


Community Health Needs Assessment

Brazos Valley Health Community

2022

Baylor Scott & White HEALTH

Brazos Valley health community hospitals

- 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 13, 2022
Baylor Scott & White Medical Center – Brenham Board of Directors on April 13, 2022
Posted to **BSWHealth.com/CommunityNeeds** on June 30, 2022

Baylor Scott & White HEALTH

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Baylor Scott & White Health mission

Our commitment to the communities we serve

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 51 hospitals, 1,100 access points, more than 7,300 active physicians, and over 49,000 employees and the Baylor Scott & White Health Plan.

Baylor Scott & White Health is a leading Texas healthcare provider with a proven commitment to patient and community health. Baylor Scott & White Health demonstrates this commitment through periodic community health needs assessments, then addresses those needs with a wide range of outreach initiatives.

These Community Health Needs Assessment (CHNA) activities also satisfy federal and state community benefit requirements outlined in the Patient Protection and Affordable Care Act and the Texas Health and Safety Code.

Baylor Scott & White Health conducts a thorough periodic examination of public health indicators and a benchmark analysis comparing communities it serves to an overall state of Texas value. In this way, it can determine where deficiencies lie and the opportunities for improvement are greatest.

Through interviews, focus groups and surveys, the organization gains a clearer understanding of community needs from the perspective of the members of each community. This helps it identify the most pressing needs a community is facing and develop implementation plans to focus on those prioritized needs.

The process includes input from a wide range of knowledgeable people who represent the myriad interests of the community in compliance with 501 (r)(3) regulations. The CHNA process overview can be found in **Appendix A**.

The CHNAs serve as the foundation for community health improvement planning efforts over the next three years, while the implementation plans will be evaluated annually.

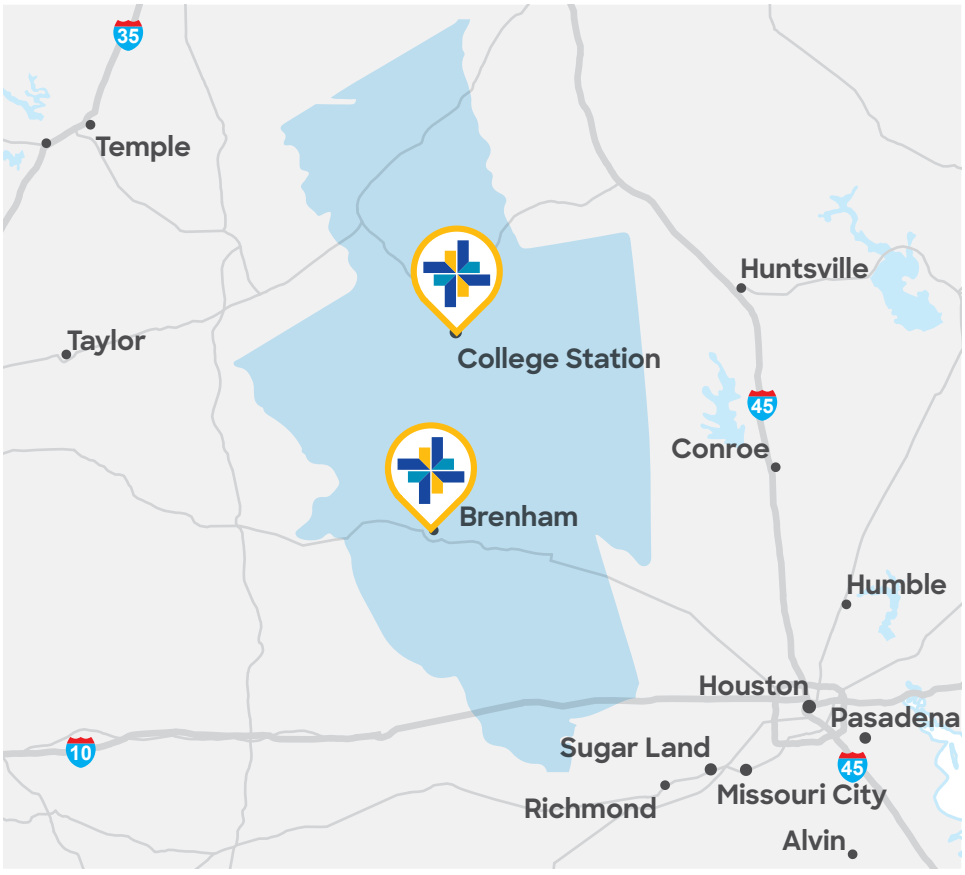
Community Health Needs Assessment (CHNA) report

Baylor Scott & White Health (BSWH) owns and operates numerous individually licensed hospital facilities serving the residents of North and Central Texas.

The Brazos Valley is home to two of these hospitals with overlapping communities, including:

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

The community served by the hospital facilities listed above is Austin, Brazos, Burleson, Grimes, Robertson, Waller and Washington counties. BSWH has at least one hospital facility or a provider-based clinic in each of these counties, and together they comprise where more than 70% of the admitted patients live according to the hospital facilities' inpatient admissions over the 12-month period of FY20. Those facilities with overlapping counties of patient origin collaborated to provide a joint CHNA report in accordance with the Internal Revenue Code Section 501 (r) (3) and the US Treasury regulations thereunder. All of the collaborating hospital facilities included in this joint CHNA report define their communities to be the same for the purposes of the CHNA report.



BSWH engaged with IBM Watson Health, a nationally respected consulting firm, to conduct a Community Health Needs Assessment (CHNA) in accordance with the federal and state community benefit requirements for the health communities they serve.

The CHNA process included:

- Gathering and analyzing more than 59 public and 45 proprietary health data indicators to provide a comprehensive assessment of the health status of the communities. The complete list of health data indicators is included in **Appendix B**.
- Creating a benchmark analysis comparing the community to overall state of Texas and United States (US) values.
- Conducting focus groups, key informant interviews and stakeholder surveys, including input from public health experts, to gain direct input from the community for a qualitative analysis.
  - Gathering input from state, local and/or regional public health department members who have the pulse of the community's health.
  - Identifying and considering input from individuals or organizations serving and/or representing the interests of medically underserved low-income and minority populations in the community to help prioritize the community's health needs.
  - The represented organizations that participated are included in **Appendix C**.

IBM Watson Health provided current and forecasted demographic, socioeconomic and utilization estimates for the community.

Demographic and socioeconomic summary

The most important demographic and socioeconomic findings for the Brazos Valley Health Community CHNA are:

- The community is growing as fast as the state of Texas, and both are outpacing the rate of growth of the US.
- The average age of the population is younger than Texas overall.
- The average income is below both the state and the US.
- The community served has a higher % of uninsured people on average than Texas and the US.
- There are seven ZIP codes that have a median household income of less than $50,200—twice the federal poverty limit (FPL) for a family of four.
  - 77801 Bryan – $29,945
  - 77803 Bryan – $43,478
  - 77445 Hempstead – $44,456
  - 76629 Bremond – $47,300
  - 77879 Somerville – $48,655
  - 77831 Bedias – $49,333
  - 77873 Richards – $49,911

Further demographic and socioeconomic information for the Brazos Valley Health Community is included in **Appendix D**.

Health community data summary

IBM Watson Health's utilization estimates and forecasts indicate the following for the Brazos Valley Health Community:

- Inpatient discharges in the community are expected to grow by 6.5% by 2030 with the largest growing product lines to include:
  - General Medicine
  - Pulmonary Medical
  - Cardiovascular Diseases
- Outpatient procedures are expected to increase by over 32% by 2030 with the largest areas of growth including:
  - General Surgery
  - Labs
  - Physical & Occupational Therapy
  - Psychiatry
- Emergency Department visits are expected to grow by over 15% by 2025.
- Hypertension represents 70% of all heart disease cases.
- Cancer incidence is expected to increase by 7.4% by 2025.

Further health community information for the Brazos Valley Health Community is included in **Appendix E**.

The community includes the following health professional shortage areas and medically underserved areas as designated by the US Department of Health and Human Services Health Resources Services Administration. **Appendix D** includes the details on each of these designations.

	Health professional shortage areas (HPSA)				Medically underserved area/ population (MUA/P)
County	Dental health	Mental health	Primary care	Grand total	MUA/P
Austin		1		1	1
Brazos	2	2	2	6	1
Burleson		1	1	2	1
Grimes	2	3	3	8	1
Robertson	2	2	2	6	1
Waller		1		1	1
Washington		1	1	2	

Source: US Department of Health and Human Services, Health Resources and Services Administration, 2021

Total population

412,484

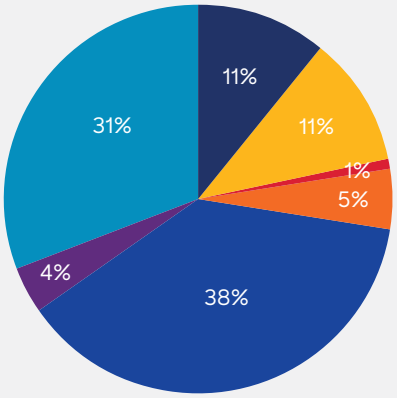
Average income

$54,679

Underserved ZIP codes

7

Insurance coverage



Priority health needs

Using the data collection and interpretation methods outlined in this report, BSWH has identified what it considers to be the community's significant health needs. The resulting prioritized health needs for this community are:

Priority	Need	Category of need
1	Chronic disease management/education	Conditions/diseases
2	Access to mental healthcare (providers/resources)	Mental health
3	Access to primary care	Access to care
4	Obesity	Conditions/diseases
5	Population under 65 without health insurance	Access to care
6	Transportation	Transportation

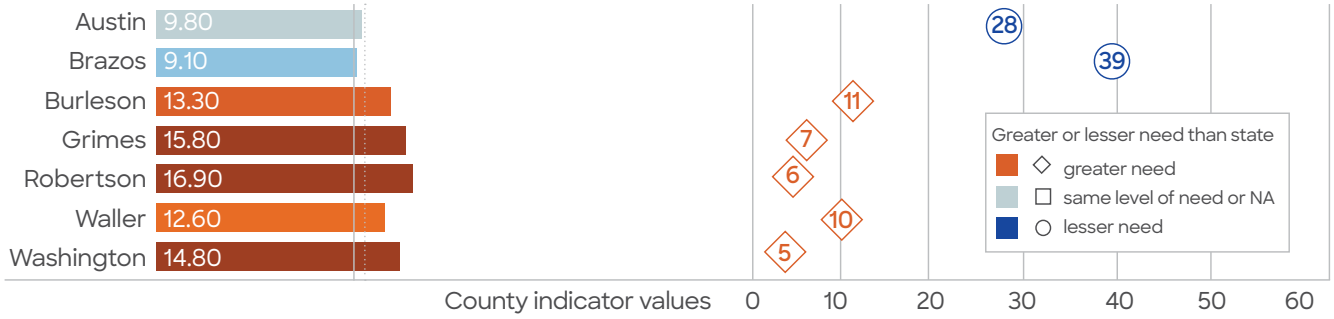
Priority 1: Chronic Disease Management/Education

Category	Data shows greater need	Key informants indicate greater need
Conditions/ diseases	• Diabetes prevalence • Medicare population: atrial fibrillation • Medicare population: heart failure • Medicare population: hypertension • Medicare population: stroke	• Residents disadvantaged with chronic conditions such as obesity and diabetes

The following data indicates greater need for chronic disease management and education, especially around diabetes, heart failure, stroke and hypertension.

The **diabetes prevalence measure** is defined as **"prevalence of diagnosed diabetes in a given county." Respondents were considered to have diagnosed diabetes if they responded "yes" to the question, "Has a doctor ever told you that you have diabetes?" Women who indicated that they only had diabetes during pregnancy were not considered to have diabetes.** The indicator is based on data from County Health Rankings (CDC Diabetes Interactive Atlas).

