Baylor Scott & White Health
Community Health Needs Assessment

Carrollton Health Community

Baylor Scott & White Medical Center – Carrollton

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

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

Table of Contents

Baylor Scott & White Health Mission Statement

Our Mission

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

Our Ambition

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

Our Values

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

Our Strategies

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

WHO WE ARE

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


Founded as a Christian ministry of healing, Baylor Scott & White Health promotes the well-being of all individuals, families and communities.
Mission
Strategies
Health
Experience
Affordability
Alignment
Growth
We serve faithfully
We act honestly
We never settle
We are in it together
Values
To be the trusted leader, educator and innovator in value-based care delivery, customer experience and affordability.
Ambition

Executive Summary

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

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

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

- Baylor Scott & White Medical Center – Carrollton

For the 2019 assessment, the community includes the geographic area where at least 80% of the hospital facility admitted patients live.

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

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

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

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

Priority	Need	Category of Need
1	Percentage of Population Under Age 65 Without Health Insurance	Access to Care
2	Schizophrenia and Other Psychotic Disorders in Medicare Population	Mental Health
3	Ratio of Population to One Non-Physician Primary Care Provider	Access to Care
4	Depression in Medicare Population	Mental Health
5	Accidental Poisoning Deaths Where Opioids Were Involved	Health Behaviors - Substance Abuse

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

An evaluation of the impact and effectiveness of interventions and activities outlined in the implementation strategy drafted after the 2016 assessment is included in **Appendix F** of this document.

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

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

Community Health Needs Assessment Requirement

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

The written CHNA Report must include descriptions of the following:

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

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

The written Implementation Strategy must include the following:

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

CHNA Overview, Methodology and Approach

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

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

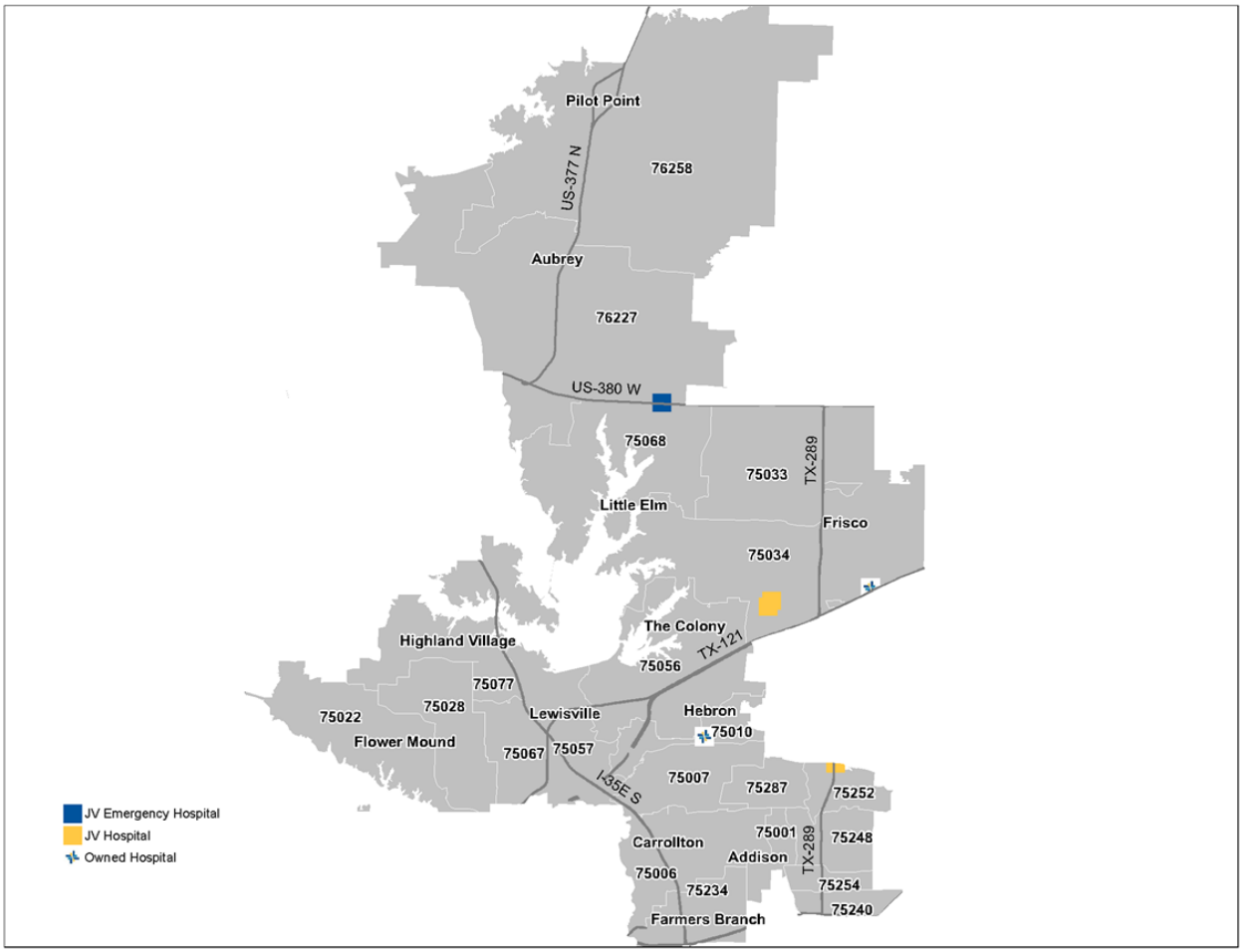
Consultant Qualifications & Collaboration

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

Community Served Definition

Based on the review of patient admission records, the hospital facility has defined its community to include the ZIP codes listed below; it spans multiple counties in the Carrollton area of north Texas including Collin, Dallas, and Denton counties. The community includes the geographic area where at least 80% of the hospital facilities' admitted patients live.

BSWH Community Health Needs Assessment
Carrollton Health Community Map



Source: Baylor Scott & White Health, 2019

75033 75034 75035 75068 76227 76258 75006 75007 75008 75010 75011 75027 75029 75057 75065 75067 75234 75381 75056 75022 75028 75077 75001 75240 75248 75252 75254 75287 75294 75370 75380 75391

Assessment of Health Needs

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

Quantitative Assessment of Health Needs – Methodology and Data Sources

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

Although this community definition is by ZIP codes, public health indicators are most commonly available by county. Therefore, a patient origin study determined which counties principally represent the community's residents receiving hospital services. The principal counties for the Carrollton Health Community needs analysis are Denton and Dallas counties.

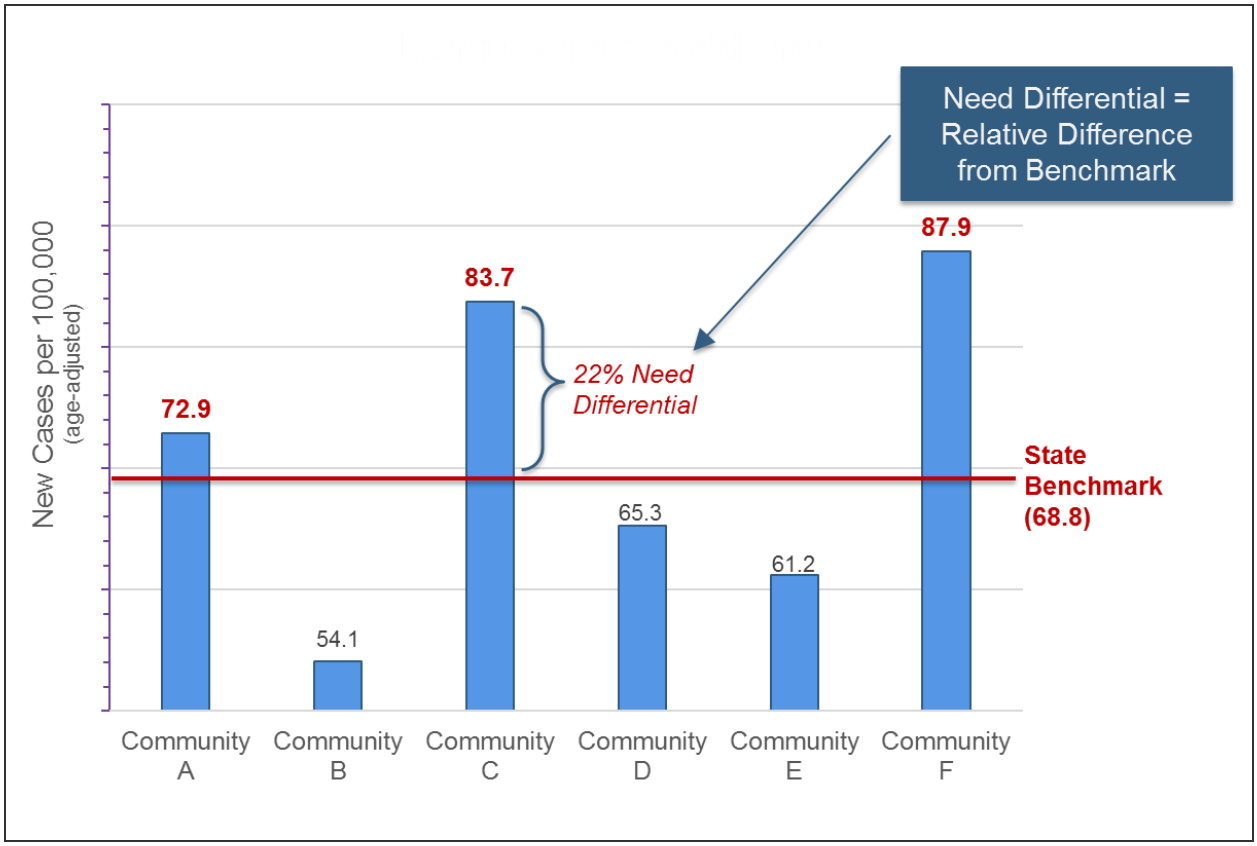
A benchmark analysis conducted for each indicator collected for the community served, determined which public health indicators demonstrated a community health need from a quantitative perspective. Benchmark health indicators included (when available): overall U.S. values; state of Texas values; and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

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

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

Outcomes of the quantitative data analysis were compared to the qualitative data findings.

Health Indicator Benchmark Analysis Example



Source: IBM Watson Health, 2018

Qualitative Assessment of Health Needs and Community Input – Approach

In addition to analyzing quantitative data, two (2) focus groups with a total of 23 participants, and three (3) key informant interviews, gathered the input of persons representing the broad interests of the community served. The focus groups and interviews solicited feedback from leaders and representatives who serve the community and have insight into community needs. Prioritization sessions held with hospital clinical leadership and other community leaders identified significant health needs from the assessment and prioritized them.

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

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

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

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

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

Community Input Participants

Participant Organization Name	Public Health	Medically Under-served	Low-income	Chronic Disease Needs	Minority Populations	Governmental Public --Health Dept.	Public Health Knowledge/ --Expertise
Baylor Scott & White Medical Center - Carrollton	X	X	X	X	X		X
Cancer Care Services	X	X	X	X	X		X
City of Denton			X	X	X		
Community Council							
Dallas Area Interfaith		X	X		X		X
Dallas County Health and Human Services	X		X				
Dallas/Ft. Worth Hindu Temple Society					X		
Denton Community Food Center			X				
Denton County Public Health	X	X	X	X	X	X	X
Family Promise of Irving		X	X				
First Refuge Ministries		X	X	X			
Genesis Women's Shelter & Support		X	X		X		X
Giving Hope, Inc.		X	X	X			X
Goodwill Industries of Dallas			X	X			
Goodwill Industries of Fort Worth		X	X		X		
Health Services of North Texas		X	X	X	X		
Hope Clinic		X	X	X	X		
Los Barrios Unidos Community Clinic	X	X	X	X	X		X

Participant Organization Name	Public Health	Medically Under-served	Low-income	Chronic Disease Needs	Minority Populations	Governmental Public --Health Dept.	Public Health Knowledge/ --Expertise
Many Helping Hands Ministry	X	X	X	X			
Metrocare	X	X	X	X	X		X
Our Daily Bread		X	X				
Refuge for Women North Texas					X		
Serve Denton			X				
Society of St. Vincent De Paul of North Texas		X	X	X	X		
United Way		X	X	X	X		
University of North Texas	X		X		X		X
YMCA	X	X	X	X	X		X

