to One Dentist	Access to Care	Dental Care	Project Unity	4001 East 29th Street	Bryan	979-595-2900
Ratio of Population to One Dentist	Access to Care	Dental Care	Project Unity	4001 E 29th St	Bryan	979-595-2900
Ratio of Population to One Dentist	Access to Care	Dental Care	Willow River Farms Assisted Living	4073 FM 359	Brookshire	713-525-8302
Ratio of Population to One Non-Physician Primary Care Provider	Access to Care	Primary Care	ABC Women and Children Clinic	1651 Rock Prairie Rd, Suite 102	College Station	979-693-7400
Ratio of Population to One Non-Physician Primary Care Provider	Access to Care	Primary Care	AccessHealth - Brookshire Center	533 FM 359 South	Brookshire	281-822-4235
Ratio of Population to One Non-Physician Primary Care Provider	Access to Care	Primary Care	Brazos County Health Department	201 North Texas Ave	Bryan	979-361-4440
Ratio of Population to One Non-Physician Primary Care Provider	Access to Care	Primary Care	Brazos Maternal & Child Health Clinic	3370 S. Texas Ave	Bryan	979-595-1780
Ratio of Population to One Non-Physician Primary Care Provider	Access to Care	Primary Care	Brazos Valley Community Action Agency	2500 Central Park Lane	College Station	979-255-3804
Ratio of Population to One Non-Physician Primary Care Provider	Access to Care	Primary Care	Brazos Valley Community Action Agency: Health Services	1301 Memorial Drive	Bryan	979-595-1700
Ratio of Population to One Non-Physician Primary Care Provider	Access to Care	Primary Care	Brazos Valley Community Action Agency: WIC	3400 S. Texas Ave, Suite 1	Bryan	979-260-2942

COMMUNITY HEALTH NEED	CATEGORY	SERVICE	FACILITY NAME	ADDRESS	CITY	PHONE NUMBER
Ratio of Population to One Non-Physician Primary Care Provider	Access to Care	Primary Care	Brazos Valley Council of Governments: County Indigent Health	3991 E 29th St	Bryan	979-595-2800
Ratio of Population to One Non-Physician Primary Care Provider	Access to Care	Primary Care	Bryan Community Health Center	3370 S. Texas Ave, Suite B	Bryan	979-595-1700
Ratio of Population to One Non-Physician Primary Care Provider	Access to Care	Primary Care	Faith Mission & Help Center	500 East Academy Street	Brenham	979-830-1488
Ratio of Population to One Non-Physician Primary Care Provider	Access to Care	Primary Care	Family Planning-Health Point Bryan	3370 S Texas Ave	Bryan	979-56=95-17
Ratio of Population to One Non-Physician Primary Care Provider	Access to Care	Primary Care	Health for All	3030 East 29th Street, Suite 111	Bryan	979-774-4176
Ratio of Population to One Non-Physician Primary Care Provider	Access to Care	Primary Care	The Bridge Ministries	1401 W Martin Luther King St, #201	Bryan	979-704-6037
Ratio of Population to One Primary Care Physician	Access to Care	Primary Care	ABC Women and Children Clinic	1651 Rock Prairie Rd, Suite 102	College Station	979-693-7400
Ratio of Population to One Primary Care Physician	Access to Care	Primary Care	AccessHealth - Brookshire Center	533 FM 359 South	Brookshire	281-822-4235
Ratio of Population to One Primary Care Physician	Access to Care	Primary Care	Brazos County Health Department	201 North Texas Ave	Bryan	979-361-4440
Ratio of Population to One Primary Care Physician	Access to Care	Primary Care	Brazos Maternal & Child Health Clinic	3370 S. Texas Ave	Bryan	979-595-1780
Ratio of Population to One Primary Care Physician	Access to Care	Primary Care	Brazos Valley Community Action Agency	2500 Central Park Lane	College Station	979-255-3804
Ratio of Population to One Primary Care Physician	Access to Care	Primary Care	Brazos Valley Community Action Agency: Health Services	1301 Memorial Drive	Bryan	979-595-1700
Ratio of Population to One Primary Care Physician	Access to Care	Primary Care	Brazos Valley Community Action Agency: WIC	3400 S. Texas Ave, Suite 1	Bryan	979-260-2942
Ratio of Population to One Primary Care Physician	Access to Care	Primary Care	Brazos Valley Council of Governments: County Indigent Health	3991 E 29th St	Bryan	979-595-2800
Ratio of Population to One Primary Care Physician	Access to Care	Primary Care	Bryan Community Health Center	3370 S. Texas Ave, Suite B	Bryan	979-595-1700

COMMUNITY HEALTH NEED	CATEGORY	SERVICE	FACILITY NAME	ADDRESS	CITY	PHONE NUMBER
Ratio of Population to One Primary Care Physician	Access to Care	Primary Care	Faith Mission & Help Center	500 East Academy Street	Brenham	979-830-1488
Ratio of Population to One Primary Care Physician	Access to Care	Primary Care	Family Planning-Health Point Bryan	3370 S Texas Ave	Bryan	979-56=95-17
Ratio of Population to One Primary Care Physician	Access to Care	Primary Care	Health for All	3030 East 29th Street, Suite 111	Bryan	979-774-4176
Ratio of Population to One Primary Care Physician	Access to Care	Primary Care	The Bridge Ministries	1401 W Martin Luther King St, #201	Bryan	979-704-6037
Ratio of Population to One Mental Health Provider	Mental Health	Crisis Services	College Station Victim Advocacy & Assistance Program	2611 Texas Avenue South	College Station	979-764-5004
Ratio of Population to One Mental Health Provider	Mental Health	Family Counseling	Brazos Valley Christian Counseling	4444 Carter Creek Parkway Suite 204	Bryan	979-260-6700
Ratio of Population to One Mental Health Provider	Mental Health	Family Counseling	Catholic Charities of Central Texas: Gabriel Project Life Ce	1410 Cavitt Ave.	Bryan	979-822-9340
Ratio of Population to One Mental Health Provider	Mental Health	Family Counseling	DePelchin Children's Center	531 FM 359 South	Brookshire	281-261-1341
Ratio of Population to One Mental Health Provider	Mental Health	Family Counseling	Oakwood Collaborative Counseling	2554 E. Villa Maria Rd.	Bryan	979-229-7636
Ratio of Population to One Mental Health Provider	Mental Health	Family Counseling	The Christian Counseling Center	The Galleria Village Tower, 1716 Briarcrest Dr, Suite 602	Bryan	979-691-7361
Ratio of Population to One Mental Health Provider	Mental Health	Family Counseling	Twin City Mission	3806 Old College Rd	Bryan	979-260-7736
Ratio of Population to One Mental Health Provider	Mental Health	Family Counseling	Twin City Mission	2505 S. College Ave	Bryan	979-775-5355
Ratio of Population to One Mental Health Provider	Mental Health	General Psychology	Brazos Valley Christian Counseling	4444 Carter Creek Parkway Suite 204	Bryan	979-260-6700
Ratio of Population to One Mental Health Provider	Mental Health	General Psychology	Oakwood Collaborative Counseling	2554 E. Villa Maria Rd.	Bryan	979-229-7636

