


Community Health Needs Assessment

North & West Emergency Health Community
2022

Baylor Scott & White HEALTH

North & West Emergency health community hospitals

- Baylor Scott & White Emergency Hospital – Colleyville*
- Baylor Scott & White Emergency Hospital – Keller*
- Baylor Scott & White Emergency Hospital – Aubrey*
- Baylor Scott & White Emergency Hospital – Murphy*
- Baylor Scott & White Emergency Hospital – Rockwall*

*The hospital facilities marked above are all operated under a single state license.

Approved by: Baylor Scott & White Health – North Texas Operating, Policy and Procedure Board on May 31, 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.

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

MISSION

STRATEGIES

Health
Experience
Affordability
Alignment
Growth

We serve faithfully

We act honestly

We never settle

We are in it together

VALUES

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

AMBITION

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

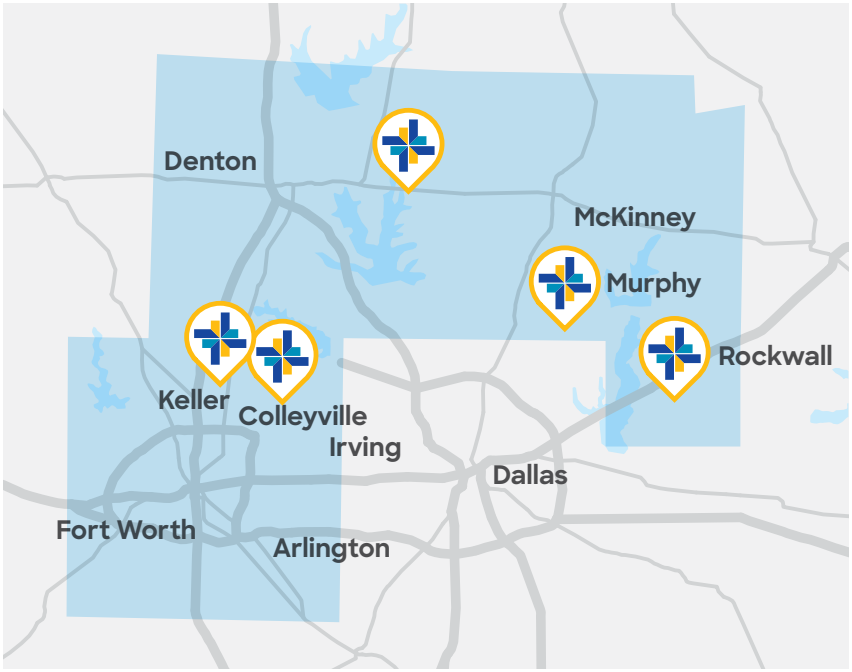
Baylor Scott & White Health (BSWH) owns and operates numerous individually licensed hospital facilities serving the residents of North and Central Texas.

The North & West Emergency Health Community is home to a number of these hospitals with overlapping communities, including:

- Baylor Scott & White Emergency Hospital – Colleyville*
- Baylor Scott & White Emergency Hospital – Keller*
- Baylor Scott & White Emergency Hospital – Aubrey*
- Baylor Scott & White Emergency Hospital – Murphy*
- Baylor Scott & White Emergency Hospital – Rockwall*

The community served by the hospital facilities listed above is Collin, Denton, Rockwall and Tarrant Counties and was determined based on the contiguous zip codes within the associated counties that made up nearly 80% of 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 a joint CHNA report define their communities to be the same for the purposes of the CHNA report.

North & West Emergency Health Community map



*The hospital facilities marked above are all operated under a single state license.

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 North & West Emergency Health Community CHNA are:

- The community is growing at a rate higher than both the state of Texas and the US.
- The average age of the population is younger than the US but older than Texas overall.
- The median household income is higher than both the state and the US.
- The community served has a lower percentage of uninsured and underinsured than Texas.

Further demographic and socioeconomic information for the North & West Emergency Health Community is included in **Appendix D**.

Health community data summary

IBM Watson Health's utilization estimates and forecasts indicate the following for the North & West Emergency Health Community:

- Inpatient discharges in the community are expected to grow by 12.6% by 2030 with the largest growing product lines to include:
  - Pulmonary medical
  - General medicine
  - Cardiovascular diseases
- Outpatient procedures are expected to increase by over 36% by 2030 with the largest areas of growth including:
  - Labs
  - General & internal medicine
  - Physical & occupational therapy
  - Psychiatry
  - Hematology & oncology
- Emergency department visits are expected to grow by almost 16% by 2025.
- Hypertension represents over 73% of all heart disease cases.
- Cancer incidence is expected to increase by 13.3% by 2025.

Further health community information for the North & West Emergency 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
Collin		1		1	
Denton	1	2	1	4	1
Rockwall	na	na	na	na	na
Tarrant	3	4	3	10	3

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

Total population

4,093,615

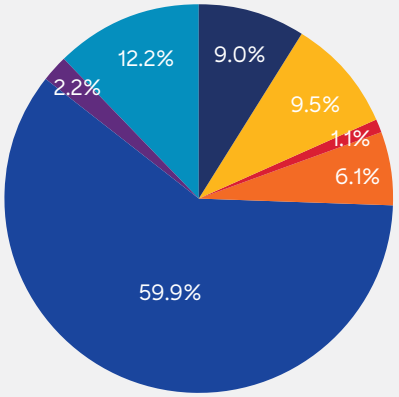
Average income

$86,914

Underserved ZIP codes

20

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	Depression/social isolation	Mental health Environment
2	Mentally unhealthy days	Mental health
3	Access to primary healthcare	Access to care
4	Hypertension	Conditions/diseases
5	Medicare population - emergency department utilization	Utilization

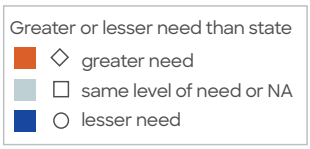
Priority 1: Depression/Social Isolation

The following data indicates a greater need in the area of depression.

