Community Health Needs Assessment

Methodist
HOSPITAL FOR SURGERY

Approved by:
Methodist Hospital for Surgery Board of Directors on October 24, 2019
Posted to www.methodisthealthsystem.org/about/communityinvolvement by Decemeber 31, 2019

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Methodist Health System

Compassionate Healthcare

The Methodist ministers and civic leaders who opened our doors in 1927 couldn't have imagined where Methodist Health System would be today. From humble beginnings, our renowned health system has become one of the leading healthcare providers in North Texas.

But all of our growth, advancements, accreditation, awards, and accomplishments have been earned under the guidance of their founding principles: life, learning, and compassion. We're still growing, learning, and improving — grounded in a proud past and looking ahead to an even brighter future.

Whatever your medical need, we are honored that you would entrust us with your health and safety. We understand that we have a solemn responsibility to you and your family, and you can trust that our team takes that commitment very seriously.

Mission, Vision, and Values of Methodist Health System

Mission

To improve and save lives through compassionate quality healthcare.

Vision for the Future

To be the trusted choice for health and wellness.

Core Values

Methodist Health System core values reflect our historic commitment to Christian concepts of life and learning:

- **S**ervant Heart – compassionately putting others first
- **H**ospitality – offering a welcoming and caring environment
- **I**nnovation – courageous creativity and commitment to quality
- **N**oble – unwavering honesty and integrity
- **E**nthusiasm – celebration of individual and team accomplishment
- **S**killful – dedicated to learning and excellence

Executive Summary

Methodist Health System (Methodist) understands the importance of serving the health needs of its communities. To do that successfully, we must first take a comprehensive look at the issues our patients, their families, and neighbors face when making healthy life choices and health care decisions.

Beginning in June 2018, the organization began the process of assessing the current health needs of the communities it serves. IBM Watson Health (Watson Health) was engaged to help collect and analyze the data for this process and to compile a final report made publicly available on September 30, 2019.

Methodist owns and operates multiple individually licensed hospital facilities serving the residents of North Texas. This assessment applies to the following Methodist hospital facility:

- Methodist Hospital for Surgery

For the 2019 assessment, the community includes the geographic area where at least 75% of the hospital facility's admitted patients live. Methodist Hospital for Surgery defined their community as the geographical area of Dallas, Collin, and Denton Counties. This hospital facility provided a Community Health Needs Assessment (CHNA) report in accordance with Treasury Regulations and 501(r) of the Internal Revenue Code.

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

Needs were first identified when it was determined which indicators for the community did not meet the state benchmarks. A need differential analysis was conducted on all of the indicators not meeting benchmarks to determine relative severity by using the percent difference from benchmark. The outcome of this quantitative analysis was then 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 of the needs. The matrix shows the convergence of needs identified in the qualitative data (interview and focus group feedback) and quantitative data (health indicators) and identifies the top health needs for this community.

On May 2, 2019 a prioritization meeting was held with system and hospital leadership in which the health needs matrix was reviewed to establish and prioritize significant needs. The meeting was moderated by Watson Health and included an overview of the

Methodist CHNA process, summary of qualitative and quantitative findings, and a review of the identified community health needs.

Participants identified the significant health needs through review of the health needs matrix, discussion, and a consensus process. Once the significant health needs were established, participants rated the needs using a set of prioritization criteria. The sum of the criteria scores for each need created an overall score that was the basis of the prioritized order of significant health needs.

The meeting participants subsequently evaluated the prioritized health needs against a set of selection criteria in order to determine which needs would be addressed by the hospital facility. A description of the selected needs is included in the body of this report. Each facility developed an individual implementation strategy with specific initiatives aimed at addressing the selected health needs. The implementation strategy will be completed and adopted by the hospital facility on or before February 15, 2020. The needs to be addressed by Methodist Hospital for Surgery are as follows:

- Poverty
- Food Insecurity

As part of the assessment process, community resources were identified, including facilities/organizations, that may be available to address the significant needs in the community. These resources are in the appendix of this report.

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 E** of this document.

The CHNA for Methodist Hospital for Surgery has been presented and approved by the Vice President of Strategic Planning, Methodist Health System Senior Executive Management team and Methodist Health System's Board of Directors. The full assessment is available for download at no cost to the public on Methodist's website, visit **www.methodisthealthsystem.org/about/communityinvolvement**.

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

Community Health Needs Assessment Requirement

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

The written CHNA Report must include descriptions of the following:

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

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

The written Implementation Strategy must include the following:

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

CHNA Overview, Methodology and Approach

Methodist began the 2019 CHNA process in June of 2018 and partnered with Watson Health to complete a CHNA for Methodist Hospital for Surgery.

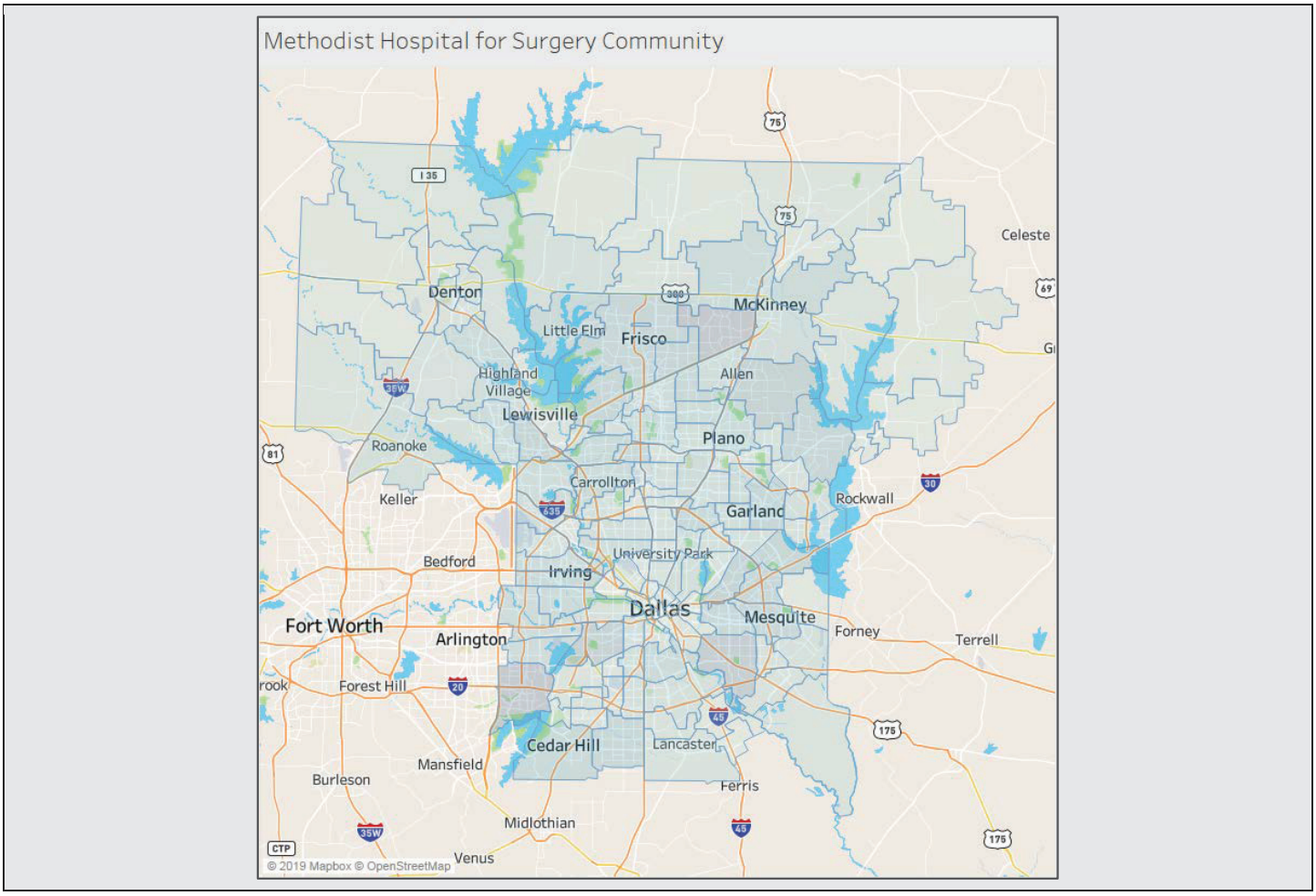
Consultant Qualifications & Collaboration

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

Community Served Definition

For the purpose of this assessment, Methodist Hospital for Surgery defined the facility's community using the counties in which at least 75% of patients reside. Using this definition, Methodist Hospital for Surgery has defined their community to be the geographical area of Dallas, Denton, and Collin Counties for the 2019 CHNA.