COMMUNITY HEALTH NEED	CATEGORY	SERVICE	FACILITY NAME	ADDRESS	CITY	PHONE NUMBER
Ratio of Population to One Mental Health Provider	Mental Health	Mental Health Evaluation	Brazos Valley Christian Counseling	4444 Carter Creek Parkway Suite 204	Bryan	979-260-6700
Ratio of Population to One Mental Health Provider	Mental Health	Mental Health Evaluation	MHMR: Intellectual and Developmental Disability Services	1504 S Texas Ave	Bryan	979-822-6467
Ratio of Population to One Mental Health Provider	Mental Health	Mental Health Services	Brazos Valley Christian Counseling	4444 Carter Creek Parkway Suite 204	Bryan	979-260-6700
Ratio of Population to One Mental Health Provider	Mental Health	Mental Health Services	MHMR: Intellectual and Developmental Disability Services	1504 S Texas Ave	Bryan	979-822-6467
Ratio of Population to One Mental Health Provider	Mental Health	Mental Health Services	National Alliance on Mental Illness of Brazos Valley	1713 Broadmoore Dr East, Suite 101	Bryan	979-744-4713
Disconnected Youth	SDH - Social Isolation	After School Programs	Boys and Girls Club (Royal ISD)	2500 Durkin Road	Pattison	281-934-3184
Disconnected Youth	SDH - Social Isolation	After School Programs	Brazos Valley Community Action Agency	1733 Briarcrest Dr., Suite 111	Bryan	979-213-4051
Disconnected Youth	SDH - Social Isolation	Community Transportation Programs	Brazos Transit District	1759 N. Earl Rudder Freeway	Bryan	800-272-0039
Disconnected Youth	SDH - Social Isolation	Community Transportation Programs	Carpool	127 John David Crow Drive	College Station	979-693-9905
Disconnected Youth	SDH - Social Isolation	Community Transportation Programs	Elder-Aid	307 S. Main Street, Suite 202	Bryan	979-823-5127
Disconnected Youth	SDH - Social Isolation	Daily Life Skills Training	Twin City Mission	2505 S. College Ave	Bryan	979-775-5355
Disconnected Youth	SDH - Social Isolation	Daily Life Skills Training	Willow River Farms Assisted Living	4073 FM 359	Brookshire	713-525-8302
Disconnected Youth	SDH - Social Isolation	Education Assistance	Boys and Girls Club (Royal ISD)	2500 Durkin Road	Pattison	281-934-3184
Disconnected Youth	SDH - Social Isolation	Education Assistance	DePelchin Children's Center	531 FM 359 South	Brookshire	281-261-1341

COMMUNITY HEALTH NEED	CATEGORY	SERVICE	FACILITY NAME	ADDRESS	CITY	PHONE NUMBER
Disconnected Youth	SDH - Social Isolation	Public Transportation	Brazos Transit District	1759 N. Earl Rudder Freeway	Bryan	800-272-0039
Disconnected Youth	SDH - Social Isolation	Social Services	Area Agency on Aging	3991 E. 29th Street	Bryan	979-595-2800
Disconnected Youth	SDH - Social Isolation	Social Services	Catholic Charities of Central Texas: Gabriel Project Life Ce	1410 Cavitt Ave.	Bryan	979-822-9340
Disconnected Youth	SDH - Social Isolation	Tutoring	Barbara Bush Literacy Corps Adult Literacy Library Program f	201 E. 26th Street	Bryan	979-209-5630
Disconnected Youth	SDH - Social Isolation	Tutoring	DePelchin Children's Center	531 FM 359 South	Brookshire	281-261-1341
Elderly Isolation. 65+ Householder Living Alone	SDH - Social Isolation	Assisted Living	Willow River Farms Assisted Living	4073 FM 359	Brookshire	713-525-8302
Elderly Isolation. 65+ Householder Living Alone	SDH - Social Isolation	Community Transportation Programs	Brazos Transit District	1759 N. Earl Rudder Freeway	Bryan	800-272-0039
Elderly Isolation. 65+ Householder Living Alone	SDH - Social Isolation	Community Transportation Programs	Carpool	127 John David Crow Drive	College Station	979-693-9905
Elderly Isolation. 65+ Householder Living Alone	SDH - Social Isolation	Community Transportation Programs	Elder-Aid	307 S. Main Street, Suite 202	Bryan	979-823-5127
Elderly Isolation. 65+ Householder Living Alone	SDH - Social Isolation	Food Delivery	Fort Bend Seniors Meals on Wheels	531 Highway 359 South	Brookshire	281-822-4240
Elderly Isolation. 65+ Householder Living Alone	SDH - Social Isolation	Health and Safety for the Home	Brazos Valley Community Action Agency	1733 Briarcrest Dr., Suite 111	Bryan	979-213-4051
Elderly Isolation. 65+ Householder Living Alone	SDH - Social Isolation	Home Health Services	Elder-Aid	307 S. Main Street, Suite 202	Bryan	979-823-5127
Elderly Isolation. 65+ Householder Living Alone	SDH - Social Isolation	Home Maintenance and Repairs	Brazos Valley Community Action Agency	1733 Briarcrest Dr., Suite 111	Bryan	979-213-4051
Elderly Isolation. 65+ Householder Living Alone	SDH - Social Isolation	Home Maintenance and Repairs	Elder-Aid	307 S. Main Street, Suite 202	Bryan	979-823-5127