Category	Data shows greater need	Key informants indicate greater need
Mental health	• Medicare population: depression	• Social isolation and loneliness caused increased depression and mental health needs

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

Mental health conditions/diseases: Medicare population: depression (% of Medicare patients with depression divided by all Medicare population by county)



Counties are listed in alphabetical order within NTX-North & West Emergency Health Community.
LEFT PANEL: Indicator Values horizontal bar and label shows the county score. Vertical dotted line shows the state benchmark. Solid line is US score. Orange colors indicate a greater need and potentially larger vulnerable population in the county relative to the state benchmark. Blue indicates a lesser need and potentially smaller vulnerable population. Darker intense colors indicate greater differences.
RIGHT PANEL: Rank within county marks show how the indicator ranks compared to other indicators within the county. Indicators are ranked from 1 to 59, where low numbers show higher need and potentially larger vulnerable population relative to the state benchmark. Color and shape compare county performance to the state benchmark; orange diamonds show greater need and blue circles lesser need.

The key informants commented that COVID brought on increased social isolation, unease, separation and loneliness, causing increased depression and mental health needs in the community. Elderly isolation due to COVID was noted, and the need to provide senior care programs to alleviate social isolation was identified.

In the prioritization session, hospital leadership agreed that depression and loneliness were worsened with stay-at-home orders during the pandemic.

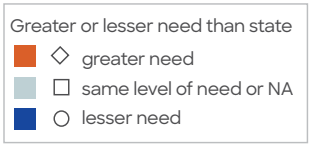
Priority 2: Mentally Unhealthy Days

The following data indicates greater need in the area of mentally unhealthy days.

Category	Data shows greater need	Key informants indicate greater need
Mental health	• Mentally unhealthy days	• Mental health issues are a problem in community

The **mentally unhealthy days** indicator is defined as **the average number of mentally unhealthy days reported in past 30 days (age-adjusted)** and is based on data from County Health Rankings & Roadmaps; The Behavioral Risk Factor Surveillance System (BRFSS).

Mental health conditions/diseases: mentally unhealthy days (number of mentally unhealthy days reported in past 30 days by county)



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The focus group participants recognized that mental issues are a problem in the community. They anticipate growth of behavioral health cases and increased severity due to patients being underserved during COVID.

In the prioritization session, the hospital and community leaders noted that mental health issues are seen in the emergency departments several times a week and are an area of need that should be prioritized, especially since outpatient care after an emergency department visit is problematic.

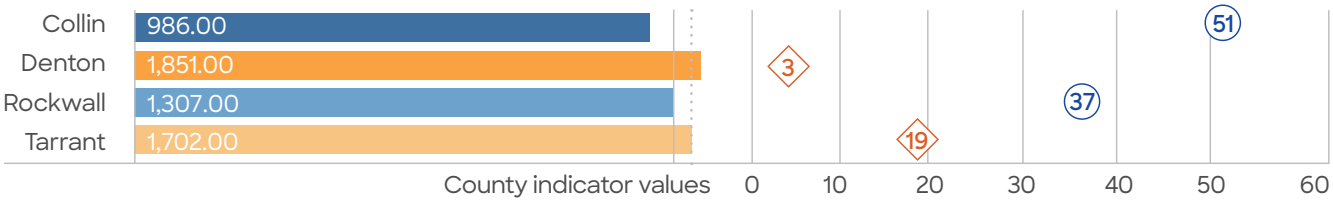
Priority 3: Access to Primary Healthcare

The following data indicates greater need for access for the population to one primary care provider.

Category	Data shows greater need	Key informants indicate greater need
Access to care	• Population to one primary care physician	• High demand for primary care

The **population to one primary care physician** indicator is defined as **the 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.

Access to care: population to one primary care physician (number of individuals served by one physician by county)



Greater or lesser need than state
- ◇ greater need
- □ same level of need or NA
- ○ lesser need

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The focus group participants noted that the overall community area has limited primary care services for the population and limited availability of low-cost providers despite the high demand. There are limited publicly funded hospitals in the North & West Emergency Health Community that contribute to the access problem.

In the prioritization session, the hospital leadership stated that many patients are challenged on how they can get established with a primary care physician. They believe that the challenge is greater for the uninsured and underinsured, who are unable to afford care and therefore have less access.

Priority 4: Hypertension

Although the key informants did not identify hypertension as a need, the data indicates a greater need around hypertension.

Category	Data shows greater need	Key informants indicate less need or not mentioned
Conditions/ diseases	• Medicare population: hypertension	• Not specifically mentioned

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

Conditions/diseases: Medicare population: hypertension (prevalence of hypertension over all Medicare beneficiaries by county)

Greater or lesser need than state
- ◇ greater need
- ☐ same level of need or NA
- ○ lesser need

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The hospital and community leaders had no lengthy discussion during prioritization regarding hypertension but agreed it is a significant need after reviewing the public health data.

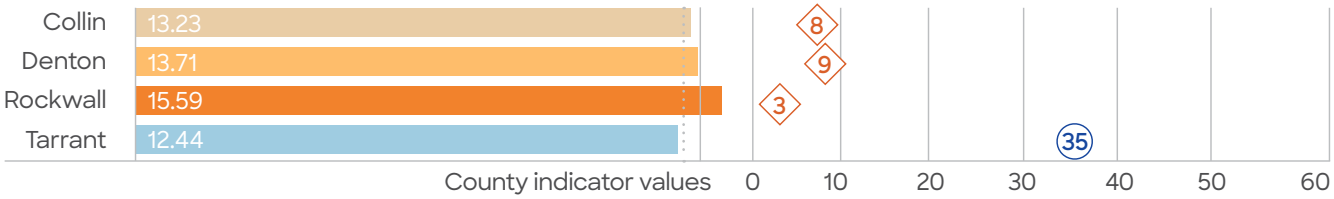
Priority 5: Medicare Population: Emergency Department Utilization

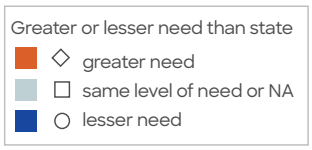
The data below indicates a greater need in the area of emergency department utilization.