Diabetes prevalence (% diabetics in county)



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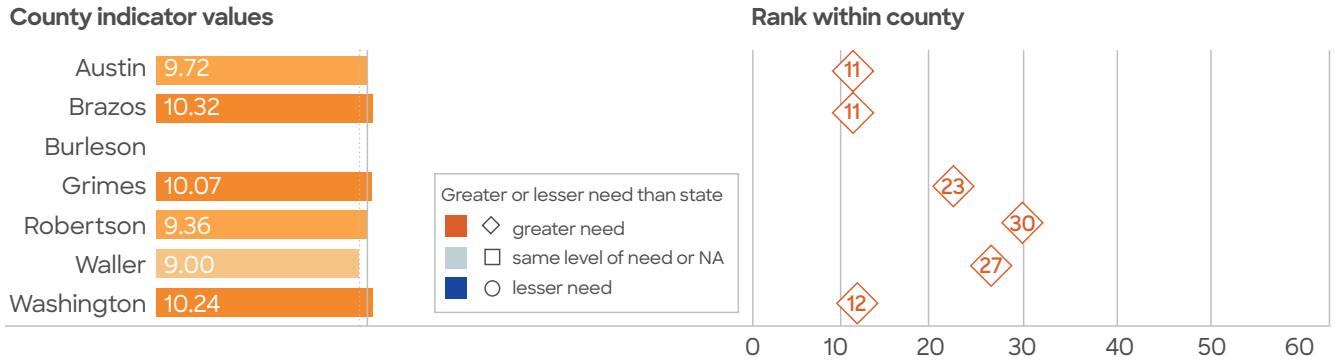
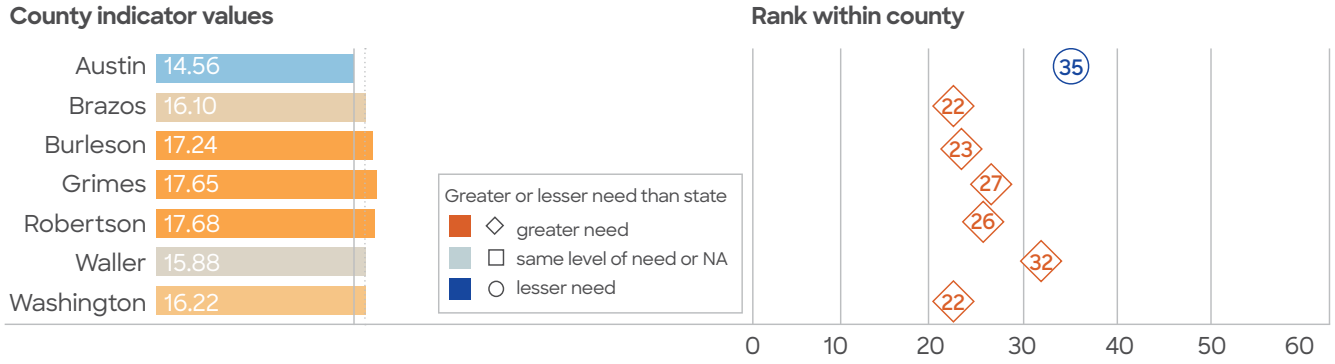
The **Medicare population: atrial fibrillation measure** is defined as **"prevalence of atrial fibrillation across all Medicare beneficiaries" in the county. A NULL value, illustrated as blank, indicates that the data have been suppressed because there are fewer than 11 Medicare beneficiaries in the cell or for necessary complementary cell suppression.** The indicator is based on data from CMS.gov Chronic Conditions.

Medicare population: atrial fibrillation (% of Medicare with atrial fibrillation in county)



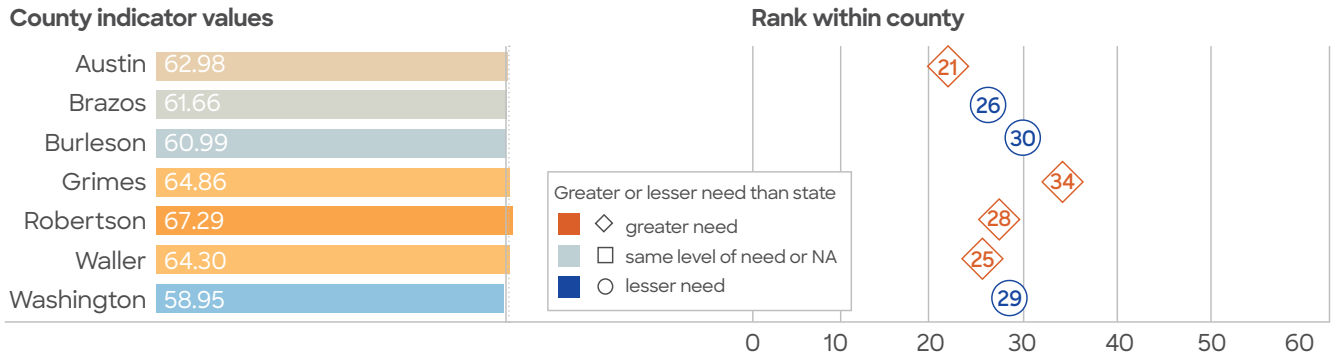
The **Medicare population: heart failure measure** is defined as **"prevalence of heart failure across all Medicare beneficiaries" in the county.** The indicator is based on data from CMS.gov Chronic Conditions.

Medicare population: heart failure (% of Medicare with heart failure in county)



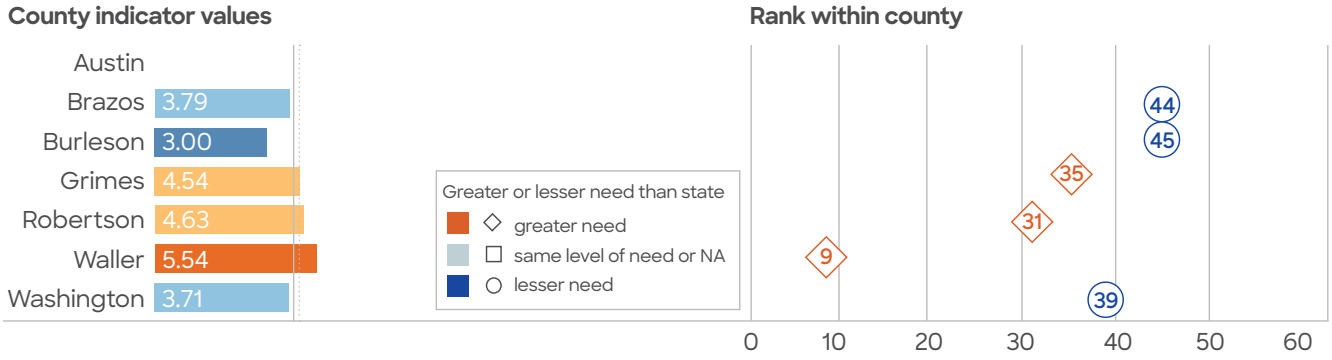
The **Medicare population: hypertension measure** is defined as **"prevalence of hypertension across all Medicare beneficiaries" in the county.** The indicator is based on data from CMS.gov Chronic Conditions.

Medicare population: hypertension (% of Medicare with hypertension in county)



The **Medicare population: stroke measure** is defined as **"prevalence of stroke across all Medicare beneficiaries" in the county. A NULL value, illustrated as blank, indicates that the data have been suppressed because there are fewer than 11 Medicare beneficiaries in the cell or for necessary complementary cell suppression.** The indicator is based on data from CMS.gov Chronic Conditions.

Medicare Population: Stroke (% of Medicare with stroke in county)



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In addition, the focus group participants highlighted the high prevalence of chronic conditions in low-income patients who are at a disadvantage with limited resources and lack of knowledge on available resources. They also noted that lack of providers and information on available resources, along with the lack of insurance and lack of transportation prevent patients from receiving treatment and getting prescriptions filled.

In the prioritization session, the hospital and community leaders agreed that some diabetes resources were lost due to COVID and that it is important that there is a refocus on diabetes and health education in the community. They added that there is an opportunity for the community to do a better job of educating our younger population on healthy lifestyle choices.

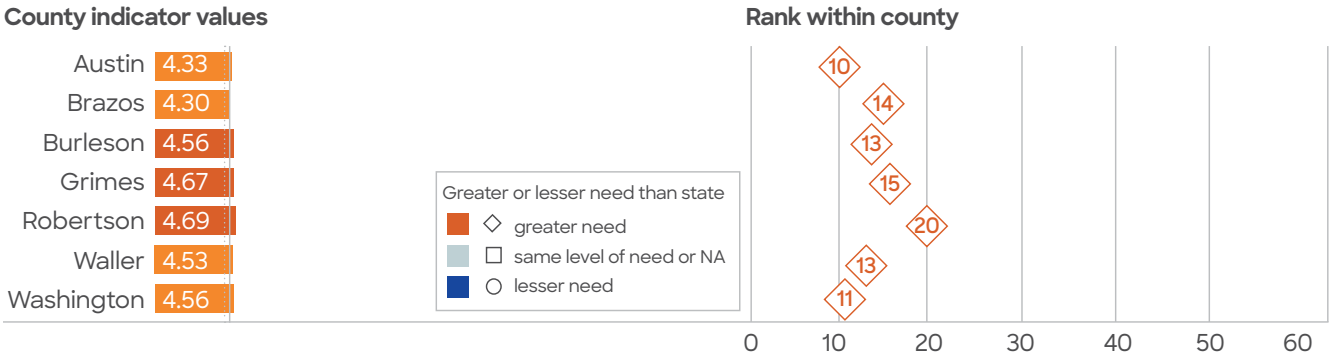
Priority 2: Access to Mental Healthcare (Providers/Resources)

Category	Data shows greater need	Key informants indicate greater need
Mental health	• Mentally unhealthy days • Population to one mental health provider	• Many who need mental health services • Limited access to mental health providers

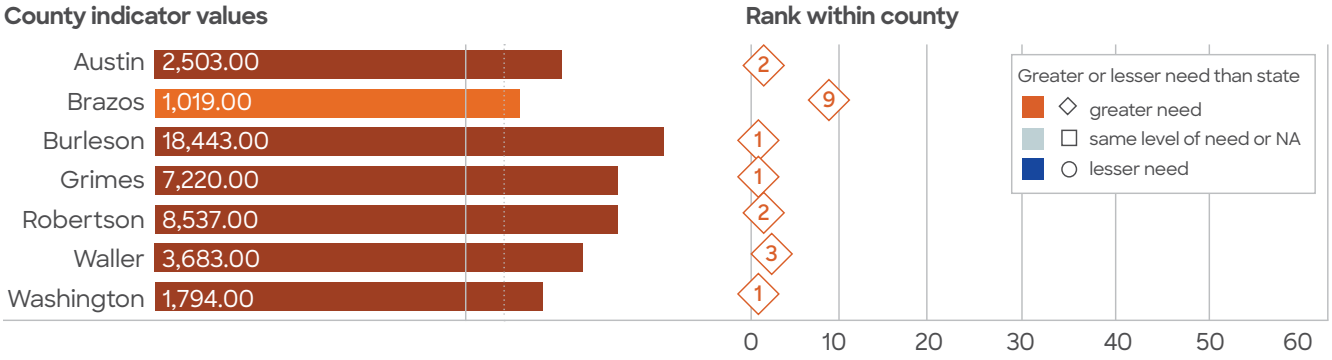
The following data indicates greater need in the area of mental health, specifically in the measures of mentally unhealthy days and population to one mental health provider.

The **mentally unhealthy days indicator** is defined as **"average number of mentally unhealthy days reported in past 30 days (age-adjusted)." The population to one mental health provider is defined as "ratio of population to mental health providers."** Both indicators are based on data from County Health Rankings & Roadmaps, The Behavioral Risk Factor Surveillance System (BRFSS), CMS and National Provider Identification Registry (NPPES).