COMMUNITY HEALTH NEED	CATEGORY	SERVICE	FACILITY NAME	ADDRESS	CITY	PHONE NUMBER
Elderly Isolation. 65+ Householder Living Alone	SDH - Social Isolation	Home Maintenance and Repairs	Texas Weatherization Program	1733 Briarcrest Drive, Suite 111	Bryan	979-846-1100
Elderly Isolation. 65+ Householder Living Alone	SDH - Social Isolation	Personal Care Items	Grind4God Ministries	307 S. Main Street, Suite 108	Bryan	979-703-2975
Elderly Isolation. 65+ Householder Living Alone	SDH - Social Isolation	Personal Hygiene	Family Promise	1806 Wilde Oak Circle	Bryan	979-268-4309
Elderly Isolation. 65+ Householder Living Alone	SDH - Social Isolation	Personal Hygiene	Grind4God Ministries	307 S. Main Street, Suite 108	Bryan	979-703-2975
Elderly Isolation. 65+ Householder Living Alone	SDH - Social Isolation	Prepared Food Delivery	Fort Bend Seniors Meals on Wheels	531 Highway 359 South	Brookshire	281-822-4240
Elderly Isolation. 65+ Householder Living Alone	SDH - Social Isolation	Public Transportation	Brazos Transit District	1759 N. Earl Rudder Freeway	Bryan	800-272-0039
Elderly Isolation. 65+ Householder Living Alone	SDH - Social Isolation	Social Services	Area Agency on Aging	3991 E. 29th Street	Bryan	979-595-2800
Elderly Isolation. 65+ Householder Living Alone	SDH - Social Isolation	Social Services	Catholic Charities of Central Texas: Gabriel Project Life Ce	1410 Cavitt Ave.	Bryan	979-822-9340

Community Healthcare Facilities

Facility Name	Type	System	Street Address	City	State	ZIP
BAYLOR SCOTT & WHITE MEDICAL CENTER - BRENHAM	ST	Baylor Scott & White	700 MEDICAL PARKWAY	BRENHAM	TX	77833
BAYLOR SCOTT & WHITE MEDICAL CENTER - COLLEGE STATION	ST	Baylor Scott & White	700 SCOTT & WHITE DRIVE	COLLEGE STATION	TX	77845
CAPROCK EMERGENCY	ED	Freestanding	948 WILLIAM D FITCH	COLLEGE STATION	TX	77845
CAPROCK HOSPITAL	ED	Freestanding	3134 BRIARCREST DR	BRYAN	TX	77802
CHI ST JOSEPH HEALTH BURLESON HOSPITAL	ST	Catholic Health Initiative	1101 WOODSON DRIVE	CALDWELL	TX	77836
CHI ST JOSEPH HEALTH GRIMES HOSPITAL	ST	Catholic Health Initiative	210 SOUTH JUDSON	NAVASOTA	TX	77868
CHI ST JOSEPH REHAB HOSPITAL A PARTNERSHIP WITH HEALTHSOUTH	ST	Catholic Health Initiative	1600 JOSEPH DRIVE	BRYAN	TX	77802
COLLEGE STATION MEDICAL CENTER	ST	Community Health Sys	1604 ROCK PRAIRIE ROAD	COLLEGE STATION	TX	77845
PHYSICIANS PREMIER	ED	Physicians Premier	2411 BOONVILLE ROAD	BRYAN	TX	77802
ROCK PRAIRIE BEHAVIORAL HEALTH	PSY	Strategic Behavioral Health	3550 NORMAND DRIVE	COLLEGE STATION	TX	77845
SIGNATURECARE COLLEGE STATION	ED	Signature care	1512 S TEXAS AVE SUITE 500	COLLEGE STATION	TX	77840
ST JOSEPH REGIONAL HEALTH CENTER	ST	Catholic Health Initiative	2801 FRANCISCAN DRIVE	BRYAN	TX	77802
THE PHYSICIANS CENTRE HOSPITAL	ST	National Surgical Hospitals	3131 UNIVERSITY DRIVE EAST	BRYAN	TX	77802

**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)[14]

County Name	HPSA ID	HPSA Name	HPSA Discipline Class	Designation Type
Brazos	1486502526	Western Brazos	Primary Care	High Needs Geographic HPSA
Brazos	148999485K	Brazos Valley Community Action	Primary Care	Federally Qualified Health Center
Brazos	64899948A2	Brazos Valley Community Action	Dental Health	Federally Qualified Health Center
Brazos	748999481Z	Brazos Valley Community Action	Mental Health	Federally Qualified Health Center
Burleson	1483864850	Burleson County	Primary Care	Geographic HPSA
Burleson	6486933359	Burleson County	Dental Health	Geographic HPSA
Burleson	7483750363	Burleson County	Mental Health	Geographic HPSA
Grimes	1485506279	CF-Pack Facility	Primary Care	Correctional Facility
Grimes	1486015184	Low Income-Grimes County	Primary Care	Low Income Population HPSA
Grimes	1489125559	CF-Luther Facility	Primary Care	Correctional Facility
Grimes	6484443934	CF-Pack Facility	Dental Health	Correctional Facility
Grimes	6485415399	CF-Luther Facility	Dental Health	Correctional Facility
Grimes	7483926387	CF-Luther Facility	Mental Health	Correctional Facility
Grimes	7486251334	CF-Pack Facility	Mental Health	Correctional Facility

[14] 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
Waller	1484382331	Waller County	Primary Care	Geographic HPSA
Waller	7484226314	Waller County	Mental Health	High Needs Geographic HPSA
Washington	1485145906	Low Income-Washington County	Primary Care	Low Income Population HPSA
Washington	7483005436	Washington County	Mental Health	Geographic HPSA

Medically Underserved Areas and Populations (MUA/P)[15]

County Name	MUA/P Source Identification Number	Service Area Name	Designation Type	Rural Status
Brazos	07192	West Central	Medically Underserved Area	Non-Rural
Burleson	03289	BURLESON SERVICE AREA	Medically Underserved Area	Partially Rural
Grimes	03338	GRIMES SERVICE AREA	Medically Underserved Area	Rural
Waller	03439	WALLER SERVICE AREA	Medically Underserved Area	Partially Rural
Washington	03441	WASHINGTON SERVICE AREA	Medically Underserved Area	Rural

[15] U.S. Department of Health and Human Services, Health Resources and Services Administration, 201

