Baylor Scott & White Health
Community Health Needs Assessment

McKinney Health Community

Baylor Scott & White Medical Center - McKinney

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

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Baylor Scott & White Health Mission Statement

Our Mission

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

Our Ambition

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

Our Values

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

Our Strategies

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

WHO WE ARE

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


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Executive Summary

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

Beginning in June of 2018, a BSWH task force led by the Community Health, Tax Services, and Marketing Research departments began the process of assessing the current health needs of the communities served for all BSWH hospital facilities. IBM Watson Health (formerly 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 – McKinney

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, this clarified 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/or other invited community leaders reviewed the top health needs in a meeting to select and prioritize the list of significant needs in this health community. The meeting, moderated by Watson Health, included an overview of the CHNA process

for BSWH, the methodology for determining the top health needs, the BSWH prioritization approach, and discussion of the top health needs identified for the community.

Participants identified the significant health needs through review of data driven criteria for the top health needs, discussion, and a multi-voting process. Once the significant health needs were established, participants rated the needs using prioritization criteria recommended by the focus groups. The sum of the criteria scores for each need created an overall score 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	Ratio of Population to One Non-Physician Primary Care Provider	Access to Care
2	Cancer Incidence - Female Breast	Cancer
3	Depression in Medicare Population	Mental Health
4	Schizophrenia and Other Psychotic Disorders in Medicare Population	Mental Health
5	Motor Vehicle Driving Deaths with Alcohol Involvement	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 prior assessment is also included in **Appendix F** of this document.

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

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

Community Health Needs Assessment Requirement

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

The written CHNA Report must include descriptions of the following:

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

PPACA also requires hospitals to adopt an Implementation Strategy to address prioritized community health needs identified through the assessment. An Implementation Strategy is a written plan addressing each of the significant community health needs identified through the CHNA and 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.

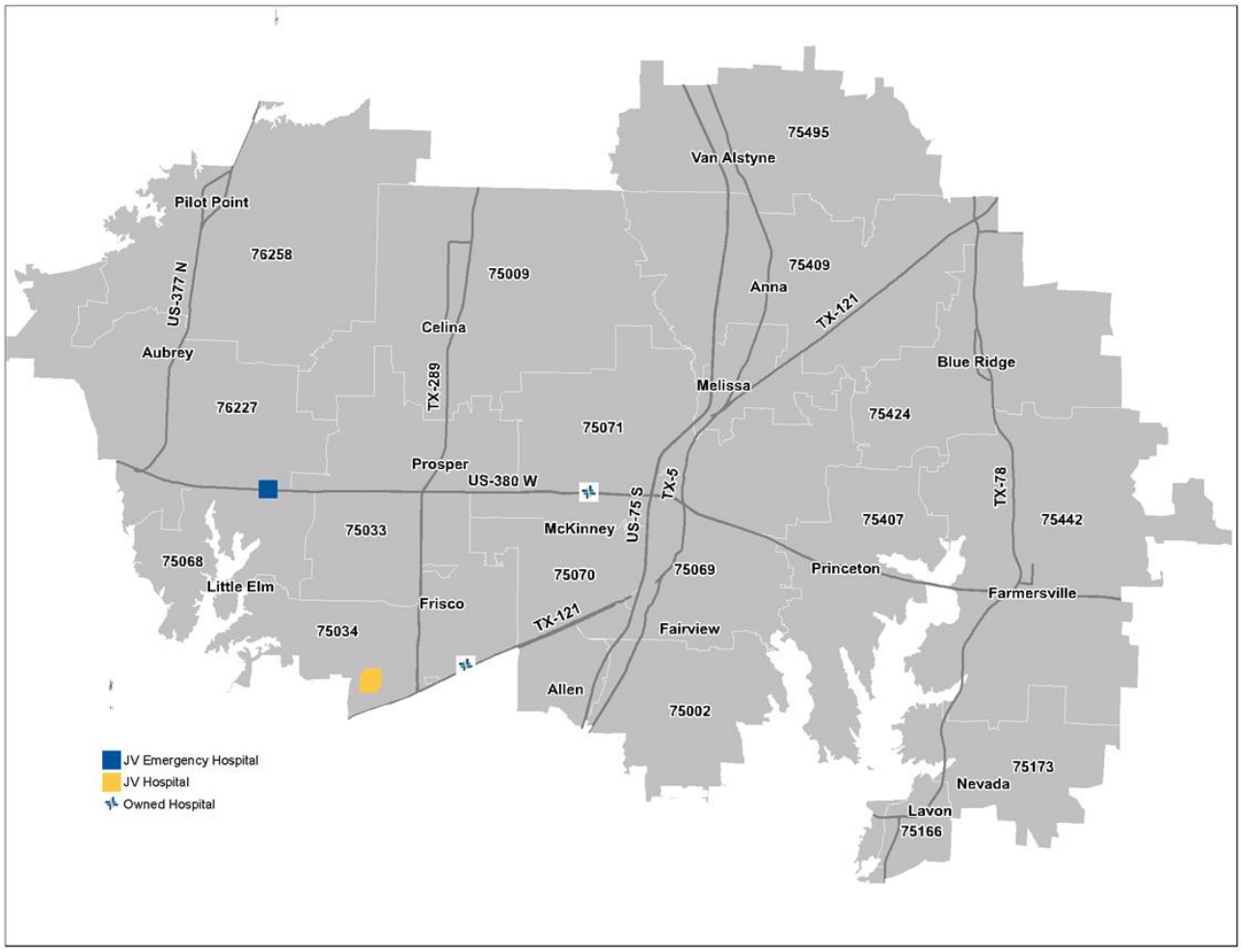
Consultant Qualifications & Collaboration

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

The community served by the BSWH hospital facility includes the ZIP codes listed below which span multiple counties in the McKinney area of north Texas including Collin, Denton, and Grayson counties. The community includes the geographic area where at least 80% of the hospital facility's admitted patients live.

BSWH Community Health Needs Assessment
McKinney Health Community Map



Source: Baylor Scott & White Health, 2019

75033 75034 75035 75095 75495 75068 76227 76258 75070 75009 75071 75078 75097 75069 75004 75018 75031 75064 75073 75096 75121 75164 75166 75173 75407 75424 75442 75003 75409 75454 75485 75002 75013

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**.

This community was defined by ZIP codes, however 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 McKinney Health Community needs analysis are Collin and Denton counties.

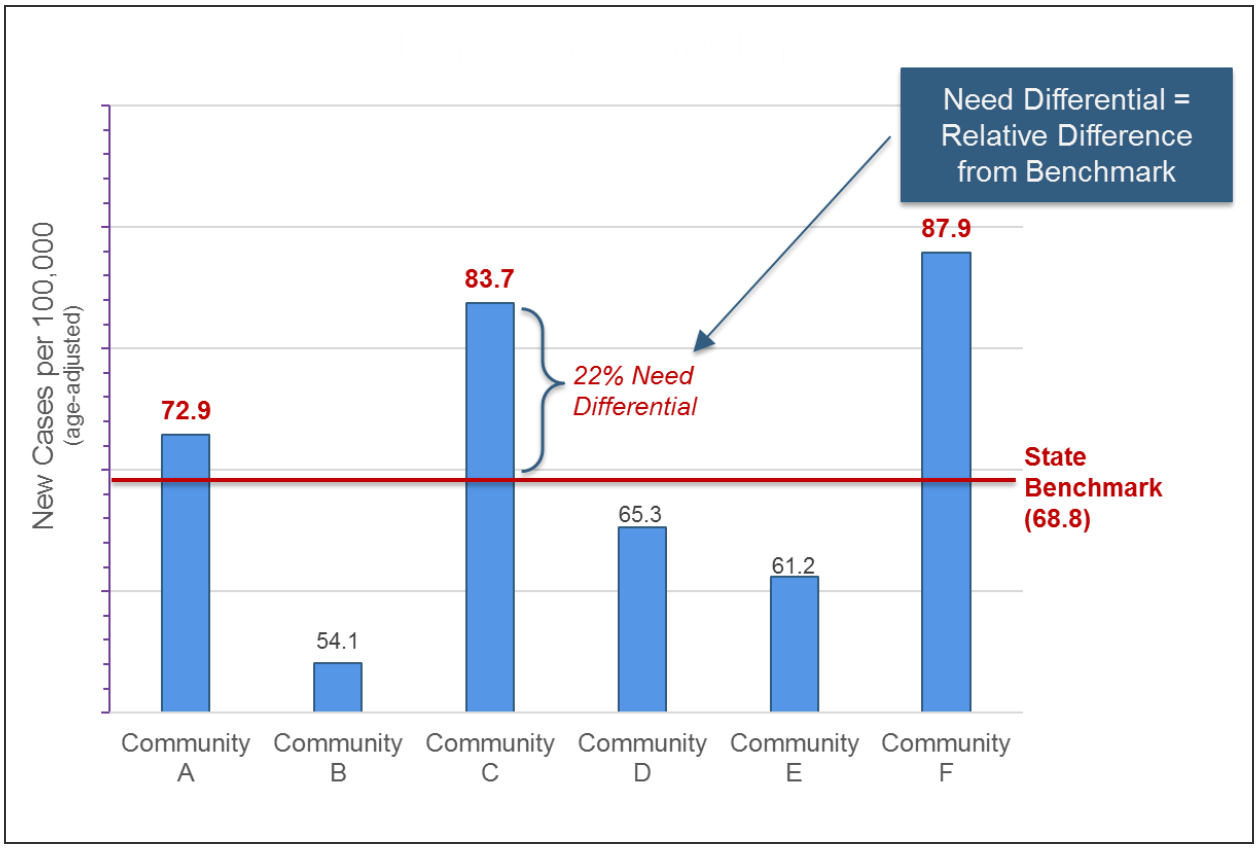
A benchmark analysis conducted for each indicator collected for the community served, determined which public health indicators demonstrated a community health need from a quantitative perspective. Benchmark health indicators collected included (when available): overall U.S. values; state of Texas values;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

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

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

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

Health Indicator Benchmark Analysis Example



Source: IBM Watson Health, 2018

Qualitative Assessment of Health Needs and Community Input – Approach

In addition to analyzing quantitative data, two (2) focus groups with a total of 23 participants, and four (4) 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 the 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 and White Health		X	X	X	X		
Cancer Care Services	X	X	X	X	X		X
City of Denton			X	X	X		
City of Plano	X	X	X	X	X		
Community Lifeline Center		X	X	X	X		
Denton Community Food Center			X				
Denton County Public Health	X	X	X	X	X	X	X
First Refuge Ministries		X	X	X			
Frisco Family Services		X	X				
Giving Hope, Inc.		X	X	X			X
Goodwill Industries of Fort Worth		X	X		X		
Health Services of North Texas		X	X	X	X		
Hope Clinic of McKinney		X	X	X	X		
Lifepath Systems	X		X	X			X
McKinney City Council					X		
Metrocare	X	X	X	X	X		X
Our Daily Bread		X	X				
PCI Procomp Solutions, LLC		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
Plano Fire-Rescue	X	X	X	X	X		X
Project Access - Collin County			X				
Refuge For Women North Texas					X		
Serve Denton			X				
Texas Muslim Women's Foundation					X		
The Samaritan Inn			X				
United Way		X	X	X	X		
University of North Texas	X		X		X		X
University of Texas - Dallas		X	X				
Veterans Center of North Texas			X				X