Community Served Map



Source: Watson Health, 2019

Assessment of Health Needs

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

Quantitative Assessment of Health Needs – Methodology and Data Sources

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

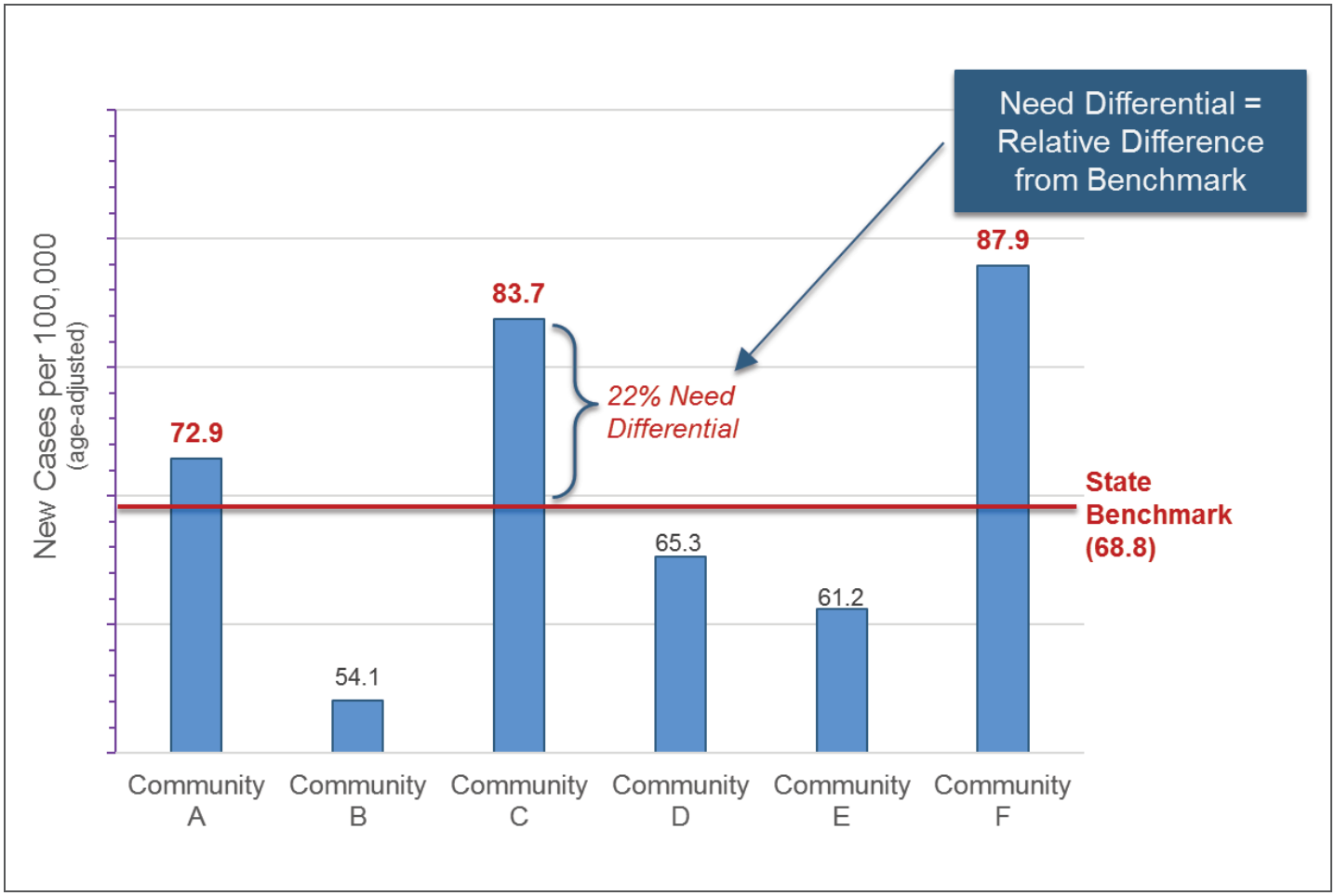
A benchmark analysis, conducted for each indicator collected for the community served, determined which public health indicators demonstrated a community health need from a quantitative perspective. Benchmark health indicators collected included (when available): overall U.S. values; state of Texas values;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

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

Once the community benchmark was set to the state value, it was determined which indicators for the community did not meet the state benchmarks. This created a subset of indicators for further analysis. A need differential analysis was conducted to understand the relative severity of need for these indicators. The need differential established a standardized way to evaluate the degree each indicator differed from its benchmark. Health community indicators with need differentials above the 50th percentile were ordered by severity and the highest ranked indicators were the highest health needs from a quantitative perspective.

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

Health Indicator Benchmark Analysis Example



Source: IBM Watson Health, 2019

Qualitative Assessment of Health Needs and Community Input – Approach

In addition to analyzing quantitative data, four (4) focus groups with a total of 45 participants, as well as 10 key informant interviews, were conducted to take into account the input of persons representing the broad interests of the community served. The focus groups and interviews solicited feedback from leaders and representatives who serve the community and have insight into community needs.

The 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. The interviews aided in gaining understanding and insight into participants' concerns about the general health status of the community and the various drivers that contributed to health issues.

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

as well as individuals or organizations who served and/or represented the interests of medically underserved, low-income and minority populations in the community.

Participation from community leaders/groups, public health organizations, other healthcare organizations, and other healthcare providers ensured that the input received represented the broad interests of the community served. A list of the organizations providing input is 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
Agape Clinic		X	X	X	X		X
Bridge Breast Network		X	X		X		X
City of Denton			X	X	X		
City of Plano	X	X	X	X	X		
CitySquare	X	X	X	X	X		X
Community Council							
Community Lifeline Center		X	X	X	X		
Cornerstone Baptist Church	X	X	X	X	X		X
D/FW Hindu Temple Society					X		
Dallas Area Interfaith		X	X		X		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			
Frisco Family Services		X	X				
Genesis Women's Shelter & Support		X	X		X		X
Giving Hope, Inc.		X	X	X			X
Goodwill Industries of Dallas			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
Goodwill Industries of Fort Worth		X	X		X		
Health services of North Texas		X	X	X	X		
Hope Clinic		X	X	X	X		
Hope Clinic of McKinney		X	X	X	X		
Legal Aid of Northwest Texas			X				
LifePath Systems	X		X	X			X
Los Barrios Unidos Community Clinic	X	X	X	X	X		X
Many Helping Hands Ministry	X	X	X	X			
McKinney City Council					X		
North Texas Food Bank			X				X
Office of the County Judge - Dallas County	X	X	X	X	X		X
Our Daily Bread		X	X				
Plano Fire-Rescue	X	X	X	X	X		X
Project Access-Collin County			X				
Refuge for Women North Texas					X		
Serve Denton			X				
Sharing Life Community Outreach Inc			X				
Society of St. Vincent de Paul of North Texas		X	X	X	X		
Texas Muslim Women's Foundation					X		
The Samaritan Inn			X				
United Way		X	X	X	X		
United Way Metropolitan Dallas		X	X	X	X		X
University of North Texas	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
Urban Inter-Tribal Center of Texas		X	X	X	X		X
Veterans Center of North Texas			X				X
YMCA	X	X	X	X	X		X
Cancer Care Services	X	X	X	X	X		X
Dallas County Health and Human Services	X		X			X	
Metrocare	X	X	X	X	X		X
PCI ProComp Solutions, LLC		X	X				
University of Texas - Dallas		X	X				
Assistance Center of Collin County		X	X		X		X
Denton County Court Appointed Special Advocates (CASA)		X	X		X		
Denton County Food Center			X				
Methodist Golden Cross Academic Clinic		X	X	X	X		X
The Visiting Nurse Association of North Texas (VNA)	X	X	X	X	X		X