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

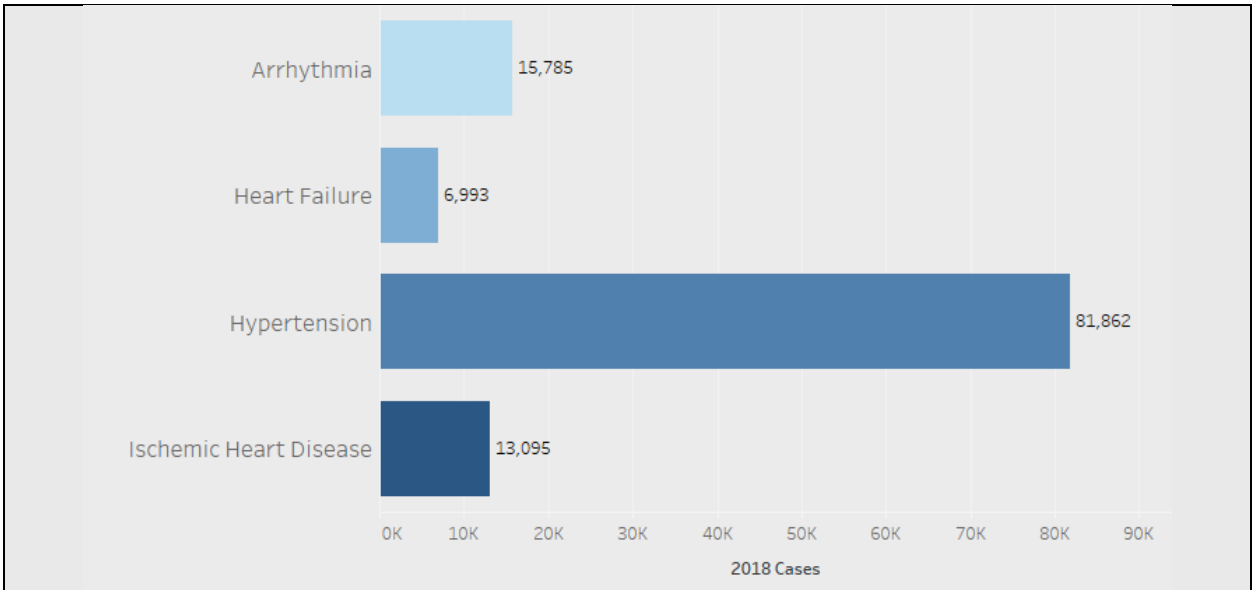
Brazos Valley Health Community		
Public Health Indicator	Category	Indicator Definition
Ratio of Population to One Non-Physician Primary Care Provider	Access to Care	2017 Ratio of Population to Primary Care Providers Other than Physicians
Ratio of Population to One Dentist	Access to Care	2016 Ratio of Population to Dentists
Ratio of Population to one Mental Health Provider	Mental Health Conditions/Diseases	2017 Ratio of Population to Mental Health Providers
Ratio of Population to One Primary Care Physician	Access to Care	2015 Ratio of Population to Primary Care Providers
Urinary Tract Infection Admission: Pediatric (Risk-Adjusted-Rate)	Preventable Hospitalizations	2016 Number Observed / Pediatric Population Under Age 18
Motor Vehicle Crash Mortality Rate	Injury & Death	2010-2016 Number of Motor Vehicle Crash Deaths per 100,000 Population
Disconnected youth	Health Behaviors	2010-2014 Population between the ages of 16 and 24 who are neither working nor in school.
Limited Access to Healthy Foods (Percent of Low Income)	Environment	2015 Percentage of Population Who are Low-Income and Do Not Live Close to a Grocery Store
Death rate due to firearms	Injury & Death	2012-2016 number of deaths due to firearms, per 100,000 population.
Elderly isolation. 65+ Householder living alone	Environment	2012 Percent of Non-family households - Householder living alone - 65 years and over
High School Dropout	Population	2016 A four-year longitudinal dropout rate is the percentage of students from the same class who drop out before completing their high school education.
Individuals Living Below Poverty Level	Population	2012-2016 American Community Survey 5-Year Estimates, Individuals below poverty level
Severe Housing Problems	Environment	2010-2014 Percentage of Households with at Least 1 of 4 Housing Problems: Overcrowding, High Housing Costs, or Lack of Kitchen or Plumbing Facilities
Number of deaths due to injury	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

Brazos Valley Health Community		
Public Health Indicator	Category	Indicator Definition
Population with Adequate Access to Locations for Physical Activity	Environment	2010 & 2016 Percentage of Population with Adequate Access to Locations for Physical Activity
Uninsured Children	Access to Care	2015 Percentage of Children Under Age 19 Without Health Insurance
Child Mortality Rate	Injury & Death	2013-2016 Number of Deaths Among Children under Age 18 per 100,000
Heart Disease Mortality Rate	Injury & Death	2013 Heart Disease Age Adjusted Death Rate (Per 100,000 - All Ages. Age-adjusted using the 2000 U.S. Standard 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
Unemployment	Population	2016 Percentage of Population Ages 16 and Older Unemployed but Seeking Work

Appendix E: Watson Health Community Data

Watson Health Heart Disease Estimates identified hypertension as the most prevalent heart disease diagnoses; there were over 81,000 estimated cases in the community overall. College Station ZIP codes had the most estimated cases of each heart disease type, likely driven by population size. However, despite fewer number of cases, the ZIP codes in Brenham had some of the highest estimated prevalence rates for Arrhythmia (630 to 770 cases per 10,000 population) and Heart Failure (315 to 390 cases per 10,000 population). While the ZIP codes of Grimes County had some of the highest prevalence for Hypertension (2,908 to 3,116 cases per 10,000 population). Grimes and Burleson county ZIP codes had the highest estimated prevalence rates of Ischemic Heart Disease (610 to 756 cases per 10,000 population).