Mentally unhealthy days (average number of mentally unhealthy days reported in past 30 days by county)



Population to one mental health provider (ratio of population to mental health providers by county)



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The focus group participants stated that the demand for mental health services outpaces the limited availability, and there is no inpatient psych facility in the area. There is a high demand but limited supply of mental/behavioral health and primary care providers leading to difficulty accessing much-needed care. They noted that there is a struggle to compete in terms of compensation to attract mental healthcare providers as a not-for-profit organization.

In the prioritization session, hospital leadership also confirmed there are not enough mental health providers, such as psychiatrists and/or psychologists, to meet the needs of the community and that they cannot recruit and hire enough to serve the community's needs. In addition, they noted that mental health providers are lower compensated than other physician specialties, which makes it more difficult to recruit medical students to study psychiatry.

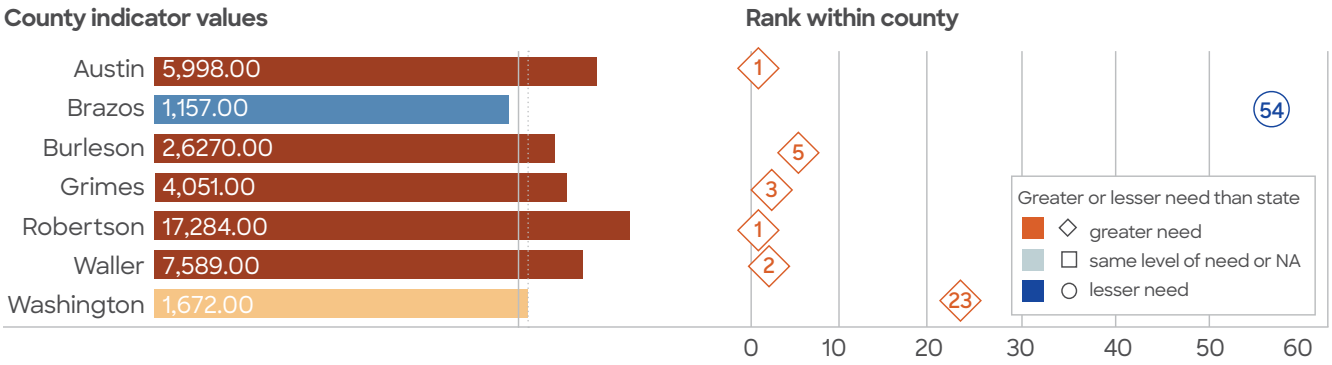
In the Brazos Valley health community, inpatient and outpatient mental health services are very much lacking. Baylor Scott & White is looking at expanding the collaborative care model to mental health services. This model would have mid-level mental health providers (LPCs, LMSWs, etc.) partnering with primary care physicians to address mental health needs.

Priority 3: Access to Primary Care

Category	Data shows greater need	Key informants indicate greater need
Access to care	• Population to one primary care physician	• Limited access to primary healthcare providers

The data below indicates **greater need for population to one primary care physician**. The indicator is defined as **"number of individuals served by one physician in a county, if the population was equally distributed across physicians"** and is based on data from County Health Rankings & Roadmaps and Area Health Resource File/American Medical Association.

Population to one primary care physician (number of individuals served by one physician by county)



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The focus group participants stated the community is desperately lacking access to healthcare services across the board. They further stated that there is limited access to primary care specifically.

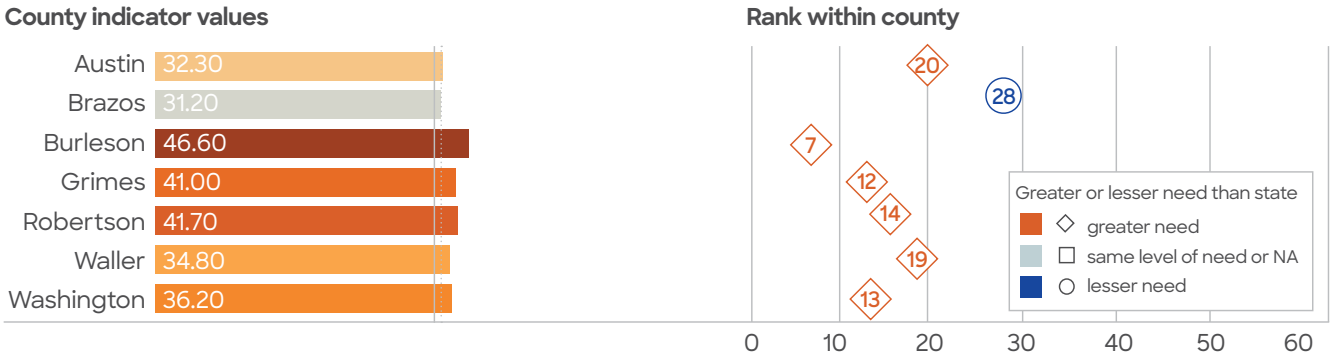
In the prioritization session, hospital leadership prioritized access to primary care as the third-highest ranked need to be addressed.

Priority 4: Obesity

Category	Data shows greater need	Key informants indicate greater need
Conditions/ diseases	• Adult obesity	• Residents disadvantaged with chronic conditions such as obesity and diabetes

The data below indicates **greater need for adult obesity**. The indicator is defined as **"percentage of the adult population (age 20 and older) that reports a body mass index (BMI) greater than or equal to 30 kg/m2"** and is based on data from County Health Rankings & Roadmaps, CDC Diabetes Interactive Atlas and The National Diabetes Surveillance System.

Adult obesity (% of adults with BMI =>30 by county)



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The focus group participants stated that there are many residents disadvantaged with limited resources and chronic conditions including obesity. These patients also lack health knowledge and lack awareness of what resources are available to them.

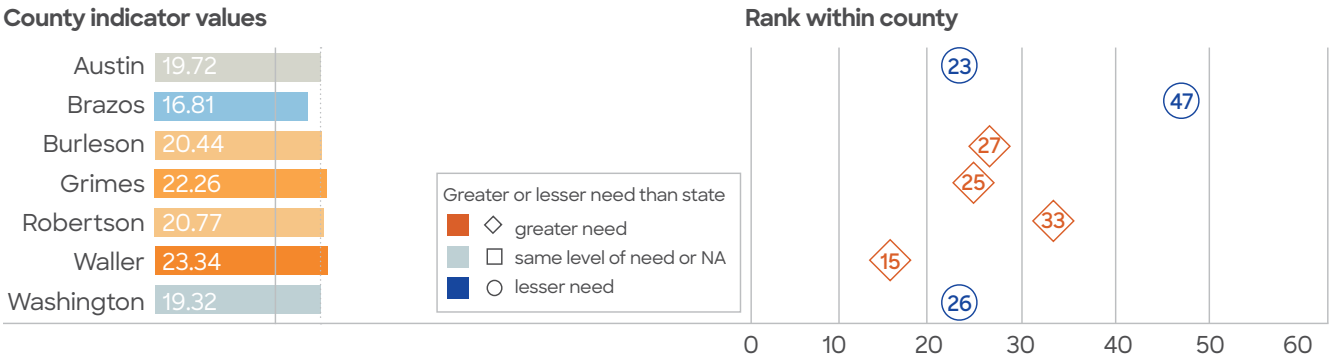
In the prioritization session, hospital leadership agreed that adult obesity is an issue and a driver to other health conditions in the community. Obesity and its related conditions drive up healthcare costs, including equipment, medication, increasing hospital days, etc., and therefore is an important need to prioritize.

Priority 5: Population Under 65 Without Health Insurance

Category	Data shows greater need	Key informants indicate greater need
Access to care	• Population under age 65 without health insurance	• Lack of health insurance

The data below indicates **greater need in the case of the indicator population under 65 without health insurance**. The indicator is defined as **"percentage of population under age 65 without health insurance"** and is based on data from County Health Rankings & Roadmaps, Small Area Health Insurance Estimates (SAHIE) and United States Census Bureau.

Population under age 65 without health insurance (% of under 65 population without health insurance by county)



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The focus group participants stated that lack of insurance is one of the factors that prevent patients from receiving treatment, seeking needed care and getting prescriptions filled, so their health worsens.

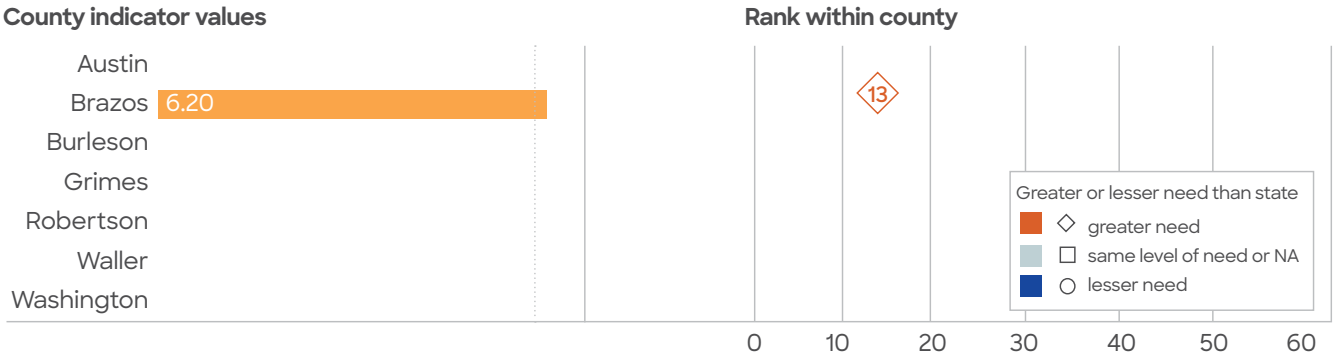
In the prioritization session, hospital leadership prioritized access to health insurance as the fifth-ranked need to be addressed.

Priority 6: Transportation

Category	Data shows greater need	Key informants indicate greater need
Transportation	• No vehicle available	• Unaffordable transportation options/ high cost of owning vehicle

The data below indicates **greater need in the case of the indicator environment: no vehicle available**. The indicator is defined as **"households with no vehicle available."** A NULL value, illustrated as blank, indicates that no sample observations or too few sample observations were available to compute an estimate. The indicator is based on data from the US Census Bureau, 2019 American Community Survey.

No vehicle available (% of households with no vehicle by county)



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The focus group participants stated that there is limited public transportation throughout the community. Transportation is especially an issue for the outer regions. Even with gas vouchers, affordability is an issue. Fortunately, there is some support in the community to improve transportation gaps that will help with some of the access issues, but those efforts need to be expanded to offer services to other vulnerable populations.

In the prioritization session, hospital leadership prioritized transportation as the sixth-ranked need to be addressed. They cited that transportation is more of an issue for rural communities. Rural residents cannot access physician visits and other care appointments to treat their conditions.

The Community Health Dashboards data referenced above can be found at **BSWHealth.com/About/Community-Involvement/Community-Health-Needs-Assessments**.

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

Existing resources to address health needs

One part of the assessment process includes gathering input on potentially available community resources. The community is served by several large healthcare systems and multiple community-based health clinics. Below is a list of some of the community resources available to address identified needs in the community.