Category	Data shows greater need	Key informants indicate greater need
Utilization	• Medicare population: emergency department use rate	• Emergency utilization is high

The **Medicare population: emergency department use rate** indicator is defined as **the unique patients having an emergency department visit divided by the total beneficiaries** and is based on data from CMS Outpatient 100% Standard Analytical File (SAF) and CMS Standard Analytical Files (SAF) Denominator File.

Utilization: Medicare population: emergency department use rate (number of unique patients/total beneficiaries by county)





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The key informants of the focus group recognized that emergency utilization is high, and patients leverage emergency departments for treatment.

The hospital and community leaders agreed that the overuse of the emergency department is an issue. They argued that we need to consider that the pandemic has changed how people access the healthcare system. They believe that the use of emergency departments is a personal choice that patients make to access the system.

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.

North & West Emergency community resources

Need	Organization	Address	Phone
Depression/ social isolation	First Step Counseling Center	900 E. Park Boulevard Plano, TX 75074	214.942.8808
	LifePath System (behavioral health services)	7308 Alma Drive Plano, TX 75025	877.422.5939
	Custer Road United Methodist Church (pastoral services)	6601 Custer Road Plano, TX 75023	972.618.3450 ext. 227
	First Step Denton County Outreach Program, LLC	1406 N. Corinth Street Suite 401 Corinth, TX 76208	940.497.5576
	First Refuge Ministries (counseling/spiritual support/ group therapy)	1701 Broadway Street Denton, TX 76201	940.484.4384
Mentally unhealthy days	Lena Pope (counseling, mental health assessment)	8713 Airport Freeway North Richland Hills, TX 76180	817.255.2652
	North Texas Area Community Health Centers Inc. (behavioral health services)	979 N. Cooper Street Arlington, TX 76011	817.801.4440
	CK Family Services (CK)	710 E. Park Boulevard Plano, TX 75074	817.516.9100
	Lifeologie Institute (counseling)	3600 Shire Boulevard Richardson, TX 75082	214.556.0996
	The Center for Integrative Counseling and Psychology	3901 N. Star Road Richardson, TX 75082	214.526.4525
Access to primary care	Community Health Clinic	120 Central Expressway McKinney, TX 75070	972.547.0606
	Hope Clinic	103 E. Lamar Street McKinney, TX 75069	469.712.4246
	Carevide	111 N. Johnson Street Farmersville, TX 75442	903.455.5958
	Cornerstone Charitable Clinic	3500 Noble Avenue Fort Worth, TX 76111	817.632.6020
	North Texas Area Community Health Centers Inc. (primary care)	979 N. Cooper Street Arlington, TX 76011	817.625.4254

Need	Organization	Address	Phone
Hypertension	Texas A&M AgriLife Extension Service (nutrition education)	200 Taylor Street Fort Worth, TX 76196	817.212.7501
	YMCA of Arlington (physical activity)	7120 S. Cooper Street Arlington, TX 76001	817.299.9629
	Carevide (primary/preventive care)	111 N. Johnson Street Farmersville, TX 75442	903.455.5958
	Hope Clinic (primary/preventive care, prescription assistance)	103 E. Lamar Street McKinney, TX 75069	469.712.4246
	DCHD Lewisville Clinic	401 N. Valley Parkway Lewisville, TX 75067	940.349.2900
ED utilization	Texas Health and Human Services Commission (HHSC) (Medicaid/Medicare)	1301 S. Bowen Road Arlington, TX 76013	817.264.4500
	Texas HHSC (Medicaid/Medicare)	901 N. McDonald Street McKinney, TX 75069	972.562.5832
	Carevide (disease management)	111 N. Johnson Street Farmersville, TX 75442	903.455.5958
	Cornerstone Charitable Clinic (disease management)	3500 Noble Avenue Fort Worth, TX 76111	817.632.6020
	Little Elm Medical Clinic (disease management)	730 E. Eldorado Parkway Little Elm, TX 75068	972.292.3330

There are many other community resources and facilities serving the North & West Emergency 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 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.

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 hospital's 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:

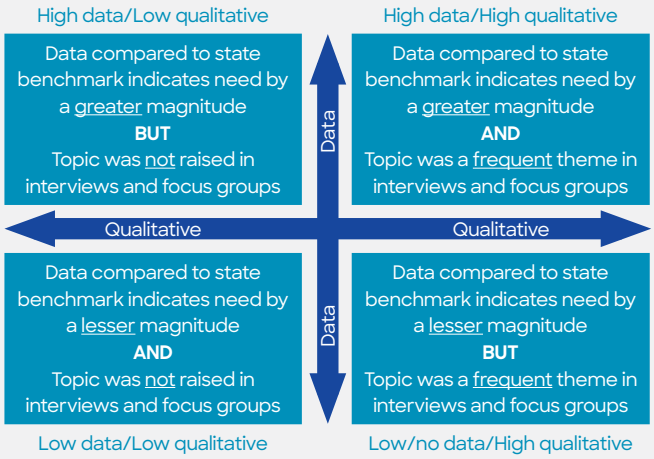
- Assembled a focus group representing the broad interests of the community served;
- Conducted interviews and surveys with key informants—leaders and representatives who serve the community and have insight into its needs; and
- Held prioritization sessions with hospital clinical leadership and community 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**.