2018 Estimated Heart Disease Cases



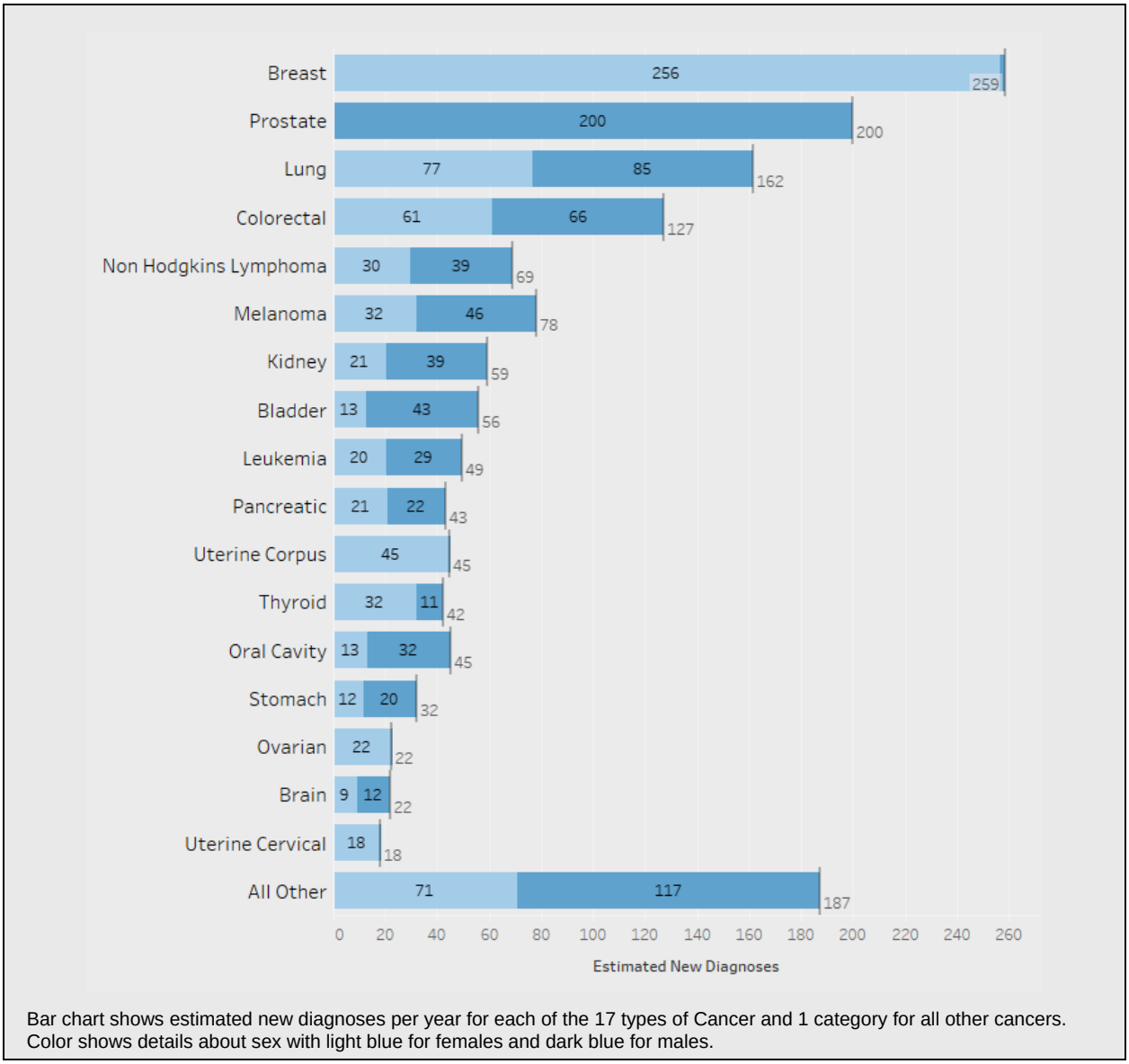
Bar chart shows total number of 2018 Estimated Heart Disease cases for each of four types: arrhythmia, heart failure, hypertension, and ischemic heart disease

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 cancers estimated to have the greatest number of new cases in 2018 were breast, prostate, and lung.

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	56	65	16.1%
Brain	22	24	9.1%
Breast	259	290	12.0%
Colorectal	127	126	-0.8%
Kidney	59	68	15.3%
Leukemia	49	56	14.3%
Lung	162	181	11.7%
Melanoma	78	90	15.4%
Non-Hodgkin's Lymphoma	69	78	13.0%
Oral Cavity	45	52	15.6%
Ovarian	22	25	13.6%
Pancreatic	43	51	18.6%
Prostate	200	209	4.5%
Stomach	32	35	9.4%
Thyroid	42	50	19.0%
Uterine Cervical	18	19	5.6%
Uterine Corpus	45	51	13.3%
All Other	187	213	13.9%
Grand Total	1,515	1,683	11.1%