Note: multiple persons from the same organization may have participated

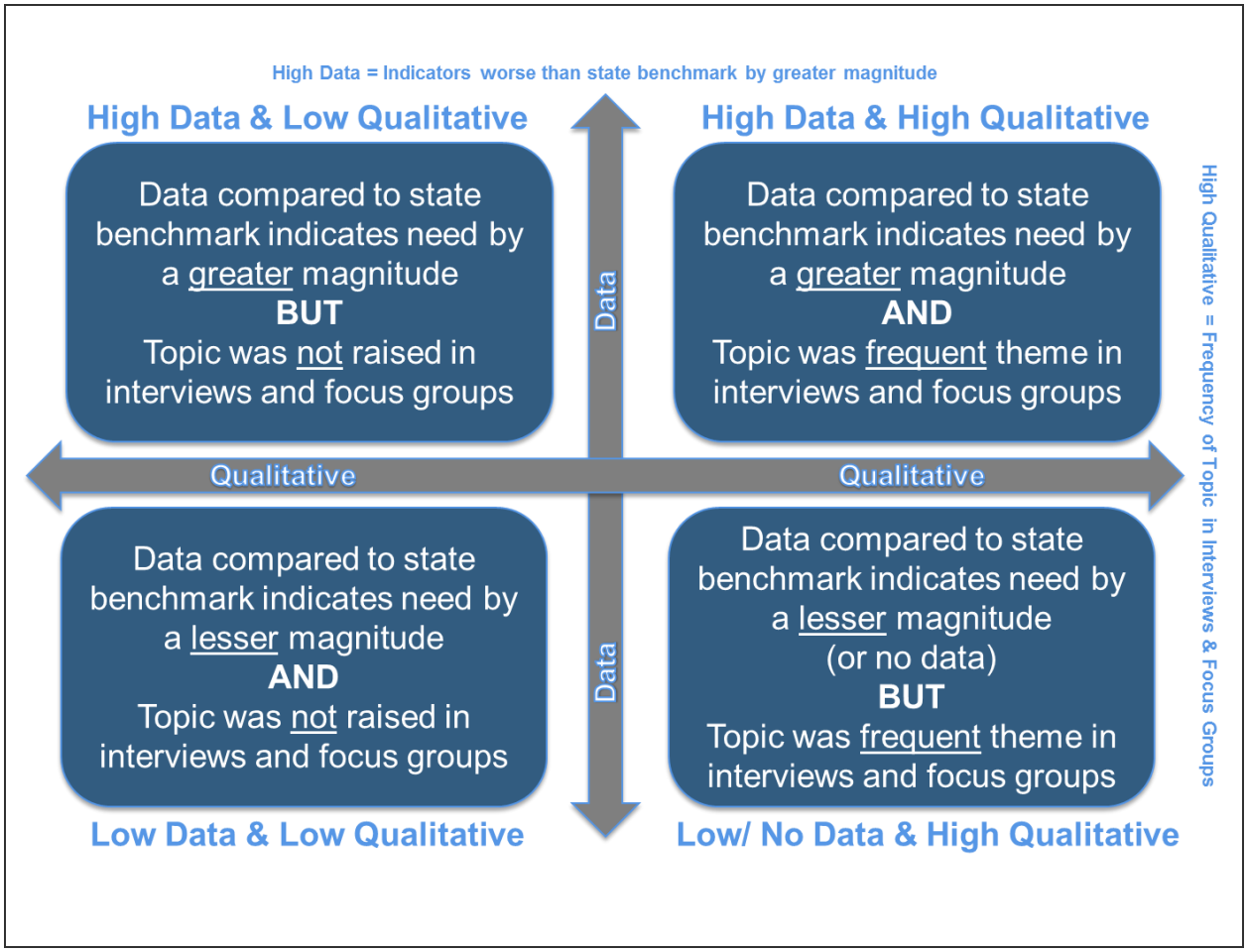
In addition to soliciting input from public health and various interests of the community, the hospital facility was also required to consider written input received on their most recently conducted CHNA and subsequent implementation strategies. The assessment is available to receive public comment or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

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

Methodology for Defining Community Need

Using qualitative feedback from the interviews and focus group, and the health indicator data, the consolidated issues currently 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 on November 6, 2018, Baylor Scott & White hospital facility 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. Severity: the problem results in disability or premature death or creates burdens on the community, economically or socially
2. Vulnerable Populations: there is a high need among vulnerable populations and/or vulnerable populations are adversely impacted
3. Community Capacity: the community has the capacity to act on the issue, including any economic, social, cultural, or political consideration

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**.

McKinney Health Community CHNA

Demographic and Socioeconomic Summary

According to population statistics, the community served had a much higher projected population growth compared to Texas and the country. The median age was younger than both Texas and the United States. Median income was much higher than both the state and the country. The community served had a smaller proportion of Medicaid beneficiaries and uninsured individuals than Texas and the U.S..

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

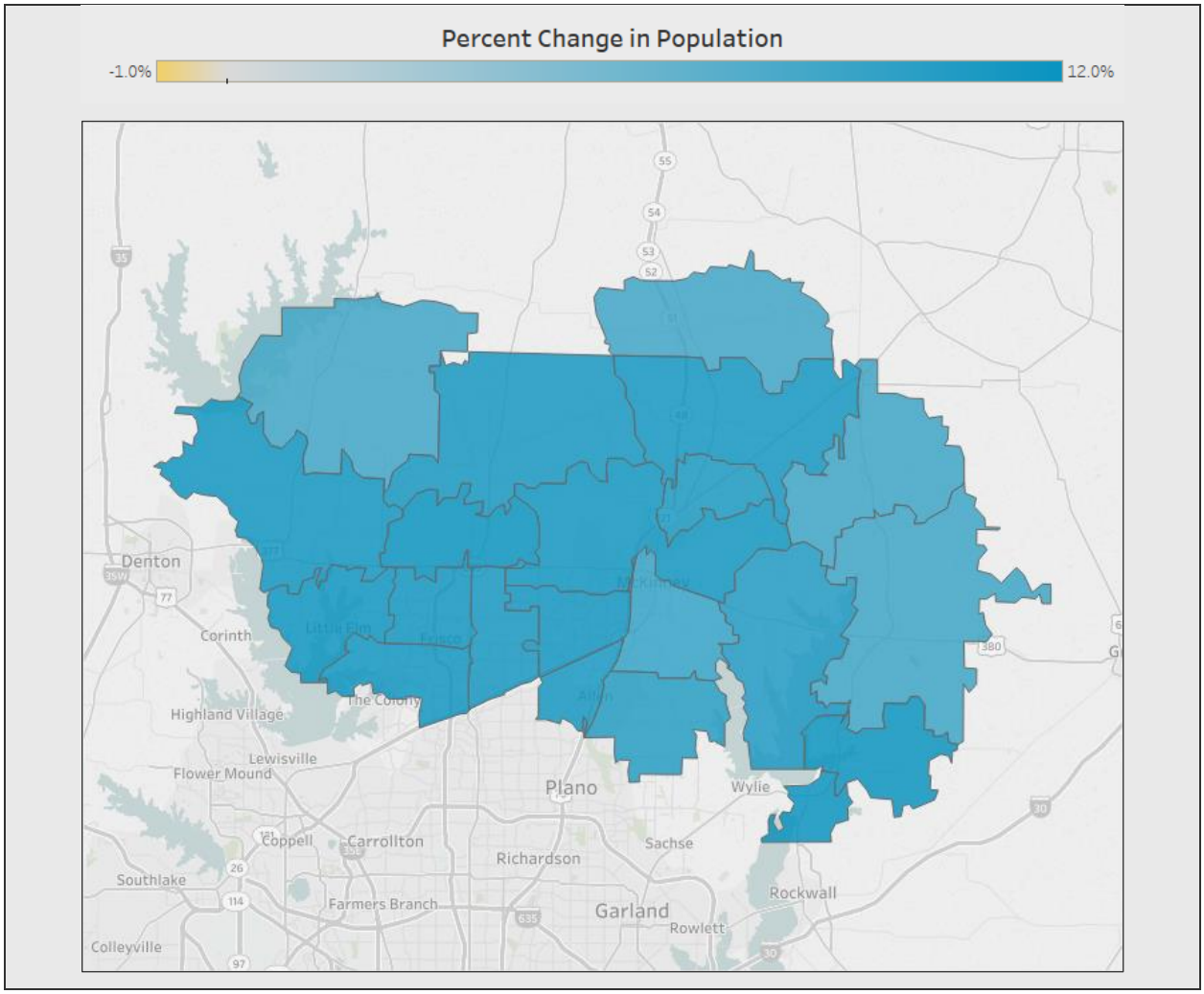
Geography		Benchmarks		Community Served
		United States	Texas	McKinney Health Community
Total Current Population		326,533,070	28,531,631	695,092
5 Yr Projected Population Change		3.5%	7.1%	11.1%
Median Age		42.0	38.9	37.2
Population 0-17		22.6%	25.9%	28.4%
Population 65+		15.9%	12.6%	9.6%
Women Age 15-44		19.6%	20.6%	21.0%
Non-White Population		30.0%	32.2%	29.0%
Hispanic Population		18.2%	39.4%	16.0%
Insurance Coverage	Uninsured	9.4%	19.0%	7.5%
	Medicaid	14.9%	13.4%	4.9%
	Private Market	9.6%	9.9%	10.8%
	Medicare	16.1%	12.5%	7.8%
	Employer	45.9%	45.3%	69.0%
Median HH Income		$61,372	$60,397	$92,598
Limited English		26.2%	39.9%	26.8%
No High School Diploma		7.4%	8.7%	3.3%
Unemployed		6.8%	5.9%	3.8%

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

The population of the community served projects to grow 11.1% by 2023, an increase of more than 77,000 people. The 11.1% projected population growth is much higher than the state's 5-year projected growth rate (7.1%) and higher compared to the national projected growth rate (3.5%). The ZIP Codes expected to experience the most growth in five years are:

- 75070 McKinney Westside – 12,270 people
- 75002 Allen – 7,892 people
- 75035 Frisco – 7,697 people
- 75034 Frisco – 7,567 people

2018 - 2023 Total Population Projected Change by ZIP Code

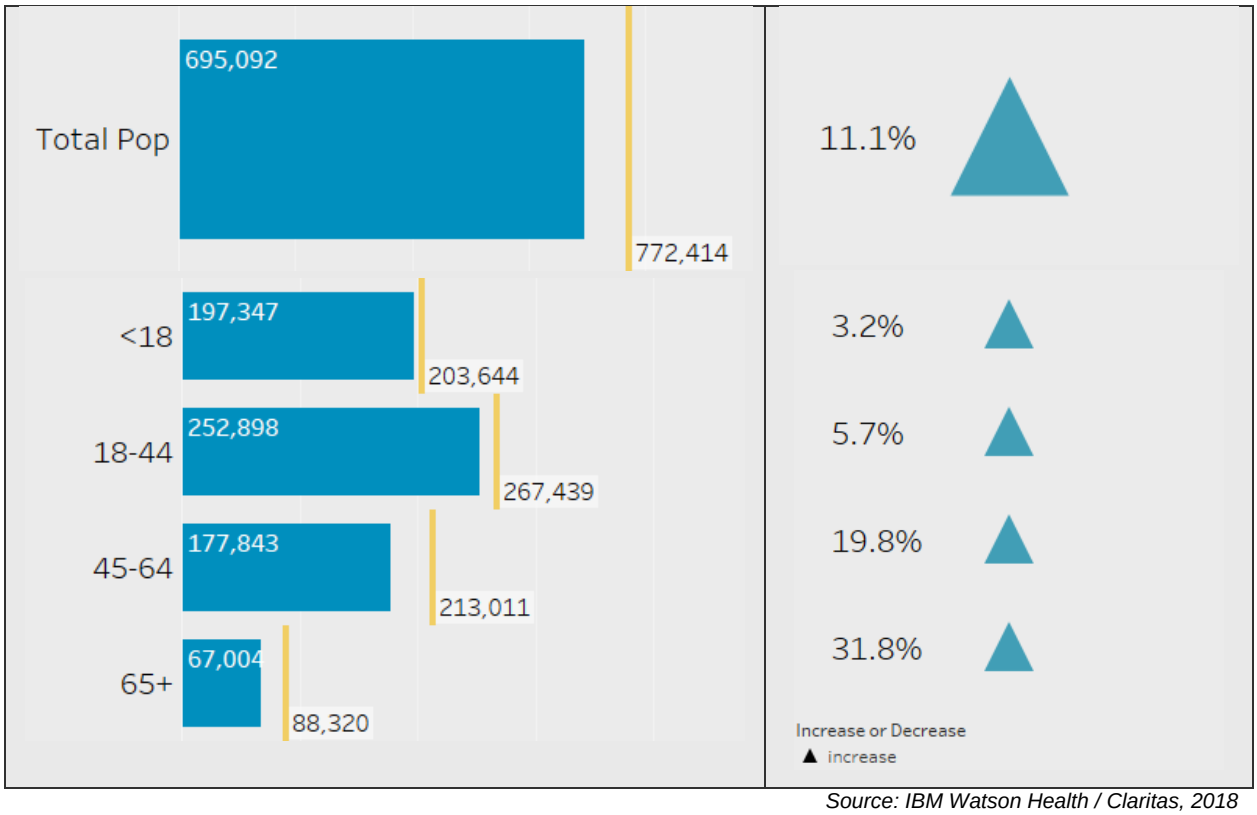


Source: IBM Watson Health / Claritas, 2018

The community's population skewed younger with 36.4% of the population ages 18-44, and 28.4% under age 18. The largest cohort (ages18-44) projects to grow by 14,541 people by 2023. The age 65 plus cohort was the smallest (9.6%) but projects to experience the fastest growth (31.8%) over the next five years, adding 21,316 seniors to the community. Growth in the senior population will likely contribute to increased utilization of healthcare services as the population continues to age.

Population Distribution by Age

2018 Population by Age Cohort *Percent Change by 2023*

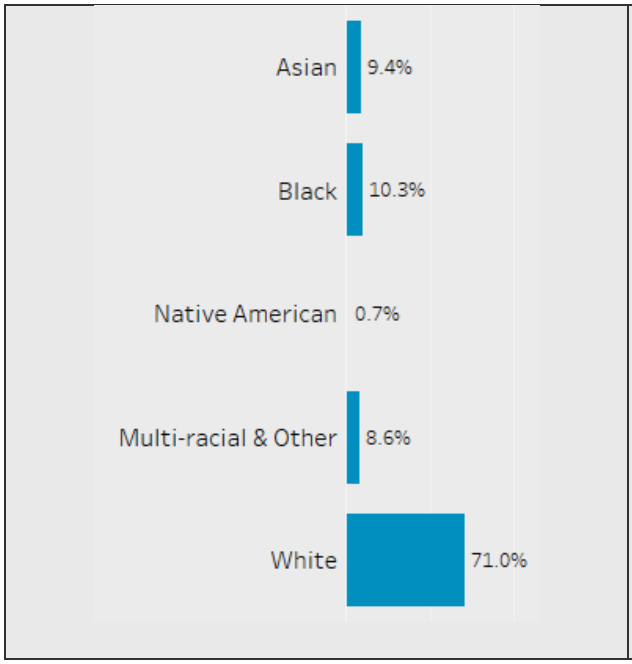


Source: IBM Watson Health / Claritas, 2018

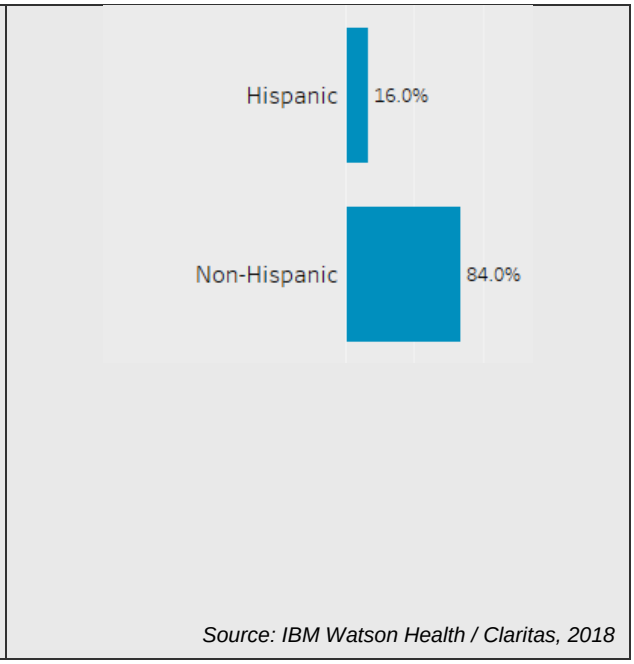
Population statistics are analyzed by race and by Hispanic ethnicity. The community was primarily white and non-Hispanic (61.3% of total population), but diversity in the community will increase due to the projected growth of minority populations over the next five years. The expected growth rate of the Hispanic population (all races) is over 15,000 people (14.3%) by 2023. The white population is expected to have the slowest growth rate (5.6%) in the next 5 years. Meanwhile the Asian / Pacific Islander population is expected to experience the highest growth of 33.0% or 21,691 people followed by the black population (25.3% or 18,166 people).