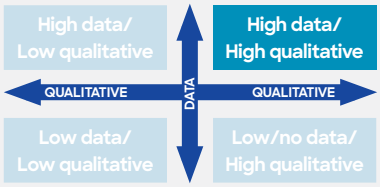
Approach to prioritizing significant health needs



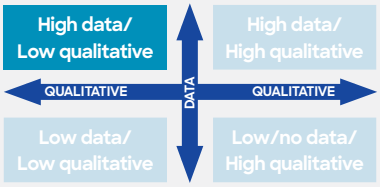
High data = Indicators worse than state benchmark by greater magnitude
High qualitative = Frequency of topic in interviews and focus groups

On January 19, 2022, a session was conducted with key leadership members from Baylor Scott & White 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.

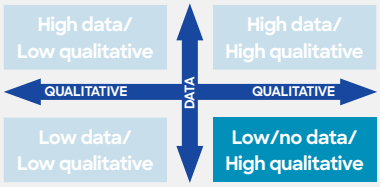
In the first step, participants reviewed the top health needs for their community using associated data-driven criteria. The criteria included health indicator value(s) for the community and how the indicator compared to the state benchmark.



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:

- **Root cause:** The need is a root cause of other problems. If addressed, it could possibly impact multiple issues.
- **Severity (outcome if ignored):** The problem results in disability or premature death or creates burdens on the community, economically or socially.
- **Feasibility/cost:** Is the problem amenable to interventions? Is the problem preventable? What technology, knowledge or resources are necessary to effect a change? Is it too expensive for the community to tackle?

The group rated each of the five 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	Depression/social isolation	Mental health Environment
2	Mentally unhealthy days	Mental health
3	Access to primary healthcare	Access to care
4	Hypertension	Conditions/diseases
5	Medicare population - emergency department utilization	Utilization

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
- Baylor Scott & White The Heart Hospital - Denton
- Brittain Kalish Group Project Access
- Baylor Scott & White - McKinney
- Baylor Scott & White - Plano
- Callier Center for Communication Disorders
- Collin County RHP 18
- Church of Jesus Christ of LDS
- City of Denton
- Collin County Coalition Charitable Clinics
- Collin County Health Care Services
- Collin County Health Department
- Collin County Public Health
- Collin College Homeless Coalition
- Community Lifeline Center
- Community Services, Inc.
- Denton County MHMR Center
- First Refuge Ministries
- First United Methodist, Richardson
- Fort Worth Housing Solutions
- Health Services of North Texas
- Julia's Center
- Meals on Wheels
- MedStar
- Methodist Mansfield Advisory Board
- Metroport Meals on Wheels
- My Possibilities
- North Central Texas Health Care Center Comm.
- North Texas Food Bank
- One Safe Place
- Plano Fire-Rescue
- Project Access Tarrant County
- Tarrant Area Food Bank
- Tarrant County Public Health
- Texas Health Resources
- United Way
- United Way of Tarrant County
- Visiting Nurse Association of Texas - Dallas/Fort Worth
- Wellness Center for Older Adults

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 almost the same as Texas but younger than the United States. Median income is higher than both the state and the country. The community served has a lower percentage of Medicaid beneficiaries and a lower percentage of uninsured individuals than the state of Texas.

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

Geography		Benchmarks		Community served
		United States	Texas	North & West Emergency health community
Total current population		330,342,293	29,321,501	4,093,615
Five-year projected population change		3.3%	6.6%	7.9%
Median age		38.6	35.2	36.6
Population 0 - 17		22.4%	25.7%	25.3%
Population 65+		16.6%	13.2%	11.8%
Women age 15 - 44		19.5%	20.5%	21.0%
Hispanic population		19.0%	40.7%	24.2%
Insurance coverage	Uninsured	9.9%	18.8%	12.2%
	Medicaid	20.9%	13.0%	9.0%
	Private market	8.3%	8.4%	8.3%
	Medicare	13.8%	12.7%	10.6%
	Employer	47.2%	47.1%	59.9%
Median HH income		$65,618	$63,313	$86,914
No high school diploma		12.2%	16.7%	11.0%

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

The community served expects to grow 7.9% by 2025, an increase of over 325,000 people. The projected population growth is higher than the state's five-year projected growth rate (6.6%) and higher than the national projected growth rate (3.3%). The ZIP codes expected to experience the most growth in five years are:

- 76244 Keller – 8,072 additional people
- 75035 Frisco – 7,244 additional people
- 75002 Allen – 7,402 additional people
- 75098 Wylie – 7,020 additional people
- 76063 Mansfield – 7,296 additional people

The community's population is younger with 51.2% of the population ages 18 - 54 and 25.3% under age 18. The age 65-plus cohort is expected to experience the fastest growth (27.9%) 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 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 134,600 people (13.6%) by 2025. The non-Hispanic white population is expected to remain flat at 0%.

Population distribution

	Age distribution				
Age group	2020	% of total	2025	% of total	USA 2020 % of total
0 - 14	852,642	20.8%	862,638	19.5%	18.5%
15 - 17	183,520	4.5%	196,561	4.4%	3.9%
18 - 24	386,971	9.5%	438,815	9.9%	9.5%
25 - 34	550,385	13.4%	552,952	12.5%	13.5%
35 - 54	1,157,233	28.3%	1,204,132	27.2%	25.2%
55 - 64	479,497	11.7%	545,496	12.3%	12.9%
65+	483,367	11.8%	618,417	14.0%	16.6%
Total	**4,093,615**	**100.0%**	**4,419,011**	**100.0%**	**100.0%**