Note: multiple persons from the same organization may have participated

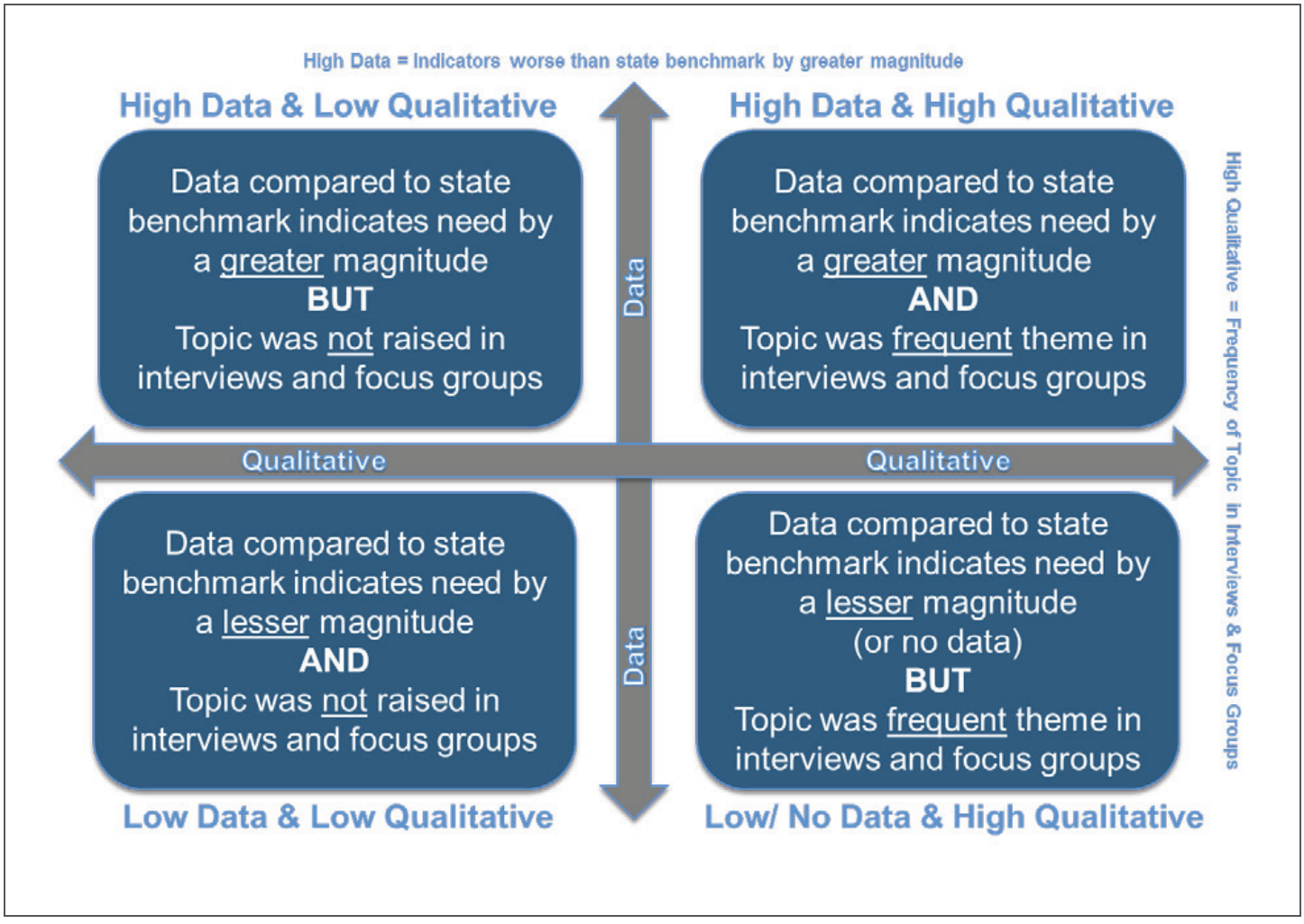
In addition to soliciting input from public health and various interests of the community, the hospital was also required to consider written input received on their most recently conducted CHNA and subsequent implementation strategies. The assessment is available to receive public comment or feedback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

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

Methodology for Defining Community Need

Using qualitative feedback from the interviews and focus groups, as well as the health indicator data, the issues currently affecting the community served are assembled in the Health Needs Matrix below to help identify the top health needs for the 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 significant health needs for this community.

The Health Needs Matrix



Information Gaps

Most public health indicators were available only at the county level. In evaluating data for entire counties versus more localized data, it was difficult to understand the health needs for specific population pockets within a county. It could also be a challenge to tailor programs to address community health needs, as placement and access to specific programs in one part of the county may or may not actually affect the population who truly need the service. The publicly available health indicator data was supplemented with Watson Health's ZIP code estimates to assist in identifying specific populations within a community where health needs may be greater.

Approach to Identify and Prioritize Significant Health Needs

In a session held with system and hospital leadership representing Methodist Hospital for Surgery on May 2, 2019, significant health needs were identified and prioritized. Moderated by Watson Health, the meeting included: an overview of the CHNA process for Methodist; the methodology for determining the top health needs; the Methodist 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 based on the Health Needs Matrix. The group then reviewed the significant health needs as determined by the upper right quadrant of the matrix and identified other significant needs from other matrix quadrants by leveraging the professional experience and community knowledge of the group via discussion.

In the second step, participants ranked the significant health needs based on the following prioritization criteria:

1. Magnitude: The need impacts a large number of people, actually or potentially.
2. Severity: What degree of disability or premature death occurs because of the problem? What are the potential burdens to the community, such as economic or social burdens?
3. Vulnerable Populations: There is a high need among vulnerable populations and/or vulnerable populations are adversely impacted.
4. Root Cause: The issue is a root cause of other problems, thereby possibly affecting multiple issues.

Through discussion and consensus, the group rated each of the significant health needs on each of the four identified criteria utilizing a scale of 1 (low) to 10 (high). The criteria scores summed for each need created an overall score. The list of significant health needs was then prioritized based on the overall scores. 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 was approved by the hospitals' governing body and the full assessment is available to anyone at no cost. To download a copy, visit **www.methodisthealthsystem.org/about/communityinvolvement**.

Selecting the Health Needs to be Addressed by Methodist

To choose which of the prioritized health needs Methodist would address through its corresponding implementation plans, the participants representing Methodist Hospital for Surgery collectively as a group rated each of the prioritized significant health needs on the following selection criteria:

1. Expertise & Collaboration: Confirm health issues can build upon existing resources and strengths of the organization. Ability to leverage expertise within the organization and resources in the community for collaboration.
2. Feasibility: Ensure needs are amenable to interventions, acknowledge resources needed, and determine if need is preventable.
3. Quick Success & Impact: Ability to obtain quick success and make an impact in the community.

Through discussion and consensus, the group rated a subset of the prioritized health needs on each of the three identified criteria utilizing a scale of 1 (low) to 10 (high). The criteria scores summed for each need, created an overall score. The list of prioritized health needs was then ranked based on the overall scores. The health needs selected by participants which will be addressed via implementation strategies are located in the "**Health Needs to be Addressed by Methodist**" section of the assessment.

Existing Resources to Address Health Needs

Part of the assessment process included gathering input on community resources potentially available to address the significant health needs identified through the CHNA. 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**.

Demographic and Socioeconomic Summary

According to population statistics, the population in this health community is expected to grow 8% in five years, above the Texas growth rate of 7.1%. The median age was younger than the Texas and national benchmarks. Median income was above both the state and the country. The community served had a lower proportion of Medicaid beneficiaries than the state of Texas.