Population Distribution by Race and Ethnicity

2018 Population by Race

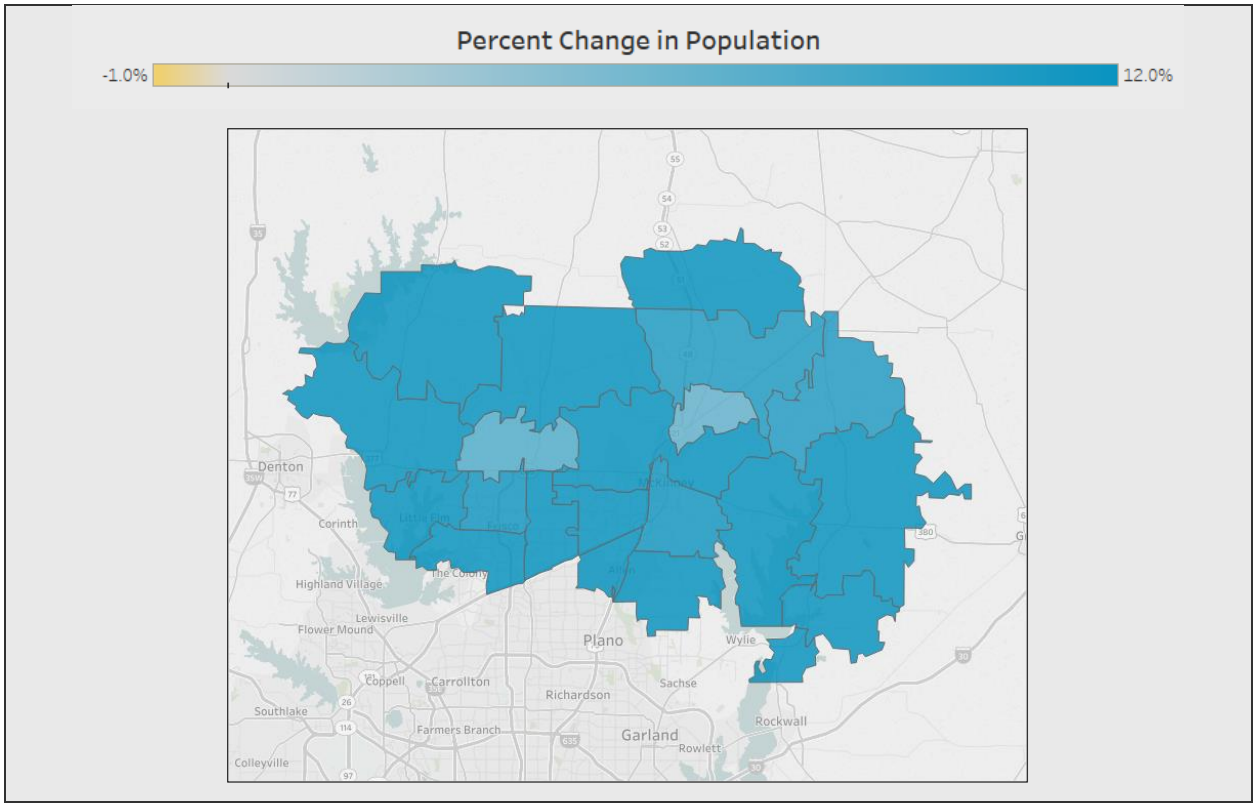


2018 Population by Ethnicity



Source: IBM Watson Health / Claritas, 2018

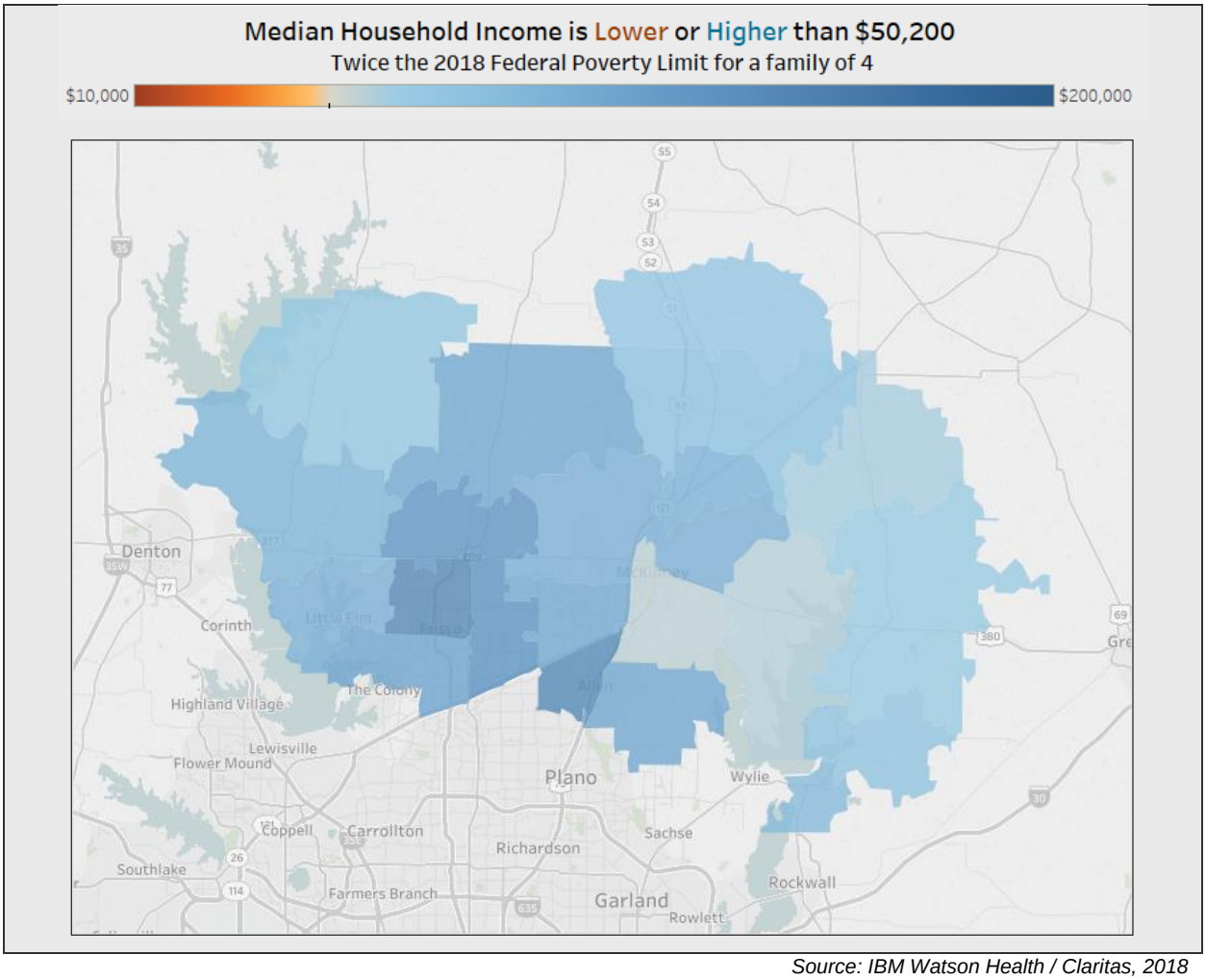
2018 - 2023 Hispanic Population Projected Change by ZIP Code



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 $56,509 for 75069 Downtown McKinney-Eastside to $140,446 for 75033 Frisco. There were not any ZIP Codes with median household incomes less than $50,200 – twice the 2018 Federal Poverty Limit for a family of four.

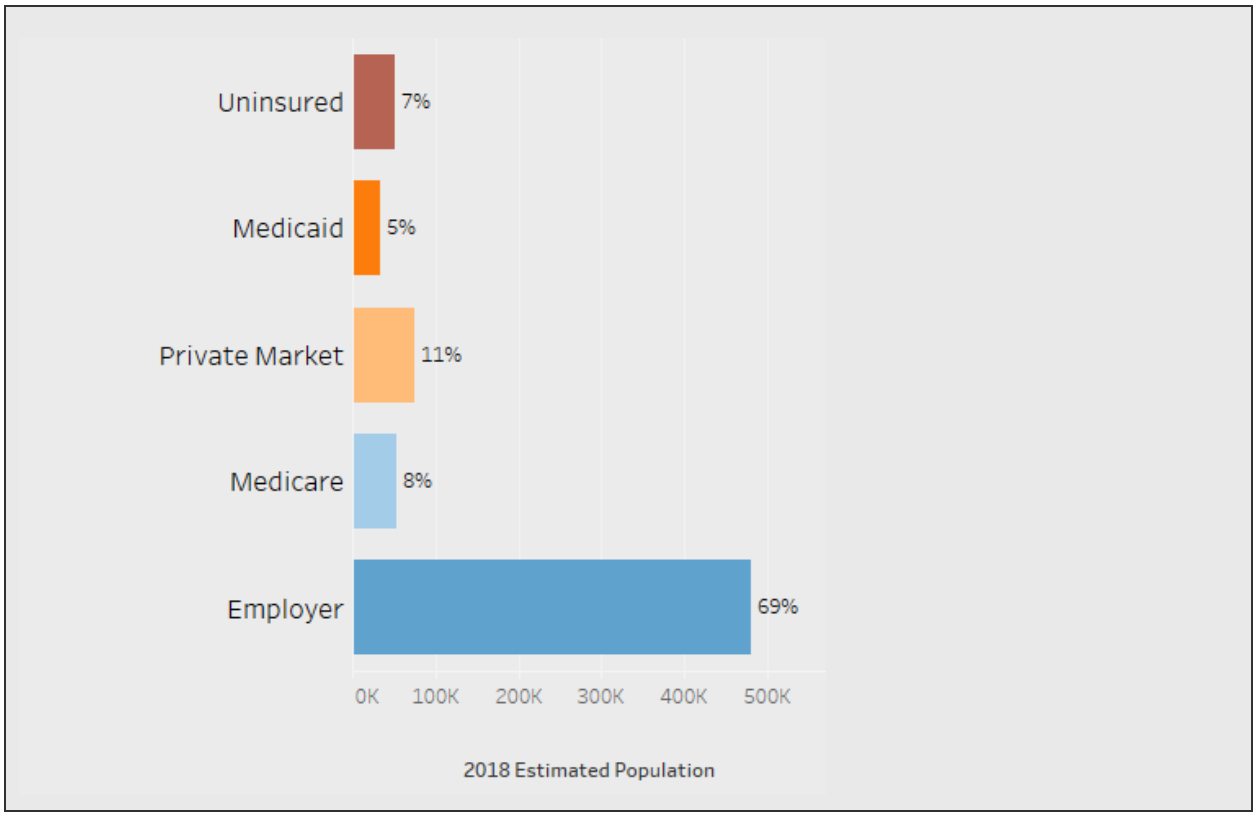
2018 Median Household Income by ZIP Code



Source: IBM Watson Health / Claritas, 2018

A majority of the population (69%) were insured through employer sponsored health coverage. The remainder of the population was divided between Medicaid (5%), Medicare (8%), Uninsured (7%) and private market (the purchasers of coverage directly or through the health insurance marketplace) (11%).

2018 Estimated Distribution of Covered Lives by Insurance Category



Source: IBM Watson Health / Claritas, 2018

The community includes six (6) Health Professional Shortage Areas and two (2) 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 McKinney Health Community	Dental Health	Mental Health	Primary Care	Grand Total	MUA/P
Collin	1	1	1	3	1
Denton	1	1	1	3	1
Total	2	2	2	6	2

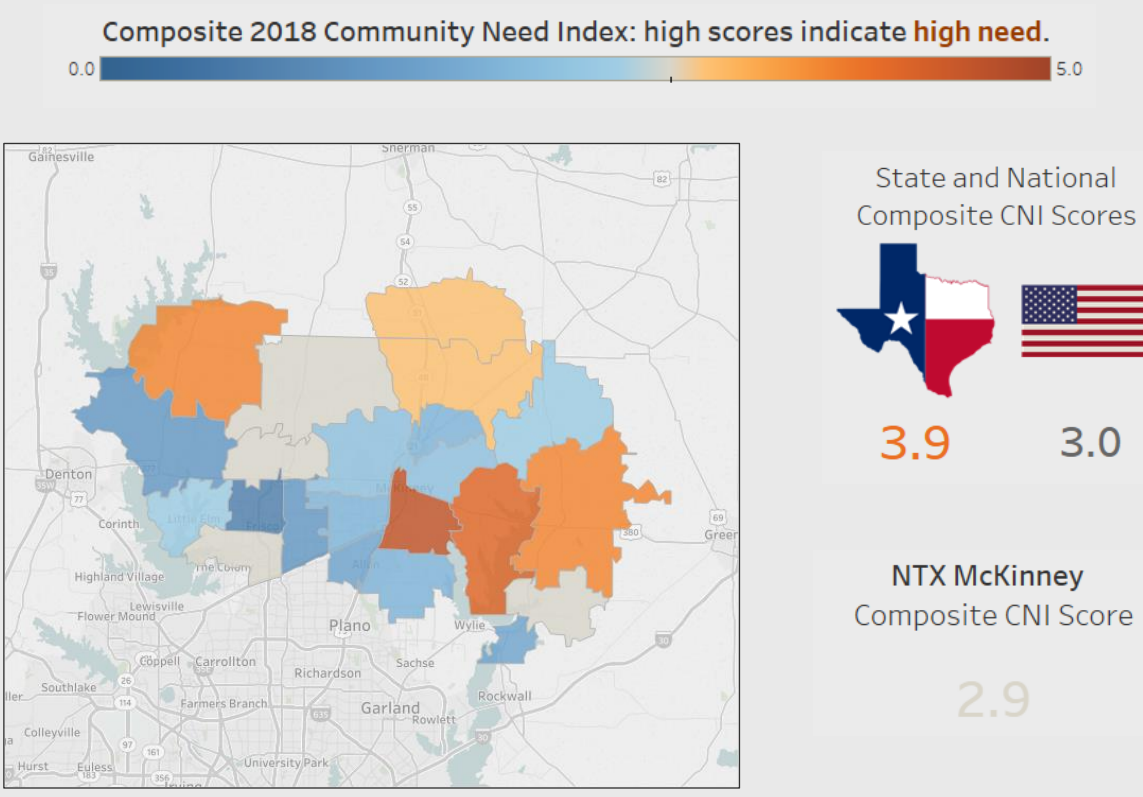
Source: U.S. Department of Health and Human Services, Health Resources and Services Administration, 2018

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

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

Overall, the CNI score for the community served was 2.9, this is lower than the CNI national average of 3.0. There was a portion of the community (Downtown McKinney-Eastside) where the CNI score was greater than 4.5, pointing to potentially more significant health needs among that 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
McKinney	Downtown McKinney-Eastside	Collin	75069	4.6
Princeton	East Collin Co	Collin	75407	4.2

Source: IBM Watson Health / Claritas, 2018

Public Health Indicators

Public health indicators were collected and analyzed to assess community health needs. Evaluation for the community served used 102 indicators. For each health indicator, a comparison between the most recently available community data and benchmarks for the same/similar indicator was made. The basis of benchmarks was available data for the U.S. and the state of Texas.