Household Income distribution

	Income distribution		
2020 Household income	HH count	% of total	USA % of total
<$15K	92,696	6.3%	10.0%
$15 - 25K	84,355	5.8%	8.6%
$25 - 50K	260,875	17.8%	20.7%
$50 - 75K	240,942	16.4%	16.7%
$75 - 100K	191,872	13.1%	12.4%
Over $100K	595,187	40.6%	31.5%
Total	**1,465,927**	**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	138,727	5.2%	5.2%
Some high school	154,008	5.8%	7.0%
High school degree	538,190	20.2%	27.2%
Some college/assoc. degree	782,092	29.3%	28.9%
Bachelor's degree or greater	1,057,465	39.6%	31.6%
Total	**2,670,482**	**100.0%**	**100.0%**

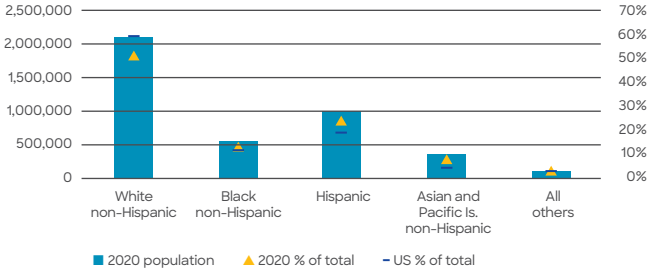
Race/ethnicity

	Race/ethnicity distribution		
Race/ethnicity	2020 pop	% of total	USA % of total
White non-Hispanic	2,086,091	51.0%	59.3%
Black non-Hispanic	532,398	13.0%	12.4%
Hispanic	988,937	24.2%	19.0%
Asian & Pacific is. non-Hispanic	369,404	9.0%	6.0%
All others	116,785	2.9%	3.3%
Total	**4,093,615**	**100.0%**	**100.0%**

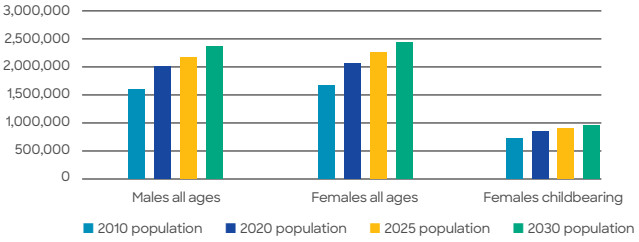
Population estimates		
Population	National	Selected area
2010 total	308,745,538	3,279,030
2020 total	330,342,293	4,093,615
2025 total	341,132,738	4,419,011
2030 total	353,513,931	4,818,404
% change 2020 - 2025	3.27%	7.95%
% change 2020 - 2035	7.01%	17.71%

Population	Males all ages	Females all ages	Females childbearing
2010 total	1,610,225	1,668,805	725,072
2020 total	2,009,187	2,084,428	860,432
2025 total	2,167,998	2,251,013	896,773
2030 total	2,362,356	2,456,048	958,224
10Y %	17.58%	17.83%	11.37%
National	7.02%	7.01%	4.01%

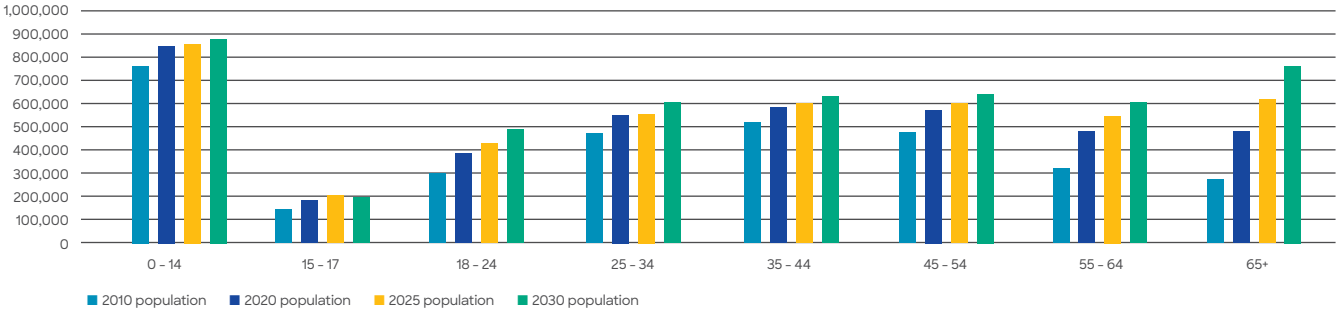
2020 race and ethnicity with total population