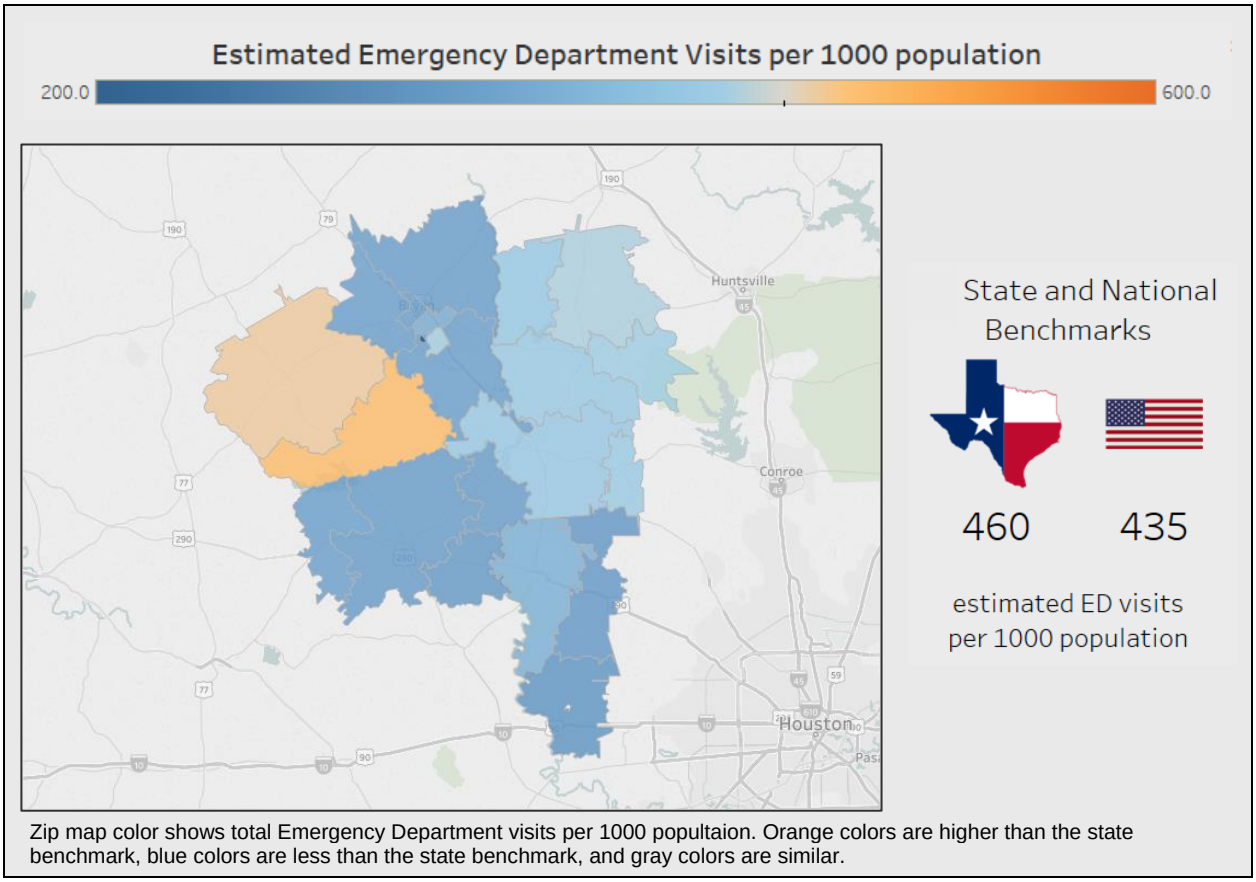
Source: IBM Watson Health, 2018

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 College Station ZIP codes, but the highest estimated ED use rates were in the ZIP codes of Burleson County; 472.3 to 490.1 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 4.3% over the next five years in this community.

Estimated 2018 Emergency Department Visit Rate

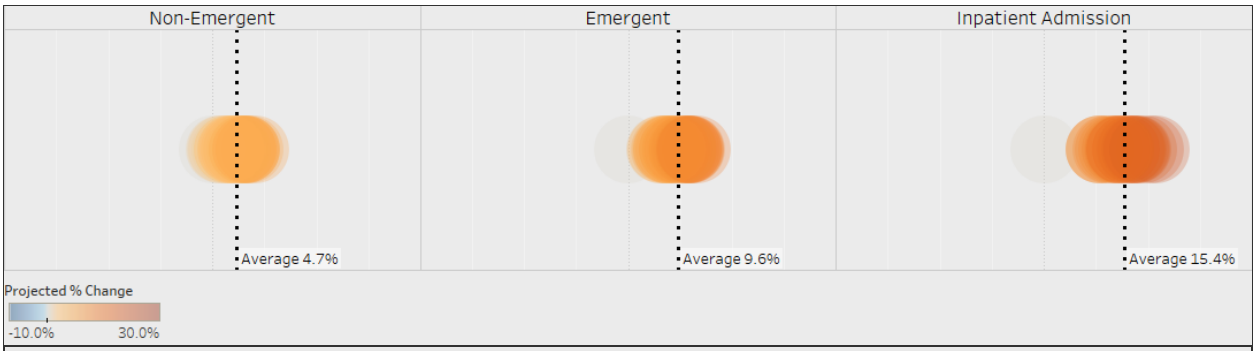


Zip map color shows total Emergency Department visits per 1000 popultaion. Orange colors are higher than the state benchmark, blue colors are less than the state benchmark, and gray colors are similar.

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 of any actions taken since the hospital facilities finished conducting their immediately preceding CHNA.

Total Resources Contributed to Addressing Community Needs: $12,443,654

Identified Needs Addressed: Chronic Disease Management and Cancer

Program Name: Chronic Disease Programs
Description: Baylor Scott & White Health has established multiple community education programs on various chronic conditions including: *Chronic Disease Self-Management Program* This program benefits people with different chronic health problems. Subjects covered include: 1) techniques to deal with problems such as frustration, fatigue, pain and isolation, 2) appropriate exercise for maintaining and improving strength, flexibility, and endurance, 3) appropriate use of medications, 4) communicating effectively with family, friends, and health professionals, 5) nutrition, 6) decision making, and, 7) how to evaluate new treatments. *Diabetes Education* BSWH provides diabetes education seminars and presentations open to the public or for a specific group on request to educate the community about the signs and symptoms of diabetes and how to prevent diabetes from happening. *Congestive Heart Failure Education* The hospital provides a congestive heart failure (CHF) program for patients after their primary diagnosis that aligns with the American Heart Association model. *Heart Disease/Stroke Education* Heart disease is the leading cause of death in our communities as well as at a national level. Screenings and education assist in early detection and treatment. Stroke is the leading cause of adult disability in the nation and understanding the symptoms and signs of a stroke is important not only in saving lives, but also in preserving quality of life. The stroke team actively participates in educational opportunities to educate the community on the signs, risk factors and symptoms of stroke.
Impact/Outcomes: More than 13,410 people completed one or more of these programs
Supported by: Baylor Scott & White Medical Center – Brenham, Baylor Scott & White Medical Center – College Station and affiliated Scott & White Clinics
Resources Contributed: Staff time and materials valued at $46,647 of Community Benefit

Program Name: Health Screenings
Description: Baylor Scott & White Health offers free and/or reduced cost health screenings to community members on a walk-in basis geared towards enhancing the well-being of individuals in the community. Breast cancer screenings were also provided by mobile mammography for eligible indigent women between ages 35 to 64. BSWH staff contacts, prescreens, and completes financial apps for all the patients prior to the event dates. Clinical assessment and follow up was provided as appropriate.
Impact/Outcomes: 48 cancer screenings

Supported by: Baylor Scott & White Medical Center - Brenham
Resources Contributed: Resources valued at $11,027 of Community Benefit plus 1.7 FTE at the Washington County Clinic

Program Name: DSRIP ED Navigation Program
Program Description: As part of the HHSC 1115 Waiver to increase transition of care from hospital setting to the primary care setting specific to the Medicaid, Low-Income, and Uninsured patient populations. Develop and implement care navigation interventions geared toward improving management of chronic disease patients with comorbidities, improving health outcomes and quality of life, preventing disease complications, and reducing unnecessary acute and emergency care utilization.
Impact/Outcomes: 250 DSRIP Program Participants
Supported by: Baylor Scott & White Medical Center – Brenham
Committed Resources: staff and resources to implement and manage program