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

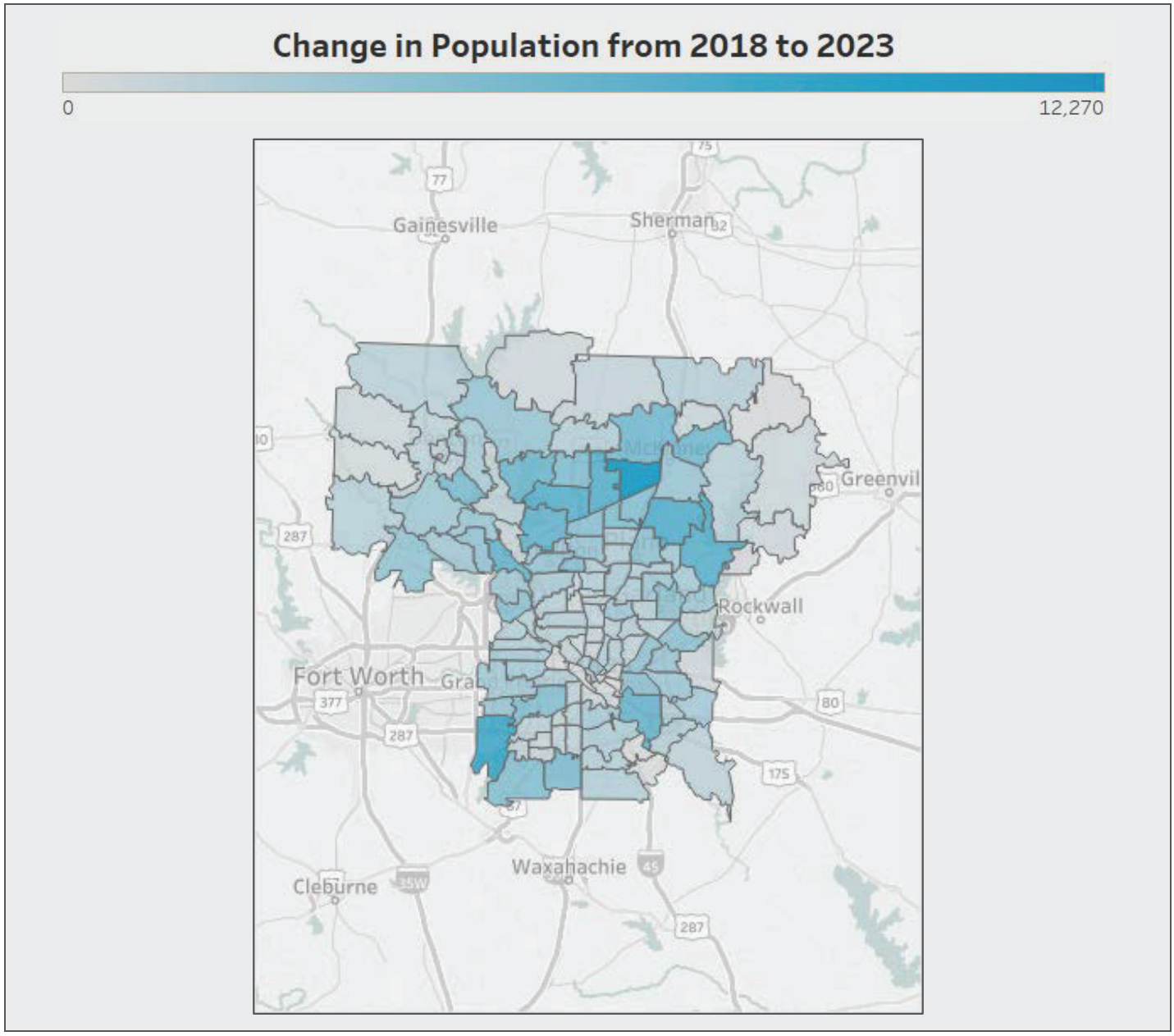
Geography		Benchmarks		Community Served
		United States	Texas	
Total Current Population		326,533,070	28,531,631	4,503,348
5 Yr Projected Population Change		3.5%	7.1%	8.0%
Median Age		42.0	38.9	35.7
Population 0-17		22.6%	25.9%	26.0%
Population 65+		15.9%	12.6%	10.7%
Women Age 15-44		19.6%	20.6%	21.5%
Non-White Population		30.0%	32.2%	42.3%
Hispanic Population		18.2%	39.4%	30.8%
Insurance Coverage	Uninsured	9.4%	19.0%	15.7%
	Medicaid	19.0%	13.4%	11.8%
	Private Market	9.6%	9.9%	10.0%
	Medicare	16.1%	12.5%	10.1%
	Employer	45.9%	45.3%	52.4%
Median HH Income		$61,372	$60,397	$72,886
Limited English		26.2%	39.9%	39.7%
No High School Diploma		7.4%	8.7%	7.7%
Unemployed		6.8%	5.9%	5.2%

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

The population of the community served is expected to grow 8% by 2023, an increase of more than 358,000 people. The 8% projected population growth is more than the state's 5-year projected growth rate (7.1%) and much higher when compared to the national projected growth rate (3.5%). The ZIP codes expected to experience the most growth in five years are:

- 75070 McKinney - 12,270 people
- 75052 Grand Prairie - 9,059 people
- 75002 Allen - 7,892 people

2018 - 2023 Total Population Projected Change by ZIP Code

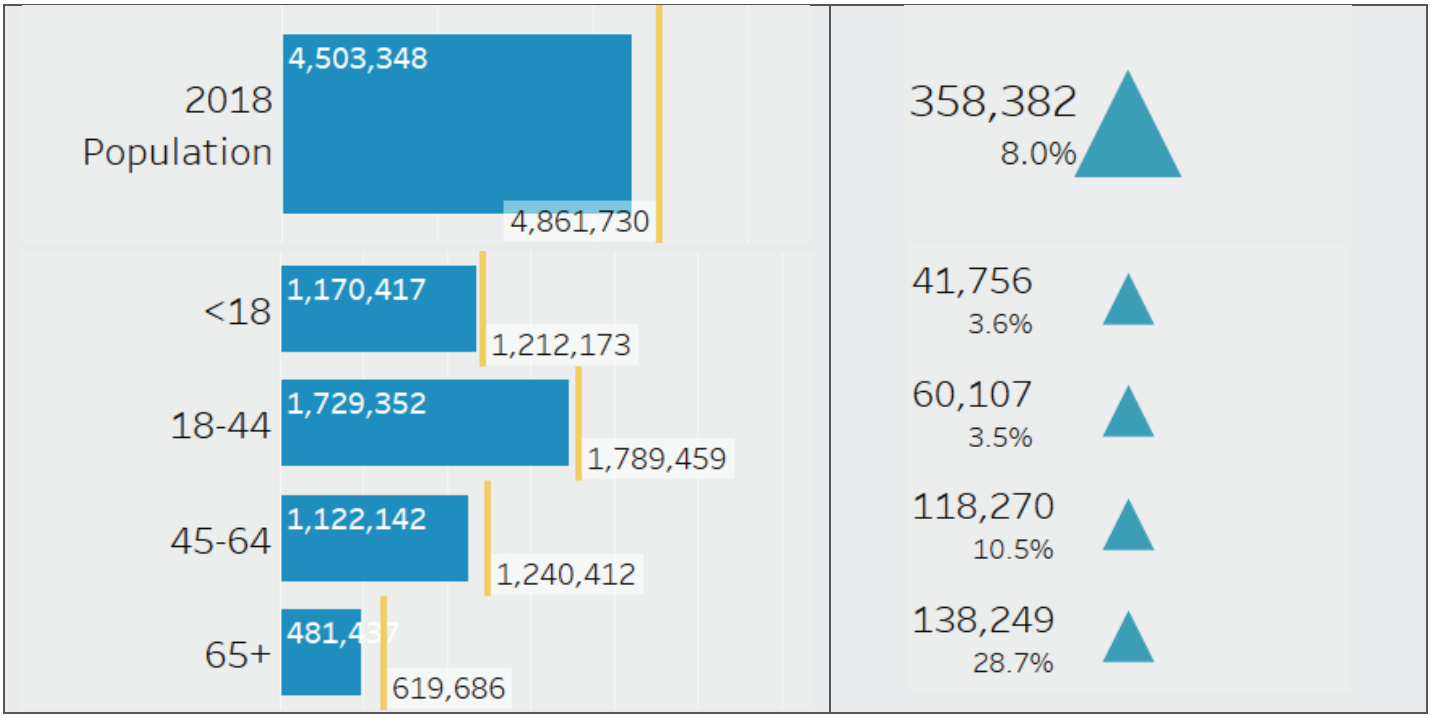


Source: IBM Watson Health / Claritas, 2018

The community's population skewed younger with 38.4% of the population ages 18-44 and 26.0% under age 18. The largest cohort (18-44) is expected to grow by 60,107 people by 2023. The age 65 plus cohort was the smallest but is expected to experience the fastest growth (28.7%) over the next five years; adding 138,249 seniors to the community. Growth in the senior population will likely contribute to increased utilization of services as the population continues to age.