Population by sex 2010 - 2030



Population by age group 2010 - 2030

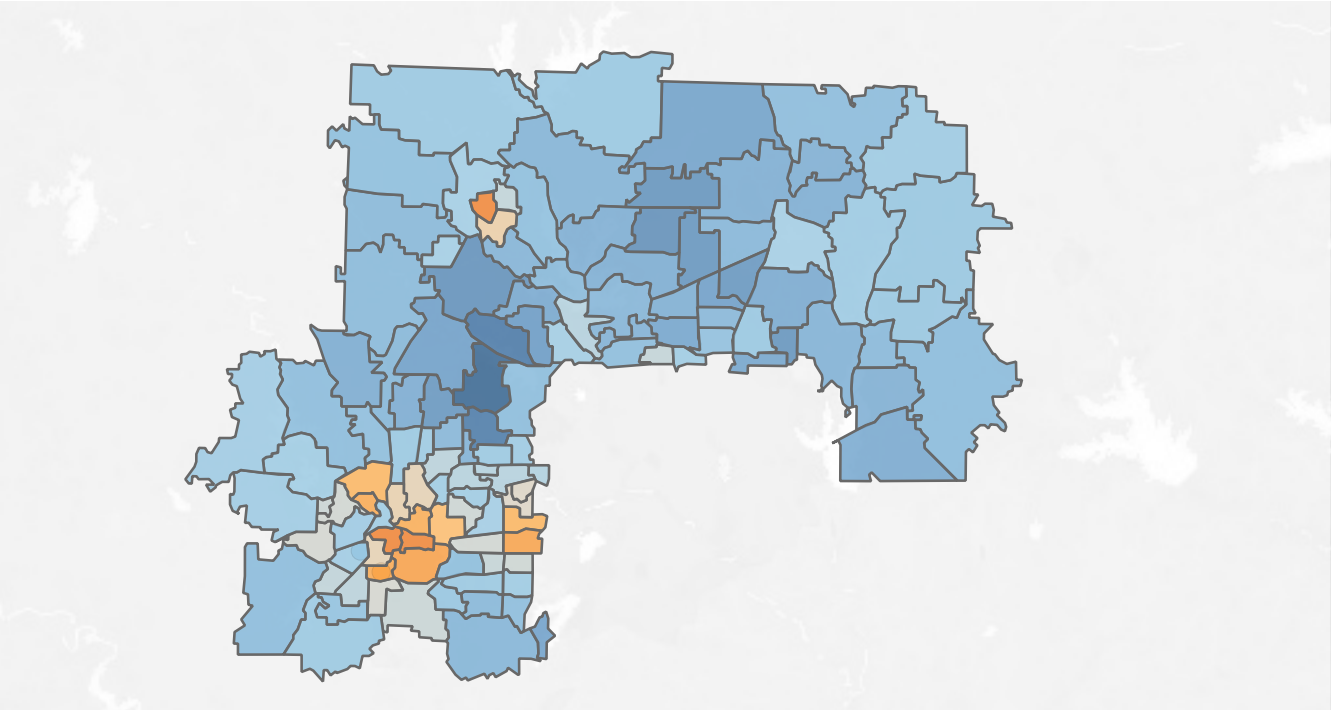


Source: IBM Watson Health/Claritas, 2020.

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 $206,212 for 76092 Southlake to $33,035 for 76104 Fort Worth. There were nineteen (19) additional ZIP codes with median household incomes less than $52,400–twice the 2020 federal poverty limit for a family of four.

- 76105 Fort Worth – $33,276
- 76201 Denton – $33,629
- 76119 Fort Worth – $38,658
- 76010 Arlington – $39,158
- 76122 Fort Worth – $40,000
- 76115 Fort Worth – $40,552
- 76164 Fort Worth – $40,592
- 76103 Fort Worth – $41,363
- 76011 Arlington – $43,245
- 76106 Fort Worth – $43,387
- 76112 Fort Worth – $45,229
- 76205 Denton – $48,554
- 76111 Fort Worth – $48,837
- 76110 Fort Worth – $49,075
- 76117 Haltom City – $49,157
- 76005 Arlington – $49,944
- 76006 Arlington – $49,980
- 76134 Fort Worth – $51,749
- 76116 Fort Worth – $52,244

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.



A majority of the population (59.9%) is insured through employer sponsored health coverage. 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).

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
Collin	7485109304	LI - MHCA - Collin County	Mental health	Low-income population HPSA
Denton	7487902282	LI - MHCA - Denton County	Mental health	Low-income population HPSA
Denton	14899948PA	Health Services of North Texas, Inc.	Primary care	Federally qualified health center
Denton	74899948MQ	Health Services of North Texas, Inc.	Mental health	Federally qualified health center
Denton	64899948MR	Health Services of North Texas, Inc.	Dental health	Federally qualified health center
Tarrant	1482468046	Federal Medical Center - Fort Worth	Primary care	Correctional facility
Tarrant	6484046496	Federal Medical Center - Fort Worth	Dental health	Correctional facility
Tarrant	7483350268	Federal Medical Center - Fort Worth	Mental health	Correctional facility
Tarrant	1485279877	FMC - Carswell	Primary care	Correctional facility
Tarrant	6486448024	FMC - Carswell	Dental health	Correctional facility
Tarrant	7483623264	FMC - Carswell	Mental health	Correctional facility
Tarrant	7483111792	LI - MHCA - Tarrant County	Mental health	Low-income population HPSA
Tarrant	14899948H2	North Texas Area Community Health Centers Inc.	Primary care	Federally qualified health center
Tarrant	748999483N	North Texas Area Community Health Centers Inc.	Mental health	Federally qualified health center
Tarrant	64899948F5	North Texas Area Community Health Centers Inc.	Dental health	Federally qualified health center

Medically underserved areas and populations (MUA/P)				
County	MUA/P source identification number	Service area name	Designation type	Rural status
Denton	03463	Poverty population	Medically underserved area - governor's exception	Non-rural
Tarrant	07393	Central service area	Medically underserved area	Non-rural
Tarrant	1481461749	Fort Worth - North	Medically underserved area	Non-rural
Tarrant	07382	Low Inc. - East Side	Medically underserved population	Non-rural