Note: multiple persons from the same organization may have participated

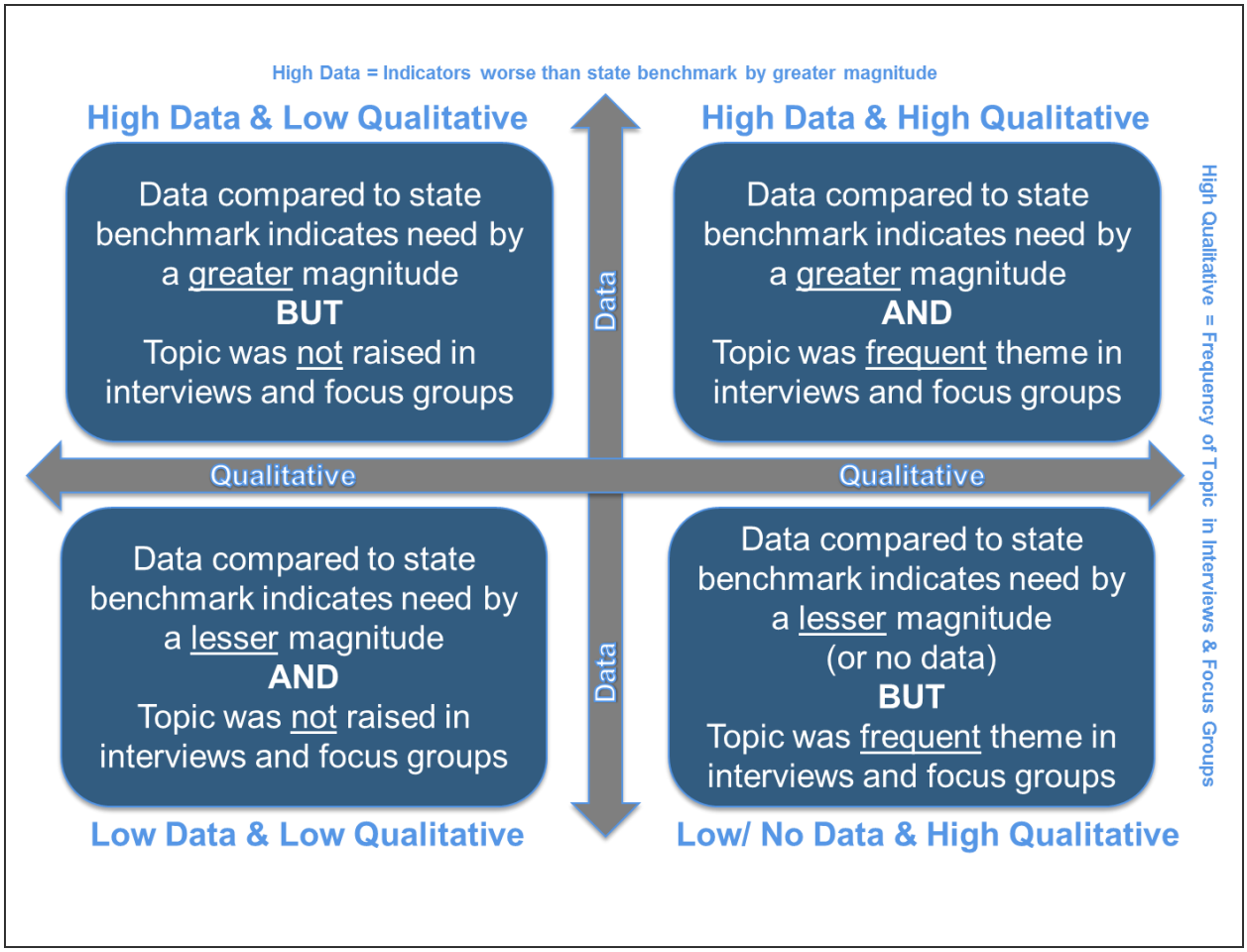
In addition to soliciting input from public health and various interests of the community, the hospital facility was required to consider written input received on their most recently conducted CHNA and subsequent implementation strategies. The assessment is available to receive public comment or feedback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

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

Methodology for Defining Community Need

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

The Health Needs Matrix



Source: IBM Watson Health, 2018

Information Gaps

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

Approach to Identify and Prioritize Significant Health Needs

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

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

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

1. Vulnerable Populations: there is a high need among vulnerable populations and/or vulnerable populations are adversely impacted
2. Community Capacity: the community has the capacity to act on the issue, including any economic, social, cultural, or political consideration
3. Root Cause: the need is a root cause of other problems, thereby addressing it could possibly impact multiple issues
4. Severity: the problem results in disability or premature death or creates burdens on the community, economically or socially

Through discussion and consensus, the group rated each of the five (5) significant health needs on each of the four (4) identified criteria utilizing a scale of one (low) to 10 (high). The criteria scores summed for each need created an overall score and became the basis for prioritizing the significant health needs. For the scores resulting in a tie, the need with the greater negative difference from the benchmark ranked above the other need. The outcome of this process (the list of prioritized health needs for this community) is located in the "**Prioritized Significant Health Needs**" section of the assessment.

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

Existing Resources to Address Health Needs

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

Carrollton Health Community CHNA

Demographic and Socioeconomic Summary

According to population statistics, the community predicts growth exceeding the projected population growth in Texas. The median age was younger than both Texas and the United States. Median household income was higher than both the state and the Country. The community served had fewer Medicaid beneficiaries than Texas and the U.S.

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

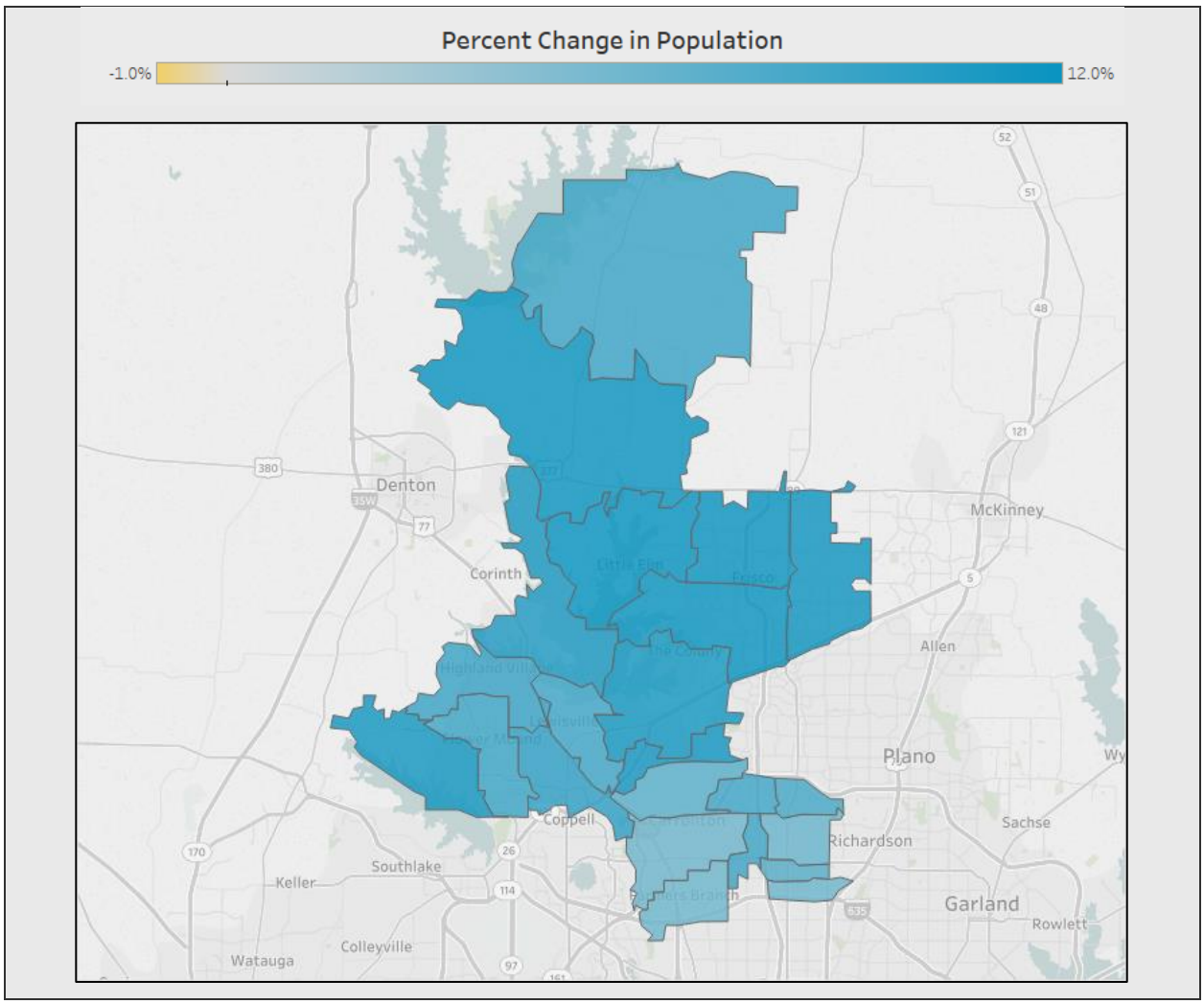
Geography		Benchmarks		Community Served
		United States	Texas	Carrollton Health Community
Total Current Population		326,533,070	28,531,631	904,249
5 Yr Projected Population Change		3.5%	7.1%	9.1%
Median Age		42.0	38.9	37.1
Population 0-17		22.6%	25.9%	25.0%
Population 65+		15.9%	12.6%	10.1%
Women Age 15-44		19.6%	20.6%	21.6%
Non-White Population		30.0%	32.2%	35.3%
Hispanic Population		18.2%	39.4%	23.7%
Insurance Coverage	Uninsured	9.4%	19.0%	9.9%
	Medicaid	14.9%	13.4%	6.6%
	Private Market	9.6%	9.9%	10.8%
	Medicare	16.1%	12.5%	8.5%
	Employer	45.9%	45.3%	64.2%
Median HH Income		$61,372	$60,397	$86,573
Limited English		26.2%	39.9%	34.5%
No High School Diploma		7.4%	8.7%	4.7%
Unemployed		6.8%	5.9%	4.3%

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

The population of the health community projects a growth of 9.1% by 2023, an increase of more than 82,000 people. This five-year growth rate is higher than the state's population growth rate (7.1%) and the national projected growth rate (3.5%). The ZIP codes expected to experience the most growth in five years are:

- 75035 Frisco – 7,697 people
- 75034 Frisco – 7,567 people

2018 - 2023 Total Population Projected Change by ZIP Code

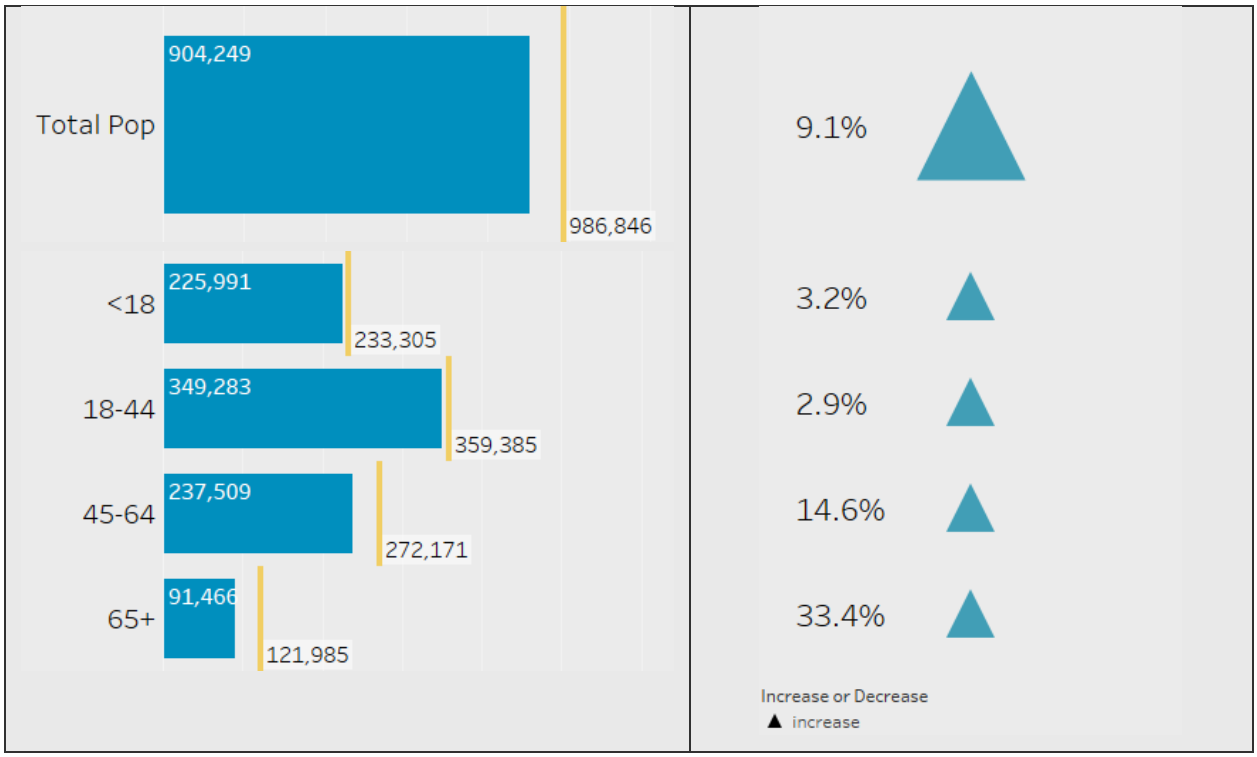


Source: IBM Watson Health / Claritas, 2018

The community's population skewed younger, with 38.6% of the population ages 18-44 and 25% under age 18. The largest cohort (ages 18-44) predicts a growth of 10,102 people by 2023 (2.9%), while the age 65+ senior cohort was the smallest (about 10% of the population) but is expected to experience the fastest growth (33.4%) over the next five years, adding 30,159 seniors to the community. By 2023, the 65 plus and 45-64 age cohorts expect to be similar sized populations.