Brazos community resources

Need	Organization	Address	Phone
Chronic disease management/ education	Catholic Health Initiatives (CHI) St. Joseph Health System	2801 Franciscan Street Bryan, TX, 77802	979.776.3777
	Guardian Healthcare	1411 Memorial Drive Bryan, TX 77802	979.774.7770
	Health for All Clinic, Inc.	3030 E. 29th Street Bryan, TX 77802	979.774.4176
	The Brenham Clinic	600 N. Park Street Brenham, TX 77833	979.836.6153
	HealthPoint - Grimes County	1905 Dove Crossing Lane Navasota, TX 77868	979.695.3400
Access to mental healthcare	Catholic Charities of Central Texas	1410 Cavitt Avenue Bryan, TX 77801	979.822.9340
	The Brazos Valley Council on Alcohol and Substance Abuse	4001 E. 29th Street Bryan, TX 77802	979.846.3560
	MHMR Authority of Brazos Valley - Mental Health Provider/Crisis Services	804 S. Texas Avenue Bryan, TX 77802	979.361.9815
	Texas A&M Health Science Center Telehealth Counseling Clinic	3030 E. 29th Street Bryan, TX 77802	979.458.9990
	Rock Prairie Behavioral Health	3550 Normand Drive College Station, TX 77845	979.703.8848
Access to primary care	Brazos County Health Department - Adult Health Clinic	201 N. Texas Avenue Bryan, TX 77803	979.361.4440
	HealthPoint - Bryan/College Station	3370 Texas Avenue, Suite B Bryan, TX 77802	979.695.3400
	Community Health Clinic	100 S. Chappell Hill Street Brenham, TX 77833	979.836.6771
	HealthPoint Caldwell - FQHC	1103 Woodson Drive Caldwell, TX 77836	979.567.7080
	The Brenham Clinic	600 N. Park Street Brenham, TX 77833	979.836.6153

Need	Organization	Address	Phone
Obesity	Texas Avenue Medical Clinic (nutrition education, diabetes education - Medicare, Medicaid, self-pay)	1703 E. 29th Street Bryan, TX 77802	979.779.4756
	WIC - Brazos County	3400 S. Texas Avenue Bryan, TX 77802	979.260.2942
	WIC - Faith Mission Washington County Health and Service Center	100 S. Chappell Hill Street Brenham, TX 77833	979.836.1913
	AccessHealth - Austin County - WIC Services	800 E. Wendt Street Bellville, TX 77418	979.865.9140
	WIC - Grimes County	118 Farquhar Street Navasota, TX 77868	936.825.8700
Population under 65 without health insurance	Texas HHSC Caldwell Office - Burleson County	500 W. Hwy 21 Caldwell, TX 77836	979.567.3283
	Society of St. Vincent De Paul-Bryan-College Station (immediate/temporary aid)	307 S. Main Street Bryan, TX 77803	979.775.2273
	Texas HHSC - Washington County	2248 S. Market Street Brenham, TX 77833	979.836.7951
	Health Point - Bryan-FQHC	2700 E. 29th Street Bryan, TX 77802	979.776.0371
	Texas HHSC - Austin County	800 E. Wendt Street Bellville, TX 77418	979.865.9164
Transportation	Brazos Valley Center for Independent Living (Transportation for individuals with significant accessibility needs.)	1869 Briarcrest Drive Bryan, TX 77802	979.776.5505
	Brazos Transit District - Demand and Response Program	1759 N. Earl Rudder Freeway Bryan, TX 77803	979.778.4480
	Brenham HHSC Office - CSHCN Program (Transit to medical appointments for teens, children, patients of all ages with CF.)	2505 Stone Hollow Drive Brenham, TX 77833	979.836.7951
	Elder Aid (Transit for individuals older than 59 years.)	307 S. Main Street Bryan, TX 77803	979.823.5127
	Caldwell HHSC Office - CSHCN Program (Transit for teens, children, patients of all ages with cystic fibrosis.)	500 State Highway 21 West Caldwell, TX 77836	979.567.3283

There are many other community resources and facilities serving the Brazos Valley area that are available to address identified needs and can be accessed through a comprehensive online resource catalog called Find Help (formerly known as Aunt Bertha). It can be accessed 24/7 at **BSWHealth.FindHelp.com**.

Next steps

BSWH started the Community Health Needs Assessment process in April 2021. 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 its 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.

Appendix A: CHNA requirement details

The Patient Protection and Affordable Care Act (PPACA) requires all tax-exempt organizations operating hospital facilities to assess the health needs of their community every three (3) years. The resulting Community Health Needs Assessment (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 used 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; and
- An evaluation of the impact of any actions that were taken since the hospitals' most recent CHNA to address the significant health needs identified in that report.
    - Hospitals also must adopt an implementation strategy to address prioritized community health needs identified through the assessment.

CHNA process

BSWH began the 2022 CHNA process in April of 2021. The following is an overview of the timeline and major milestones:

Consultant qualifications

IBM 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.

Health needs assessment process overview

To identify the health needs of the community, the hospitals established a comprehensive method using all available relevant data including community input. They used the qualitative and quantitative data obtained when assessing the community to identify its community health needs. Surveyors conducted interviews and focus groups with individuals representing public health, community leaders/groups, public organizations and other providers. In addition, data collected from public sources compared to the state benchmark indicated the level of severity. The outcomes of the quantitative data analysis were compared to the qualitative data findings.

These data are available to the community via an interactive dashboard at **BSWHealth.com/CommunityNeeds**.

Data gathering: quantitative assessment of health needs – methodology and data sources

The IBM team used quantitative data collection and analysis garnered from public health indicators to assess community health needs. This included over 100 data elements grouped into over 11 categories evaluated for the counties where data was available. Recently, indicators expanded to include new categories addressing mental health, healthcare costs, opioids and social determinants of health. A table depicting the categories and indicators and a list of sources are in **Appendix B**.

A benchmark analysis of each indicator determined which public health indicators demonstrated a community health need. Benchmark health indicators included overall US values, state of Texas values and other goal-setting benchmarks, such as Healthy People 2020.

According to America's Health Rankings 2021 Annual Report, Texas ranks 22nd out of the 50 states in the area of Health Outcomes (which includes behavioral health, mortality and physical health) and 50th in the area of Clinical Care (which includes avoiding care due to cost, providers per 100,000 population and preventive services). When the health status of Texas was compared to other states, the team identified many opportunities to impact community health.

The quantitative analysis of the health community used the following methodology:

- The team set benchmarks for each health community using state value for comparison.
- They identified community indicators not meeting state benchmarks.
- From this, they determined a need differential analysis of the indicators, which helped them understand the community's relative severity of need.
- Using the need differentials, they established a standardized way to evaluate the degree that each indicator differed from its benchmark.
- This quantitative analysis showed which health community indicators were above the 25th percentile in order of severity—and which health indicators needed their focus.

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

Information gaps

In some areas of Texas, the small population size has an impact on reporting and statistical significance. The team has attempted to understand the most significant health needs of the entire community. It is understood that there is variation of need within the community, and BSWH may not be able to impact all of the population who truly need the service.

Community input: qualitative health needs assessment - approach

To obtain a qualitative assessment of the health community, the team:

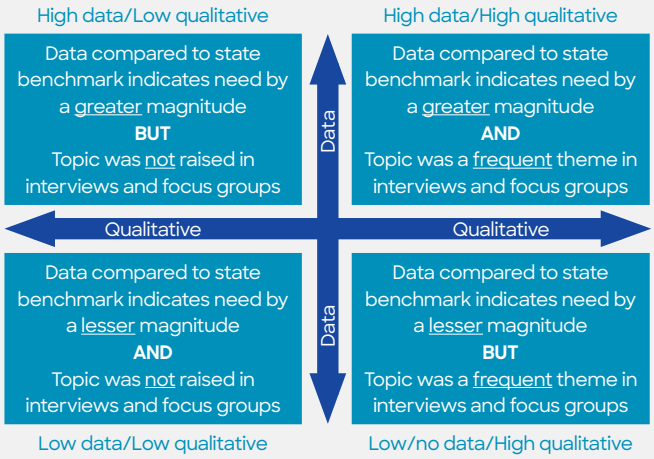
- Assembled a focus group representing the broad interests of the community served;
- Conducted interviews and surveys with key informants—leaders and representatives who serve the community and have insight into its needs; and
- Held prioritization sessions with hospital clinical leadership and community leaders to review collection results and identify the most significant healthcare needs based on information gleaned from the focus groups and key informants.

Focus groups helped identify barriers and social factors influencing the community's health needs. Key informant interviews gave the team even more understanding and insight about the general health status of the community and the various drivers that contributed to health issues.

Multiple governmental public health department individuals were asked to contribute their knowledge, information and expertise relevant to the health needs of the community. Individuals or organizations who served and/or represented the interests of medically underserved, low-income and minority populations in the community also took part in the process. NOTE: In some cases, public health officials were unavailable due to obligations concerning the COVID-19 pandemic.

The hospitals also considered written input received on their most recently conducted CHNA and subsequent implementation strategies if provided. The assessment is available for public comment or feedback on the report findings by going to the BSWH website (**BSWHealth.com/CommunityNeeds**) or by emailing **CommunityHealth@BSWHealth.org**.

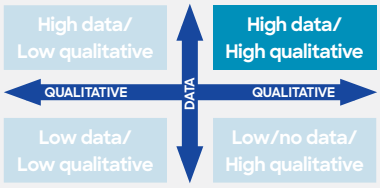
Approach to identifying significant health needs



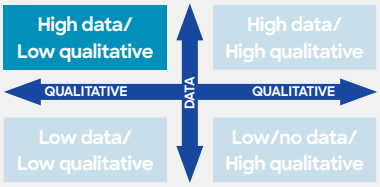
High data = Indicators worse than state benchmark by greater magnitude
High qualitative = Frequency of topic in interviews and focus groups

On January 13, 2022, a session was held with key leadership members from Baylor Scott & White Medical Center – Brenham and Baylor Scott & White Medical Center – College Station along with community leaders to review the qualitative and quantitative data findings of the CHNA to date, discuss at length the significant needs identified, and complete prioritization exercises to rank the community needs. Prioritizing health needs was a two-step process. The two-step process allowed participants to consider the quantitative needs and qualitative needs as defined by the indicator dataset and focus group/interview/survey participant input.

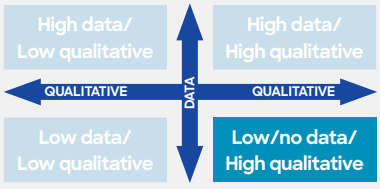
In the first step, participants reviewed the top health needs for their community using associated data-driven criteria. The criteria included health indicator value(s) for the community and how the indicator compared to the state benchmark.



High data and high qualitative: The community indicators that showed a greater need in the health community overall when compared to the state of Texas comparative benchmark and were identified as a greater need by the key informants.



High data and low qualitative: The community indicators showed a greater need in the health community overall when compared to the state of Texas comparative benchmark but were not identified as a greater need or not specifically identified by the key informants.



Low/no data and high qualitative:
The community indicators showed less need or had no data available in the health community overall when compared to the state of Texas comparative benchmark but were identified as a greater need by the key informants.

Participants held a group discussion about which needs were most significant, using the professional experience and community knowledge of the group. A virtual voting method was invoked for individuals to provide independent opinions.

This process helped the group define and identify the community's significant health needs. Participants voted individually for the needs they considered the most significant for this community. When the votes were tallied, the top identified needs emerged and were ranked based on the number of votes.

Prioritization of significant needs

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

- **Severity (outcome if ignored):** What degree of disability or premature death occurs because of the problem? What are the potential burdens to the community, such as economic or social burdens?
- **Magnitude (size of problem):** How many persons does the problem affect, either actually or potentially?
- **Feasibility/cost:** Is the problem amenable to interventions? What technology, knowledge, or resources are necessary to effect a change? Is the problem preventable? Is it too expensive for the community to tackle?

The group rated each of the significant health needs on each of the three identified criteria, using a scale of 1 (low) to 10 (high). The criteria score sums for each need created an overall score.

They prioritized the list of significant health needs based on the overall scores. The outcome of this process was the list of prioritized health needs for this community.