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

Watson Health Community Data

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

Focus Groups & Interviews

BSWH worked jointly with Texas Health Resources and Methodist Health hospital facilities 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 identified the greatest barriers and strengths that contribute to the overall health of the community. For this community there were two (2) focus group sessions with 23 participants and four interviews conducted July through September 2018.

Focus group participants described both Denton and Collin counties as growing areas and among the healthiest in Texas. Denton County schools and the university attract many foreign students and international residents. Collin County is a fast-growing, increasingly diverse area with a high cost of living. People moved to this community for its high quality of life, good schools, and job growth. Participants described the many outdoor activities, libraries, low crime rate, and abundant music venues that attract new residents, but the increased cost of housing and taxes have been putting some longtime residents and fixed-income seniors at risk for homelessness.

In Collin County, the Asian and Indian populations were the fastest growing populations in the area. Cultural differences created challenges for the local health care organizations when delivering services and participants suggested that education for health care providers to address trust issues would help tremendously. For example, only a few clinics treated female Muslims and those facilities needed guidance in delivering culturally sensitive care as to not offend the women or their families.

The area had limited health care services for the uninsured but an abundance of services for those with both insurance and a high income. The focus group participants noted that

Denton County had a high rate of insured residents skewed by the requirement that all university and community college students have insurance. The statistic on insurance coverage masked the fact that residents covered by Medicare or Medicaid often had trouble finding providers that accept those payers. Participants also said pediatric specialists were completely lacking in the area, along with shortages for prenatal services, neonatal intensive care treatment, and OB/GYN care. Although the community offered preventative care, participants recommended expanding these services. A need exists for Dentists serving low-income residents and people without a car. Limited public transportation created transportation “deserts”, and the lack of public transit interfered with ability to pursue follow up care. Public transportation that did exist and was ineffectual in assisting residents to get to their places of employment. Many participants noted that drunk driving was an issue and surmised the lack of public transportation contributed to this issue.

This area contained quickly growing bedroom communities, but also impoverished areas east of the I-75 corridor. High housing costs contributed to a growing transient population who frequently use emergency departments for care. There are free clinics, but they were often inaccessible due to the lack of transportation. Low-income residents of Denton County had more mental health providers than other parts of the Dallas Ft Worth area, but that amount is still insufficient to meet demand, especially for children.

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

McKinney Health Community		
Top Needs Identified	Category of Need	Public Health Indicator
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
Cancer Incidence - Female Breast	Cancer	2011-2015 Age-Adjusted Female Breast Cancer Incidence Rate Cases Per 100,000
Cancer Incidence - Prostate	Cancer	2011-2015 Age-Adjusted Prostate Cancer Incidence Rate Cases per 100,000
Depression in Medicare Population	Mental Health	Prevalence of chronic condition across all Medicare beneficiaries
Motor Vehicle Driving Deaths with Alcohol Involvement	Health Behaviors - Substance Abuse	2012-2016 Percentage of Motor Vehicle Crash Deaths that had Alcohol Involvement
Ratio of Population to One Non-Physician Primary Care Provider	Access To Care	2017 Ratio of Population to Primary Care Providers Other than Physicians
Schizophrenia and Other Psychotic Disorders in Medicare Population	Mental Health	Prevalence of chronic condition across all Medicare beneficiaries

Note: Listed alphabetically, not in order of significance

Source: IBM Watson Health, 2018

Prioritized Significant Health Needs

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

The resulting prioritized health needs for this community were:

Priority	Need	Category of Need
1	Ratio of Population to One Non-Physician Primary Care Provider	Access to Care
2	Cancer Incidence - Female Breast	Cancer
3	Depression in Medicare Population	Mental Health
4	Schizophrenia and Other Psychotic Disorders in Medicare Population	Mental Health
5	Motor Vehicle Driving Deaths with Alcohol Involvement	Health Behaviors - Substance Abuse

Description of Health Needs

A CHNA for the McKinney Health Community identified several significant community health needs categorized as issues related to access to care, cancer, mental health, and health behaviors. Regionalized health needs affect all aspects of the population to some degree; however, it is often the most vulnerable populations that are negatively affected. Community health gaps define the resources and access to care within the county or region. Health and social concerns for this community were validated through key informant interviews, focus groups and county data. Access to non-physician primary care providers; female breast cancer incidence; mental health issues, specifically depression and schizophrenia/other psychotic disorders in the Medicare population; and motor vehicle deaths with alcohol involvement were identified as significant areas of concern and noted in the data results for the McKinney Health Community.

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

<u>Non-Physician Primary Care Provider Access</u>

There is a national 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 or 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 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 is a need for both Denton and Collin counties. Of 107 indicators, the Denton and Collin county values for this indicator ranked in the top ten needs for this health community. Access to care was a critical issue within the focus group discussions. The Texas state benchmark for non-physician primary care providers is one provider for every 1,497 residents. The Denton County ratio was one provider to 1,966 residents; this was a difference of 31.3% relative to the state benchmark (relative difference). The Collin County ratio was one provider to every 1,828 residents, or 22.1% higher than the state benchmark.[2] The CHNA findings point to a greater need regarding access to non-physician primary care providers within the McKinney Health Community.

Cancer Incidence: Female Breast

Breast cancer is responsible for more than 40,000 deaths in the U.S. each year, along with more than 265,000 new cancer diagnoses. According to M.D. Anderson research, new treatments have pushed the diseases five-year survival rate to nearly 90%.[3] Breast cancer is a complex disease with varied types, and all can be influenced by risk factors such as hereditary, body habitus, medical history, exposure to carcinogens, as well as other factors. Early diagnosis and treatment are essential to long term success and mortality. Lack of access to care could delay both diagnosis and treatment. Communities with access to screening, education, primary care and specialized medical care can affect the incidence and outcomes of all types of cancer.

Both Denton and Collin counties had age-adjusted breast cancer rates that were higher than the state of Texas benchmark of 111.7 new female breast cancer cases per 100,000 residents. Denton County was nearly 13% higher at 125.9 new cases per 100,000 and Collin County was nearly 11% higher with 123.7 new cases per 100,000 residents.[4] The data indicates a significant need and a potentially vulnerable population.

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. 80% of older adults have at least one

[2] CMS, National Provider Identification Registry (NPPES); County Health Rankings & Roadmaps, 2018
[3] https://www.mdanderson.org/cancer-types/breast-cancer.html
[4] State Cancer Profiles, National Cancer Institute (CDC), 2011-2015

chronic health condition and 50% have two or more.[5] 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.

Denton County, as part of the McKinney Health Community, had a rate of depression in the Medicare population of 17.6% and was greater than the Texas state benchmark by 18.0%, indicating a greater need and a larger vulnerable population within this health community.[6]

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 but may be a proxy for need across the greater population as it relates to the prevalence of mental health conditions within the community.

In the McKinney Health Community, the population age 65 and older (seniors) expected to experience the fastest growth of 31.8% by 2023. This projected to add approximately 21,346 seniors to the McKinney Health Community.[7] Growth among this age group will likely contribute to increased utilization of healthcare services. Over time, the community must be able to provide adequate services to care for the aging population, including services related to mental health.

Denton County had a rate of schizophrenia and other psychotic disorders of 2.6% among their Medicare population. This was 10.4% higher relative to the overall Texas value for the same measure.[8] 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 an aging senior. Isolation for adults 65 and older who are living alone is a growing challenge for communities across the Nation. Isolation compounded with serious mental health concerns points out the need for integrated social services to engage, support and positively challenge their 65 and older populations may improve the overall health and well-being of the community.

Motor Vehicle Driving Deaths with Alcohol Involvement

Motor vehicle driving deaths with alcohol involvement is measured as percentage of all motor vehicle crash deaths where alcohol was involved.[9] Approximately 17,000

[5] **U.S. Center for Disease Control and Prevention**, 2019
[6] CMS Chronic Conditions Warehouse, 2007-2015
[7] IBM Watson Health / Claritas, 2018
[8] CMS Chronic Conditions Warehouse, 2007-2015
[9] **Alcohol-impaired Driving Deaths**, County Health Rankings, 2018

Americans are killed annually in alcohol-related motor vehicle crashes.[10] Binge/heavy drinkers account for most instances of alcohol-impaired driving.[11] Not all fatal motor vehicle traffic accidents have a valid blood alcohol test, so data available likely undercounts instances of actual alcohol involvement. Additionally, there can be a large difference in the degree that alcohol was responsible for the crash as blood alcohol may be minimally or significantly over the legal limit.

The Texas state benchmark for alcohol-impaired motor vehicle crash deaths was 28.3%. Collin County's rate was 35.8%, this was 26.5% higher than the state benchmark and one of the top ranked health needs for this health community.[12] Reliance on motor vehicles for primary transportation coupled with high alcohol consumption could increase both alcohol related accidents and deaths. Community education addressing the county rates and associated outcomes will be essential. Private/public partnerships to increase transportation options is another potential solution.

Summary

BSWH conducted its Community Health Needs Assessments beginning June 2018 to identify and begin addressing the health needs of the communities they serve. Using both qualitative community feedback as well as publicly available and proprietary health indicators, BSWH was able to identify and prioritize community health needs for their healthcare system. With the goal of improving the health of the community, implementation plans with specific tactics and periods will be developed for the health needs BSWH chooses to address for the community served.