Population Distribution by Age

2018 Population by Age Cohort *Percent Change by 2023*

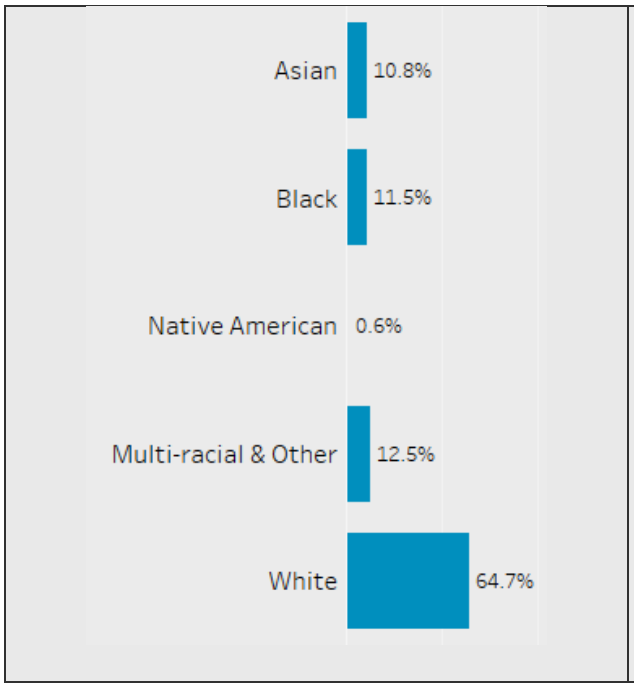


Source: IBM Watson Health / Claritas, 2018

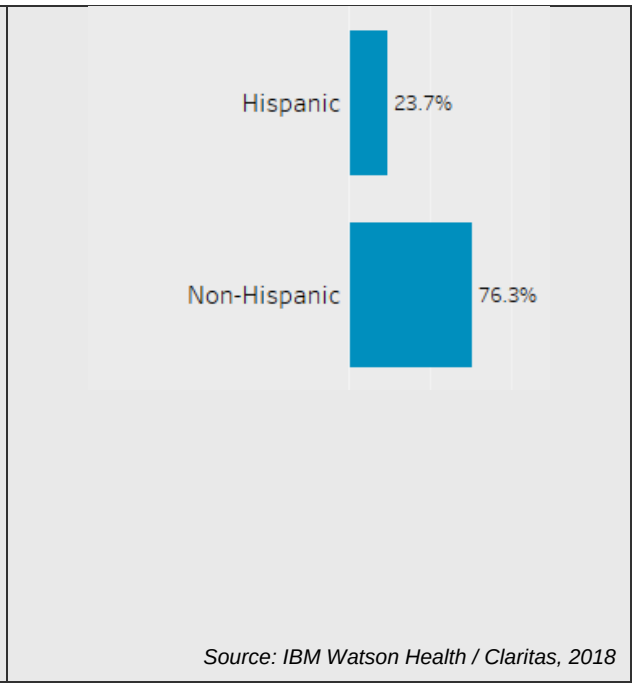
Analyzed by race and by Hispanic ethnicity, population statistics indicates White Non-Hispanic residents were the largest demographic group (51.6%) and predicts a growth increase by 0.8% in five years with faster growth-rate predictions among Asian, Black, and Hispanic residents. By 2023, White Non-Hispanics comprises 47.6% of the population. The Hispanic population represented 23.7% of the health community. A growth increase of 3.5% in five years will comprise 24.5% population represented. The growth rate of the Asian/Non-Hispanic population expects its highest increase by 25,369 people to make up 12.4% of the health community. The Black population will increase by 33,467 people to make up 33.1% of the population by 2023.

Population Distribution by Race and Ethnicity

2018 Population by Race

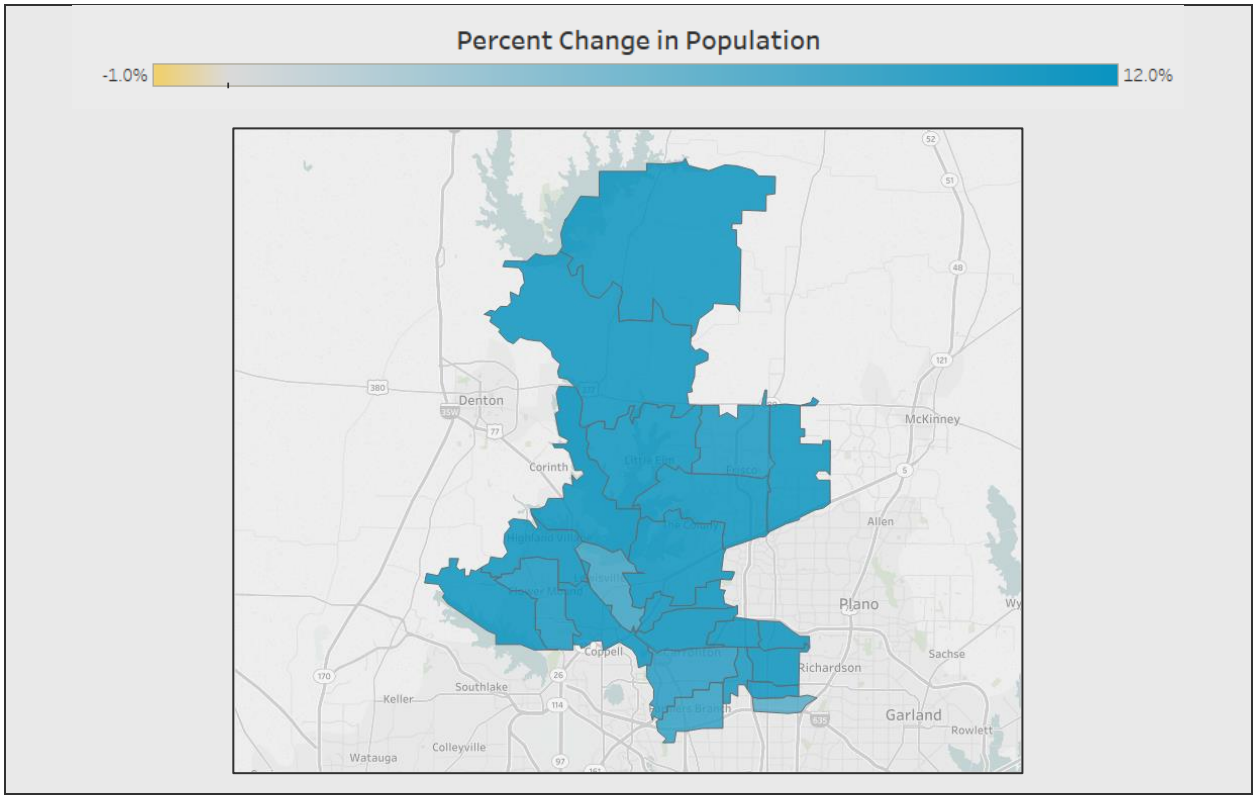


2018 Population by Ethnicity



Source: IBM Watson Health / Claritas, 2018

2018 - 2023 Hispanic Population Projected Change by ZIP Code

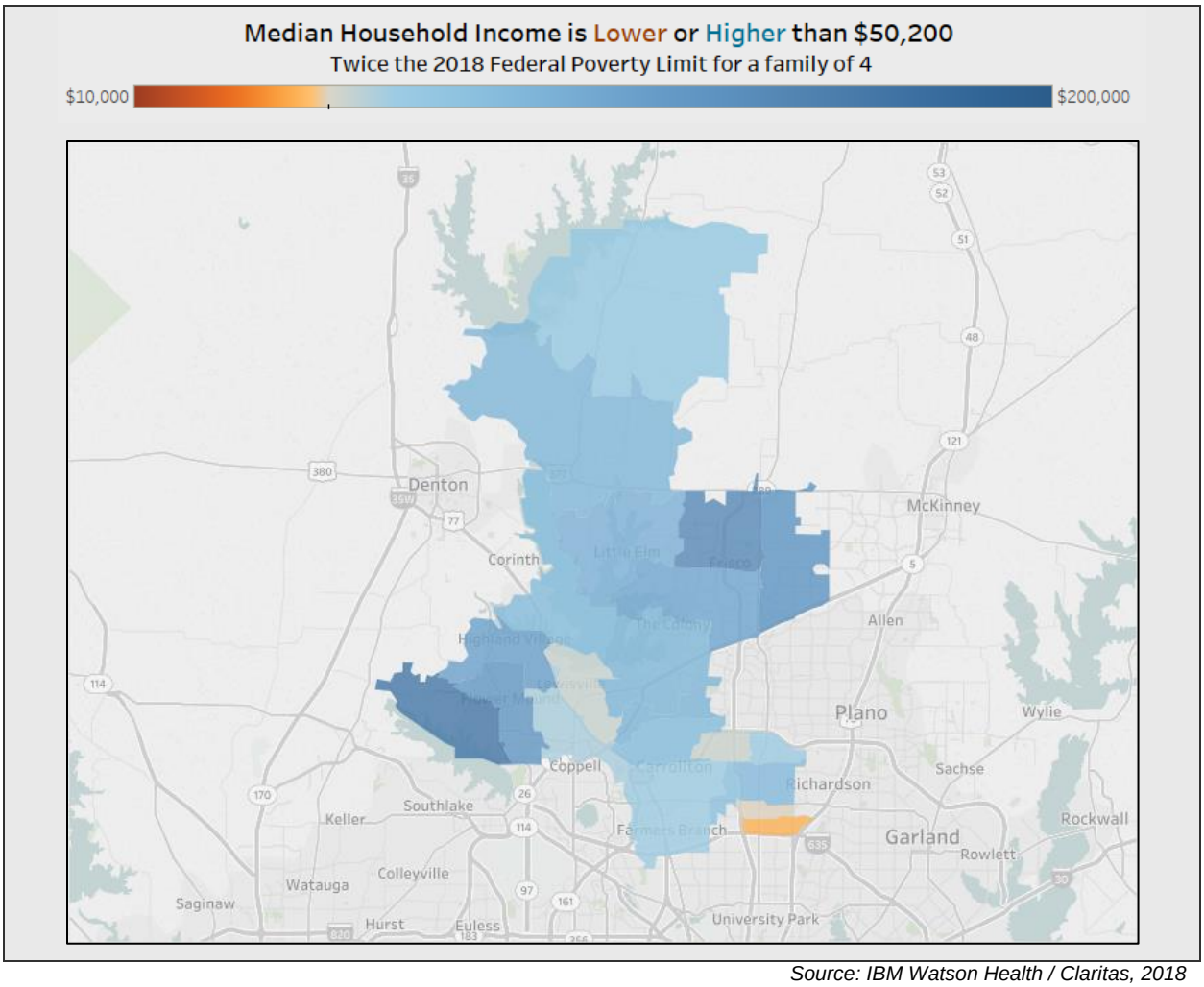


Source: IBM Watson Health / Claritas, 2018

The 2018 median household income for the United States was $61,372 and $60,397 for the state of Texas. The median household income for the ZIP codes within this community ranged from $43,473 for 75240 – Far North Dallas to $160,980 for 75022 – Flower Mound-Highland Village. Two ZIP codes had median household incomes less than $50,200 – twice the 2018 Federal Poverty Limit for a family of four:

- 75240 Far North Dallas – $43,473
- 75254 Far North Dallas – $49,817

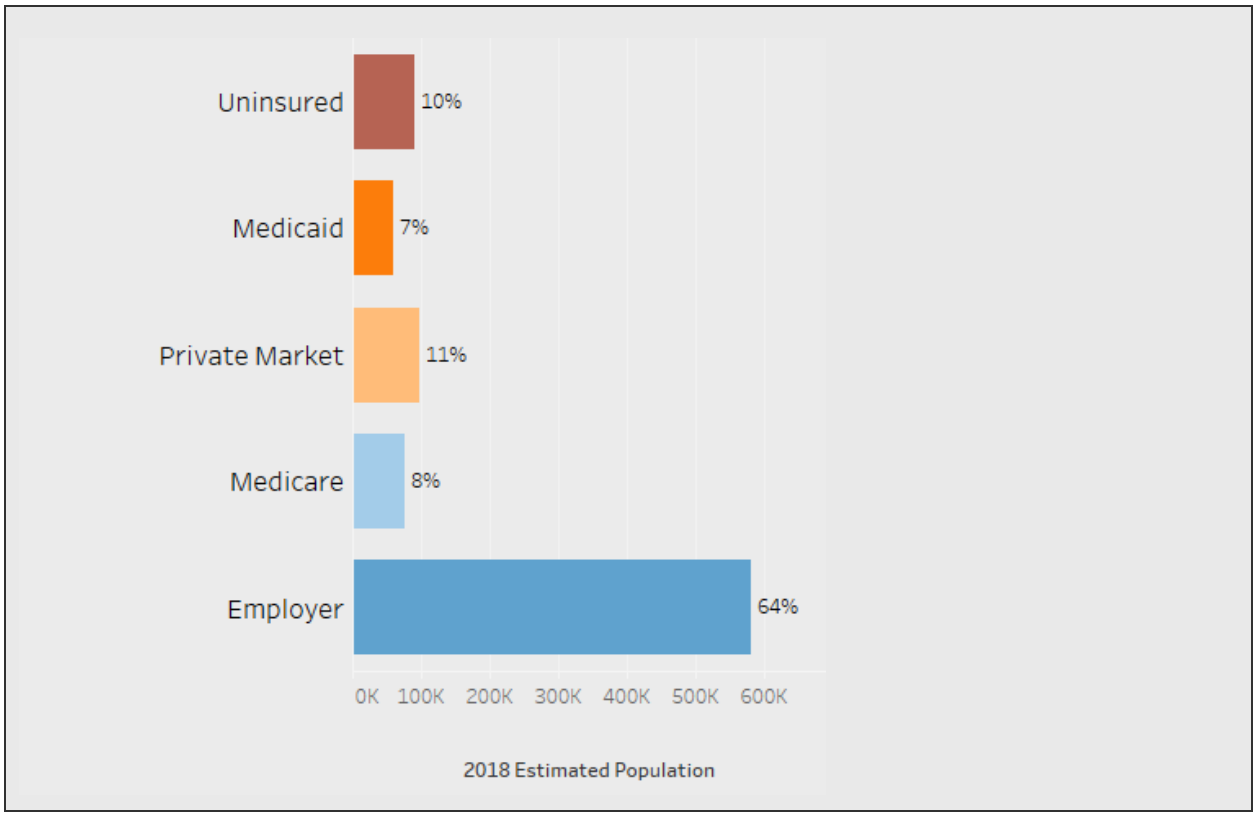
2018 Median Household Income by ZIP Code



Source: IBM Watson Health / Claritas, 2018

A majority of the insured population (64%) received insurance through employer sponsored health coverage. The remainder of the population was fairly equally divided between Medicaid (7%), Medicare (8%), uninsured (10%), and private market (the purchasers of coverage directly or through the health insurance marketplace).