Priority	Need	Category of need
1	Chronic disease management/education	Conditions/diseases
2	Access to mental healthcare (providers/resources)	Mental health
3	Access to primary care	Access to care
4	Obesity	Conditions/diseases
5	Population under 65 without health insurance	Access to care
6	Transportation	Transportation

Appendix B: key public health indicators

IBM Watson Health collected and analyzed fifty-nine (59) public health indicators to assess and evaluate community health needs. 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 US and the state of Texas.

The indicators used and the sources are listed below:

Indicator name	Indicator source	Indicator definition
Adult obesity	2021 County Health Rankings & Roadmaps; CDC Diabetes Interactive Atlas, The National Diabetes Surveillance System	2017 Percentage of the adult population (age 20 and older) that reports a body mass index (BMI) greater than or equal to 30 kg/m2
Adults reporting fair or poor health	2021 County Health Rankings & Roadmaps; The Behavioral Risk Factor Surveillance System (BRFSS)	2018 Percentage of adults reporting fair or poor health (age-adjusted)
Binge drinking	2021 County Health Rankings & Roadmaps; The Behavioral Risk Factor Surveillance System (BRFSS)	2018 Percentage of a county's adult population that reports binge or heavy drinking in the past 30 days
Cancer incidence: all causes	State Cancer Profiles National Cancer Institute (CDC)	2013 - 2017 Age-adjusted cancer (all) incidence rate cases per 100,000 (all races, includes Hispanic; both sexes; all ages. Age-adjusted to the 2000 US standard population)
Cancer incidence: colon	State Cancer Profiles National Cancer Institute (CDC)	2013 - 2017 Age-adjusted colon and rectum cancer incidence rate cases per 100,000 (all races, includes Hispanic; both sexes; all ages. Age-adjusted to the 2000 US standard population). Data has been suppressed to ensure confidentiality and stability of rate estimates. Counts are suppressed if fewer than 16 records were reported in a specific area-sex-race category. If an average count of three is shown, the total number of cases for the time period is 16 or more, which exceeds suppression threshold (but is rounded to three).
Cancer incidence: female breast	State Cancer Profiles National Cancer Institute (CDC)	2013 - 2017 Age-adjusted female breast cancer incidence rate cases per 100,000 (all races, includes Hispanic; female; all ages. Age-adjusted to the 2000 US standard population). Data has been suppressed to ensure confidentiality and stability of rate estimates. Counts are suppressed if fewer than 16 records were reported in a specific area-sex-race category. If an average count of three is shown, the total number of cases for the time period is 16 or more, which exceeds suppression threshold (but is rounded to three).

Indicator name	Indicator source	Indicator definition
Cancer incidence: lung	State Cancer Profiles, National Cancer Institute (CDC)	2013 - 2017 Age-adjusted lung and bronchus cancer incidence rate cases per 100,000 (all races, includes Hispanic; both sexes; all ages. Age-adjusted to the 2000 US standard population)
Cancer incidence: prostate	State Cancer Profiles, National Cancer Institute (CDC)	2013 - 2017 Age-adjusted prostate cancer incidence rate cases per 100,000 (all races, includes Hispanic; males; all ages. Age-adjusted to the 2000 US standard population)
Children in poverty	2021 County Health Rankings & Roadmaps; Small Area Health Insurance Estimates (SAHIE), United States Census Bureau	2019 Percentage of children under age 18 in poverty.
Children in single-parent households	2021 County Health Rankings & Roadmaps; American Community Survey (ACS), Five-Year Estimates (United States Census Bureau)	2015 - 2019 Percentage of children that live in a household headed by single parent
Children uninsured	2021 County Health Rankings & Roadmaps; Small Area Health Insurance Estimates (SAHIE), United States Census Bureau	2018 Percentage of children under age 19 without health insurance
Diabetes admission	2018 Texas Health and Human Services Center for Health Statistics Preventable Hospitalizations	Number observed/adult population age 18 and older. Risk-adjusted rates not calculated for counties with fewer than five admissions.
Diabetes diagnoses in adults	CMS.gov Chronic Conditions 2007 - 2018	Prevalence of chronic condition across all Medicare beneficiaries
Diabetes prevalence	County Health Rankings (CDC Diabetes Interactive Atlas)	2017 Prevalence of diagnosed diabetes in a given county. Respondents were considered to have diagnosed diabetes if they responded "yes" to the question, "Has a doctor ever told you that you have diabetes?" Women who indicated that they only had diabetes during pregnancy were not considered to have diabetes.
Drug poisoning deaths	2021 County Health Rankings & Roadmaps, CDC WONDER Mortality Data	2017 - 2019 Number of drug poisoning deaths (drug overdose deaths) per 100,000 population. Death rates are null when the rate is calculated with a numerator of 20 or less.
Elderly isolation	2018 American Community Survey Five-Year Estimates, US Census Bureau - American FactFinder	Percent of non-family households - householder living alone - 65 years and over
English spoken "less than very well" in household	2015 - 2019 American Community Survey Five-Year Estimates, US Census Bureau - American FactFinder	2019 Percentage of households that 'speak English less than "very well"' within all households that 'speak a language other than English'
Food environment index	2021 County Health Rankings & Roadmaps; USDA Food Environment Atlas, Map the Meal Gap from Feeding America, United States Department of Agriculture (USDA)	2015 and 2018 Index of factors that contribute to a healthy food environment, 0 (worst) to 10 (best)
Food insecure	2021 County Health Rankings & Roadmaps; Map the Meal Gap, Feeding America	2018 Percentage of population who lack adequate access to food during the past year

Indicator name	Indicator source	Indicator definition
Food: limited access to healthy foods	2021 County Health Rankings & Roadmaps; USDA Food Environment Atlas, United States Department of Agriculture (USDA)	2015 Percentage of population who are low-income and do not live close to a grocery store
High school graduation	Texas Education Agency	2019 A four-year longitudinal graduation rate is the percentage of students from a class of beginning ninth graders who graduate by their anticipated graduation date or within four years of beginning ninth grade.
Household income	2021 County Health Rankings (Small Area Income and Poverty Estimates)	2019 Median household income is the income where half of households in a county earn more and half of households earn less.
Income inequality	2021 County Health Rankings & Roadmaps; American Community Survey (ACS), Five-Year Estimates (United States Census Bureau)	2015 - 2019 Ratio of household income at the 80th percentile to income at the 20th percentile. Absolute equality = 1.0. Higher ratio is greater inequality.
Individuals below poverty level	2018 American Community Survey Five-Year Estimates, US Census Bureau - American FactFinder	Individuals below poverty level
Low birth weight rate	2019 Texas Certificate of Live Birth	Number low birth weight newborns /number of newborns. Newborn's birth weight – low or very low birth weight includes birth weights under 2,500 grams. Blanks indicate low counts or unknown values. A null value indicates unknown or low counts. The location variables (region, county, ZIP) refer to the mother's residence.
Medicare population: Alzheimer's disease/ dementia	CMS.gov Chronic Conditions 2007 - 2018	Prevalence of chronic condition across all Medicare beneficiaries. A null value indicates that the data have been suppressed because there are fewer than 11 Medicare beneficiaries in the cell or for necessary complementary cell suppression.
Medicare population: atrial fibrillation	CMS.gov Chronic Conditions 2007 - 2018	Prevalence of chronic condition across all Medicare beneficiaries. A null value indicates that the data have been suppressed because there are fewer than 11 Medicare beneficiaries in the cell or for necessary complementary cell suppression.
Medicare population: COPD	CMS.gov Chronic Conditions 2007 - 2018	Prevalence of chronic condition across all Medicare beneficiaries. A null value indicates that the data have been suppressed because there are fewer than 11 Medicare beneficiaries in the cell or for necessary complementary cell suppression.
Medicare population: depression	CMS.gov Chronic Conditions 2007 - 2018	Prevalence of chronic condition across all Medicare beneficiaries
Medicare population: emergency department use rate	CMS 2019 Outpatient 100% Standard Analytical File (SAF) and 2019 Standard Analytical Files (SAF) Denominator File	Unique patients having an emergency department visit/total beneficiaries, CY 2019

Indicator name	Indicator source	Indicator definition
Medicare population: heart failure	CMS.gov Chronic Conditions 2007 - 2018	Prevalence of chronic condition across all Medicare beneficiaries. A null value indicates that the data have been suppressed because there are fewer than 11 Medicare beneficiaries in the cell or for necessary complementary cell suppression.
Medicare population: hyperlipidemia	CMS.gov Chronic Conditions 2007 - 2018	Prevalence of chronic condition across all Medicare beneficiaries
Medicare population: hypertension	CMS.gov Chronic Conditions 2007 - 2018	Prevalence of chronic condition across all Medicare beneficiaries
Medicare population: inpatient use rate	CMS 2019 Inpatient 100% Standard Analytical File (SAF) and 2019 Standard Analytical Files (SAF) Denominator File	Unique patients being hospitalized/total beneficiaries, CY 2019
Medicare population: stroke	CMS.gov Chronic Conditions 2007 - 2018	Prevalence of chronic condition across all Medicare beneficiaries. A null value indicates that the data have been suppressed because there are fewer than 11 Medicare beneficiaries in the cell or for necessary complementary cell suppression.
Medicare spending per beneficiary (MSPB) index	CMS 2019 Medicare Spending Per Beneficiary (MSPB), Hospital Value-Based Purchasing (VBP) Program	Medicare spending per beneficiary (MSPB): for each hospital, CMS calculates the ratio of the average standardized episode spending over the average expected episode spending. This ratio is multiplied by the average episode spending level across all hospitals. Blank values indicate missing hospitals or missing score. Associated to the hospitals
Mentally unhealthy days	2021 County Health Rankings & Roadmaps; The Behavioral Risk Factor Surveillance System (BRFSS)	2018 Average number of mentally unhealthy days reported in past 30 days (age-adjusted)
Mortality rate: cancer	Texas Health Data, Center for Health Statistics, Texas Department of State Health Services	2017 Cancer (all) age adjusted death rate (per 100,000 - all ages. Age-adjusted using the 2000 US Standard population). Death rates are null when the rate is calculated with a numerator of 20 or less.
Mortality rate: heart disease	Texas Health Data, Center for Health Statistics, Texas Department of State Health Services	2017 Heart disease age adjusted death rate (per 100,000 - all ages. Age-adjusted using the 2000 US Standard population). Death rates are null when the rate is calculated with a numerator of 20 or less.
Mortality rate: infant	2021 County Health Rankings & Roadmaps, CDC WONDER Mortality Data	2013 - 2019 Number of all infant deaths (within one year), per 1,000 live births. Blank values reflect unreliable or missing data.
Mortality rate: stroke	Texas Health Data, Center for Health Statistics, Texas Department of State Health Services	2017 Cerebrovascular disease (stroke) age adjusted death rate (per 100,000 - all ages. Age-adjusted using the 2000 US Standard population). Death rates are null when the rate is calculated with a numerator of 20 or less.