[10] Flowers NT, Naimi TS, Brewer RD, Elder RW, Shults RA, Jiles R. Patterns of alcohol consumption and alcohol-impaired driving in the United States. Alcohol Clin Exp Res. 2008;32:639-644.
[11] Centers for Disease Control and Prevention. Sociodemographic differences in binge drinking among adults-14 states, 2004. MMWR Morb Mortal Wkly Rep. 2009;58:301-304.
[12] Fatality Analysis Reporting System (FARS), County Health Rankings & Roadmaps, 2018

Appendix A: Key Health Indicator Sources

Category	Public Health Indicator	Source
Access to Care	Hospital Stays for Ambulatory-Care Sensitive Conditions- Medicare	2018 County Health Rankings & Roadmaps; Dartmouth Atlas of Health Care, CMS
	Percentage of Population under age 65 without Health Insurance	2018 County Health Rankings & Roadmaps; Small Area Health Insurance Estimates (SAHIE), United States Census Bureau
	Price-Adjusted Medicare Reimbursements per Enrollee **NEW 2019**	2018 County Health Rankings & Roadmaps; Dartmouth Atlas of Health Care, CMS
	Ratio of Population to One Dentist	2018 County Health Rankings & Roadmaps; Area Health Resource File/National Provider Identification file (CMS)
	Ratio of Population to One Non-Physician Primary Care Provider	2018 County Health Rankings & Roadmaps; CMS, National Provider Identification Registry (NPPES)
	Ratio of Population to One Primary Care Physician	2018 County Health Rankings & Roadmaps; Area Health Resource File/American Medical Association
	Uninsured Children	2018 County Health Rankings & Roadmaps; Small Area Health Insurance Estimates (SAHIE), United States Census Bureau
Conditions/Diseases	Adult Obesity (Percent)	2018 County Health Rankings & Roadmaps; CDC Diabetes Interactive Atlas, The National Diabetes Surveillance System
	Arthritis in Medicare Population	CMS.gov Chronic conditions 2007-2015
	Atrial Fibrillation in Medicare Population	CMS.gov Chronic conditions 2007-2015
	Cancer Incidence - All Causes	2011-2015 State Cancer Profiles, National Cancer Institute (CDC)
	Cancer Incidence - Colon	2011-2015 State Cancer Profiles, National Cancer Institute (CDC)
	Cancer Incidence - Female Breast	2011-2015 State Cancer Profiles, National Cancer Institute (CDC)
	Cancer Incidence - Lung	2011-2015 State Cancer Profiles, National Cancer Institute (CDC)
	Cancer Incidence - Prostate	2011-2015 State Cancer Profiles, National Cancer Institute (CDC)
	Chronic Kidney Disease in Medicare Population	CMS.gov Chronic conditions 2007-2015
	COPD in Medicare Population	CMS.gov Chronic conditions 2007-2015
	Diabetes Diagnoses in Adults	CMS.gov Chronic conditions 2007-2015
	Diabetes prevalence	2018 County Health Rankings (CDC Diabetes Interactive Atlas)
	Frequent physical distress	2016 Behavioral Risk Factor Surveillance System (BRFSS)
	Heart Failure in Medicare Population	CMS.gov Chronic conditions 2007-2015
	HIV Prevalence	2018 County Health Rankings & Roadmaps; National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention (NCHHSTP)
	Hyperlipidemia in Medicare Population	CMS.gov Chronic conditions 2007-2015
	Hypertension in Medicare Population	CMS.gov Chronic conditions 2007-2015
	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
Ratio of Population to One Non-Physician Primary Care Provider	Access to Care	Primary Care	Children and Community Health Center	120 S Central Expressway, Suite 102	McKinney	972-547-0606
Ratio of Population to One Non-Physician Primary Care Provider	Access to Care	Primary Care	Collin County Healthcare Services	825 N. McDonald St. #130	McKinney	972-548-5500
Depression in Medicare Population	Mental Health	Counseling	Avenues Counseling Center	201 W Louisiana St	McKinney	972-562-9647

Community Healthcare Facilities

Facility Name	Type	System	Street Address	City	State	ZIP
Baylor Emergency Medical Center	ED	Baylor Scott & White	26791 Highway 380	Aubrey	TX	76227
Baylor Scott & White Institute For Rehabilitation - Frisco	LT	Baylor Scott & White	2990 Legacy Drive	Frisco	TX	75034
Baylor Scott & White Medical Center - Centennial	ST	Baylor Scott & White	12505 Lebanon Road	Frisco	TX	75035
Baylor Scott & White Medical Center - Frisco	ST	Baylor Scott & White	5601 Warren Parkway	Frisco	TX	75034
Baylor Scott & White Medical Center - Mckinney	ST	Baylor Scott & White	5252 West University Drive	McKinney	TX	75071

Facility Name	Type	System	Street Address	City	State	ZIP
Haven Behavioral Hospital Of Frisco	PSY	Haven Behavioral Healthcare	5680 Frisco Square Blvd Suite 3000	Frisco	TX	75034
Icare Emergency Room	ED	iCare	2955 Eldorado Parkway Suite 100	Frisco	TX	75033
Legacy ER	ED	Legacy	1310 West Exchange Parkway	Allen	TX	75013
Legacy ER	ED	Legacy	16151 Eldorado Pkwy Ste 100	Frisco	TX	75035
Legacy ER	ED	Legacy	2810 South Hardin Blvd Suite 100	McKinney	TX	75070
Legacy ER	ED	Legacy	9205 Legacy Drive	Frisco	TX	75034
Medical City Frisco A Medical Center Of Plano Facility	ST	Hospital Corporation of America	5500 Frisco Square Blvd	Frisco	TX	75034
Medical City Mckinney	ST	Hospital Corporation of America	4500 Medical Center Drive	McKinney	TX	75069
Medical City Mckinney - Wysong Campus	ST	Hospital Corporation of America	130 South Central Expressway	McKinney	TX	75070
Methodist Mckinney Hospital LLC	ST	Methodist Health System	8000 West Eldorado Parkway	McKinney	TX	75070
Pam Rehabilitation Hospital Of Allen	LT	Post Acute Medical	1001 Raintree Circle	Allen	TX	75013
Texas Health Presbyterian Hospital Allen	ST	Texas Health Resources	1105 Central Expressway North Suite 140	Allen	TX	75013
The ER At Craig Ranch By Code 3	ED	Code 3	6045 Alma Road Suite 110	McKinney	TX	75070

**Type: St=Short-Term; Lt=Long-Term, Psy=Psychiatric, Kid = Pediatric, Ed = Freestanding Ed*

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

Health Professional Shortage Areas (HPSA)[13]

County Name	HPSA ID	HPSA Name	HPSA Discipline Class	Designation Type
Collin	14899948PD	Collin County Adult Clinic	Primary Care	Federally Qualified Health Center Look-alike
Collin	64899948MU	Collin County Adult Clinic	Dental Health	Federally Qualified Health Center Look-alike
Collin	74899948MT	Collin County Adult Clinic	Mental Health	Federally Qualified Health Center Look-alike
Denton	14899948PA	Health Services of North Texas, Inc.	Primary Care	Federally Qualified Health Center
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)[14]

County Name	MUA/P Source Identification Number	Service Area Name	Designation Type	Rural Status
Collin	3471	Collin Service Area	Medically Underserved Area	Non-Rural
Denton	3463	Poverty Population	MUA – Governor's Exception	Non-Rural

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

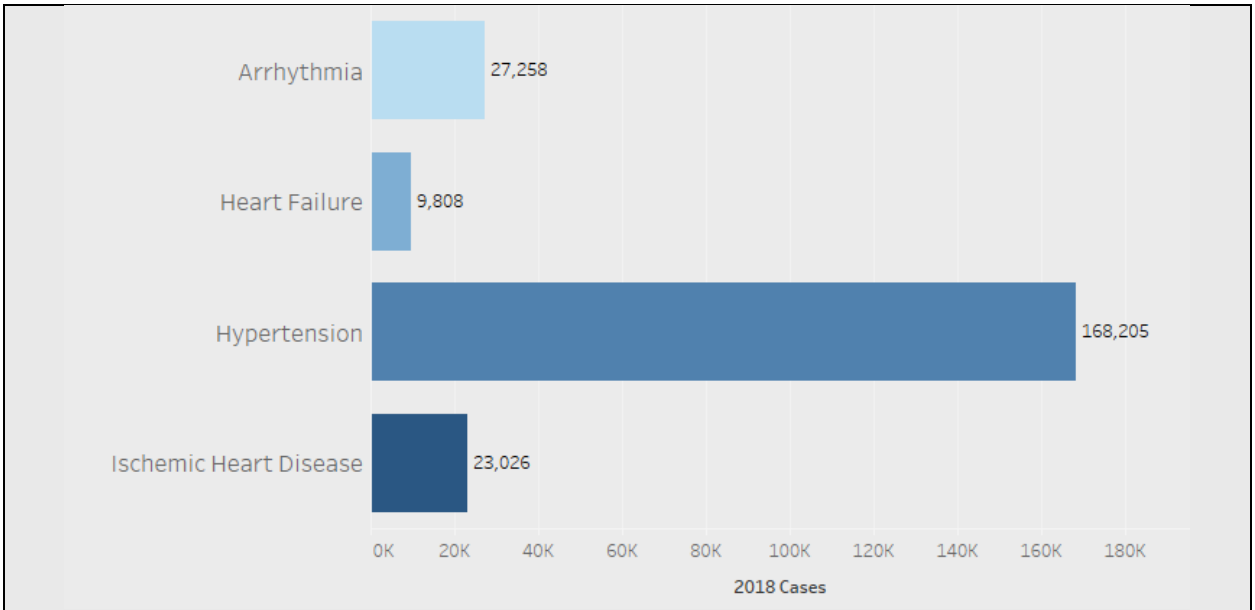
Appendix D: Public Health Indicators Showing Greater Need When Compared to State Benchmark