2018 Estimated Distribution of Covered Lives by Insurance Category



Source: IBM Watson Health / Claritas, 2018

The community includes 34 Health Professional Shortage Areas and 20 Medically Underserved Areas as designated by the U.S. Department of Health and Human Services Health Resources Services Administration.[1] **Appendix C** includes the details on each of these designations.

Health Professional Shortage Areas and Medically Underserved Areas and Populations

	Health Professional Shortage Areas (HPSA)				Medically Underserved Area/Population (MUA/P)
NTX Carrollton Health Community	**Dental Health**	**Mental Health**	**Primary Care**	**Grand Total**	**MUA/P**
Dallas	10	9	12	31	19
Denton	1	1	1	3	1
Total	**11**	**10**	**13**	**34**	**20**

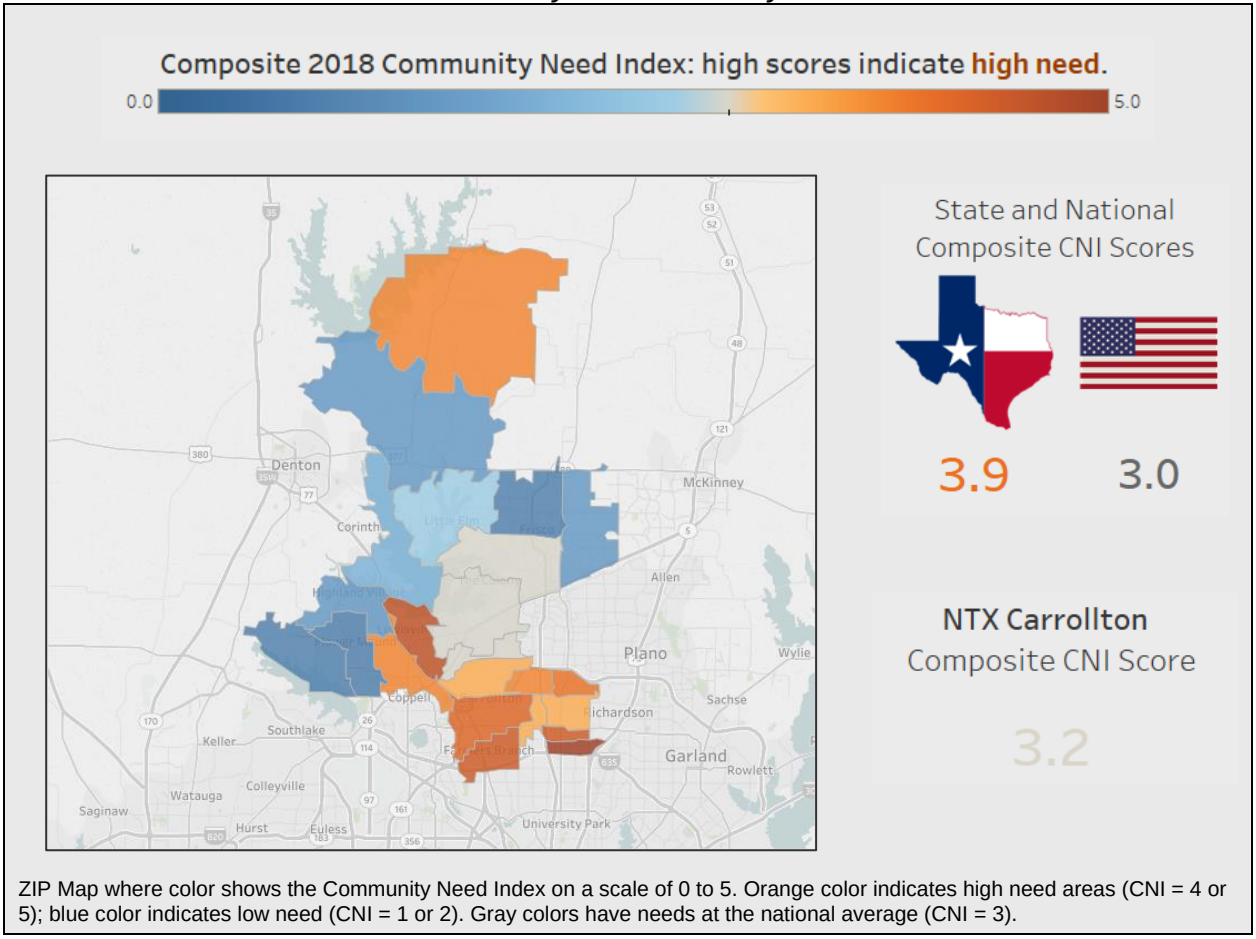
Source: U.S. Department of Health and Human Services, Health Resources and Services Administration, 2018

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

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

Overall, the CNI score for the community served was 3.2, this was higher than the CNI national average of 3.0; potentially indicating greater health care needs in this community. In portions of the community (75240 Far North Dallas and 75057 Denton), the CNI score was greater than 4.5, pointing to potentially more significant health needs among the population.

2018 Community Need Index by ZIP Code



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

CNI High Need ZIP Codes

City	Community	County	ZIP Code	2018 CNI Score
Dallas	Far North Dallas	Dallas	75240	5.0
Lewisville	Lewisville	Denton	75057	4.6
Dallas	Far North Dallas	Dallas	75254	4.4
Dallas	Farmers Branch	Dallas	75234	4.4
Carrollton	Carrollton	Dallas	75006	4.2
Dallas	Far North Dallas	Collin	75252	4.0

Source: IBM Watson Health / Claritas, 2018

Public Health Indicators

For each health indicator, a comparison between the most recently available community data and benchmarks for the same/similar indicator was made. The basis of benchmarks was available data for the U.S. and the state of Texas.

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

Watson Health Community Data

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

Focus Groups & Interviews

BSWH worked jointly with Parkland Health & Hospital System and Methodist Health in collecting and sharing qualitative data (community input) on the health needs of this community.

In the focus group sessions and interviews, participants identified and discussed the factors that contribute to the current health status of the community, and then identify the greatest barriers and strengths that contribute to the overall health of the community. For this health community there were 23 participants in two (2) focus groups and three (3) interviews conducted July through September 2018.

In this health community, the top health needs identified in the discussions included:

- Safe public transportation

- Lack of preventive care
- Fragmentation of services & navigating services
- Lack of behavioral health services
- Language barriers/cultural differences
- Dental health
- Lack of insurance & low income

The Carrollton Health Community is a blend of urban neighborhoods, growing commuter suburbs, and a diverse university area. Denton County, recently ranked the healthiest county in Texas, attracted many foreign students and international residents through the local schools and university. Part of the growth, driven by an increase in commuters, led participants to note that income disparity was high. Combined with Dallas County, a predominantly urban area with strong networks but challenged with high poverty levels and growing homelessness the health community was diverse, with unique challenges for the different population fragments, but overall described by participants as a strong and giving community.

Public transportation was extremely limited and compounded challenges to residents without a car. The focus group described a local culture of generational habits and limited knowledge about healthy eating habits. The food pantries were working to alleviate hunger and provide healthier and fresh food options, but language and culture were barriers to developing trust and increased access.

Focus groups shared that the diversity in the health community also presented barriers to good health. Language continued to be a barrier for Asian, African and the large Latino populations. Cultural and historical habits in the immigrant populations and lack of cultural sensitivity in providers contributed to a culture of distrust of outsiders. Combined with very limited public transportation, food deserts, and lack of insurance, many residents had no access to preventive services or primary care and used the ED for medical services.

The primary barriers to good health in this health community were the limited number of well-paying jobs with health insurance, health services, and healthy food. Lack of insurance often mentioned by the focus group was a big issue in the area. Many residents worked but had no health insurance, and thus characterized as part of the “working poor” population. Participants identified gaps in service in all clinical areas; primary, maternal, vision, dental, specialty, and behavioral health care were the most acute. Health community members noted that Denton County had a high rate of insured residents, but the requirement that all university and community college students have insurance skews the rate.

This health community had more mental health providers than other parts of the Dallas Fort Worth area, but that amount was still insufficient to meet demand. Focus group participants called out the need for increased space for residents to receive mental health treatment and increased funding.

Community Health Needs Identified

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

Top Community Health Needs Identified

Carrollton Valley Health Community		
Top Needs Identified	Category of Need	Public Health Indicator
Accidental poisoning deaths where opioids were involved	Health Behaviors - Substance Abuse	Annual Estimates Accidental Poisoning Deaths where Opioids Were Involved
Adults Engaging in Binge Drinking During the Past 30 Days	Health Behaviors - Substance Abuse	2016 Percentage of a County's Adult Population that Reports Binge or Heavy Drinking in the Past 30 Days
Children Eligible for Free Lunch Enrolled in Public Schools	SDH - Income	2015-2016 Percentage of Children Enrolled in Public Schools that are Eligible for Free or Reduced Price Lunch
Children in Poverty	SDH - Income	2016 Percentage of Children Under Age 18 in Poverty
Depression in Medicare Population	Mental Health	Prevalence of chronic condition across all Medicare beneficiaries
Drug Poisoning Deaths Rate	Health Behaviors - Substance Abuse	2014-2016 Number of Drug Poisoning Deaths (Drug Overdose Deaths) per 100,000 Population
Food Insecure	Environment - Food	2015 Percentage of Population Who Lack Adequate Access to Food During the Past Year
Health Care Costs	Access To Care	2015 Amount of Price-Adjusted Medicare Reimbursements per Enrollee
Individuals Living Below Poverty Level	SDH - Income	2012-2016 American Community Survey 5-Year Estimates, Individuals below poverty level
Motor Vehicle Driving Deaths with Alcohol Involvement	Health Behaviors - Substance Abuse	2012-2016 Percentage of Motor Vehicle Crash Deaths that had Alcohol Involvement
No vehicle available	Access To Care	2017 Households with no vehicle available (percent of households)
Non-English speaking households	SDH - Language	2012 Percent- Language other than English

Carrollton Valley Health Community		
Top Needs Identified	Category of Need	Public Health Indicator
Percentage of Population under age 65 without Health Insurance	Access To Care	2015 Percentage of Population Under Age 65 Without Health Insurance
Ratio of Population to One Non-Physician Primary Care Provider	Access To Care	2017 Ratio of Population to Primary Care Providers Other than Physicians
Renter-occupied housing	Environment - Housing	2017 Renter-occupied housing (percent of households)
Schizophrenia and Other Psychotic Disorders in Medicare Population	Mental Health	Prevalence of chronic condition across all Medicare beneficiaries
Severe Housing Problems	Environment - Housing	2010-2014 % of Households with at Least 1 of 4 Housing Problems: Overcrowding, High Housing Costs, or No Kitchen or Plumbing Facilities
Uninsured Children	Access To Care	2015 Percentage of Children Under Age 19 Without Health Insurance

Note: Listed alphabetically, not in order of significance

Source: IBM Watson Health, 2018

Prioritized Significant Health Needs

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

The resulting prioritized health needs for this community were:

Priority	Need	Category of Need
1	Percentage of Population under age 65 without Health Insurance	Access To Care
2	Schizophrenia and Other Psychotic Disorders in Medicare Population	Mental Health
3	Ratio of Population to One Non-Physician Primary Care Provider	Access To Care
4	Depression in Medicare Population	Mental Health
5	Accidental poisoning deaths where opioids were involved	Health Behaviors - Substance Abuse

Description of Health Needs

A CHNA for the Carrollton Health Community identified six significant health needs facing the community related to: access to care, mental health, and substance abuse issues. These needs were determined based on analysis of community health data and community input sessions. Regionalized health needs affect all age levels to some degree; however, it is often the most vulnerable populations that are negatively affected. Identified health gaps assist community leaders to define resources and access to care within the county and/or region.

Population under age 65 without Health Insurance

Health Insurance coverage for adults not covered by Medicare has been a volatile topic for the last ten years. Health insurance coverage continues to be a major topic in recent elections and among voters. Lack of health insurance is a significant barrier in accessing health care and overall financial security. A key finding from a recent Kaiser Foundation paper included; "Going without coverage can have serious health consequences for the uninsured because they receive less preventative care, and delayed care often results in serious illness or other health problems. Being uninsured can also have serious financial consequences, with many unable to pay their medical bills, resulting in medical debt."[2]

According to the 2018 County Health Rankings, the rate of uninsured population under age 65 across Texas is 19.2%, as compared to an overall U.S. rate of 11% and top performing U.S. counties rate of 6%.[3] The Carrollton Health community comprises a portion of Denton and Dallas counties. Denton County has an uninsured rate for the population under age 65 that is better than the overall Texas rate. However, the Dallas County rate of uninsured population under age 65 is 22.6%, indicating need for that portion of the greater Carrollton Health Community.[4]

Schizophrenia and Other Psychotic Disorders in the Medicare Population

Data on mental health diagnoses for the overall population can be difficult to gather. In some instances, only information about a subset of the population is available. For this community, reliable data about mental health diagnoses is available for the Medicare population only. These results indicate a need among the Medicare population and can be a proxy for need across the greater population as it relates to the prevalence of mental health conditions within the community.

In the Carrollton Health Community, the fastest growing population, aged 65 and older (seniors), may reach 33.4% by 2023. This projection will add approximately 30,519 seniors to the Carrollton Health Community.[5] Growth among this age group will likely contribute to increased utilization of healthcare services. Over time, the community must

[2] Kaiser Family Foundation. The Uninsured: A Primer - Key Facts about Health Insurance and the Uninsured Under the Affordable Care Act. December 2017.
[3] Small Area Health Insurance Estimates (SAHIE), United States Census Bureau, U.S. County Health Rankings & Roadmaps, 2018
[4] Small Area Health Insurance Estimates (SAHIE), United States Census Bureau, U.S. County Health Rankings & Roadmaps, 2018
[5] IBM Watson Health / Claritas, 2018

be able to provide adequate services to care for the aging population, including services related to mental health.