Population Distribution by Age

2018 Population by Age Cohort *Change by 2023*

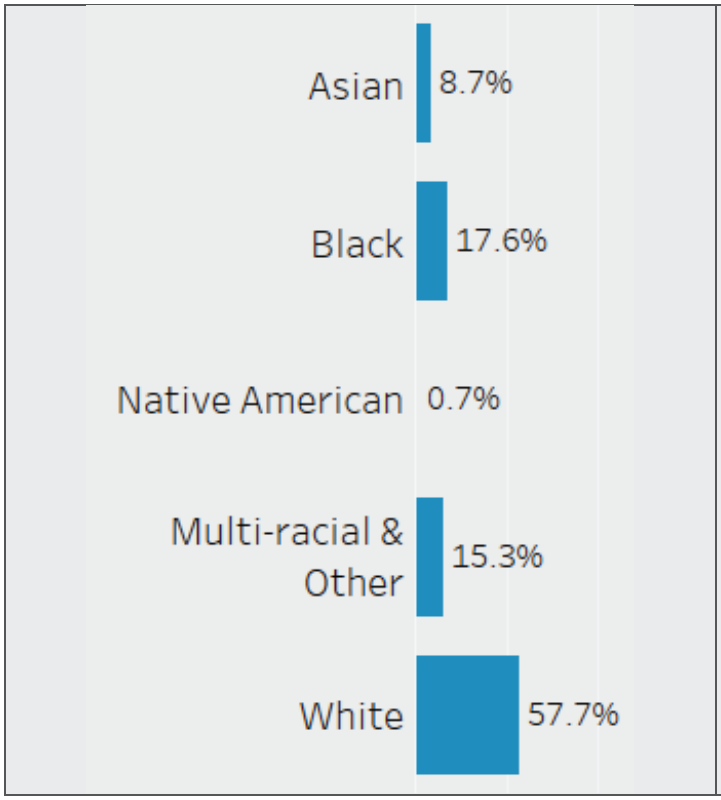


Source: IBM Watson Health / Claritas, 2018

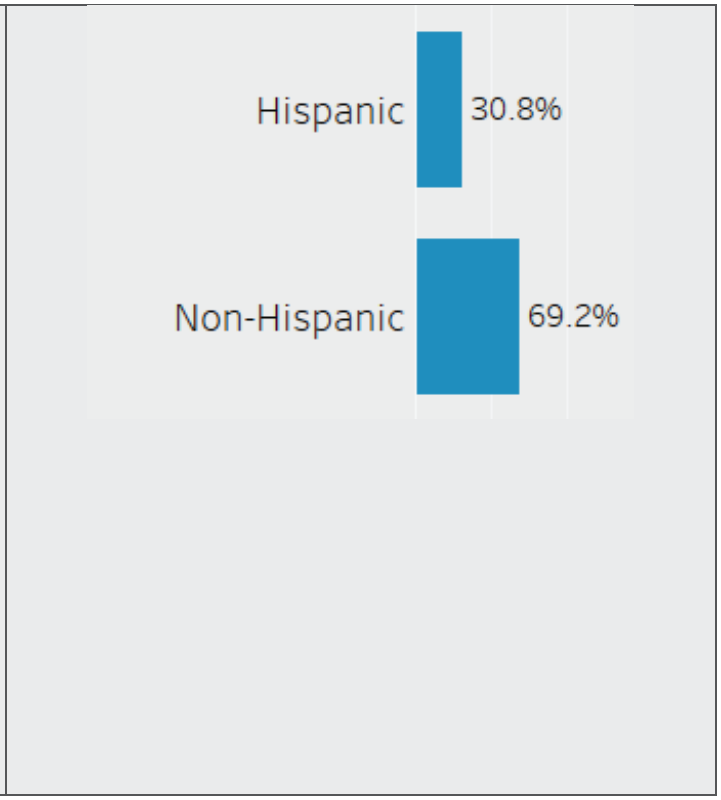
Population statistics are analyzed by race and by Hispanic ethnicity. The largest groups in the community were Non-Hispanic White (40.98%), Hispanic Black (17.23%), and Hispanic White (16.73%). The expected growth rate of the Hispanic population (all races) is over 151,000 people (10.9%) by 2023, while the Non-Hispanic population (all races) is expected to grow by over 206,000 people (6.6%) by 2023.