Program Name: DSRIP Cancer Screening Program
Program Description: As part of the HHSC 1115 Waiver to increase access to cancer screening in the primary care setting specific to the Medicaid, Low-Income, and Uninsured patient populations. Develop and implement cancer management interventions geared toward improving management of cancers and comorbidities, improving health outcomes and quality of life, preventing disease complications, and reducing unnecessary acute and emergency care utilization.
Impact/Outcomes: 2,697 participants
Supported by: Baylor Scott & White Medical Center – Brenham and Baylor Scott & White Medical Center – College Station
Committed Resources: staff and resources to implement and manage program

Program Name: Pink Alliance Partnership
Program Description: The hospital partners with the Pink Alliance to provide informational packets to men and women newly diagnosed with breast cancer.
Impact/Outcomes: 800 medically underserved women receive appropriate information to manage their condition every year
Supported by: Baylor Scott & White Medical Center – College Station
Committed Resources: $15,000 contribution to Pink Alliance

Program Name: Increased Access to Cancer Care
Program Description: The hospital is working to address the need for increased access to specialists in the cancer field and has 2 full-time oncologists serving the community's cancer patients
Impact/Outcomes: 5,700 oncology visits over the past 3 years
Supported by: Baylor Scott & White Medical Center – College Station
Committed Resources: $700,000 for physician staffing

Program Name: Brazos Valley Community Outpatient Nutrition Classes and Outreach on Chronic Diseases

Program Description: A 4-week nutrition program offered to the community that will teach families how to make changes to begin living a healthier lifestyle like: -Increasing number of family dinners to 5 - 7 days of the week. -Increasing selection of healthier items (low sugar, low salt, review nutrition label for nutrition facts and portions, more fruit and vegetable options at home, meals prepared at home.) -Increasing physical activity to meet or exceed national guidelines (adults 30-60 minutes most days of the week, children 60 minutes most days of the week).
Impact/Outcomes: n/a
Supported by: Baylor Scott & White Medical Center – College Station
Committed Resources: unable to pursue this program due to delayed contracting with outsourced hospitality service

Program Name: Endocrinology Provider Access
Program Description: The Scott & White Clinic has added an advanced practice professional (APP) and will explore the opportunity for hiring additional physician providers to serve in Endocrinology to help meet the growing need for patients to get treatment for diabetes. The Clinic will also evaluate annually to determine if/when more providers are needed**.**
Impact/Outcomes: improved access for patients
Supported by: Scott & White Clinic
Committed Resources: $80,000 annually

Program Name: Cardiac Rehabilitation Clinic
Program Description: The Clinic began offering a new Cardiac rehab clinic for inpatients beginning July 1, 2016. The clinic provides education and exercise information for patients being discharged from the hospital after a heart episode such as congestive heart failure, heart attack, or post-surgical patients. The goal is to expand this service to outpatient later in 2016. The Hospital will be doing renovations in order to allow for the cardiac clinic to move in.
Impact/Outcomes: Reduction in hospital readmission following cardiac treatment
Supported by: Scott & White Clinic
Committed Resources: 1 Outpatient FTE, $60,000 for Equipment

Program Name: Washington County Clinic Diabetes Counseling
Program Description: Brenham provides staff and materials to the Washington County Community Clinic to provide medically underserved patients with nutrition and diabetes counseling.
Anticipated Impact/Outcomes: Patients with Diabetes will be able to better manage their disease on their own without making unnecessary trips to the ED or the hospital.
Impact/Outcomes: 70 participants lowered their A1C levels, 43 participants achieved the goal of A1C below 7.0
Supported by: Baylor Scott & White Medical Center - Brenham
Committed Resources: $4,100 of staff hours at Washington clinic

Program Name: Community Donations for Health Improvement
Description: BSWH regularly donates funds to local charitable, not for profit organizations whose efforts to improve community health align with the identified health needs in our community. We do so to

support their efforts to improve the overall health of the community through education, prevention, health advocacy, or disease management education. Funds that go to improving the health infrastructure of our community are counted after subtracting the fair market value of participation by employees or the organization.
Impact/Outcomes: Over the past 3 years, organizations receiving support from BSWH have offered a combined total of 2,753,888 services targeting under-served populations and addressing health needs.
Supported by: Baylor Scott & White Medical Center – Brenham and Baylor Scott & White Medical Center-College Station
Resources Contributed: $333,192 made of charitable donations to local non-profits supporting their efforts to improve health.

Program Name: Community Health and School Health Education
Description: Baylor Scott & White Health consistently looks for opportunities to educate the community on health issues to support our mission and vision. The programs and services that fall into this category extend beyond patient care activities and include services directed to both individuals and larger populations in the community. They include such things as educational information about preventive health care, lectures, or presentations held by BSWH physicians and staff about health-related topics like understanding various conditions and diseases, when to seek treatment, and the treatment options available.
Impact/Outcomes: 10,575 participants
Supported by: Baylor Scott & White Medical Center – Brenham and Baylor Scott & White Medical Center – College Station
Resources Contributed: Staff time and materials valued at $3,525,568 of Community Benefit

Program Name: Community Health Fairs
Description: BS&W regularly participates in health fairs in the communities we serve in order to provide screening and access to educational materials that will help impact healthy lifestyle habits. Through *It's A Guy Thing and For Women for Life* the Hospitals provide health services, screenings, and treatments, assisting men and women in taking steps that help their chances for living a longer, healthier life and preventing the onset of some chronic conditions. These events for men and women focus on proactive health care including preventive health screenings, seminars and healthy lifestyle information.
Impact/Outcomes: 1,624
Supported by: Baylor Scott & White Medical Center – Brenham and Baylor Scott & White Medical Center – College Station
Resources Contributed: Staff time and materials valued at $1,523,676 of Community Benefit

Program Name: Better Breathers Club
Description: Better Breathers Club is offered in partnership with the American Lung Association for individuals with COPD, pulmonary fibrosis and lung cancer, and their caregivers. Led by a trained facilitator, these in-person adult participants learn better ways to cope with lung disease while getting the support of others in similar situations. Better Breathers Clubs meet regularly and feature educational presentations on a wide range of topics.
Impact/Outcomes: 269 participants
Supported by: Baylor Scott & White Medical Center – Brenham and Baylor Scott & White Medical Center-College Station

Resources Contributed: Staff time and materials valued at $2,113 of Community Benefit