Seniors, with either life-long mental health diagnoses or recent onset changes, face a multitude of challenges including access to specialized services, insurance, transportation, etc. Individuals with long-term mental health issues who have had access to therapy and medications may now face additional concerns as aging seniors. Isolation for adults 65 and older who are living alone is a growing challenge for communities across the nation and compounds with serious mental health concerns. Integrated social services engaged to support and positively challenge their 65 and older populations may improve the overall health and well-being of the community.

In the Carrollton Health Community, the percentage of Medicare beneficiaries diagnosed with Schizophrenia and other psychotic disorders was 2.6%. In Denton County, this was 10.4% greater than the Texas state benchmark and ranked in the top ten needs for the community in public health indicators analyzed for the CHNA.[6]

Depression in the Medicare Population

Depression is a true and treatable condition and not a normal result of aging. However, a myriad of conditions such as: chronic illness, financial challenges, death, and a change of living situation, are some reasons why there are a growing number of people in the Medicare population with depressive diagnoses. Eighty percent of older adults have at least one chronic health condition, and 50% have two or more.[7] Healthcare providers may mistake an older adult's symptoms of depression as just a natural reaction to illness or the life changes that may occur as we age, and therefore not see the depression as a condition to be treated.

The Texas state benchmark for depression within the Medicare population is 14.9%. Depression among the Medicare population for Denton County was 17.6% and ranked in the top ten needs for the community when public health indicators analyzed for the CHNA.[8] Primary care providers are often the first line in diagnosing depression. As noted below, Denton County also showed a deficit of non-physician primary care providers, which provides a challenge in reversing the decline of mental health in the elderly.

Non-Physician Primary Care Provider Access

There is a nation-wide scarcity of physicians across the United States, while particularly challenging in small towns and cities, metropolitan areas are not exempt. Demographic shifts, such as growth in the elderly/near elderly populations increase the need for primary care access. Estimates of the scope of the provider shortage in America vary, however, it is generally agreed upon that thousands of additional Primary Care Providers (PCPs) are needed to meet the current demand, and that tens of thousands of additional caregivers will be needed to meet the growing aging population across the country.

Primary care physician extenders (e.g. nurse practitioners, physician assistants, and clinical nurse specialists) could help close the gap in access to primary care services

[6] CMS Chronic Conditions Warehouse, 2007-2015
[7] **U.S. Center for Disease Control and Prevention**, 2019
[8] CMS Chronic Conditions Warehouse, 2007-2015

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

Access to non-physician primary care providers in Denton County indicates a need when compared to the state benchmark. The overall Texas provider ratio was one non-physician primary care provider to 1,497 residents, while the Denton County ratio was 1 provider per 1,966 residents or, 31.3% greater than the state threshold.[9] The need for access to non-physician primary care providers was the number two top ranked need for the Carrollton Health Community.

Accidental Poisoning Deaths: Opioid Involvement

Opioids were involved in 47,600 overdose deaths in 2017 (67.8% of all drug overdose deaths). Twenty-three of the 50 states in the U.S. have seen a statistically significant increase in opioid drug deaths from 2016 to 2017. Texas was not one of the states with a statistically significant increase, however one accidental drug-overdose death is one too many for a community. The realization that over half of the overdose deaths are opioid related is a key reason for states to address this issue in their community. There were 70,237 drug overdose deaths in the United States in 2017. The age-adjusted rate of overdose deaths increased significantly by 9.6% from 2016 (19.8 per 100,000) to 2017 (21.7 per 100,000). Opioids, mainly synthetic opioids (other than methadone), are currently the main driver of drug overdose deaths.[10]

Dallas County shows a need as it relates to overall drug overdose deaths with a rate of 12.4 deaths per 100,000 people compared to a Texas rate of 9.7 deaths per 100,000 people. However, Dallas County also stands out as it relates to drug overdose deaths where Opioids were involved. The overall Texas state benchmark for accidental poisoning deaths where opioids were involved was 4.3 deaths per 100,000 people. Dallas County had a rate of 6.3 deaths per 100,000 people, 45.7% higher than the state benchmark.[11] Opioid deaths remain a growing and significant concern across both Texas and the nation. The opioid epidemic burden affects many social service agencies who face challenges meeting the needs that present across all socioeconomic groups.

Summary

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

[9] CMS, National Provider Identification Registry (NPPES), County Health Rankings & Roadmaps, 2018
[10] **U.S. Center for Disease Control and Prevention**, 2019
[11] Texas Health and Human Services Center for Health Statistics, 2015

tactics and time- frames will be developed for the health needs BSWH chooses to address for the community served.

Appendix A: Key Health Indicator Sources

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

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

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

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

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

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

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

Resources Identified

Community Health Need	Category	Service	Facility Name	Address	City	Phone Number
Percentage of Population Under Age 65 Without Health Insurance	Access to Care	Job Insecurity Services	Christian Community Action (CCA)	200 S. Mill Street Lewisville	Lewisville	972- 436-435
Percentage of Population Under Age 65 Without Health Insurance	Access to Care	Job Insecurity Services	Jewish Family Services	5402 Arapaho Rd	Dallas	972-437-9950
Percentage of Population Under Age 65 Without Health Insurance	Access to Care	Job Insecurity Services	Metrocrest Services	13801 Hutton Drive #150	Farmers Branch	972-446-2100
Percentage of Population Under Age 65 Without Health Insurance	Access to Care	Vaccinations	PediPlace - Park Lane Village	502 S. Old Orchard Lane, Suite 126	Lewisville	972-436-7962
Percentage of Population Under Age 65 Without Health Insurance	Access to Care	Vaccinations	PediPlace - Spring Creek Village	7989 Belt Line Rd, #120 Dallas	Dallas	214-420-8008
Ratio of Population to One Non-Physician Primary Care Provider	Access to Care	Primary Care	Denton County Public Health	359 Lake Park Road, Suite 113	Lewisville	972-221-1603
Ratio of Population to One Non-Physician Primary Care Provider	Access to Care	Primary Care	Irving Bible Church/2435 Clinic	2435 Kinwest Parkway	Irving	972-443-3328
Ratio of Population to One Non-Physician Primary Care Provider	Access to Care	Primary Care	Metrocare at Midway — Center & Pharmacy	16160 Midway Rd. Suite 200	Addison	214-689-5196
Ratio of Population to One Non-Physician Primary Care Provider	Access to Care	Primary Care	Mi Doctor Family Clinic - Spring Valley Clinic	8112 Spring Valley Rd	Dallas	214-884-1705

Community Health Need	Category	Service	Facility Name	Address	City	Phone Number
Ratio of Population to One Non-Physician Primary Care Provider	Access to Care	Primary Care	PediPlace - Park Lane Village	502 S. Old Orchard Lane, Suite 126	Lewisville	972-436-7962
Ratio of Population to One Non-Physician Primary Care Provider	Access to Care	Primary Care	PediPlace - Spring Creek Village	7989 Belt Line Rd, #120 Dallas	Dallas	214-420-8008
Ratio of Population to One Non-Physician Primary Care Provider	Access to Care	Primary Care	Primary Care Clinic of NTX - Lewisville Clinic	570 South Edmonds Lane, #111	Lewisville	972-221-6005
Accidental Poisoning Deaths Where Opioids Were Involved	Health Behaviors - Substance Abuse	Behavioral Health Services	Denton County Public Health	359 Lake Park Road, Suite 113	Lewisville	972-221-1603
Accidental Poisoning Deaths Where Opioids Were Involved	Health Behaviors - Substance Abuse	Behavioral Health Services	Jewish Family Services	5402 Arapaho Rd	Dallas	972-437-9950
Accidental Poisoning Deaths Where Opioids Were Involved	Health Behaviors - Substance Abuse	Behavioral Health Services	Jewish Family Services	6910 Dallas Parkway, Suite 116	Dallas	972-437-9950
Accidental Poisoning Deaths Where Opioids Were Involved	Health Behaviors - Substance Abuse	Behavioral Health Services	Metrocare at Midway — Center & Pharmacy	16160 Midway Rd. Suite 200	Addison	214-689-5196
Accidental Poisoning Deaths Where Opioids Were Involved	Health Behaviors - Substance Abuse	Behavioral Health Services	Metrocare at Midway — Center & Pharmacy	5580 LBJ Freeway, Suite 615	Dallas	972-331-6363
Accidental Poisoning Deaths Where Opioids Were Involved	Health Behaviors - Substance Abuse	Family Counseling	Children's Advocacy Center for Denton County	1854 Cain Drive	Lewisville	972- 317-281
Accidental Poisoning Deaths Where Opioids Were Involved	Health Behaviors - Substance Abuse	Family Counseling	Jewish Family Services	5402 Arapaho Rd	Dallas	972-437-9950
Accidental Poisoning Deaths Where Opioids Were Involved	Health Behaviors - Substance Abuse	Social Services	Children's Advocacy Center for Denton County	1854 Cain Drive	Lewisville	972- 317-281
Accidental Poisoning Deaths Where Opioids Were Involved	Health Behaviors - Substance Abuse	Social Services	Christian Community Action (CCA)	200 S. Mill Street Lewisville	Lewisville	972- 436-435

Community Health Need	Category	Service	Facility Name	Address	City	Phone Number
Accidental Poisoning Deaths Where Opioids Were Involved	Health Behaviors - Substance Abuse	Social Services	Jewish Family Services	6910 Dallas Parkway, Suite 116	Dallas	972-437-9950
Accidental Poisoning Deaths Where Opioids Were Involved	Health Behaviors - Substance Abuse	Social Services	Metrocare at Midway — Center & Pharmacy	16160 Midway Rd. Suite 200	Addison	214-689-5196
Accidental Poisoning Deaths Where Opioids Were Involved	Health Behaviors - Substance Abuse	Substance Use Services	Metrocare at Midway — Center & Pharmacy	16160 Midway Rd. Suite 200	Addison	214-689-5196
Depression in Medicare Population	Mental Health	Crisis Services	Jewish Family Services	5402 Arapaho Rd	Dallas	972-437-9950
Depression in Medicare Population	Mental Health	Family Counseling	Children's Advocacy Center for Denton County	1854 Cain Drive	Lewisville	972- 317-281
Depression in Medicare Population	Mental Health	Family Counseling	Jewish Family Services	5402 Arapaho Rd	Dallas	972-437-9950
Depression in Medicare Population	Mental Health	Mental Health Hospital Treatment	Excel Center of Lewisville	190 Civic Circle, Suite 170	Lewisville	972-906-5522
Depression in Medicare Population	Mental Health	Mental Health Outpatient Treatment	Excel Center of Lewisville	190 Civic Circle, Suite 170	Lewisville	972-906-5522
Depression in Medicare Population	Mental Health	Mental Health Services	Excel Center of Lewisville	190 Civic Circle, Suite 170	Lewisville	972-906-5522
Depression in Medicare Population	Mental Health	Mental Health Services	Jewish Family Services	5402 Arapaho Rd	Dallas	972-437-9950
Depression in Medicare Population	Mental Health	Mental Health Services	Jewish Family Services	6910 Dallas Parkway, Suite 116	Dallas	972-437-9950
Depression in Medicare Population	Mental Health	Mental Health Services	Metrocare at Midway — Center & Pharmacy	16160 Midway Rd. Suite 200	Addison	214-689-5196

Community Health Need	Category	Service	Facility Name	Address	City	Phone Number
Depression in Medicare Population	Mental Health	Mental Health Services	Metrocare at Midway — Center & Pharmacy	5580 LBJ Freeway, Suite 615	Dallas	972-331-6363
Depression in Medicare Population	Mental Health	Social Services	Children's Advocacy Center for Denton County	1854 Cain Drive	Lewisville	972- 317-281
Depression in Medicare Population	Mental Health	Social Services	Christian Community Action (CCA)	200 S. Mill Street Lewisville	Lewisville	972- 436-435
Depression in Medicare Population	Mental Health	Social Services	Jewish Family Services	6910 Dallas Parkway, Suite 116	Dallas	972-437-9950
Depression in Medicare Population	Mental Health	Social Services	Metrocare at Midway — Center & Pharmacy	16160 Midway Rd. Suite 200	Addison	214-689-5196
Schizophrenia and Other Psychotic Disorders in Medicare Population	Mental Health	Crisis Services	Jewish Family Services	5402 Arapaho Rd	Dallas	972-437-9950
Schizophrenia and Other Psychotic Disorders in Medicare Population	Mental Health	Family Counseling	Children's Advocacy Center for Denton County	1854 Cain Drive	Lewisville	972- 317-281
Schizophrenia and Other Psychotic Disorders in Medicare Population	Mental Health	Family Counseling	Jewish Family Services	5402 Arapaho Rd	Dallas	972-437-9950
Schizophrenia and Other Psychotic Disorders in Medicare Population	Mental Health	Long Term Housing	Christian Community Action (CCA)	200 S. Mill Street Lewisville	Lewisville	972- 436-435
Schizophrenia and Other Psychotic Disorders in Medicare Population	Mental Health	Mental Health Hospital Treatment	Excel Center of Lewisville	190 Civic Circle, Suite 170	Lewisville	972-906-5522
Schizophrenia and Other Psychotic Disorders in Medicare Population	Mental Health	Mental Health Outpatient Treatment	Excel Center of Lewisville	190 Civic Circle, Suite 170	Lewisville	972-906-5522
Schizophrenia and Other Psychotic Disorders in Medicare Population	Mental Health	Mental Health Services	Excel Center of Lewisville	190 Civic Circle, Suite 170	Lewisville	972-906-5522