McKinney Health Community		
Public Health Indicator	Category	Indicator Definition
Air Pollution - Particulate Matter daily density	Environment	2012 Average Daily Density of Fine Particulate Matter in Micrograms per Cubic Meter (PM2.5)
Ratio of Population to One Non-Physician Primary Care Provider	Access To Care	2017 Ratio of Population to Primary Care Providers Other than Physicians
Long Commute Alone	Environment	2012-2016 Among Workers Who Commute in Their Car Alone, the Percentage that Commute More than 30 Minutes
Motor Vehicle Driving Deaths with Alcohol Involvement	Health Behaviors	2012-2016 Percentage of Motor Vehicle Crash Deaths that had Alcohol Involvement
Social/Membership Associations	Population	2015 Number of Membership Associations per 10,000 Population
Chronic Lower Respiratory Disease (CLRD) Mortality Rate	Injury & Death	2013 Chronic Lower Respiratory Disease (CLRD) Age Adjusted Death Rate (per 100,000 - All Ages. Age-adjusted using the 2000 U.S. Standard Population)
Depression in Medicare Population	Mental Health	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 - Female Breast	Conditions/Diseases	2011-2015 Age-Adjusted Female Breast Cancer Incidence Rate Cases Per 100,000
Hyperlipidemia in Medicare Population	Conditions/Diseases	2007-2015 Prevalence of chronic condition across all Medicare beneficiaries
Schizophrenia and Other Psychotic Disorders in Medicare Population	Mental Health	2007-2015 Prevalence of chronic condition across all Medicare beneficiaries
Perforated Appendix Admission: Pediatric (Risk-Adjusted-Rate for Appendicitis)	Preventable Hospitalizations	2016 Number Observed / Pediatric Population Under Age 18
Cancer Incidence - Prostate	Conditions/Diseases	2011-2015 Age-Adjusted Prostate Cancer Incidence Rate Cases per 100,000.
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
Atrial Fibrillation in Medicare Population	Conditions/Diseases	2007-2015 Prevalence of chronic condition across all Medicare beneficiaries

Appendix E: Watson Health Community Data

Watson Health Heart Disease Estimates identified hypertension as the most prevalent heart disease diagnoses; there were over 168,000 estimated cases in the community overall. McKinney Westside ZIP Code 75070 had the most estimated cases of each heart disease type, likely driven by population size. However, despite a fewer number of cases, the ZIP Code in Van Alstyne 75495 had the highest estimated prevalence rates for Arrhythmia (644 cases per 10,000 population), Heart Failure (299 cases per 10,000 population), Hypertension (2,968 cases per 10,000 population) and Ischemic Heart Disease (603 cases per 10,000 population).

2018 Estimated Heart Disease Cases



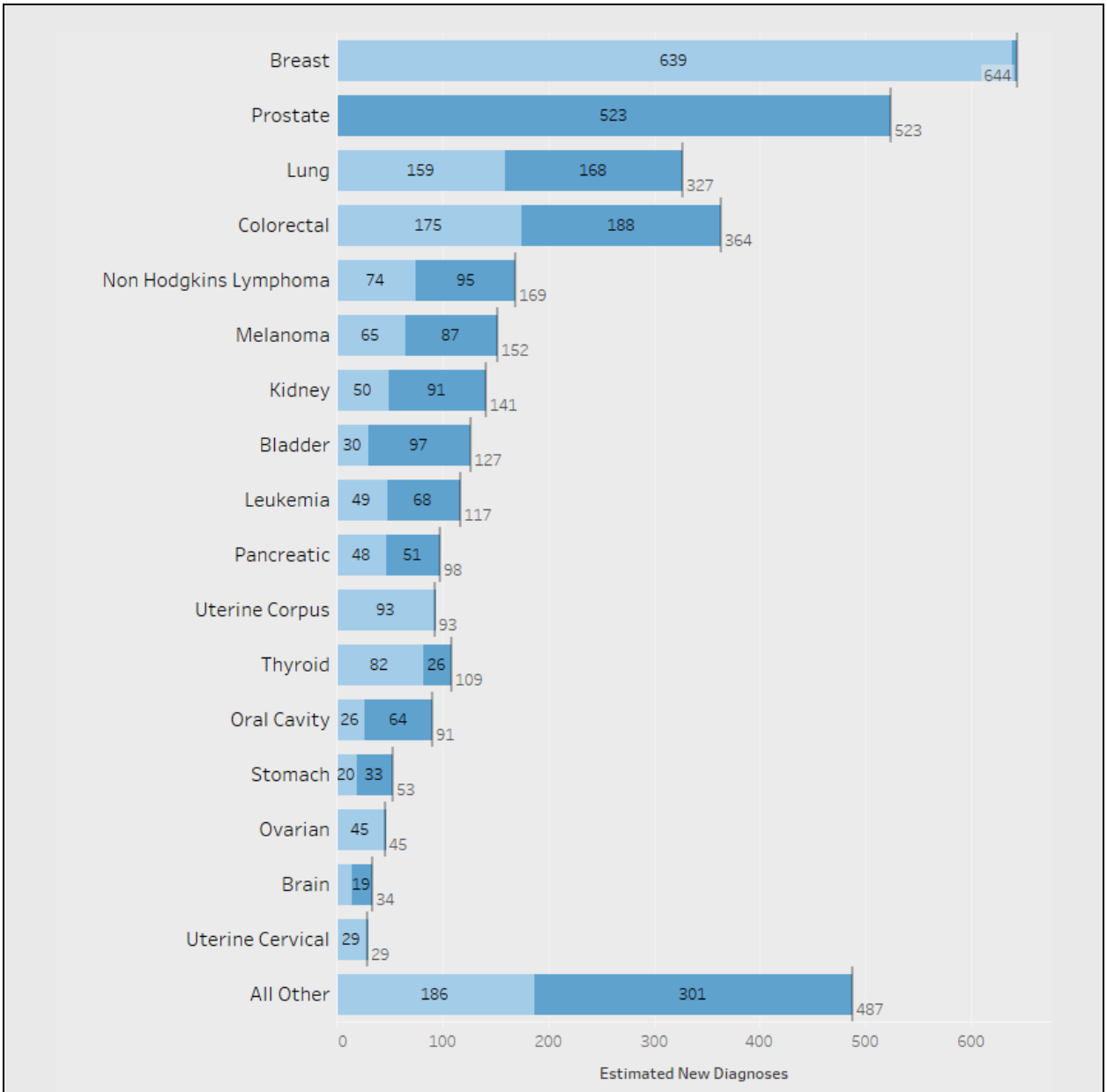
Bar chart shows total number of 2018 Estimated Heart Disease cases for each of four types: arrhythmia, heart failure, hypertension, and ischemic heart disease

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 grow the fastest in next 5 years were pancreatic and uterine corpus; based on both population changes and disease rates. The cancers estimated to have the greatest number of new cases in 2018 were breast and prostate 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	127	160	26.0%
Brain	34	39	14.7%
Breast	644	790	22.7%
Colorectal	364	406	11.5%
Kidney	141	177	25.5%
Leukemia	117	142	21.4%
Lung	327	401	22.6%
Melanoma	152	185	21.7%
Non Hodgkins Lymphoma	169	208	23.1%
Oral Cavity	91	114	25.3%
Ovarian	45	55	22.2%
Pancreatic	98	127	29.6%
Prostate	523	618	18.2%
Stomach	53	65	22.6%
Thyroid	109	135	23.9%
Uterine Cervical	29	33	13.8%
Uterine Corpus	93	117	25.8%
All Other	487	605	24.2%
Grand Total	3,602	4,376	21.5%

Source: IBM Watson Health, 2018

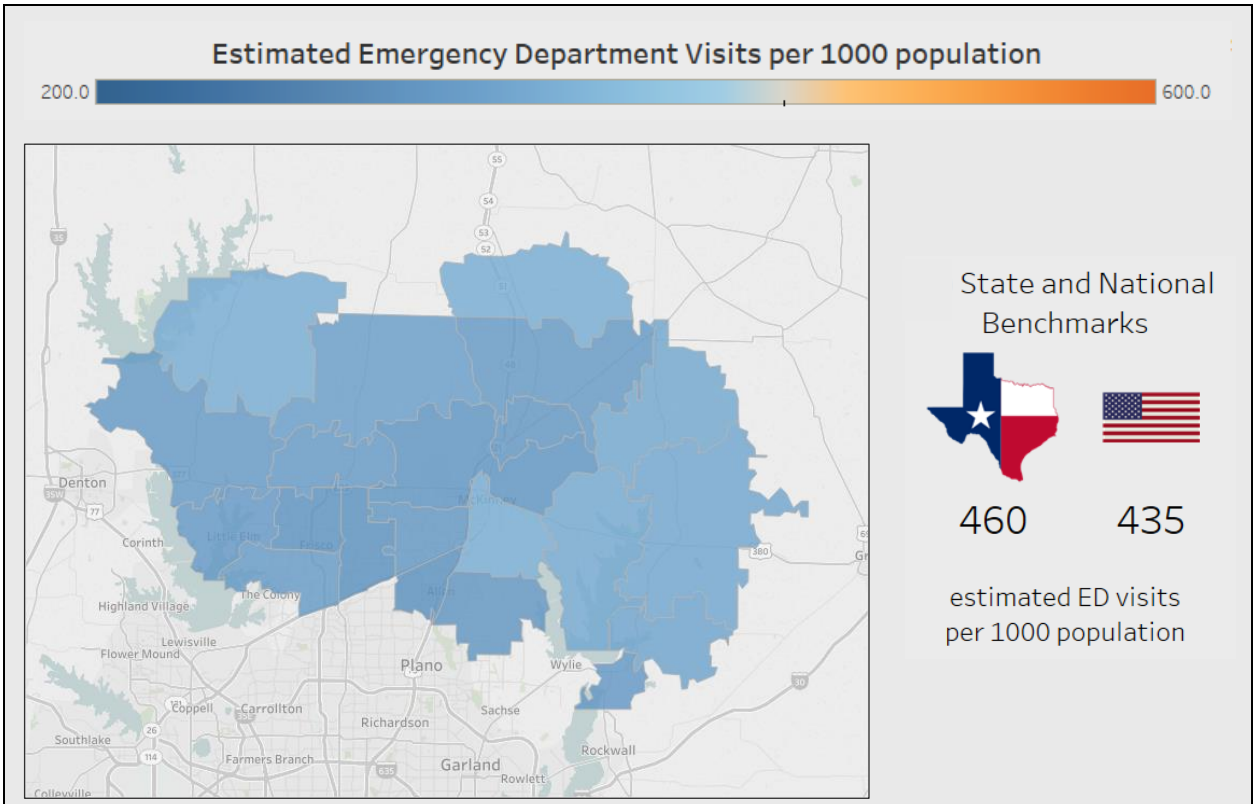
Based on population characteristics and regional utilization rates, Watson Health projected all emergency department (ED) visits in this community to increase by 11.5% over the next 5 years. One-quarter of ED visits were generated by the residents of Frisco ZIP Codes, but the highest estimated ED use rates were in the ZIP Codes of Downtown McKinney-Eastside, 372.1 ED visits per 1,000 residents. This rate is lower, 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 a less intensive outpatient treatment setting is more appropriate.

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 6.6% over the next five years in this community.