Population Distribution by Race and Ethnicity

2018 Population by Race

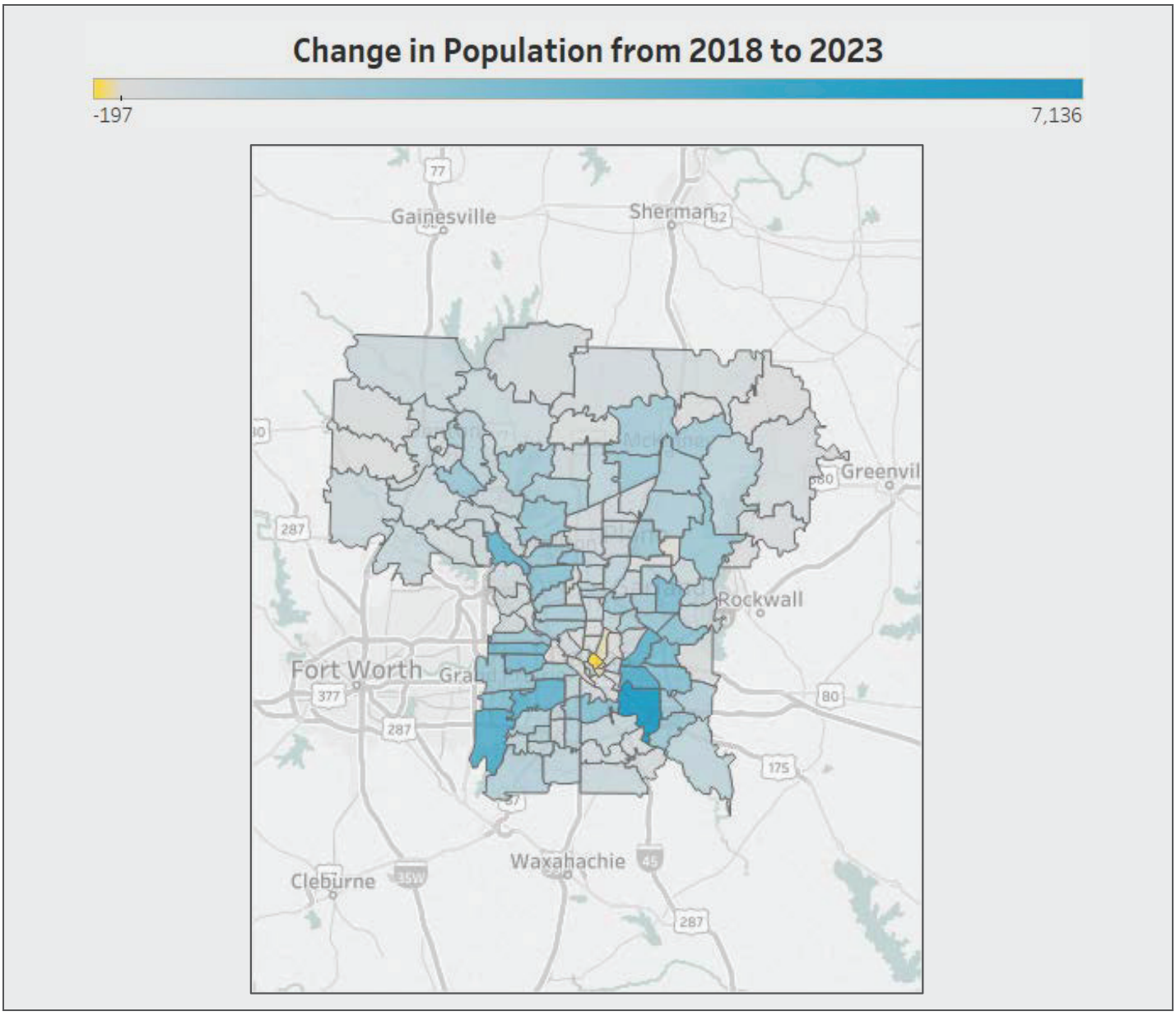


2018 Population by Ethnicity



Source: IBM Watson Health / Claritas, 2018

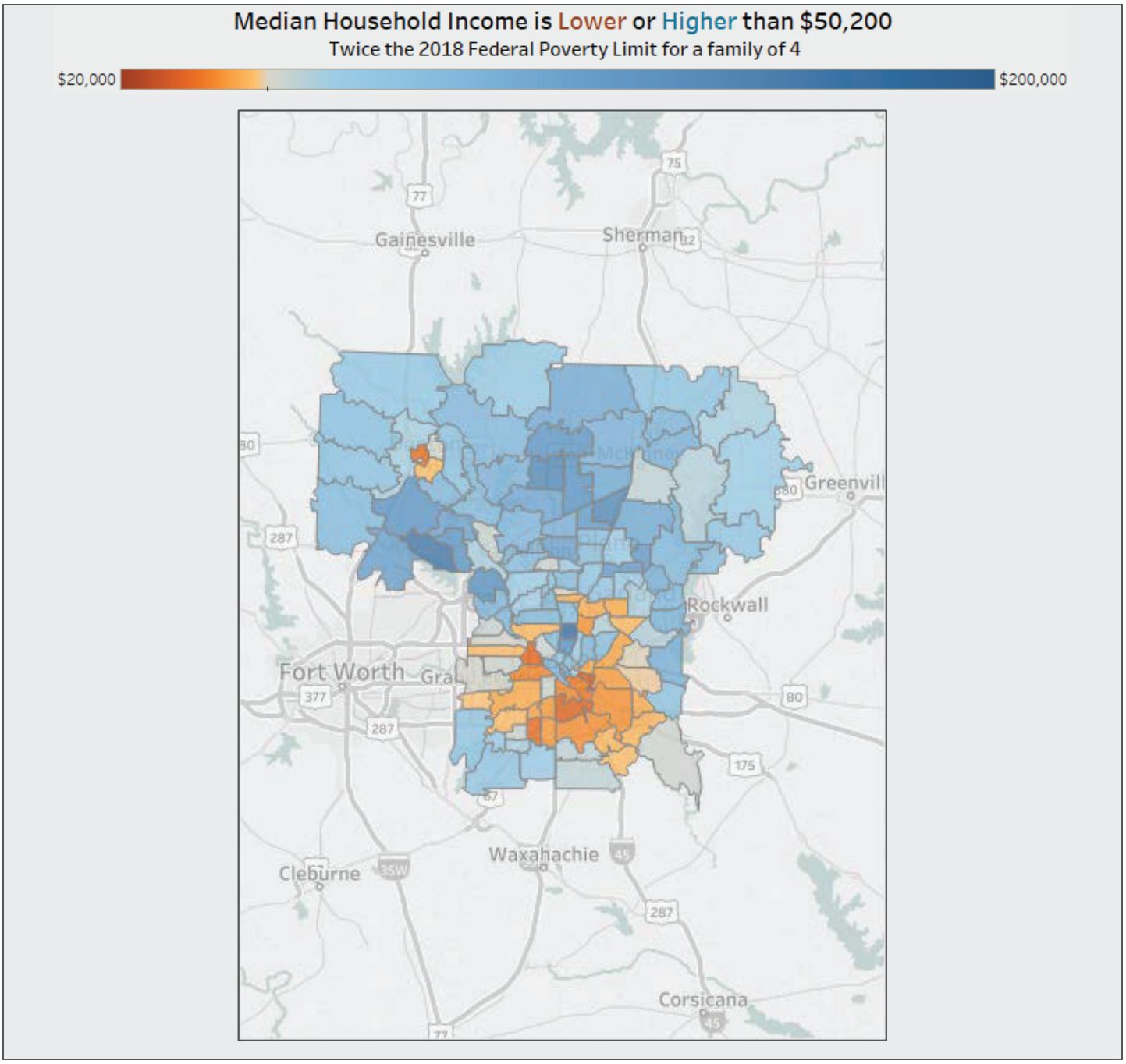
2018 - 2023 Hispanic Population Projected Change by ZIP Code



Source: IBM Watson Health / Claritas, 2018

The 2018 median household income for the United States was $61,372 compared to $60,397 for the state of Texas. The median household income for the ZIP codes within this community ranged from $21,940 for 75210-Dallas to $169,738 for 75225-Dallas. There were thirty-five (35) ZIP Codes with median household incomes less than $50,200, twice the 2018 Federal Poverty Limit for a family of four:

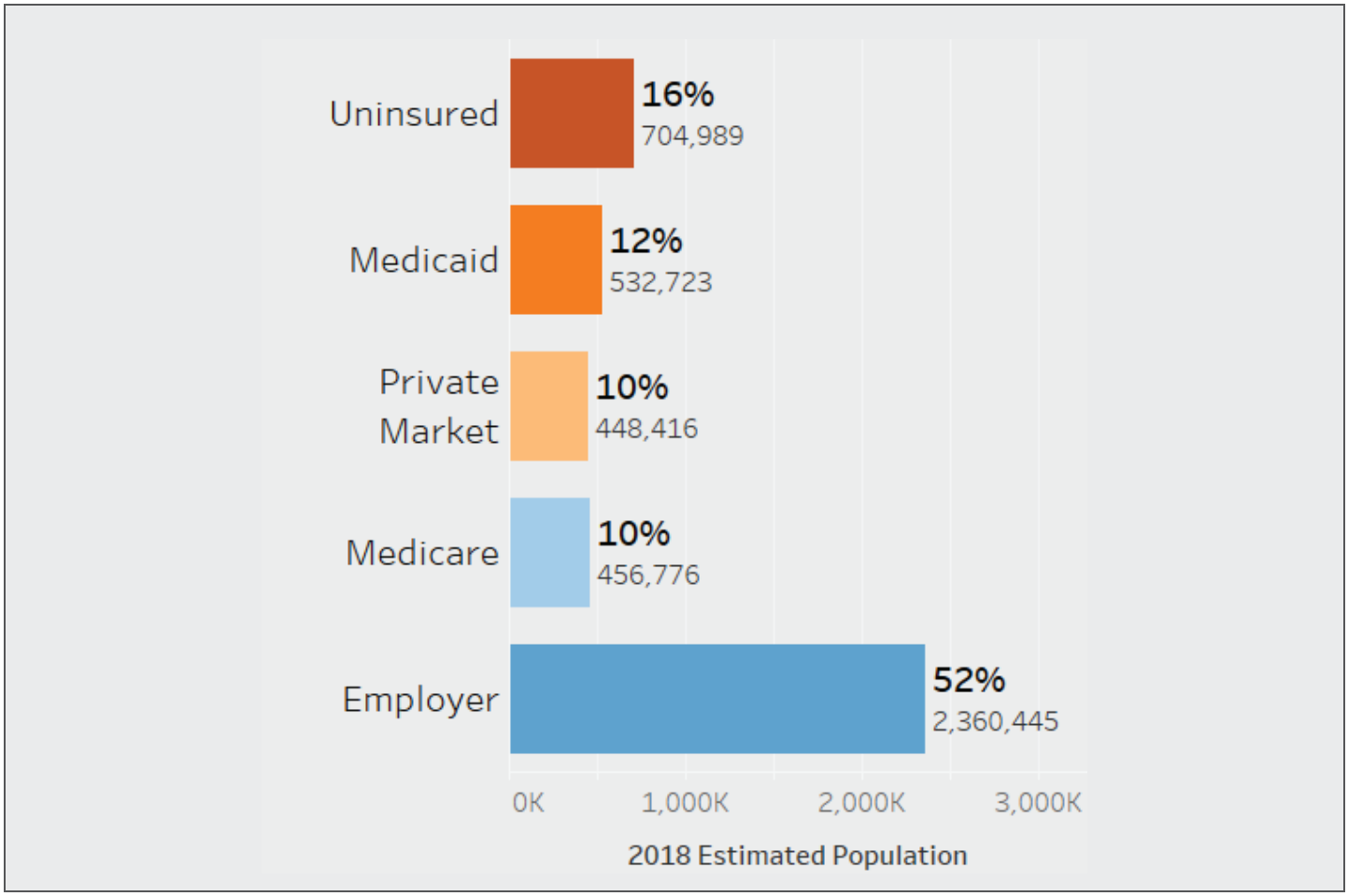
- 75210 Dallas - $21,940
- 75216 Dallas - $26,240
- 75247 Dallas - $28,750
- 75237 Dallas - $29,606
- 76201 Denton - $30,230
- 75215 Dallas - $31,213
- 75212 Dallas - $34,787
- 75203 Dallas - $35,177
- 75241 Dallas - $36,316
- 75217 Dallas - $36,886
- 75231 Dallas - $37,253
- 75232 Dallas - $38,650
- 75224 Dallas - $39,096
- 75227 Dallas - $39,505
- 75233 Dallas - $40,741
- 75228 Dallas - $41,081
- 75223 Dallas - $41,798
- 75211 Dallas - $42,165
- 75042 Garland - $42,226
- 75243 Dallas - $42,441
- 75180 Balch Springs - $43,055
- 75240 Dallas - $43,473
- 75253 Dallas - $43,956
- 75141 Hutchins - $43,968
- 75246 Dallas - $43,992
- 75041 Garland - $44,881
- 75061 Irving - $44,965
- 75220 Dallas - $45,016
- 76205 Denton - $45,625
- 75172 Wilmer - $45,833
- 75236 Dallas - $45,849
- 75051 Grand Prairie - $46,798
- 75149 Mesquite - $48,436
- 75150 Mesquite - $49,678
- 75254 Dallas - $49,817



Source: IBM Watson Health / Claritas, 2018

The majority of the population (52%) were insured through employer sponsored health coverage, sixteen percent (16%) of the community did not have insurance coverage. The remainder of the population was fairly equally divided between Medicaid, Medicare, and private market (the purchasers of coverage directly or through the health insurance marketplace).