Community Health Need	Category	Service	Facility Name	Address	City	Phone Number
Schizophrenia and Other Psychotic Disorders in Medicare Population	Mental Health	Mental Health Services	Jewish Family Services	5402 Arapaho Rd	Dallas	972-437-9950
Schizophrenia and Other Psychotic Disorders in Medicare Population	Mental Health	Mental Health Services	Jewish Family Services	6910 Dallas Parkway, Suite 116	Dallas	972-437-9950
Schizophrenia and Other Psychotic Disorders in Medicare Population	Mental Health	Mental Health Services	Metrocare at Midway — Center & Pharmacy	16160 Midway Rd. Suite 200	Addison	214-689-5196
Schizophrenia and Other Psychotic Disorders in Medicare Population	Mental Health	Mental Health Services	Metrocare at Midway — Center & Pharmacy	5580 LBJ Freeway, Suite 615	Dallas	972-331-6363
Schizophrenia and Other Psychotic Disorders in Medicare Population	Mental Health	Social Services	Children's Advocacy Center for Denton County	1854 Cain Drive	Lewisville	972- 317-281
Schizophrenia and Other Psychotic Disorders in Medicare Population	Mental Health	Social Services	Christian Community Action (CCA)	200 S. Mill Street Lewisville	Lewisville	972- 436-435
Schizophrenia and Other Psychotic Disorders in Medicare Population	Mental Health	Social Services	Jewish Family Services	6910 Dallas Parkway, Suite 116	Dallas	972-437-9950
Schizophrenia and Other Psychotic Disorders in Medicare Population	Mental Health	Social Services	Metrocare at Midway — Center & Pharmacy	16160 Midway Rd. Suite 200	Addison	214-689-5196

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

Health Professional Shortage Areas (HPSA)[12]

County Name	HPSA ID	HPSA Name	HPSA Discipline Class	Designation Type
Dallas	1481414864	CF-Hutchins State Jail	Primary Care	Correctional Facility
Dallas	1482645075	Southeast Dallas	Primary Care	Geographic HPSA
Dallas	1487732421	Trinity Area	Primary Care	Geographic HPSA
Dallas	1487790622	Parkland Center for Internal Medicine (Pcim)	Primary Care	Other Facility
Dallas	1488147611	Simpson-Stuart	Primary Care	Geographic HPSA
Dallas	6486350827	West Dallas/Cliff Hall	Dental Health	High Needs Geographic HPSA
Dallas	6488063344	CF-Hutchins State Jail	Dental Health	Correctional Facility
Dallas	6488138803	Lisbon Service Area	Dental Health	Geographic HPSA
Dallas	6489994838	Federal Correctional Institution - Seagoville	Dental Health	Correctional Facility
Dallas	6489994889	Los Barrios Unidos Community Health Center	Dental Health	Federally Qualified Health Center
Dallas	6489994897	MLK Jr. Family Center	Dental Health	Federally Qualified Health Center
Dallas	7481857339	South Irving Service Area	Mental Health	Geographic HPSA
Dallas	7482132665	West Dallas	Mental Health	High Needs Geographic HPSA
Dallas	7487523613	CF-Hutchins State Jail	Mental Health	Correctional Facility

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

County Name	HPSA ID	HPSA Name	HPSA Discipline Class	Designation Type
Dallas	148999484M	Federal Correctional Institution - Seagoville	Primary Care	Correctional Facility
Dallas	148999485F	MLK Jr Family Center	Primary Care	Federally Qualified Health Center
Dallas	14899948D3	Los Barrios Unidos Community Health Center	Primary Care	Federally Qualified Health Center
Dallas	14899948OY	Urban Inter-Tribal Center of Texas	Primary Care	Native American/Tribal Facility/Population
Dallas	14899948OZ	Mission East Dallas (Medical) and Metroplex Project	Primary Care	Federally Qualified Health Center
Dallas	14899948P6	Dallas County Hospital District Homeless Programs	Primary Care	Federally Qualified Health Center
Dallas	14899948Q0	Healing Hands Ministries, Inc.	Primary Care	Federally Qualified Health Center
Dallas	64899948C2	Dallas County Hospital District Homeless Programs	Dental Health	Federally Qualified Health Center
Dallas	64899948MO	Mission East Dallas (Medical) and Metroplex Project	Dental Health	Federally Qualified Health Center
Dallas	64899948MP	Urban Inter-Tribal Center of Texas	Dental Health	Native American/Tribal Facility/Population
Dallas	64899948NX	Healing Hands Ministries, Inc.	Dental Health	Federally Qualified Health Center
Dallas	748999481L	Los Barrios Unidos Community Health Center	Mental Health	Federally Qualified Health Center
Dallas	748999481V	MLK Jr. Family Center	Mental Health	Federally Qualified Health Center
Dallas	748999482V	Dallas County Hospital District Homeless Programs	Mental Health	Federally Qualified Health Center
Dallas	74899948MN	Mission East Dallas (Medical) and Metroplex Project	Mental Health	Federally Qualified Health Center
Dallas	74899948MP	Urban Inter-Tribal Center of Texas	Mental Health	Native American/Tribal Facility/Population
Dallas	74899948O2	Healing Hands Ministries, Inc.	Mental Health	Federally Qualified Health Center
Denton	14899948PA	Health Services of North Texas, Inc.	Primary Care	Federally Qualified Health Center

County Name	HPSA ID	HPSA Name	HPSA Discipline Class	Designation Type
Denton	64899948MR	Health Services of North Texas, Inc.	Dental Health	Federally Qualified Health Center
Denton	74899948MQ	Health Services of North Texas, Inc.	Mental Health	Federally Qualified Health Center

Medically Underserved Areas and Populations (MUA/P)[13]

County Name	MUA/P Source Identification Number	Service Area Name	Designation Type	Rural Status
Dallas	03453	Pleasant Grove Service Area	Medically Underserved Area	Non-Rural
Dallas	03468	Dallas Service Area	Medically Underserved Area	Non-Rural
Dallas	03453	Pleasant Grove Service Area	Medically Underserved Area	Non-Rural
Dallas	03468	Dallas Service Area	Medically Underserved Area	Non-Rural
Dallas	03469	Dallas Service Area	Medically Underserved Area	Non-Rural
Dallas	03490	Dallas Service Area	Medically Underserved Area	Non-Rural
Dallas	03491	Dallas Service Area	Medically Underserved Area	Non-Rural
Dallas	03526	Dallas Service Area	Medically Underserved Area	Non-Rural
Dallas	05210	Brooks Manor Service Area	Medically Underserved Area	Non-Rural
Dallas	05211	Cedar Glenn Service Area	Medically Underserved Area	Non-Rural
Dallas	05212	Cliff Manor Service Area	Medically Underserved Area	Non-Rural
Dallas	05213	Forest Glenn Service Area	Medically Underserved Area	Non-Rural

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

County Name	MUA/P Source Identification Number	Service Area Name	Designation Type	Rural Status
Dallas	05214	Cedar Glenn South Service Area	Medically Underserved Area	Non-Rural
Dallas	07294	Oak Cliff Service Area	Medically Underserved Area	Non-Rural
Dallas	07392	Grand Prairie	Medically Underserved Area	Non-Rural
Dallas	07631	Cockrell Hill Service Area	Medically Underserved Area	Non-Rural
Dallas	07753	Mission East Dallas Area	Medically Underserved Population	Non-Rural
Dallas	07921	Balch Springs	Medically Underserved Area	Non-Rural
Dallas	07942	Southwest Dallas	Medically Underserved Area	Non-Rural
Dallas	07959	Lillycare Dallas	Medically Underserved Area	Non-Rural
Dallas	07973	Hutchins-Wilmer	Medically Underserved Area	Non-Rural
Denton	3463	Poverty Population	MUA – Governor's Exception	Non-Rural

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

Carrollton Health Community		
Public Health Indicator	Category	Indicator Definition
HIV Prevalence	Conditions/Diseases	2015 Number of Persons Aged 13 Years and Older Living with a Diagnosis of Human Immunodeficiency Virus (HIV) Infection per 100,000 Population
High School Dropout	Population	2016 A four-year longitudinal dropout rate is the percentage of students from the same class who drop out before completing their high school education.
Accidental poisoning deaths where opioids were involved	Mental Health	Annual Estimates of Accidental Poisoning Deaths where Opioids Were Involved Among Resident Population: April 1, 2010 to July 1, 2017.
Homicides	Population	2010-2016 Number of Deaths Due to Homicide, Defined as ICD-10 Codes X85-Y09, per 100,000 Population
Air Pollution - Particulate Matter daily density	Environment	2012 Average Daily Density of Fine Particulate Matter in Micrograms per Cubic Meter (PM2.5)
Renter-occupied housing	Environment	2017 Renter-occupied housing (percent of households)
Ratio of Population to One Non-Physician Primary Care Provider	Access To Care	2017 Ratio of Population to Primary Care Providers Other than Physicians
Drug Poisoning Deaths Rate	Health Behaviors	2014-2016 Number of Drug Poisoning Deaths (Drug Overdose Deaths) per 100,000 Population
Long Commute Alone	Environment	2012-2016 Among Workers Who Commute in Their Car Alone, the Percentage that Commute More than 30 Minutes
No vehicle available	Environment	2017 Households with no vehicle available (percent of households)
Children Eligible for Free Lunch Enrolled in Public Schools	Population	2015-2016 Percentage of Children Enrolled in Public Schools that are Eligible for Free or Reduced Price Lunch
Sexually Transmitted Infection Incidence	Health Behaviors	2015 Number of Newly Diagnosed Chlamydia Cases per 100,000 Population
Social/Membership Associations	Population	2015 Number of Membership Associations per 10,000 Population
Perforated Appendix Admission: Pediatric (Risk-Adjusted-Rate for Appendicitis)	Preventable Hospitalizations	2016 Number Observed / Pediatric Population Under Age 18
Chronic Lower Respiratory Disease (CLRD) Mortality Rate	Injury & Death	2013 Chronic Lower Respiratory Disease (CLRD) Age Adjusted Death Rate (per 100,000 - All Ages. Age-adjusted using the 2000 U.S. Standard Population)

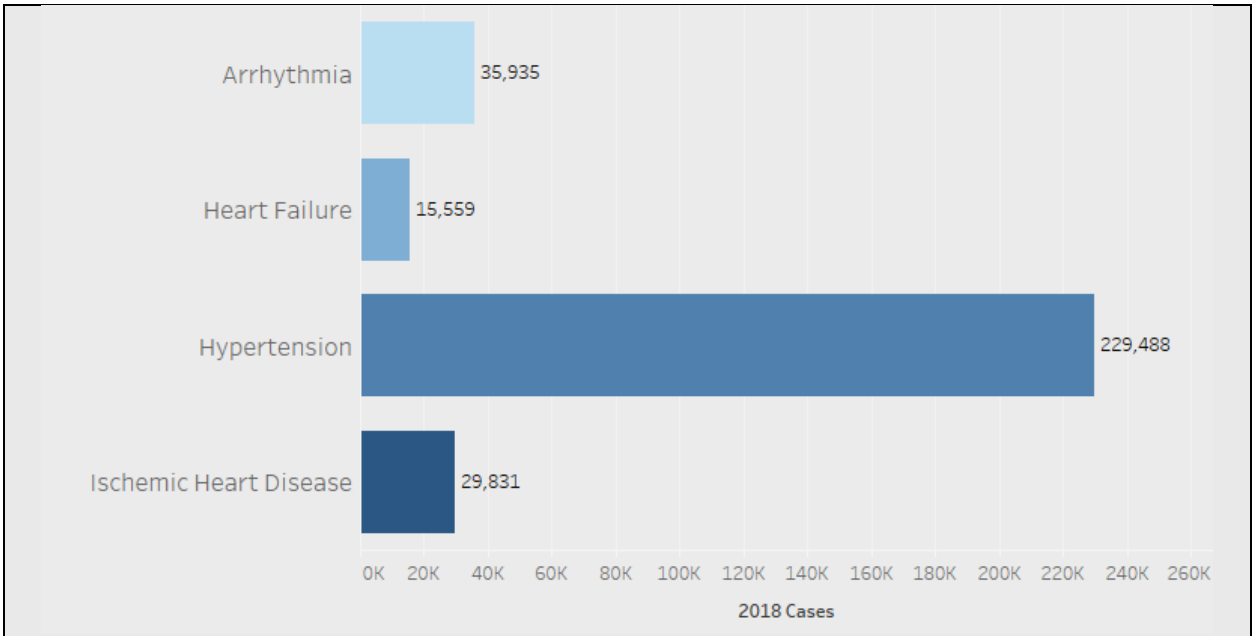
Carrollton Health Community		
Public Health Indicator	Category	Indicator Definition
Severe Housing Problems	Environment	2010-2014 Percentage of Households with at Least 1 of 4 Housing Problems: Overcrowding, High Housing Costs, or Lack of Kitchen or Plumbing Facilities
Motor Vehicle Driving Deaths with Alcohol Involvement	Health Behaviors	2012-2016 Percentage of Motor Vehicle Crash Deaths that had Alcohol Involvement
Non-English speaking households	Population	2012 Percent- Language other than English
Depression in Medicare Population	Mental Health	2007-2015 Prevalence of chronic condition across all Medicare beneficiaries
Percentage of Population under age 65 without Health Insurance	Access To Care	2015 Percentage of Population Under Age 65 Without Health Insurance
Children in Single-Parent Households	Population	2012-2016 Percentage of Children that Live in a Household Headed by Single Parent
Infant Mortality Rate	Injury & Death	2010-2016 Number of All Infant Deaths (Within 1 year), per 1,000 Live Births
Food Insecure	Environment	2015 Percentage of Population Who Lack Adequate Access to Food During the Past Year
Diabetes Short-term Complications Admission: Pediatric (Risk-Adjusted-Rate)	Preventable Hospitalizations	2016 Number Observed / Pediatric Population Under Age 18
Uninsured Children	Access To Care	2015 Percentage of Children Under Age 19 Without Health Insurance
Cancer Incidence - Female Breast	Conditions/Diseases	2011-2015 Age-Adjusted Female Breast Cancer Incidence Rate Cases Per 100,000
Teen Birth Rate per 1,000 Female Population, Ages 15-19	Health Behaviors	2010-2016 Number of Births to Females Ages 15-19 per 1,000 Females in a County.
Individuals Living Below Poverty Level	Population	2012-2016 American Community Survey 5-Year Estimates, Individuals below poverty level
Children in Poverty	Population	2016 Percentage of Children Under Age 18 in Poverty
Child Mortality Rate	Injury & Death	2013-2016 Number of Deaths Among Children under Age 18 per 100,000
Schizophrenia and Other Psychotic Disorders in Medicare Population	Mental Health	2007-2015 Prevalence of chronic condition across all Medicare beneficiaries