Indicator name	Indicator source	Indicator definition
No vehicle available	US Census Bureau, 2019 American Community Survey One-Year Estimates	2019 Households with no vehicle available (percent of households). A null value entry indicates that either no sample observations or too few sample observations were available to compute an estimate, or a ratio of medians cannot be calculated because one or both of the median estimates fall in the lowest interval or upper interval of an open-ended distribution, or the margin of error associated with a median was larger than the median itself.
Opioid involved accidental poisoning death	US Census Bureau, Population Division and 2019 Texas Health and Human Services Center for Health Statistics Opioid related deaths in Texas	Annual estimates of the resident population: April 1, 2010, to July 1, 2017. 2019 Accidental poisoning deaths where opioids were involved are those deaths that include at least one of the following ICD-10 codes among the underlying causes of death: X40 - X44, and at least one of the following ICD-10 codes identifying opioids: T40.0, T40.1, T40.2, T40.3, T40.4, T40.6. Blank values reflect unreliable or missing data.
Physical inactivity	2021 County Health Rankings & Roadmaps; CDC Diabetes Interactive Atlas, The National Diabetes Surveillance System	2017 Percentage of adults ages 20 and over reporting no leisure-time physical activity in the past month
Physically unhealthy days	2021 County Health Rankings & Roadmaps; The Behavioral Risk Factor Surveillance System (BRFSS)	2018 Average number of physically unhealthy days reported in past 30 days (age-adjusted)
Population to one dentist	2021 County Health Rankings & Roadmaps; Area Health Resource File/National Provider Identification file (CMS)	2019 Ratio of population to dentists
Population to one mental health provider	2021 County Health Rankings & Roadmaps; CMS, National Provider Identification Registry (NPPES)	2020 Ratio of population to mental health providers
Population to one non-physician primary care provider	2020 County Health Rankings & Roadmaps; CMS, National Provider Identification Registry (NPPES)	2020 Ratio of population to primary care providers other than physicians
Population to one primary care physician	2021 County Health Rankings & Roadmaps; Area Health Resource File/American Medical Association	2018 Number of individuals served by one physician in a county, if the population was equally distributed across physicians
Population under age 65 without health insurance	2021 County Health Rankings & Roadmaps; Small Area Health Insurance Estimates (SAHIE), United States Census Bureau	2018 Percentage of population under age 65 without health insurance
Prenatal care: first trimester entry into prenatal care	2020 Texas Health and Human Services - Vital statistics annual report	2016 Percent of births with prenatal care onset in first trimester

Indicator name	Indicator source	Indicator definition
Renter-occupied housing	US Census Bureau, 2019 American Community Survey One-Year Estimates	2019 Renter-occupied housing (percent of households). A null value entry indicates that either no sample observations or too few sample observations were available to compute an estimate, or a ratio of medians cannot be calculated because one or both of the median estimates fall in the lowest interval or upper interval of an open-ended distribution, or the margin of error associated with a median was larger than the median itself.
Severe housing problems	2021 County Health Rankings & Roadmaps; Comprehensive Housing Affordability Strategy (CHAS) data, US Department of Housing and Urban Development (HUD)	2013 - 2017 Percentage of households with at least one of four housing problems: overcrowding, high housing costs, or lack of kitchen or plumbing facilities
Sexually transmitted infection incidence	2021 County Health Rankings & Roadmaps; National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention (NCHHSTP)	2018 Number of newly diagnosed chlamydia cases per 100,000 population
Smoking	2021 County Health Rankings & Roadmaps; The Behavioral Risk Factor Surveillance System (BRFSS)	2018 Percentage of the adult population in a county who both report that they currently smoke every day or most days and have smoked at least 100 cigarettes in their lifetime
Suicide: intentional self-harm	Texas Health Data Center for Health Statistics	2019 Intentional self-harm (suicide) (X60 - X84, Y87.0). Death rates are null when the rate is calculated with a numerator of 20 or less.
Teen birth rate	2021 County Health Rankings & Roadmaps; National Center for Health Statistics - Natality files, National Vital Statistics System (NVSS)	2013 - 2019 Number of births to females ages 15 - 19 per 1,000 females in a county (The numerator is the number of births to mothers ages 15 - 19 in a seven-year time frame, and the denominator is the sum of the annual female populations, ages 15 - 19.)
Teens (16 - 19) not in school or work - disconnected youth	2021 County Health Rankings (Measure of America)	2015 - 2019 Disconnected youth are teenagers and young adults between the ages of 16 and 19 who are neither working nor in school. Blank values reflect unreliable or missing data.
Unemployment	2021 County Health Rankings & Roadmaps; Local Area Unemployment Statistics (LAUS), Bureau of Labor Statistics	2019 Percentage of population ages 16 and older unemployed but seeking work

Appendix C: community input participating organizations

Representatives from the following organizations participated in the focus group and a number of key informant interviews/surveys:

- Baylor Scott & White Health
- Bellville Medical Center
- Brazos Maternal & Child Health Clinic, Inc. (The Prenatal Clinic)
- Brazos Valley Center for Independent Living
- Brazos Valley Community Action Agency (Now HealthPoint)
- Brazos Valley Food Bank, Inc.
- Brazos Valley Council of Governments
- Bryan Independent School District
- College Station Independent School District
- Family Promise of Bryan-College Station
- Grimes County Texas Government
- Scotty's House – Brazos Valley Child Advocacy Center
- Sexual Assault Resource Center
- United Way of The Brazos Valley, Inc.
- Unbound Bryan College Stations (BCS)

Appendix D: 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 younger than both Texas and 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 US.

Demographic and socioeconomic comparison: community served and state/US benchmarks

Geography		Benchmarks		Community served
		United States	Texas	Brazos Valley health community
Total current population		330,342,293	29,321,501	412,483
Five-year projected population change		3.3%	6.6%	6.8%
Median age		38.6	35.2	33.5
Population 0 - 17		22.4%	25.7%	22.1%
Population 65+		16.6%	13.2%	13.3%
Women age 15 - 44		19.5%	20.5%	23.2%
Hispanic population		19.0%	40.7%	26.6%
Insurance coverage	Uninsured	9.9%	18.8%	30.6%
	Medicaid	20.9%	13.0%	10.7%
	Private market	8.3%	8.4%	8.7%
	Medicare	13.8%	12.7%	12.6%
	Employer	47.2%	47.1%	37.5%
Median HH income		$65,618	$63,313	$54,679
No high school diploma		12.2%	16.7%	16.1%

Source: IBM Watson Health Demographics, Claritas, 2020, Insurance Coverage Estimates, 2020.

The community served expects to grow 6.8% by 2025, an increase of more than 27,860 people. The 6.8% projected population growth is slightly higher than the state's five-year projected growth rate (6.6%) and higher compared to the national projected growth rate (3.3%). The ZIP codes expected to experience the most growth in five years are:

- 77845 College Station (Southside) – 5,323 people
- 77840 College Station (A&M) – 3,779 people

The community's population is younger, with 54.2% of the population ages 18 - 54 and 22.1% under age 18. The age 65-plus cohort is expected to experience the fastest growth (18.9%) over the next five years. Growth in the senior population will likely contribute to increased utilization of services as the population continues to age.

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 16,247 people (14.7%) by 2025. The non-Hispanic white and black populations are expected to have the slowest growth (2.2% and 4.7%).

Population distribution

	Age distribution				
Age group	2020	% of total	2025	% of total	USA 2020 % of total
0 - 14	75,098	18.2%	79,843	18.1%	18.5%
15 - 17	16,183	3.9%	16,104	3.7%	3.9%
18 - 24	77,628	18.8%	77,350	17.6%	9.5%
25 - 34	58,094	14.1%	62,313	14.2%	13.5%
35 - 54	87,687	21.3%	96,110	21.8%	25.2%
55 - 64	42,780	10.4%	43,209	9.8%	12.9%
65+	55,013	13.3%	65,414	14.9%	16.6%
Total	**412,483**	**100.0%**	**440,343**	**100.0%**	**100.0%**

Household Income distribution

	Income distribution		
2020 Household income	HH count	% of total	USA % of total
<$15K	23,070	15.2%	10.0%
$15 - 25K	16,833	11.1%	8.6%
$25 - 50K	34,342	22.6%	20.7%
$50 - 75K	24,295	16.0%	16.7%
$75 - 100K	17,979	11.8%	12.4%
Over $100K	35,538	23.4%	31.5%
Total	**152,057**	**100.0%**	**100.0%**

Education level

	Education level distribution		
2020 Adult education level	Pop age 25+	% of total	USA % of total
Less than high school	18,851	7.7%	5.2%
Some high school	20,549	8.4%	7.0%
High school degree	63,259	26.0%	27.2%
Some college/assoc. degree	67,697	27.8%	28.9%
Bachelor's degree or greater	73,218	30.1%	31.6%
Total	**243,574**	**100.0%**	**100.0%**

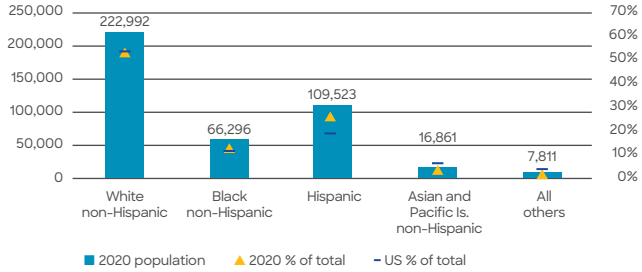
Race/ethnicity

	Race/ethnicity distribution		
Race/ethnicity	2020 pop	% of total	USA % of total
White non-Hispanic	222,992	54.1%	59.3%
Black non-Hispanic	55,296	13.4%	12.4%
Hispanic	109,523	26.6%	19.0%
Asian & Pacific is. non-Hispanic	16,861	4.1%	6.0%
All others	7,811	1.9%	3.3%
Total	**412,483**	**100.0%**	**100.0%**

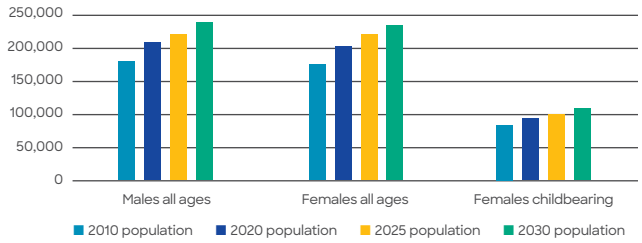
Population estimates		
Population	National	Selected area
2010 total	308,745,538	356,058
2020 total	330,342,293	412,483
2025 total	341,132,738	440,343
2030 total	353,513,931	471,686
% change 2020 - 2025	3.27%	6.75%
% change 2020 - 2035	7.01%	14.35%

Population	Males all ages	Females all ages	Females childbearing
2010 total	179,672	176,386	84,958
2020 total	208,126	204,357	95,645
2025 total	221,983	218,360	100,612
2030 total	237,041	234,645	107,503
10Y %	13.89%	14.82%	12.40%
National	7.02%	7.01%	4.01%

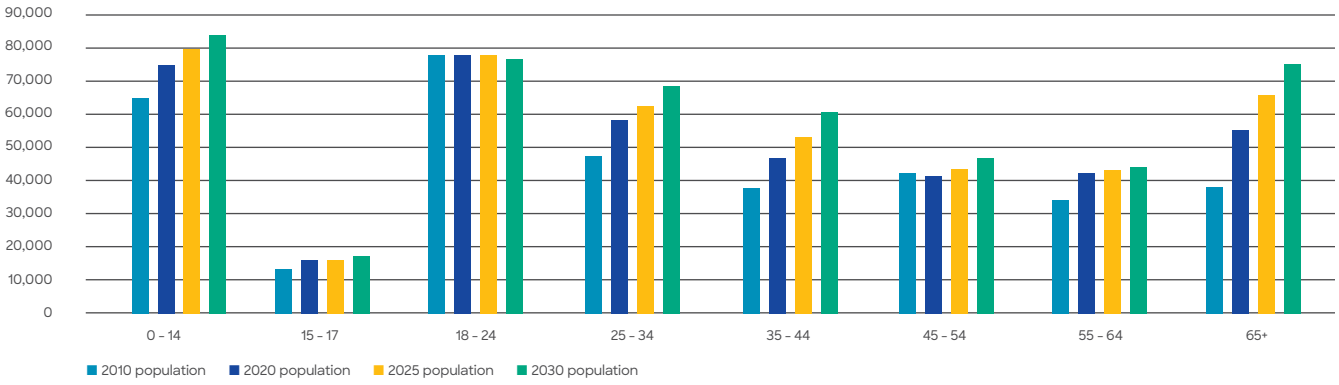
2020 race and ethnicity with total population