2018 Estimated Distribution of Covered Lives by Insurance Category



Source: IBM Watson Health / Claritas, 2018

The community includes 31 Health Professional Shortage Areas and 21 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 Provessional Shortage Areas (HPSA)				Medically Underserved Area/Population (MUA/P)
3. Methodist Hospital for Surgery	Dental Health	Mental Health	Primary Care	Grand Total	MUA/P
Collin		1		1	1
Dallas	8	8	10	26	19
Denton	1	2	1	4	1
Total	**9**	**11**	**11**	**31**	**21**

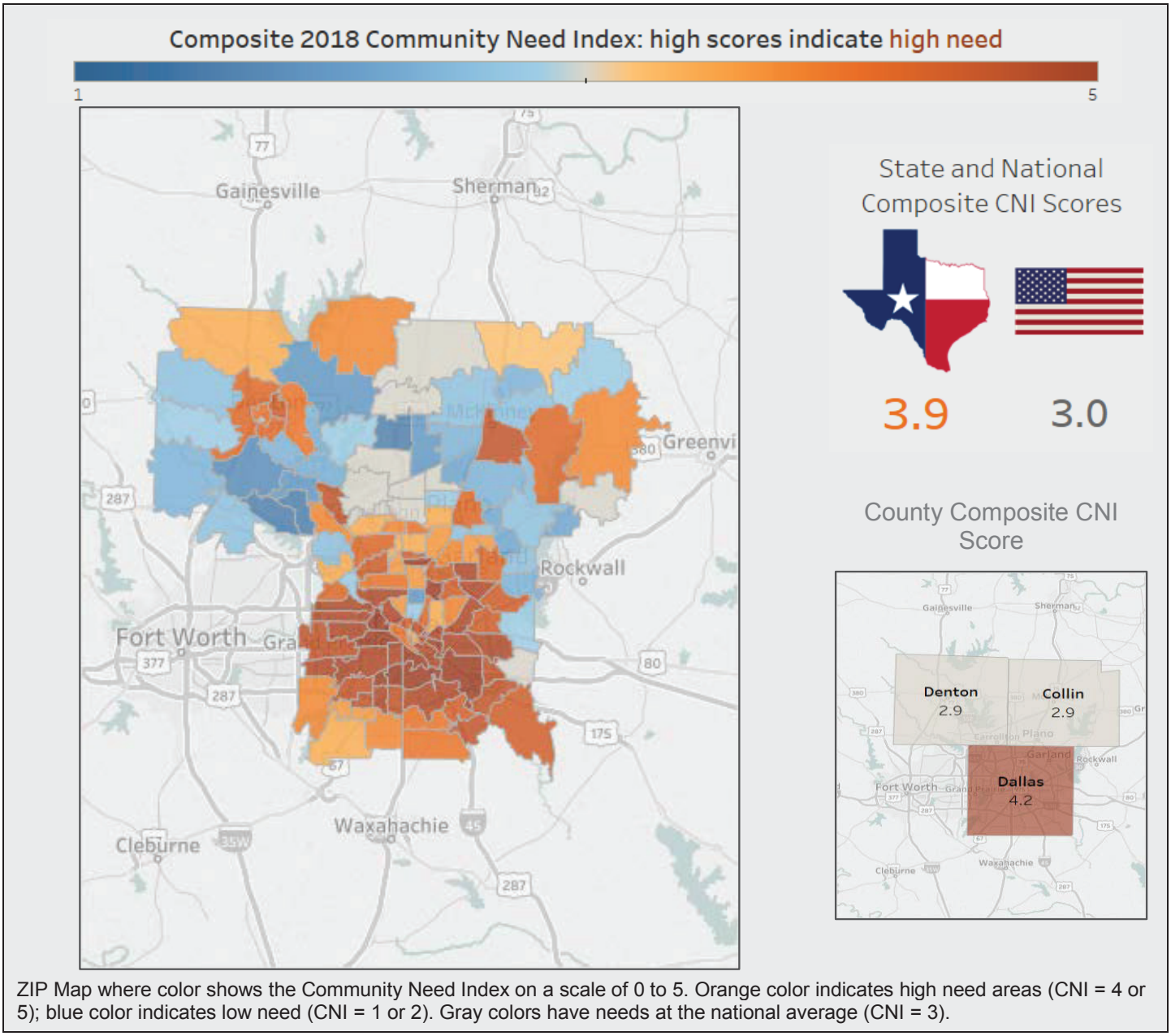
Source: U.S. Department of Health and Human Services, Health Resources and Services Administration, 2018

[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 links 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 3.7, higher than the CNI national average of 3.0, potentially indicating greater health care needs in this community. In portions of the community (Dallas, Garland, Grand Prairie, Irving, Mesquite) the CNI score was greater than 4.8, 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).

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 the benchmarks was available data for the U.S. and the state of Texas.

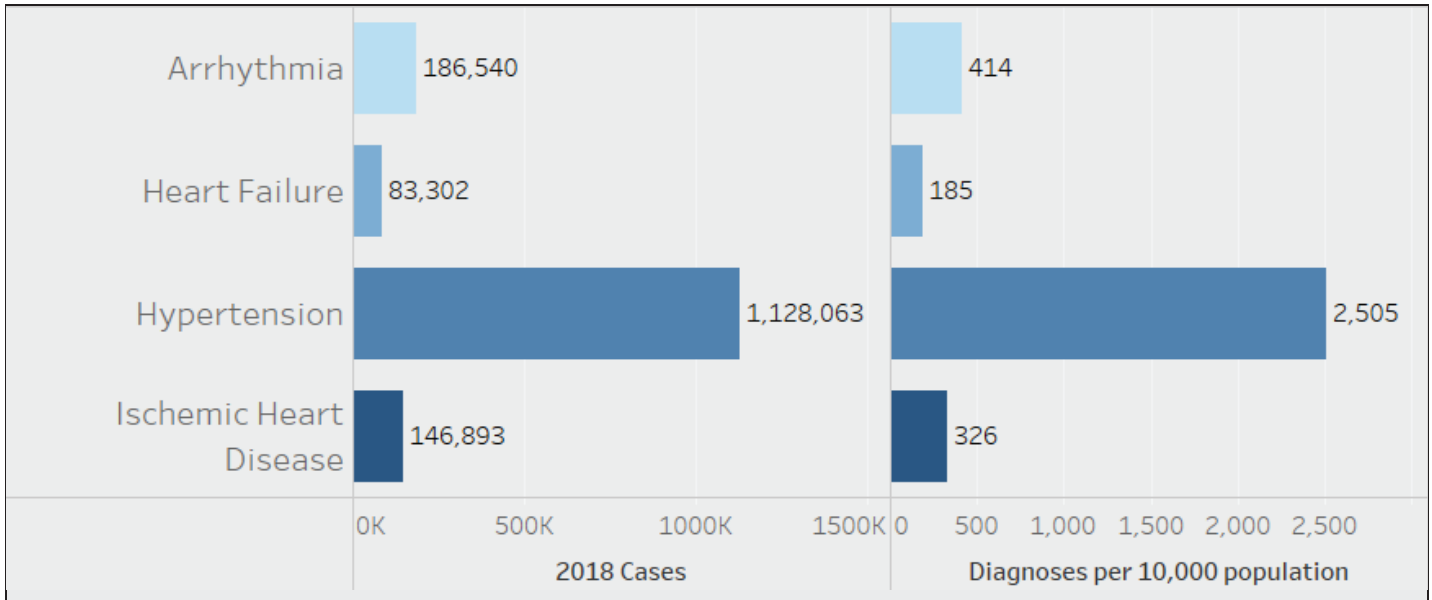
Where the community indicators showed greater need when compared to the state of Texas comparative benchmark, the difference between the community values and the state benchmark was calculated (need differential). These indicators are in **Appendix D.** Those highest ranked indicators with need differentials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

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.

Watson Health Heart Disease Estimates identified hypertension as the most prevalent heart disease diagnosis; there were over 1,128,000 estimated cases in the community overall. The ZIP 75070-McKinney had the most estimated cases of Arrhythmia, Hypertension, and Ischemic Heart Disease, while ZIP 75052-Grand Prairie had the most estimated cases of Heart Failure. ZIP 75075-Plano had the highest estimated prevalence rates for Arrhythmia (705 cases per 10,000 population), Hypertension (3,332 cases per 10,000 population), and Ischemic Heart Disease (654 cases per 10,000 population). ZIP 75225-Dallas was the highest for Heart Failure (341 cases per 10,000 population).