Carrollton Health Community		
Public Health Indicator	Category	Indicator Definition
Osteoporosis in Medicare Population	Conditions/Diseases	2007-2015 Prevalence of chronic condition across all Medicare beneficiaries
Perforated Appendix Admission: Adult (Risk-Adjusted-Rate per 100 Admissions for Appendicitis)	Preventable Hospitalizations	2016 Number Observed / Adult Population Age 18 and older
Cancer Incidence - Prostate	Conditions/Diseases	2011-2015 Age-Adjusted Prostate Cancer Incidence Rate Cases per 100,000.
Stroke Mortality Rate	Injury & Death	2013 Cerebrovascular Disease (Stroke) Age Adjusted Death Rate (Per 100,000 - All Ages. Age-adjusted using the 2000 U.S. Standard Population)
Adults Engaging in Binge Drinking During the Past 30 Days	Health Behaviors	2016 Percentage of a County's Adult Population that Reports Binge or Heavy Drinking in the Past 30 Days
Violent Crime Offenses	Population	2012-2014 Number of Reported Violent Crime Offenses per 100,000 Population
Price-Adjusted Medicare Reimbursements per Enrollee	Access To Care	2015 Amount of Price-Adjusted Medicare Reimbursements (Part A and B) per Enrollee

Appendix E: Watson Health Community Data

Watson Health Heart Disease Estimates identified hypertension as the most prevalent heart disease diagnoses. There were over 229,000 estimated cases in the health community. The Far North Dallas ZIP codes had the most estimated cases of each heart disease type. ZIP code 75248 had the highest estimated prevalence rates for all heart diseases: Arrhythmia (614 cases per 10,000 population), Heart Failure (314 cases per 10,000 population), Hypertension (3,174 cases per 10,000 population) and Ischemic Heart Disease (495 cases per 10,000 population).

2018 Estimated Heart Disease Cases



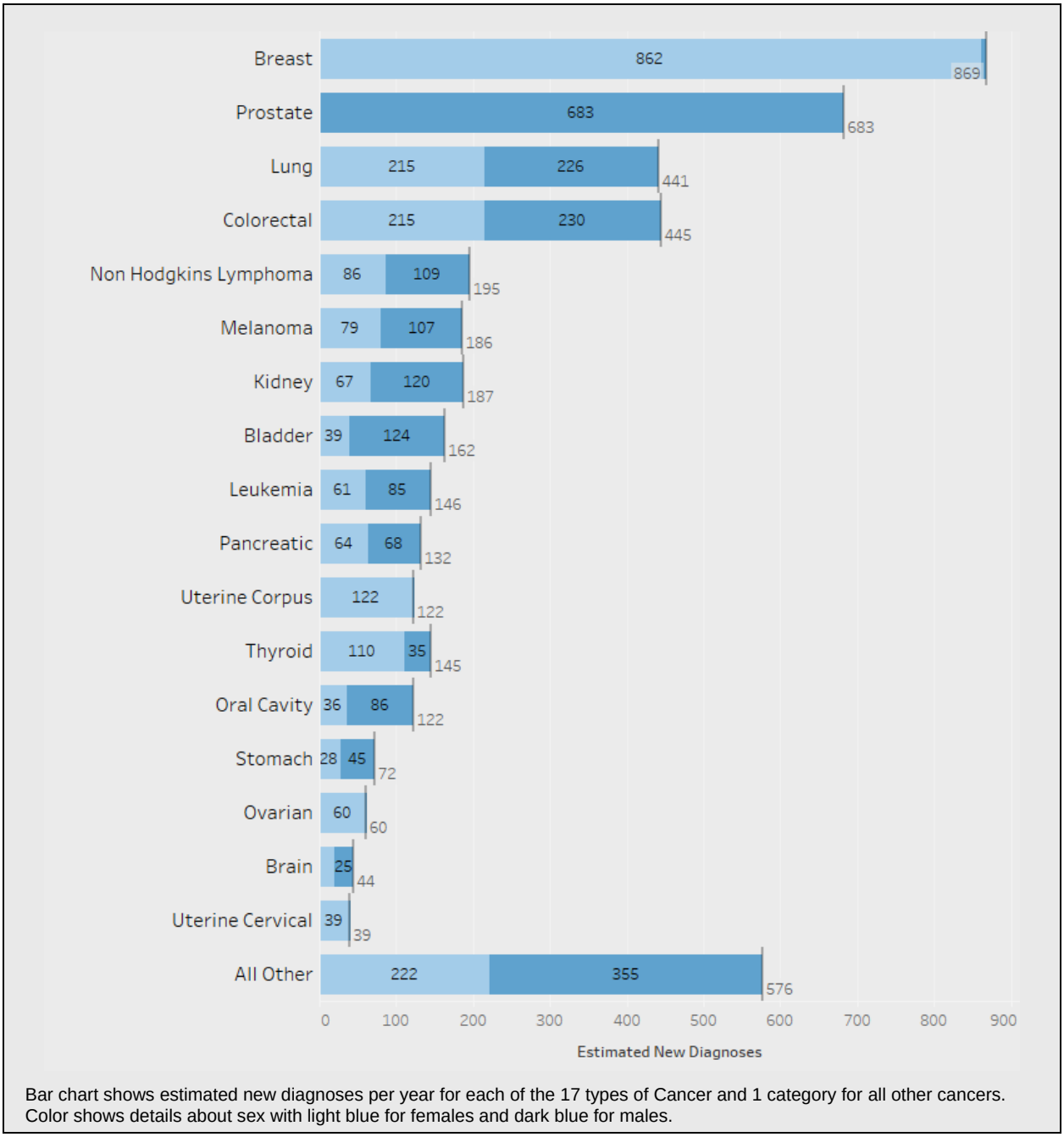
Bar chart shows total number of 2018 Estimated Heart Disease cases for each of four types: arrhythmia, heart failure, hypertension, and ischemic heart disease

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

Source: IBM Watson Health, 2018

For this community, Watson Health's 2018 Cancer Estimates revealed the cancers projected to have the greatest rate of growth in the next five years were pancreatic, bladder, stomach, and kidney. The estimates for the most new cancer cases in 2018 were breast, prostate, lung and colorectal cancers.

2018 Estimated New Cancer Cases



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

Source: IBM Watson Health, 2018

Estimated Cancer Cases and Projected 5 Year Change by Type

Cancer Type	2018 Estimated New Cases	2023 Estimated New Cases	5 Year Growth (%)
Bladder	162	202	24.7%
Brain	44	50	13.6%
Breast	869	1,043	20.0%
Colorectal	445	491	10.3%
Kidney	187	231	23.5%
Leukemia	146	175	19.9%
Lung	441	539	22.2%
Melanoma	186	222	19.4%
Non-Hodgkin's Lymphoma	195	238	22.1%
Oral Cavity	122	150	23.0%
Ovarian	60	71	18.3%
Pancreatic	132	168	27.3%
Prostate	683	794	16.3%
Stomach	72	89	23.6%
Thyroid	145	175	20.7%
Uterine Cervical	39	43	10.3%
Uterine Corpus	122	149	22.1%
All Other	576	707	22.7%
Grand Total	**4,627**	**5,535**	**19.6%**

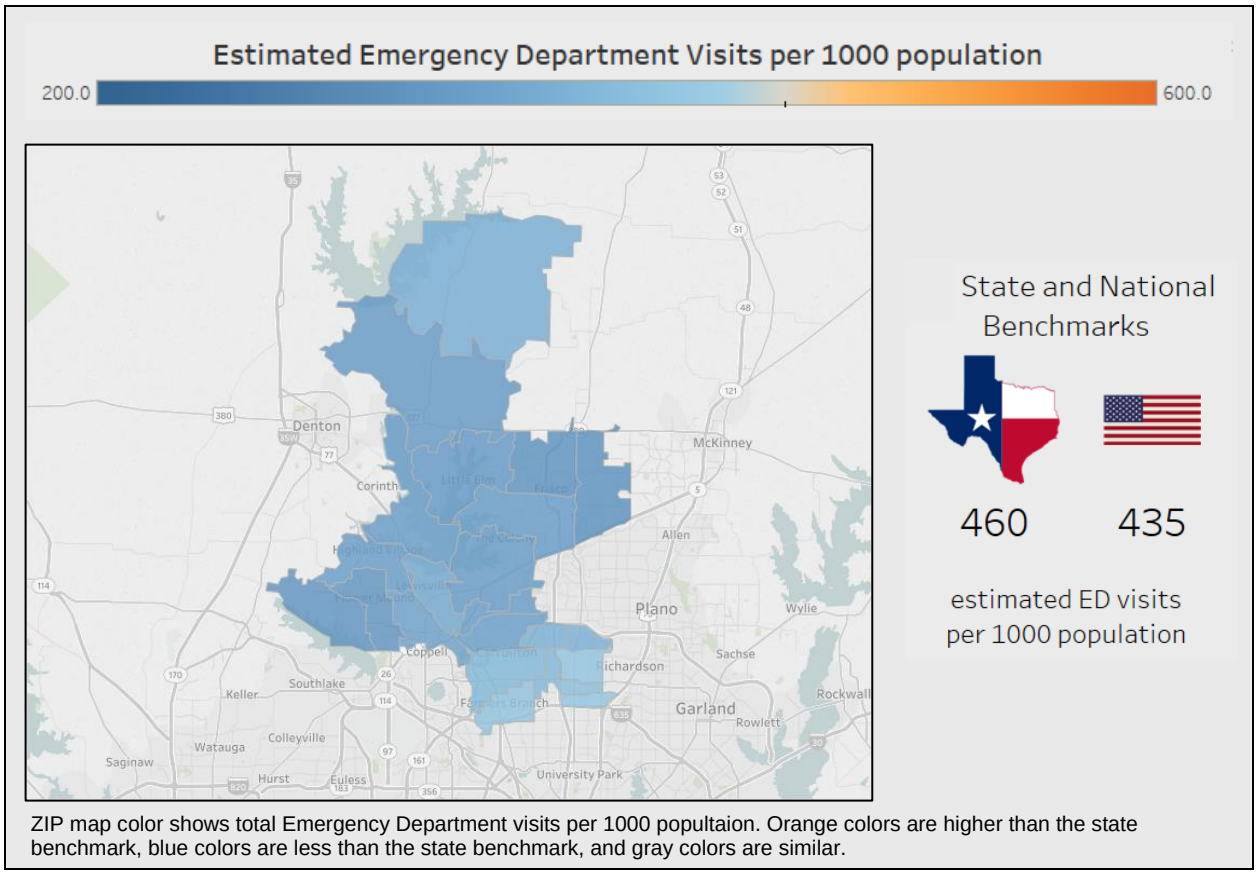
Source: IBM Watson Health, 2018

Based on population characteristics and regional utilization rates, Watson Health projected all emergency department (ED) visits in this community to increase by 9.6% over the next 5 years. Almost a quarter of ED visits were generated by the residents of Far North Dallas ZIP codes, where we have also some of the highest estimated ED use rates in this health community; 378.1 to 419.3 ED visits per 1,000 residents compared to the Texas state benchmark of 460 visits and the U.S. benchmark 435 visits per 1,000.

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

Non-emergent outpatient ED visits could be an indication of systematic issues within the community regarding access to primary care, managing chronic conditions, or other access to care issues such as ability to pay. Watson Health estimated non-emergent ED visits to increase by an average of 4.3% over the next five years in this community.

Estimated 2018 Emergency Department Visit Rate

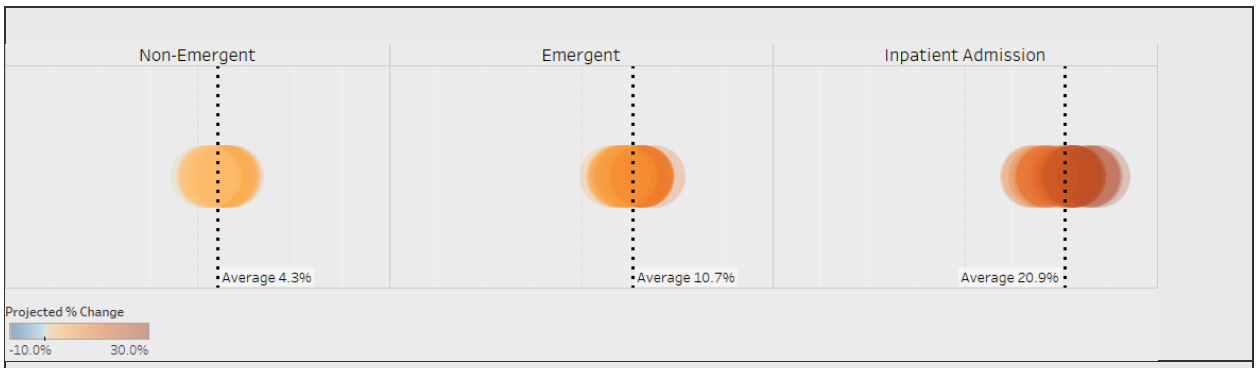


ZIP map color shows total Emergency Department visits per 1000 popultaion. Orange colors are higher than the state benchmark, blue colors are less than the state benchmark, and gray colors are similar.