Population by sex 2010 - 2030



Population by age group 2010 - 2030

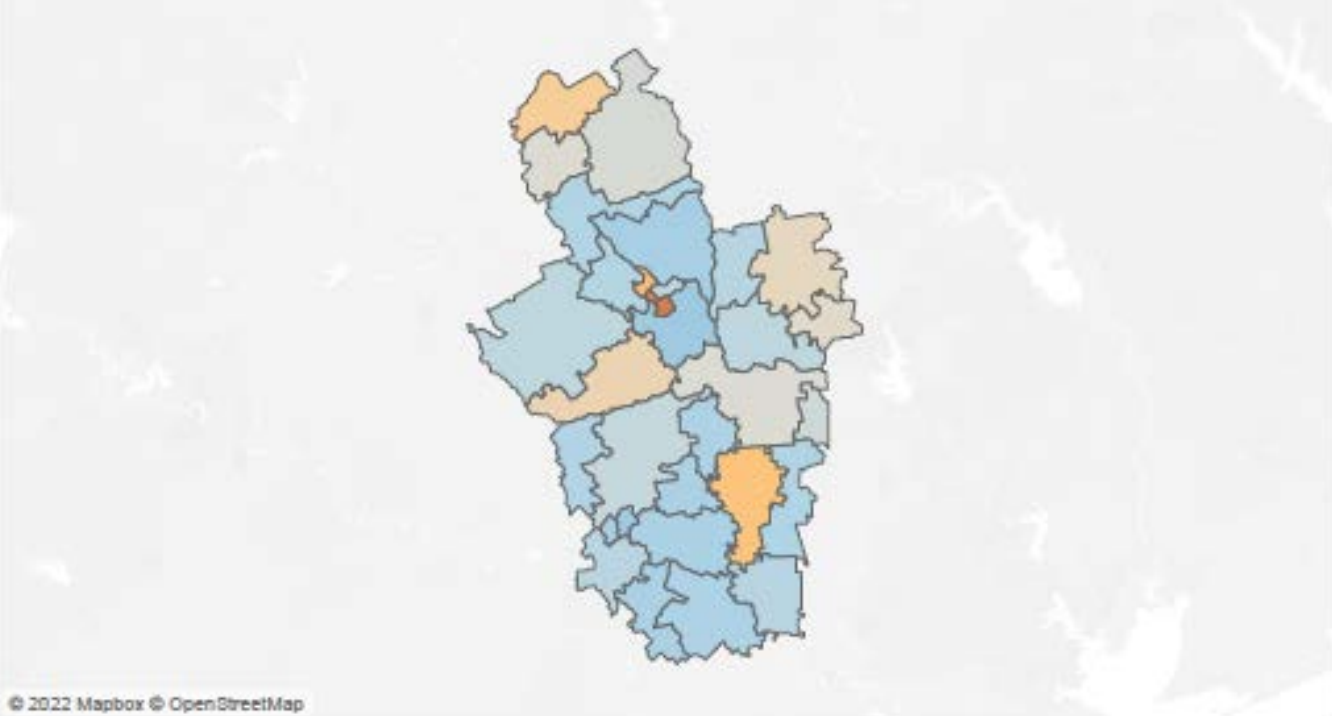


The 2020 median household income for the United States was $65,618 and $63,313 for the state of Texas. The median household income for the ZIP codes within this community ranged from $25,398 for 77840 – College Station (A&M) to $80,114 for 78931 – Bleiblerville. There were seven (7) additional ZIP codes with median household incomes less than $50,200—twice the 2020 Federal Poverty Limit for a family of four.

- 77801 Bryan – $29,945
- 77803 Bryan – $43,478
- 77445 Hempstead – $44,456
- 76629 Bremond – $47,300
- 77879 Somerville – $48,655
- 77831 Bedias – $49,333
- 77873 Richards – $49,911

A majority of the population (38%) were insured through employer sponsored health coverage, closely followed by those without health insurance (31%). 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).

The median household income ZIP code map below illustrates ZIP codes that are lower or higher than twice the federal poverty level for a family of four in 2020.



Federally designated health professional shortage areas and medically underserved areas and populations

Health professional shortage areas (HPSA)				
County	HPSA ID	HPSA name	HPSA discipline class	Designation type
Austin	7484010692	Austin County	Mental health	Geographic HPSA
Brazos	7486883858	Brazos County	Mental health	Geographic HPSA
Brazos	1488634342	LI-Brazos County	Primary care	Low income population HPSA
Brazos	6489977332	LI-Brazos County	Dental health	Low income population HPSA
Brazos	148999485K	Brazos Valley Community Action Agency, Inc.	Primary care	Federally qualified health center
Brazos	748999481Z	Brazos Valley Community Action Agency, Inc.	Mental health	Federally qualified health center
Brazos	64899948A2	Brazos Valley Community Action Agency, Inc.	Dental health	Federally qualified health center
Burleson	1483864850	Burleson County	Primary care	Geographic HPSA
Burleson	7483750363	Burleson County	Mental health	Geographic HPSA
Grimes	1486015184	LI-Grimes County	Primary care	Low income population HPSA
Grimes	7486480521	Grimes County	Mental health	Geographic HPSA
Grimes	6485415399	CF-Luther facility	Dental health	Correctional facility
Grimes	6484443934	CF-Pack facility	Dental health	Correctional facility
Grimes	1485506279	CF-Pack facility	Primary care	Correctional facility
Grimes	7486251334	CF-Pack facility	Mental health	Correctional facility
Grimes	1489125559	CF-Luther facility	Primary care	Correctional facility
Grimes	7483926387	CF-Luther facility	Mental health	Correctional facility
Robertson	1483176408	Robertson County	Primary care	Geographic HPSA
Robertson	7482931746	Robertson County	Mental health	High needs geographic HPSA
Robertson	6482815958	LI-Robertson County	Dental health	Low income population HPSA
Robertson	1484356180	FCHC Bremond Clinic	Primary care	Rural health clinic
Robertson	7483818787	FCHC Bremond Clinic	Mental health	Rural health clinic
Robertson	6489101272	FCHC Bremond Clinic	Dental health	Rural health clinic
Waller	7487389757	LI-Waller County	Mental health	Low income population HPSA
Washington	7483005436	Washington County	Mental health	Geographic HPSA
Washington	1485145906	LI-Washington County	Primary care	Low income population HPSA

Medically underserved areas and populations (MUA/P)				
County	MUA/P source identification number	Service area name	Designation type	Rural status
Austin	1481289520	Austin County	Medically underserved area	Rural
Brazos	07192	West Central	Medically underserved area	Non-rural
Burleson	1488378043	Burleson County	Medically underserved area	Partially rural
Grimes	1489830679	Grimes County	Medically underserved area	Rural
Robertson	1483963446	Robertson County	Medically underserved area	Partially rural
Waller	1482548406	Waller County	Medically underserved area	Partially rural

Community Needs Index

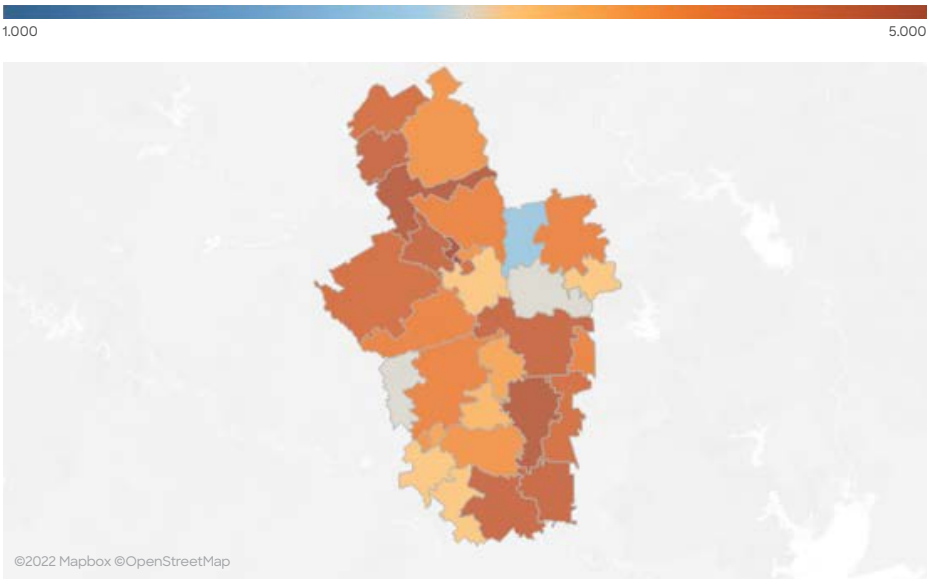
The IBM Watson Health Community Need Index (CNI) is a statistical approach that identifies areas within a community where there are likely gaps in healthcare. The CNI takes into account vital socio-economic factors, including income, culture, education, insurance and housing, about a community to generate a CNI score for every population ZIP code in the US.

The CNI is strongly linked to variations in community healthcare needs and is a good indicator of a community's demand for a range of healthcare services. Not-for-profit and community-based hospitals, for whom community need is central to the mission of service, are often challenged to prioritize and effectively distribute hospital resources. The CNI can be used to help them identify specific initiatives best designed to address the health disparities of a given community.

The CNI score by ZIP code shows specific areas within a community where healthcare needs may be greater.

Brazos Valley Health Community

Composite CNI: high scores indicate high need.



ZIP map where color shows the 2020 Community Need Index on a scale of 1 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).

Composite CNI score
4.17

Texas CNI score
3.85

US composite CNI score
3.00

Barrier	State	US
Income	3.0	3.0
Culture	4.7	3.0
Education	3.5	3.0
Insurance	4.3	3.0
Housing	3.9	3.0

The overall CNI score for the Brazos Valley Health Community was 4.17. The difference in the numbers indicates both a strong link to community healthcare needs and a community's demand for various healthcare services. In portions of the community, the CNI score was greater than 4.5, indicating more significant health needs among the population.

Appendix E: proprietary community data

IBM Watson Health supplemented the publicly available data with estimates of localized inpatient demand discharges, outpatient procedures, emergency department visits, heart disease, as well as cancer incidence estimates.

Social determinants of health are the structural determinants and conditions in which people are born, grow, live, work and age. All of which can greatly impact healthcare utilization and play a major role in the shifting healthcare landscape. Social determinants, such as education, income and race, are factored into Inpatient Demand Estimates and Outpatient Procedure Estimates utilization rate creation methodologies.

Inpatient demand estimates

Inpatient demand estimates provide the total volume of annual acute care admissions by ZIP code and DRG Product Line for every market in the United States. IBM uses all-payor state discharge data for publicly available states and Medicare (MEDPAR) data for the entire US. These rates are applied to demographic projections by ZIP code to estimate inpatient utilization for 2020 through 2030.

The following summary is reflective of the inpatient utilization trends for Brazos Valley Health Community. Total discharges in the community are expected to grow by 6.5% by 2030, with General Medicine, Pulmonary Medical and Cardiovascular Diseases projecting the largest growth.

Product line	2020 discharges	2025 discharges	2030 discharges	2020 - 2025 discharges change	2020 - 2025 discharges % change	2020 - 2030 discharges change	2020 - 2030 discharges % change
General Medicine	6,208	6,513	6,911	304	4.9%	703	11.3%
Pulmonary Medical	2,293	2,609	2,913	316	13.8%	620	27.0%
Cardiovascular Diseases	2,606	2,773	3,030	168	6.4%	425	16.3%
Neuro Sciences	1,631	1,677	1,800	46	2.8%	169	10.4%
Nephrology/Urology	1,461	1,499	1,577	38	2.6%	116	7.9%
Orthopedics	2,618	2,609	2,686	(9)	-0.3%	67	2.6%
Alcohol & Drug Abuse	489	500	556	11	2.3%	67	13.7%
General Surgery	2,743	2,722	2,796	(21)	-0.8%	52	1.9%
Cardio-Vasc-Thor Surgery	1,486	1,505	1,508	19	1.3%	22	1.5%
Oncology	713	709	724	(4)	-0.6%	11	1.6%
Rehabilitation	14	14	16	1	4.2%	2	12.5%
Psychiatry	130	131	129	1	0.5%	(1)	-1.0%
Ophthalmology	36	34	32	(3)	-7.9%	(5)	-13.3%
ENT	171	154	143	(17)	-9.8%	(28)	-16.3%
Gynecology	220	113	69	(108)	-48.9%	(151)	-68.5%
Obstetrics Del	3,855	3,518	3,531	(336)	-8.7%	(324)	-8.4%
TOTAL	**26,674**	**27,080**	**28,419**	**406**	**1.5%**	**1,745**	**6.5%**

Source: IBM Watson Health Inpatient Demand Estimates, 2020.