Estimated 2018 Emergency Department Visit Rate

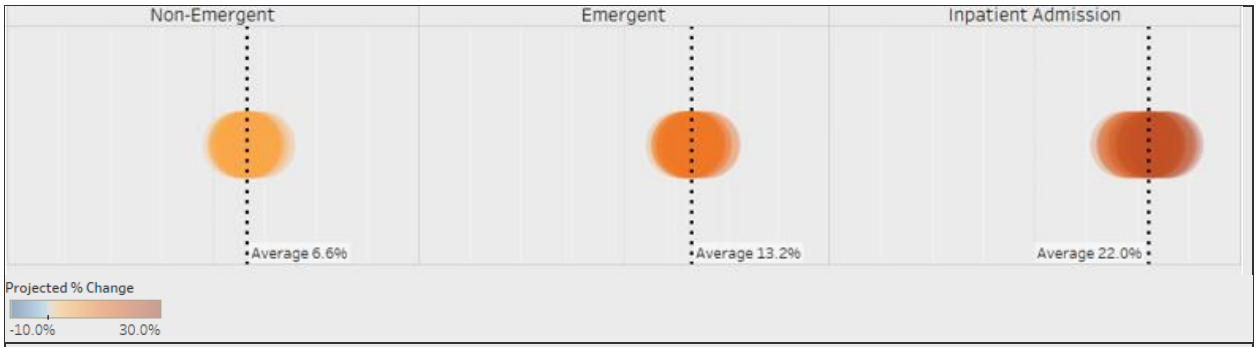


ZIP map color shows total Emergency Department visits per 1000 popultaion. Orange colors are higher than the state benchmark, blue colors are less than the state benchmark, and gray colors are similar.

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

Source: IBM Watson Health, 2018

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



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

emergency department due to the severity of illness. ED visits that result in inpatient admissions do not receive a CPT® code, but typically can be assumed to have resulted from an emergent encounter.

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

Source: IBM Watson Health, 2018

Appendix F: Evaluation of Prior Implementation Strategy Impact

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 – McKinney

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 uncolntrolled diabetes	Lack of Dental Providers	Teen Pregnancy	Drug Abuse
Baylor Scott & White Medical Center - McKinney	√					

Total Resources Contributed to Addressing Needs: $3,823,839

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

Program: Community Benefit Operations
Description:
The Hospital provides assigned staff to carry out services that specifically benefit the community. This includes conducting a community health needs and/or assets assessment, dedicated staff to perform various services in the community as well as the provision of other services associated with community benefit strategy and operations. Community benefits are programs or activities that provide treatment and/or promote health and healing as a response to identified community needs. They increase access to health care and improve community health.
Impact: improves access to healthcare services; enhanced community health; advances medical or health knowledge; relieved burden of government and other community health efforts.
Committed Resources: Staff time; $133,107 net community benefit

Program: Community Health Education and Outreach
Description:
The Hospital provides community health improvement services which extend beyond patient care activities. Hospital subsidized services 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. The provision of these services for underserved/underinsured populations and the broader community are not limited to Hospital patients.
Impact: 3,282 persons served; enhanced community health knowledge; increased awareness of health conditions, prevention and treatment.
Committed Resources: staff time; health experts; supplies/equipment; literature; $21,455 net community benefit

Program: Donations – Financial
Description:
The Hospital provides funds to various not-for-profit community organizations who share the mission and vision of the Hospital. These donations include contributions to charity events and programs after subtracting the fair market value of participation by employees of the organization, contributions to individuals for emergency assistance and scholarships to community members.
Impact: 44,567 persons served; 12 community partners developed Community partners & reported outcomes: • American Cancer Society - contributed to the 22% decline in cancer mortality in the past 2 decades, preventing more than 1.5 million cancer deaths; current estimated rate for colorectal cancer screening in the population in North Texas is around 2 million; expanded access to transportation services and lodging based on identified needs and referral that decrease barriers to receiving care and increase screening • Hope Women's Center • HUGS café - Expanded Hugs Prep Program designed to train additional adults with special needs in life/kitchen skills to be fully employed; Launched Hugs Greenhouse to serve as an additional venue to employ adults with special needs including those that may be physically challenged; Expanded Hugs Café catering services, outdoor dining, upgraded equipment, "Grab and Go" refrigeration system, and a computerized point of sale system • ManeGait - serve 140 riders each week; provides more than 4,000 hours of service • Samaritan Inn - residents stay in the program for 205 days and the average cost incurred by the Samaritan Inn is $42 per day per resident. • Community Lifeline • Community Health Clinic - 1,512 patient visits and 595 unique patients; funding was utilized for nurse practitioner's salary, medical supplies and equipment needed to provide quality patient care and to purchase medications for patients in need • Community Health Center of McKinney - free medical and educational services to women in unplanned pregnancies throughout the City of McKinney and Collin County • Cornerstone Ranch • Boys & Girls Club of Collin County • Childrens Advocacy Services Association • Buckner International
Committed Resources: Staff time; $191,634 net community benefit

Program: Donations - In Kind
Description:
The Hospital provides In Kind Donations to the community to other not-for-profit organizations whose missions are similar to the hospital. Donations generally Includes meeting room space, equipment and medical supplies, emergency medical care at a community event, and food donations.
Impact: 5,285 persons served
Committed Resources: staff time; $8,096 net community benefit

Program: Donations Faith in Action Initiatives
Description:
The hospital provides highly valuable supplies to be recycled for humanitarian and faith based projects through the office of Faith in Action Initiatives, 2nd Life program to providing for the health care needs of populations in the community and nation whose needs are not met through their own organization.
Impact: increased health infrastructure; Volunteer development;
Committed Resources: Staff time; depreciated equipment; shipping costs; physical home for warehousing donated items; $26,672 net community benefit
Program: Enrollment Services
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: improved access to care for underinsured/underserved populations
Committed Resources: ECI contract staff; $216,369 net community benefit

Program: Health Screenings
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: 1,273 persons served; Increased awareness of early detection and disease prevention
Committed Resources: staff time; clinical experts; space; $74,863 net community benefit

Program: Medical Education Allied Health Services
Description:
The Hospital provides medical education to students other than those in nursing education and residency programs to assist in attaining medical degrees, certifications or licenses. These education programs include students of rehabilitation services and social work.
Impact: 231 Students educated; enhanced relationship with local schools/colleges; enhanced access to care through increased workforce
Committed Resources: Nurse educator time; equipment/supplies; $433,159 net community benefit

Program: Medical Education – Nursing Students
Description:
Medical Education/Nursing. 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: 408 nurses educated; increased quality and size of nursing workforce in the North Texas area
Committed Resources: Nurse Educators; $1,459,460 net community benefit

Program: Medical Education – Physician Education
Description:
Baylor Scott & White McKinney offers continuing medical education (CME) to community physicians on subjects for which Baylor Scott & White Health has special expertise.
Impact: 450 physicians educated; increased access to quality health care provision in North Texas
Committed Resources: Clinical Experts; Staff time; Supplies/equipment; $5,100 net community benefit

Program: Moms To Be
Description:
Health education classes for Moms To Be for both underserved/underinsured populations and the general public help prepare new parents for their upcoming arrival. Courses include prepared childbirth, baby care basics, and breastfeeding. Prepared Childbirth classes help moms to be a support person to make informed choices and feel prepared for the delivery. Baby Basics is a class to help first time parents develop realistic expectations while learning the basics of newborn care. Topics include feeding, diapering, and bathing baby, recognizing your baby's cues, comforting and soothing a crying baby, choosing a health care provider, and growth, development and parenting tips. The breastfeeding class is designed to provide information to help mothers make an informed feeding choice while covering recent research, how to avoid problems and build confidence. Topics include the benefits of breastfeeding, getting ready, knowing when your baby is getting plenty of milk, working while nursing, pumping and storing milk.
Impact: 5,837 persons served;
Committed Resources: Staff time; Space; Clinical Experts; Literature; $45,926 net community benefit

Program: News Media Generated Community Health Education
Description:
The hospital uses media and social media efforts to equip the community with the latest health and wellness information as well as information on when and how to connect with health care professionals, hospitals, and other health care institutions. The scope of the efforts includes but is not limited to: • public health • disease-specific or injury-specific information • identifying community resources for meeting health needs • the development of tools and resources needed to get credible information to patients This is accomplished through: • publishing educational and diagnostic opportunities • providing timely, relevant health content on social media sites

• hosting electronic education events • maintaining health education blogs • promoting the System health library • monitoring and engaging government agencies and industry associations relative to connecting providers and patients • promoting the tools and resources needed to improve the quality, cost-effectiveness, efficiency, patient-centeredness, safety and access to health care. The Hospital produces opportunities for free health and wellness education for all people – whether they are insured, uninsured or under insured patients – through well-developed relationships with news media outlets.
Impact: 20,000 audience reach; increased awareness of preventive health strategies, chronic disease treatments, therapies and self- help on topics as follows: • Colorectal cancer awareness • Breast cancer awareness • Heart health • Blood drives • GERD • Allergies • Heart disease • Health for the holidays
Committed Resources: Staff time; Clinical Experts; Net community benefit $12,792

Program: Purchased Services for Indigent Patients
Description:
The Hospital provides continuing care services for patients who do not qualify for means tested government programs, who are uninsured or underinsured and have no means of purchasing the care or services. • Medications through Baylor Plaza pharmacy and Walgreens • Skilled Nursing facility contracts • Taxi vouchers • Home infusion services
Impact: improved health outcomes; reduced preventable re-admissions; quicker recovery
Committed Resources: Staff time; $578,591 net community benefit

Program: Workforce Development
Description:
Recruitment of physicians and other health professionals for areas identified as medically underserved 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: increased access to care for physician/ non-physician health care providers
Committed Resources: Staff time; $732,372 net community benefit

Identified Need Addressed: Mental/Behavioral Health

Program: Child Life Specialists Services
Description:
Palliative Care Child Life Program helps children "navigate" the illness of someone they love. Serious illnesses not only drastically affect patients but also affects the children in their lives. As the largest program of its kind in the nation, the Hospitals' 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; improved grief management; reduced length of stay;
Committed Resources: Palliative Care Staff; $25,446 net community benefit

Identified Need Addressed: Preventable Admits: Adult Uncontrolled Diabetes

Program: Health Screenings - City of McKinney Wellness Event 2017
Description:
Baylor McKinney provided full blood analysis including cholesterol, blood pressure, waist circumference, nutrition and diabetes information, women's health, skin screenings, cancer education, heart and vascular and digestive health information to the City of McKinney employees. 600 employees attended and participated in the screenings.
Impact: 600 screened
Committed Resources: Staff hours; Supplies/Equipment; Clinical staff; $3,021 net community benefit

Needs Not Addressed:

- Lack of Dental Providers
- Teen Pregnancy *
- Drug Abuse

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

*Financial donations to Hope Women's Center, a women's medical clinic providing counselling support for women of all ages through reproductive care addressed this need. This organizations' reported outcome: "This allows us to continue to provide free medical and educational services to women in unplanned pregnancies throughout the City of McKinney and Collin County."