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

Source: IBM Watson Health, 2018

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



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

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

Source: IBM Watson Health, 2018

Appendix F: Evaluation of Prior Implementation Strategy Impact

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

Baylor Scott & White Medical Center – Carrollton
Baylor Scott & White Medical Center – Trophy Club
(CHNA 2019, Carrollton Health Community)

Prior Significant Health Needs Addressed by Facilities

Prior Identified Need Facility	Access to care for middle to lower socioecomic status	Mental/ Behavioral Health	Preventable Admissions: adult uncontrolled diabetes	Lack of Dental Providers	Teen Pregnancy	Drug Abuse
Baylor Scott & White Medical Center - Carrollton	√	√	√			√
Prior Identified Need **Facility**	**Access to care for middle to lower socioecomic status**	**Non-MD & MD primary care providers to population ratio**	**Mental/ Behavioral Health**	**Chronic disease**	**Dentists to population ratio**	**Health and wellness promotion**
Baylor Scott & White Medical Center - Trophy Club	√					

Identified Need Addressed: Access to Care for Middle to Lower Socio- Economic

Program: Community Benefit Operations
Entity: Baylor Scott & White Medical Center - Carrollton
Description:
The Hospital produces a triennial Community Needs Assessment. The Hospital also provides dedicated staff for managing or overseeing community benefit program activities that are not included in other categories of community benefit. This staff provides internal tracking and reporting community benefit as well as managing or overseeing community benefit program activities.
Impact: 49,162 persons served; increased access to health care
Committed Resources: staff time; travel; supplies/equipment; $73,941 net community benefit

Program: Community Health Education and Outreach
Entity: Baylor Scott & White Medical Center - Carrollton

Description:
The Hospital provides Community Health Improvement Services to extend beyond patient care activities subsidized by the hospital. These activities include, but are not limited to, community health education, support groups, pastoral outreach programs, community based clinical services, caregiver training, and education on specific diseases.
Impact: 3,167 persons served; increased access to free health care information
Committed Resources: staff time; clinical experts; supplies/equipment; $47,779 net community benefit

Program: Donations - Financial
Entity: Baylor Scott & White Medical Center - Carrollton
Description:
The Hospital provides funds in the community whose mission compliments the mission of the Hospital. These funds include monetary gifts to other not-for-profit organizations, contributions to charity events and help to extend the services of the hospital beyond its walls. Net benefit calculates by subtracting the fair market value of participation by employees or the organization.
Impact: 37,280 person served **Community Partners** and their reported outcomes: • Metrocrest Social Services - funds provided 24,500 pounds of food and provided 20,580 meals to those in-need • American Cancer Society Relay for Life - contributed to the 22% decline in cancer mortality in the past 2 decades, preventing more than 1.5 million cancer deaths during that time • Primary Care Clinic of North Texas - Our total outpatient visit for July 2017-2018 was 13,000 patients. • Metrocrest Community Clinic - Provided over 2200 low income uninsured patients access to health care services, disease prevention, basic mental health, chronic disease management, including nutrition therapy, counseling, weight management, access to medications, immunizations and cancer screenings. a) 83% of hypertension patients are controlled b) 19% of patients that set goal to lose weight lost >5% of body weight c) 100% of patients were offered the influenza vaccine at no cost; d) 65% received vaccinations e) 102 patients attended Heart Healthy Fairs
Committed Resources: staff time; $66,162 net community benefit.

Program: Donations - In Kind
Entity: Baylor Scott & White Medical Center - Carrollton
Description:
The Hospital provides In Kind donations to the community which include equipment and medical supplies, emergency medical care at a community event, food, clothing and toy donations for not for profit organizations and community groups.
Impact: 80 persons served
Committed Resources: staff time; supplies/equipment; $3,626 net community benefit

Program: Donations In Kind - Faith in Action Initiatives
Entity: Baylor Scott & White Medical Center - Carrollton
Description:

Hospitals donate retired medical supplies and equipment to the office of Faith in Action Initiatives and Life program to providing for the health care needs of populations in the community and nation whose needs not met through their own organization.
Impact: persons served – unknown; increased access to health care infrastructure in North Texas, the Nation and World.
Committed Resources: staff time; volunteers; depreciated supplies/equipment; shipping; $45,344 net community benefit

Program: DSRIP Chronic Disease Management
Entity: Baylor Scott & White Medical Center - Carrollton
Description:
This project establishes a new clinic for the underserved (including Medicaid/Uninsured) population on the Baylor Scott & White Medical Center - Carrollton campus. Currently, there is no Baylor Clinic on the campus meeting the needs of the underserved population of Carrollton and surrounding communities. Existing space furnished a primary care clinic leveraging and utilizing the standards, requirements and experience of similar Baylor Scott & White Health (BSWH) Clinics on other BSWH campuses. In addition to receiving primary care, this project also proposes that ancillary services such as labs, imaging (i.e.: CT scans, MRI, mammograms, ultrasound, echocardiograms, and interventional radiology) and diagnostics (i.e.: colonoscopy, stress tests, esophageal diagnostic, retinal screens) will be provided upon physician request.
Impact: 117 persons served • DSRIP Chronic Disease Volume - 117 patients received chronic disease management services in FY 2017 (July 1, 2016 June 30, 2017)
Committed Resources: clinical staff

Program: DSRIP Primary Care Expansion
Entity: Baylor Scott & White Medical Center - Carrollton
Description:
This project aims to close the loop of care and increase patient compliance by co-locating/coordinating many of the essential services that the underserved population often has issues accessing and completing.
Impact: 6,815 persons served • Provided continuity and transition to post-acute care services; improve patients' health outcomes and status; • Created an integrated primary care model for underserved patients to receive high quality, complete care keeping these patients from utilizing the emergency department for low acuity needs and preventing re admissions avoided with proper primary care.
Committed Resources: Clinical staff; Supplies; Clinical space

Program: DSRIP Specialty Care Expansion
Entity: Baylor Scott & White Medical Center - Carrollton
Description:
Patients (including Medicaid and Uninsured) who are seen at Clinic and have established primary care there, can receive the following specialty care services: certain outpatient procedures such as: office visits

with specialists, wound care, and facility based procedures such as cardiac catheterizations, certain surgeries (i.e.: gall bladder/hernia), excision of masses (breast, lymphoma), and cataract removal. This project excludes transplants, oncology and perinatal services. The specialty care referral and coordination comes from the clinic per request by the patient's PCP.
Impact: 742 persons served;
Committed Resources: clinical staff; clinical space

Program: Enrollment Services
Entity: Baylor Scott & White Medical Center - Carrollton
Description:
The hospital provides assistance to enroll in public programs, such as SCHIP and Medicaid. These health care support services provided by the hospital to increase access and quality of care in health services to individuals, especially persons living in poverty and those in vulnerable situations. The hospital provides staff to assist in the qualification of the medically under-served for programs that will enable their access to care, such as Medicaid, Medicare, SCHIP and other government programs or charity care programs for use in any hospital within or outside the hospital.
Impact:.2,404 persons served (number served measured only for FY 2018); increased access to health care services in North Texas
Committed Resources: Eligibility Contract; $140,247 net community benefit

Program: For Women For Life Multiple Health Screening
Entity: Baylor Scott & White Medical Center - Carrollton
Description:
Regular health exams and tests can help find problems before they start. They also can help find problems early, when the chances for treatment and cure are better. Through For Women For Life, the Hospital provides health services, screenings, and treatments, assisting women in taking steps that help their chances for living a longer, healthier life. This annual event for women focusing on proactive health care including preventive health screenings, seminars and healthy lifestyle information.
Impact: 669 persons served; increased access to health care services
Committed Resources: staff time; clinical experts; supplies/equipment; $59,317 net community benefit

Program: Health Screenings - Multiple Diseases
Entity: Baylor Scott & White Medical Center - Carrollton
Description:
Similar to national trends, residents in the Hospitals' service area exhibit increasing diagnoses of chronic conditions. It is common that the pathology for one condition may also affect other body systems, resulting in co-occurrence or multiple chronic conditions (MCC). The presence of MCC's adds a layer of complexity to disease management. The Hospital conducts screenings for MCC's including body fat analysis, BMI, and injury prevention.
Impact: 2,093 persons served
Committed Resources: staff time; clinical experts; supplies/equipment; $48,383 net community benefit

Program: Medical Education - Allied Health

Entity: Baylor Scott & White Medical Center - Carrollton
Description:
This program includes educational programs for public school students, pastoral care trainees and other health professionals when that education is necessary for a degree, certificate, or training required by state law, accrediting body or health profession society. It involves a clinical setting for undergraduate training and internships for dietary professionals, technicians, chaplaincy/pastoral care, physical therapists, social workers, pharmacists, and other health professionals – when there is no work requirement tied to training. It might also include the training of health professionals in special settings, such as occupational health or outpatient facilities.
Impact: 45 persons served; increased quality and size of healthcare work force in the North Texas area
Committed Resources: Nurse Educator; net community benefit $1,228,156

Program: **Medical Education - Nursing Students**
Entity: Baylor Scott & White Medical Center - Carrollton
Description:
The Hospital is committed to assisting with the preparation of future nurses at entry and advanced levels of the profession to establish a workforce of qualified nurses. Through the System's relationships with many North Texas schools of nursing, the Hospital maintains strong affiliations with schools of nursing. Like physicians, nursing graduates trained at the Hospital are not obligated to join the staff although many remain in the North Texas area to provide top quality nursing services to many health care institutions.
Impact: 498 nurses educated; increased quality and size of nursing work force in the North Texas area
Committed Resources: Nurse Educator; net community benefit $835,703

Program: Workforce Development
Entity: Baylor Scott & White Medical Center - Carrollton
Description:
Workforce Development - Recruitment of physicians and other health professionals for areas identified as medically under-served areas (MUAs) or other community needs assessment. The age and characteristics of a state's population has a direct impact on the health care system. The hospitals seek to allay the physician shortage, thereby better managing the growing health needs of the community.
Impact: persons served not measured; increase primary care providers in Texas
Committed Resources: Educator staff hours; $563,470

Identified Need Addressed: Drug Abuse

Program: Impact One-Eighty
Entity: Baylor Scott & White Medical Center - Carrollton
Description:
The hospital contracted with Impact One Eighty to provide in-patient medical withdrawal stabilization services for voluntary under-served or under-insured patients who have decided to turn away from alcohol and drugs. Impact One Eighty will assist with discharge planning by assisting patients with entering into appropriate after care programs and services for follow up.
Impact: 192 persons served; access to medical withdrawal stabilization services
Committed Resources: Contract services; $1,710,118 net community benefit

Identified Need Addressed: Mental/Behavioral Health

Program: Child Life Specialists Services
Entity: Baylor Scott & White Medical Center - Carrollton
Description:
Palliative Care Child Life Program helps children "navigate" the illness of someone they love. Serious illnesses not only drastically affect patients but also affect the children in their lives. As the largest program of its kind in the nation, our Palliative Care Child Life Program is a pioneer in helping kids navigate a loved one's illness. When patients experience a serious or life limiting illness or injury, the effects reach far beyond just their physical health. For those who have children, grandchildren or another close child in their lives, it can be difficult for those children to understand and navigate the situation.
Impact: # persons served unknown Partner & their reported outcomes: • Alzheimer's Association • MetroCare - largest provider of mental health services in Dallas County, serving more than 52,000 adults and children annually.
Committed Resources: staff time; care coordinators; navigators; $50,894 net community benefit

Program: Donations - Financial
Entity: Baylor Scott & White Medical Center - Carrollton
Description:
The Hospital provides funds in the community whose mission compliments the mission of the Hospital. These funds include monetary gifts to other not-for-profit organizations, contributions to charity events and help to extend the services of the hospital beyond its walls. Net benefit calculates by subtracting the fair market value of participation by employees or the organization.
Impact: # persons served unknown Partners & their reported outcomes: • Children's Advocacy Center for Denton County - served 7 clients with 25 rides and 1 gas card to therapy sessions and have spent $762 total in transportation services and gas cards. • Girls Inc. of Metropolitan Dallas - help girls living in poverty overcome the social, economic and gender barriers that they face √ 70% of girls demonstrated improved and positive sense of self √ 75% of girls demonstrated an increase in reading proficiency √ 50% of girls demonstrated an increase in math proficiency √ 70% of girls showed a positive increase in attitude toward STEM √ 50% of girls reported they bounce back quickly, all or most of the time, when things do not go their way
Committed Resources: net community benefit amount reported in previous section

Program: Mission & Ministry Support Groups/Services
Entity: Baylor Scott & White Medical Center - Carrollton
Description:
Various Mission and Ministry departments and services at the Hospital provide support groups or services to those patients, and their family members going through care or after care at Baylor Scott & White - Carrollton.
Impact: 40 persons served

Committed Resources: Volunteer Staff; Travel; $514 net community benefit

Identified Need Addressed: Preventable Admits: Adult Uncontrolled Diabetes

Program: DSRIP Diabetes Bundle
Entity: Baylor Scott & White Medical Center - Carrollton
Description:
Develop and implement chronic disease management interventions that geared toward improving management of diabetes and comorbidities, improving health outcomes and quality of life, preventing disease complications, and reducing unnecessary acute and emergency care utilization.
Impact: 2,577 persons served
Committed Resources: Clinic staff; Clinic space

Needs Not Addressed:

The identified needs not addressed in the implementation plan are addressed through multiple other community and state agencies whose expertise and infrastructure are better suited for addressing these needs.

- Lack of Dental Providers
- Teen Pregnancy