Outpatient procedures estimates

Outpatient procedure estimates predict the total annual volume of procedures performed by ZIP code for every market in the United States using proprietary and public health claims, as well as federal surveys. Procedures are defined and reported procedure codes and are further grouped into clinical service lines. The Brazos Valley Health Community outpatient procedures are expected to increase by over 32% by 2030 with the largest growth in the categories of general surgery, labs, physical & occupational therapy and psychiatry.

Clinical service category	2020 procedures	2025 procedures	2020-2025 procedures % change	2030 procedures	2020 - 2030 procedures % change
Allergy & Immunology	85,599	91,584	7.0%	98,827	15.5%
Anesthesia	38,431	45,476	18.3%	51,825	34.9%
Cardiology	229,315	293,182	27.9%	378,067	64.9%
Cardiothoracic	258	292	13.0%	325	25.8%
Chiropractic	122,893	121,434	-1.2%	118,592	-3.5%
Colorectal Surgery	2,157	2,297	6.5%	2,469	14.5%
CT Scan	75,631	105,118	39.0%	144,020	90.4%
Dermatology	62,048	70,192	13.1%	78,883	27.1%
Diagnostic Radiology	337,903	367,496	8.8%	398,927	18.1%
Emergency Medicine	183,427	208,618	13.7%	236,481	28.9%
Gastroenterology	22,271	25,159	13.0%	28,317	27.1%
General & Internal Medicine	2,812,022	3,258,398	15.9%	3,679,998	30.9%
General Surgery	17,403	19,250	10.6%	21,401	23.0%
Hematology & Oncology	416,584	481,135	15.5%	553,396	32.8%
Labs	2,905,291	3,292,880	13.3%	3,742,875	28.8%
Miscellaneous	108,193	123,070	13.8%	138,442	28.0%
MRI	26,801	30,082	12.2%	33,670	25.6%
Nephrology	111,926	124,064	10.8%	137,258	22.6%
Neurology	30,185	34,032	12.7%	38,207	26.6%
Neurosurgery	1,804	2,354	30.5%	2,695	49.4%
Obstetrics/Gynecology	51,156	54,579	6.7%	59,979	17.2%
Ophthalmology	181,254	213,151	17.6%	245,374	35.4%
Oral Surgery	1,516	1,706	12.5%	1,946	28.4%
Orthopedics	48,035	53,178	10.7%	58,350	21.5%
Otolaryngology	101,063	113,445	12.3%	126,400	25.1%
Pain Management	29,426	31,843	8.2%	33,538	14.0%
Pathology	168	198	17.4%	225	33.9%
PET Scan	3,296	3,820	15.9%	4,327	31.3%
Physical & Occupational Therapy	728,601	864,296	18.6%	1,015,484	39.4%
Plastic Surgery	3,295	3,729	13.2%	4,220	28.0%
Podiatry	25,256	27,366	8.4%	29,079	15.1%
Psychiatry	234,823	328,841	40.0%	441,118	87.9%
Pulmonary	51,726	58,199	12.5%	66,611	28.8%
Radiation Therapy	31,598	34,599	9.5%	37,631	19.1%
Single Photon Emission CT Scan (SPECT)	5,959	6,494	9.0%	7,213	21.0%
Urology	24,494	27,884	13.8%	31,440	28.4%
Vascular Surgery	8,555	9,462	10.6%	10,385	21.4%
TOTAL	**9,120,365**	**10,528,900**	**15.4%**	**12,057,995**	**32.2%**

Source: IBM Watson Health Outpatient Procedure Estimates, 2020.

Emergency department visits

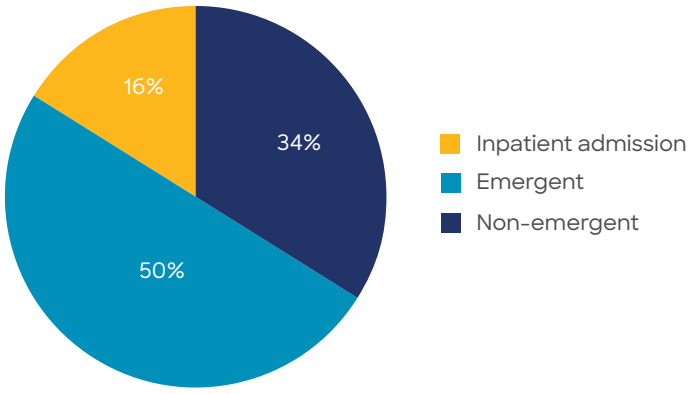
Emergency department estimates predict the total annual volume of emergency department (ED) visits by ZIP code and level of acuity for every market in the United States. IBM uses an extensive supply of proprietary claims, public claims and federal surveys to construct population-based use rates for all payors by age and sex. These use rates are then applied to demographic and insurance coverage projections by ZIP code to estimate ED utilization for 2020 through 2030.

Visits are broken out into emergent and non-emergent ambulatory visits to identify the volume of visits that could be seen in a less-acute setting, for example, a fast-track ED or an urgent care facility. In addition, visits that result in an inpatient admission are broken out into a third, separate category. In the Brazos Valley Health Community, ED visits are expected to grow by over 15% by 2025.

Emergent status	2020 visits	2025 visits	2020 - 2025 visits change	2020 - 2025 visits % change
Emergent	91,739	111,957	20,218	22.0%
Inpatient Admission	29,185	35,436	6,251	21.4%
Non-Emergent	72,360	75,630	3,270	4.5%
TOTAL	**193,283**	**223,023**	**29,740**	**15.4%**

Source: IBM Watson Health Emergency Department Visits, 2020.

2025 ED visits (estimates)



Heart disease estimates

The heart disease estimates dataset predicts the number of cases by heart disease type and ZIP code for every market in the United States. IBM uses public and private claims data as well as epidemiological data from the National Health and Nutritional Examination Survey (NHANES) to build local estimates of heart disease prevalence for the current population. County-level models by age and sex are applied to the underlying demographics of specific geographies to estimate the number of patients with specific types of heart disease.

Disease type	2020 prevalence	2020 % prevalence
Arrhythmia	18,876	13.3%
Heart Failure	8,893	6.3%
Hypertension	99,160	70.0%
Ischemic Heart Disease	14,789	10.4%
TOTAL	**141,719**	**100.0%**

Source: IBM Watson Heart Disease Estimates, 2020.

In Brazos Valley Health Community, the most common disease is hypertension at 70% of all heart disease cases.

Cancer estimates

IBM Watson Health builds county-level cancer incidence models that are applied to the underlying demographics of specific geographies to estimate incidence (i.e., the number of new cancer cases annually) of all cancer patients. Cancer incidence is expected to increase by 7.4% in the Brazos Valley Health Community by 2025.

Cancer type	2020 incidence	2025 incidence	2020 - 2025 change	2020 - 2025 % change
Bladder	70	80	10	13.9%
Brain	33	36	3	9.2%
Breast	212	235	23	10.8%
Colorectal	157	139	-17	-11.1%
Kidney	75	86	11	14.9%
Leukemia	52	59	7	13.0%
Lung	226	244	18	8.1%
Melanoma	101	118	17	16.7%
Non-Hodgkins Lymphoma	73	82	9	12.7%
Oral Cavity	52	59	7	13.0%
Other	241	271	30	12.5%
Ovarian	28	30	2	7.0%
Pancreatic	58	68	9	16.1%
Prostate	213	197	-16	-7.6%
Stomach	35	37	2	6.5%
Thyroid	48	55	7	13.6%
Uterine Cervical	13	13	0	1.0%
Uterine Corpus	58	66	8	13.1%
TOTAL	**1,747**	**1,876**	**129**	**7.4%**

Source: IBM Watson Health Cancer Estimates, 2020.

Appendix F: 2019 community health needs assessment evaluation

It is Baylor Scott & White Health's privilege to serve faithfully in promoting the well-being of all individuals, families and communities. Our 2019 Implementation Strategy described the various resources and initiatives we planned to direct toward addressing the adopted health needs of the 2019 CHNA.

Following is a snapshot of the impact of actions taken by Baylor Scott & White to address the below priority health issues.

Needs: Access to Primary Care Providers (MD and Non-MD)
Dates: Fiscal Years 2020 - March 2022
Facilities: BSWMC- Brenham, BSWMC - College Station, Baylor Scott & White Clinic
Community served: Brazos, Burleson, Grimes, Waller and Washington Counties

Ratio of population to one primary care provider (physician/non-physician)

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

Action/tactics	Anticipated outcome	Evaluation of impact
Community education Provide free community education sessions on benefits of annual checkups in primary care through programs like Walk with a Doc, community health fairs and health events. Host annual community health fair to offer screenings and health education information.	Community members became more aware of the importance of regular doctor's visits to avoid having long-term complications and potentially high ED bills. Increased access to screenings and vaccinations to aid in prevention efforts at the primary care level.	**Brenham** 5,876 served $477,107 **College Station** 21,761 served $235,530 *Event opportunities were less than anticipated due to pandemic.*
Cash and in-kind contributions Cash and in-kind contributions to other not-for-profit community organizations existing to increase access to healthcare and services for the community. In-kind medical supply and equipment donations to local non-profits supporting healthcare programs Partners: Community clinics like Health For All and the Brazos Valley Prenatal Clinic	Improved access to care for un/underinsured. Other non-profit organizations are better able to help patients at a first touch point rather than having to send them to the hospital for care.	**Brenham** $102,962 **College Station** 4,430 served $346,633
Community clinic support Washington County Community Clinic/Faith Mission Support with expansion of educational programs and resources. Partners: Faith Mission, Washington County, BSW Wellness Center	Improving access for the indigent and uninsured; Ensuring social and medical needs are met in a single location.	**Brenham** Provided in-kind lab services 3 FTEs (FNP, RN, assistant) 2,200 clients served $246,463 invested *BSW Wellness Center was closed in 2021.*
Charity care Provide free and/or discounted care to financially or medically indigent patients as outlined in the financial assistance policy.	Increased access to primary care and/or specialty care for indigent persons regardless of their ability to pay.	**Brenham** $15 million **College Station** $37.2 million

Ratio of population to one primary care provider (physician/non-physician)

Baylor Scott & White Clinic

Action/tactics	Anticipated outcome	Evaluation of impact
Expansion of primary care: College Station Expand primary care access in College Station by 2021 through the addition of two new primary care clinics and four new providers.	Improved community options for accessing primary care to keep patients healthier through regular checkups	Pandemic and budget constraints have prohibited this strategy from being implemented to date.
Expansion of primary care: Brenham Expand primary care access in Brenham by 2021 through the addition of at least one new convenient care clinic and affiliated providers.	Improved access for sick care	Pandemic and budget constraints have prohibited this strategy from being implemented to date.
Physician recruitment Recruit and place additional primary care providers in current BSW Clinics.	Improved access for general primary care	Added 5.6 FTE primary physicians at a cost of $1,400,000 and 2 APPs at a cost of $210,000.

Total investment in adopted community needs since 2019 CHNA

College Station	Brenham	Clinic
$37,782,163	**$15,826,532**	**$1,610,000**