Community Needs Index

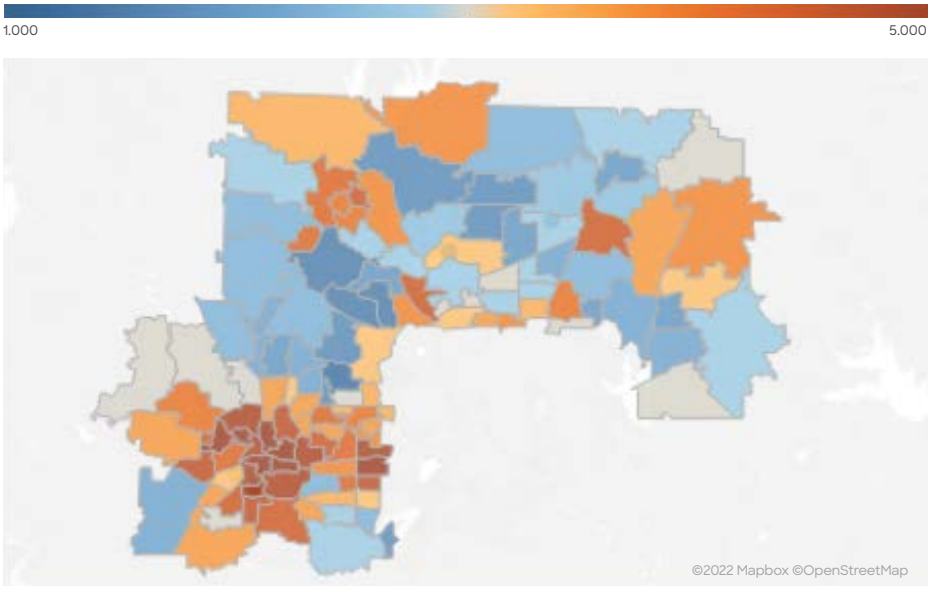
The IBM Watson Health Community Need Index (CNI) is a statistical approach that identifies areas within a community where there are likely gaps in healthcare. The CNI takes into account vital socio-economic factors, including income, culture, education, insurance and housing, about a community to generate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

North & West Emergency 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
3.20

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 North & West Emergency Health Community was 3.20. 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 North & West Emergency Health Community. Total discharges in the community are expected to grow by over 12% by 2030, with pulmonary medical, general medicine 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
Alcohol and Drug Abuse	3,993	4,095	4,549	102	2.5%	556	13.9%
Cardio-Vasc-Thor Surgery	11,827	12,687	13,434	860	7.3%	1,607	13.6%
Cardiovascular Diseases	23,374	25,662	29,623	2,288	9.8%	6,250	26.7%
ENT	1,959	1,831	1,771	(128)	-6.5%	(188)	-9.6%
General Medicine	56,232	59,146	64,058	2,914	5.2%	7,825	13.9%
General Surgery	25,130	25,371	26,743	241	1.0%	1,612	6.4%
Gynecology	2,081	1,042	627	(1,039)	-49.9%	(1,454)	-69.9%
Nephrology/Urology	15,356	16,554	18,302	1,198	7.8%	2,946	19.2%
Neuro Sciences	16,575	17,479	19,605	904	5.5%	3,030	18.3%
Obstetrics Del	41,692	38,837	39,493	(2,854)	-6.8%	(2,199)	-5.3%
Obstetrics ND	3,227	2,832	2,748	(395)	-12.2%	(479)	-14.8%
Oncology	6,404	6,673	7,142	269	4.2%	738	11.5%
Ophthalmology	358	344	336	(15)	-4.1%	(22)	-6.1%
Orthopedics	28,270	28,920	31,054	650	2.3%	2,784	9.8%
Psychiatry	4,327	4,574	4,880	247	5.7%	553	12.8%
Pulmonary Medical	24,399	29,056	34,076	4,657	19.1%	9,677	39.7%
Rehabilitation	332	376	441	44	13.2%	108	32.6%
TOTAL	**265,539**	**275,481**	**298,882**	**9,942**	**3.7%**	**33,343**	**12.6%**

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 by procedure codes and are further grouped into clinical service lines. The North & West Emergency Health Community outpatient procedures are expected to increase by over 36% by 2030 with the largest growth in the categories of labs, general & internal medicine, physical & occupational therapy and psychiatry.

Clinical service category	2020 procedures	2025 procedures	2020-2025 procedures % change	2030 procedures	2020 - 2030 procedures % change
Allergy & Immunology	1,157,521	1,288,583	11.3%	1,442,414	24.6%
Anesthesia	322,207	388,479	20.6%	454,707	41.1%
Cardiology	2,191,837	2,858,482	30.4%	3,750,931	71.1%
Cardiothoracic	2,423	2,883	19.0%	3,386	39.7%
Chiropractic	1,916,696	1,970,915	2.8%	1,995,207	4.1%
Colorectal Surgery	30,812	33,937	10.1%	37,466	21.6%
CT Scan	745,299	1,027,283	37.8%	1,404,504	88.4%
Dermatology	754,226	901,917	19.6%	1,072,020	42.1%
Diagnostic Radiology	4,295,231	4,834,363	12.6%	5,434,652	26.5%
Emergency Medicine	1,867,623	2,115,971	13.3%	2,413,361	29.2%
Gastroenterology	308,905	358,445	16.0%	412,957	33.7%
General & Internal Medicine	33,567,479	39,183,729	16.7%	45,081,339	34.3%
General Surgery	227,220	262,112	15.4%	303,420	33.5%
Hematology & Oncology	6,359,905	7,732,014	21.6%	9,110,269	43.2%
Labs	39,289,617	45,059,126	14.7%	51,803,154	31.8%
Miscellaneous	1,834,648	2,090,601	14.0%	2,373,747	29.4%
MRI	382,848	438,968	14.7%	503,418	31.5%
Nephrology	774,129	940,094	21.4%	1,122,930	45.1%
Neurology	540,063	598,189	10.8%	663,829	22.9%
Neurosurgery	18,042	26,591	47.4%	31,647	75.4%
Obstetrics/Gynecology	619,184	662,406	7.0%	730,759	18.0%
Ophthalmology	1,898,433	2,353,365	24.0%	2,851,807	50.2%
Oral Surgery	20,648	23,498	13.8%	27,052	31.0%
Orthopedics	582,016	666,294	14.5%	758,482	30.3%
Otolaryngology	1,391,664	1,552,373	11.5%	1,732,869	24.5%
Pain Management	380,746	439,245	15.4%	497,718	30.7%
Pathology	898	1,083	20.7%	1,297	44.5%
PET Scan	21,908	26,413	20.6%	31,260	42.7%
Physical & Occupational Therapy	12,851,460	15,595,748	21.4%	18,811,833	46.4%
Plastic Surgery	34,995	41,605	18.9%	49,394	41.1%
Podiatry	148,661	161,963	8.9%	174,397	17.3%
Psychiatry	5,214,184	6,602,952	26.6%	8,223,230	57.7%
Pulmonary	710,500	815,158	14.7%	940,956	32.4%
Radiation Therapy	350,400	407,367	16.3%	468,389	33.7%
Single Photon Emission CT Scan (SPECT)	51,468	59,686	16.0%	69,860	35.7%
Urology	246,044	296,353	20.4%	353,644	43.7%
Vascular Surgery	87,755	103,129	17.5%	119,884	36.6%
TOTAL	**121,197,693**	**141,921,321**	**17.1%**	**165,258,188**	**36.4%**

Source: IBM Watson Health Outpatient Procedure Estimates, 2020.