Identified Need Addressed: Obesity

Program Name: Wellness Programs
Description: A variety of classes are offered free and open to the public through the Wellness Center geared at achieving and maintaining good health. Classes include Seniorcise, Fit & Strong, Texercise and more.
Impact/Outcomes: **9**,392 class participants
Supported by: Baylor Scott & White Medical Center – Brenham
Resources Contributed: Staff time and materials valued at $65,390 of Community Benefit

Program Name: Community Health and School Health Education
Description: Baylor Scott & White Health consistently looks for opportunities to educate the community on health issues to support our mission and vision. The programs and services that fall into this category extend beyond patient care activities and include services directed to both individuals and larger populations in the community. They include such things as educational information about preventive health care, lectures, or presentations held by BSWH physicians and staff about health-related topics like understanding various conditions and diseases, when to seek treatment, and the treatment options available.
Impact/Outcomes: 10,575 participants
Supported by: Baylor Scott & White Medical Center – Brenham and Baylor Scott & White Medical Center – College Station
Resources Contributed: Staff time and materials valued at $3,525,568 of Community Benefit

Program Name: Fit & Strong
Description: Fit & Strong is an evidence-based, multiple component exercise program. It combines flexibility, strength training and aerobic walking with health education for sustained behavior change among older adults with lower extremity osteoarthritis (OA). This 8-week program helps participants to improve: Lower extremity stiffness Lower extremity pain Lower extremity strength Aerobic capacity Participation in exercise and caloric expenditure Self-Efficacy for Exercise
Impact/Outcomes: 2,089 participants
Supported by: Baylor Scott & White Medical Center – Brenham
Resources Contributed: Staff time and materials valued at $22,047 of Community Benefit

Program Name: Community Health Fairs
Description: BS&W regularly participates in health fairs in the communities we serve in order to provide screening and access to educational materials that will help impact healthy lifestyle habits. Through *It's A Guy Thing and For Women for Life* the Hospitals provide health services, screenings, and treatments, assisting men and women in taking steps that help their chances for living a longer, healthier life and preventing the onset of some chronic conditions. These events for men and women focus on proactive health care including preventive health screenings, seminars and healthy lifestyle information.
Impact/Outcomes: 1,624
Supported by: Baylor Scott & White Medical Center – Brenham and Baylor Scott & White Medical Center – College Station
Resources Contributed: Staff time and materials valued at $1,523,676 of Community Benefit

Program Name: Washington County Clinic Nutrition Counseling
Description: Brenham provides staff and materials to the Washington County Community Clinic to provide medically underserved patients with nutrition counseling.
Impact/Outcomes: 30 patients had significant weight loss
Supported by: Baylor Scott & Medical Center - Brenham
Committed Resources: $2,209 of staff hours at the Clinic

Program Name: BCS Marathon Community Health Education
Description: BSWH Staff host a series of educational classes leading up to the BCS Marathon that are free to the public. Topics include proper nutrition, exercise techniques, injury prevention, the importance of adequate stretching.
Impact/Outcomes: 15 participants
Supported by: Baylor Scott & White Medical Center – College Station and Scott & White Clinics
Resources Contributed: Staff time and materials valued at $173 of Community Benefit

Program Name: Kid's Day
Description: An annual wellness event held for kids before the start of the school year. Health information, screenings, vaccines and more are provided free to all participants.
Impact/Outcomes: 226 children received information
Supported by: Baylor Scott & White Medical Center – Brenham
Resources Contributed: Staff time and materials valued at $3,583 of Community Benefit

Program Name: Wellness Lunch & Learn Events
Description: Regular lunch & learn events are held at the hospital and are open to the public. Each session includes educational information about preventive health care, lectures, or presentations held by

BSWH physicians and staff about health-related topics like understanding various conditions and diseases, when to seek treatment, and the treatment options available.
Impact/Outcomes: 159 community members attended
Supported by: Baylor Scott & White Medical Center – Brenham
Resources Contributed: Staff time and materials valued at $1,139 of Community Benefit

Identified Need Addressed: Mental Health

Program Name: Wellness Program – Stress Busting
Description: A 9-week interactive program that is designed to provide support to family caregivers of persons with Alzheimer's/dementia, cancer, chronic disease, illness or a disability. Participants learn stress management and relaxation techniques; handling grief, loss and depression; taking time for yourself and choosing a path of wellness.
Impact/Outcomes: 38 participants
Supported by: Baylor Scott & White Medical Center – Brenham
Resources Contributed: Staff time and materials valued at $1,395 of Community Benefit

Program Name: Project SEARCH
Description: Project SEARCH is an international program brought local that places students in internships at the hospital and promotes employment for students with disabilities. It is a school-to-work program for high school students with disabilities in College Station that began in the fall of 2014, thanks to a cooperative effort between Baylor Scott & White Health, College Station ISD, Texas Department of Assistive and Rehabilitative Services (DARS), Brazos Valley Center for Independent Living (BVCIL), MHMR Authority of Brazos Valley, Region 6 Education Service Center and Junction 505. Students participate in 3 internships to explore a variety of career paths over the course of one school year. The students work with a team that includes their family, a special education teacher and rehabilitation services to create an employment goal and support the student during this important transition from school to work.
Impact/Outcomes: 16 program graduates
Supported by: Baylor Scott & White Medical Center – College Station
Resources Contributed: Staff time and materials valued at $517,151 of Community Benefit

Program Name: Mental Health in Primary Care Setting
Description: 6 mental health providers were recruited and placed in 4 primary clinics to better meet community need for ease of access and services, as well as recruitment and hiring of additional Licensed Social Workers (LSW) and Licensed Care Social Workers (LCSW). The addition of other providers will be evaluated on a biannual basis.
Impact/Outcomes: 3,960 people served
Supported by: Scott & White Clinic

Resources Contributed: More than $480,000 to employ the healthcare providers serving the clinic patients.

Program Name: Behavioral Health Care
Description: The Hospital will partner with local organizations, including Parks Behavior Therapy, that specialize in behavioral health services to enhance the available services and make appropriate referrals for community members needing help with behavioral health issues in the College Station region. The focus will be primarily on the pediatric population and applied behavioral health therapy.
Impact/Outcomes: The Hospital was unable to establish the partnership as planned with Parks Behavior Therapy and to onboard them onto the SWHP network plan.
Supported by: Baylor Scott & White Medical Center – College Station
Resources Contributed: n/a