Emergency department visits

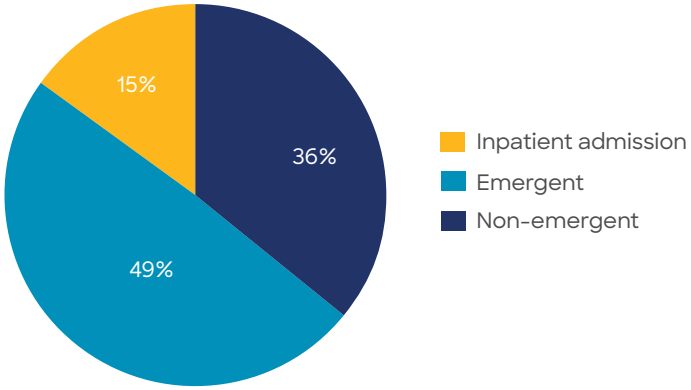
Emergency department estimates predict the total annual volume of emergency department (ED) visits by ZIP code and level of acuity for every market in the United States. IBM uses an extensive supply of proprietary claims, public claims and federal surveys to construct population-based use rates for all 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 North & West Emergency Health Community, ED visits are expected to grow by 16% by 2025.

Emergent status	2020 visits	2025 visits	2020 - 2025 visits change	2020 - 2025 visits % change
Emergent	824,500	1,009,540	185,040	22.4%
Inpatient Admission	251,318	318,109	66,791	26.6%
Non-Emergent	706,197	739,779	33,582	4.8%
TOTAL	**1,782,015**	**2,067,428**	**285,413**	**16.0%**

Source: IBM Watson Health Emergency Department Visits, 2020.

Emergency department visit estimates 2025



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.

In North & West Emergency Health Community, the most common heart disease is hypertension at 73.1% of all heart disease cases.

Disease type	2020 prevalence	2020 % prevalence
Arrhythmia	179,689	12.3%
Heart Failure	74,116	5.1%
Hypertension	1,068,771	73.1%
Ischemic Heart Disease	138,869	9.5%
TOTAL	**1,461,444**	**100.0%**

Source: IBM Watson Heart Disease Estimates, 2020.

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 13.3% in the North & West Emergency Health Community by 2025.

Cancer type	2020 incidence	2025 incidence	2020 - 2025 change	2020 - 2025 % change
Bladder	866	1,044	178	20.5%
Brain	383	428	46	12.0%
Breast	4,268	4,971	702	16.5%
Colorectal	2,326	2,275	-50	-2.2%
Kidney	763	925	162	21.2%
Leukemia	760	893	133	17.5%
Lung	2,029	2,341	311	15.3%
Melanoma	956	1,141	184	19.3%
Non-Hodgkin's Lymphoma	1,012	1,196	184	18.2%
Oral Cavity	613	727	114	18.5%
Other	2,439	2,907	468	19.2%
Ovarian	308	346	38	12.2%
Pancreatic	517	640	123	23.8%
Prostate	2,802	2,844	42	1.5%
Stomach	350	398	49	13.9%
Thyroid	634	737	103	16.3%
Uterine Cervical	137	144	7	4.8%
Uterine Corpus	500	596	95	19.1%
TOTAL	**21,665**	**24,554**	**2,888**	**13.3%**

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.

Dates: Fiscal Years 2020 - March 2022

Facilities: Baylor Scott & White Emergency Hospital – Colleyville
Baylor Scott & White Emergency Hospital – Keller
Baylor Scott & White Emergency Hospital – Aubrey
Baylor Scott & White Emergency Hospital – Murphy

Community served: Collin, Dallas, Denton and Tarrant Counties

Food insecurity

Action/tactics	Anticipated outcome	Evaluation of impact
Charity care Discounted care as outlined in the BSWH financial assistance policy. The hospital will provide the level of financial assistance consistent with certain state requirements applicable to non-profit hospitals.	Increased access to primary care and/or specialty care for indigent persons regardless of their ability to pay.	**BSWEH - Colleyville** • $80,416 community benefit **BSWEH - Keller** • $154,010 community benefit **BSWEH - Aubrey** • $167,305 community benefit **BSWEH - Murphy** • $180,331 community benefit
Assess food insecurity In the emergency department and inpatient populations, do an assessment of food insecurity needs when a patient is admitted and provide a list of resources for community food banks/charity meal services.	Increased awareness of community healthy food resources for food insecure population.	Most efforts were put into addressing COVID surges over the past few years, but hospital leaders have begun exploring the option of a collaboration with Nourished RX and health plan providers to provide ready-to-eat meal kits to at-risk and vulnerable patients.
Community food drives Participate in and support local food collection events and food bank programming.	Increased awareness of community healthy food resources for food insecure population.	Food collection drives were held in support of the North Texas Food Bank during the 2020 and 2021 holiday seasons.

Total investment in adopted community needs since 2019 CHNA

BSWEH - Colleyville	BSWEH - Keller	BSWEH - Aubrey	BSWEH - Murphy
$80,416	**$154,010**	**$167,305**	**$180,331**