2018 Estimated Heart Disease Cases



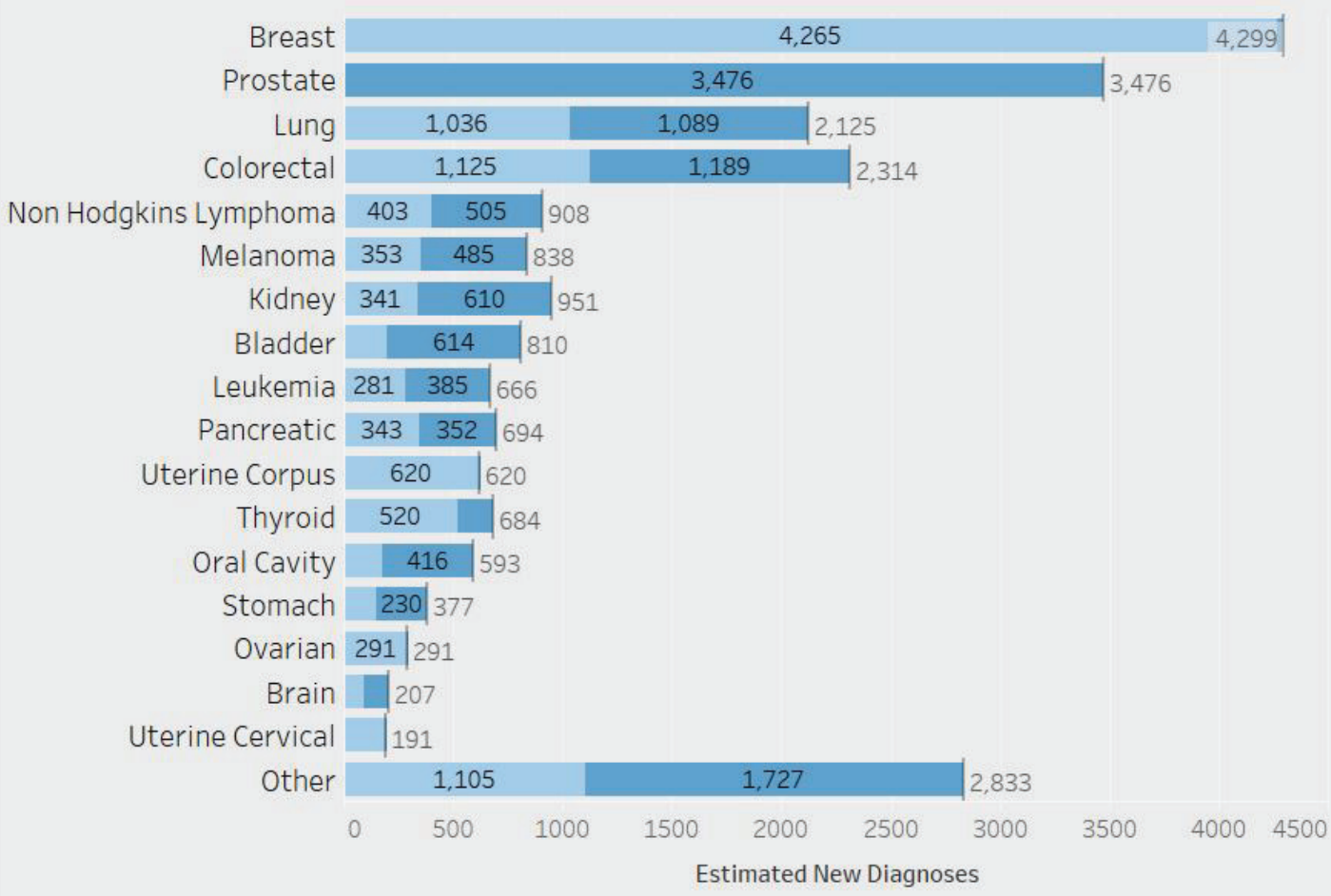
Bar chart shows total number and prevalence rate of 2018 Estimated Heart Disease cases for each of four types: arrhythmia, heart failure, hypertension, and ischemic heart disease.

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, and kidney (based on both population changes and disease rates). The cancers estimated to have the greatest number of new 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	810	985	21.5%
Brain	207	232	12.3%
Breast	4,299	5,023	16.8%
Colorectal	2,314	2,477	7.0%
Kidney	951	1,140	19.9%
Leukemia	666	784	17.8%
Lung	2,125	2,509	18.1%
Melanoma	838	987	17.8%
Non Hodgkins Lymphoma	908	1,077	18.7%
Oral Cavity	593	704	18.8%
Ovarian	291	334	14.7%
Pancreatic	694	856	23.3%
Prostate	3,476	3,883	11.7%
Stomach	377	445	18.1%
Thyroid	684	812	18.7%
Uterine Cervical	191	205	7.1%
Uterine Corpus	620	741	19.4%
All Other	2,833	3,379	19.3%
Grand Total	22,875	26,573	16.2%

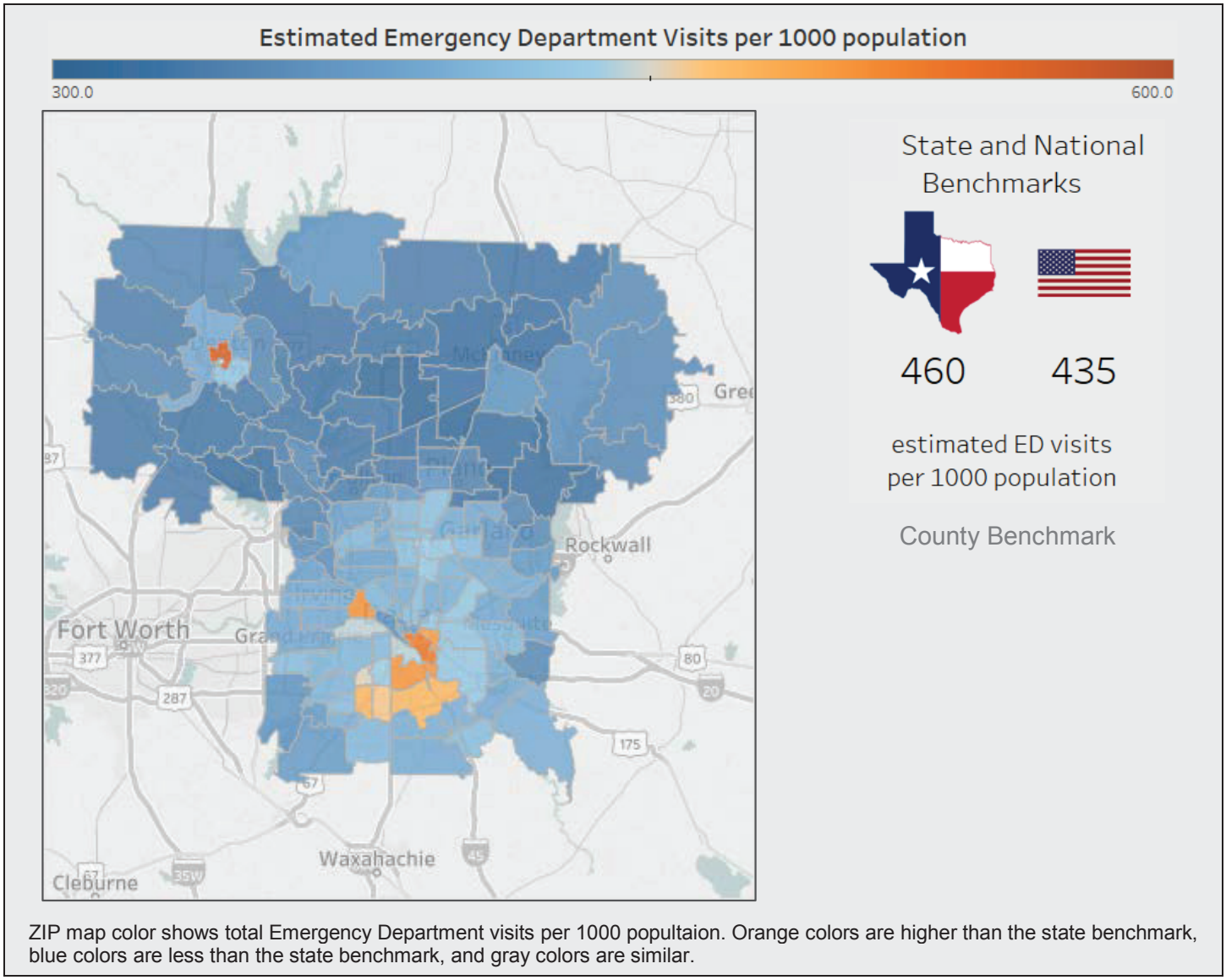
Source: IBM Watson Health, 2018

Based on population characteristics and regional utilization rates, Watson Health projected all emergency department (ED) visits in this community to increase by 8.3% over the next 5 years. The highest estimated ED use rate was in the ZIP code of 76201-Denton with 562.4 ED visits per 1,000 residents compared to the Texas state benchmark of 460 visits and the U.S. benchmark of 435 visits per 1,000.

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

Non-emergent outpatient ED visits could be an indication of systematic issues within the community regarding access to primary care, managing chronic conditions, or other access to care issues such as ability to pay. Watson Health estimated non-emergent ED visits to increase by an average of 4.0% over the next five years in this community.

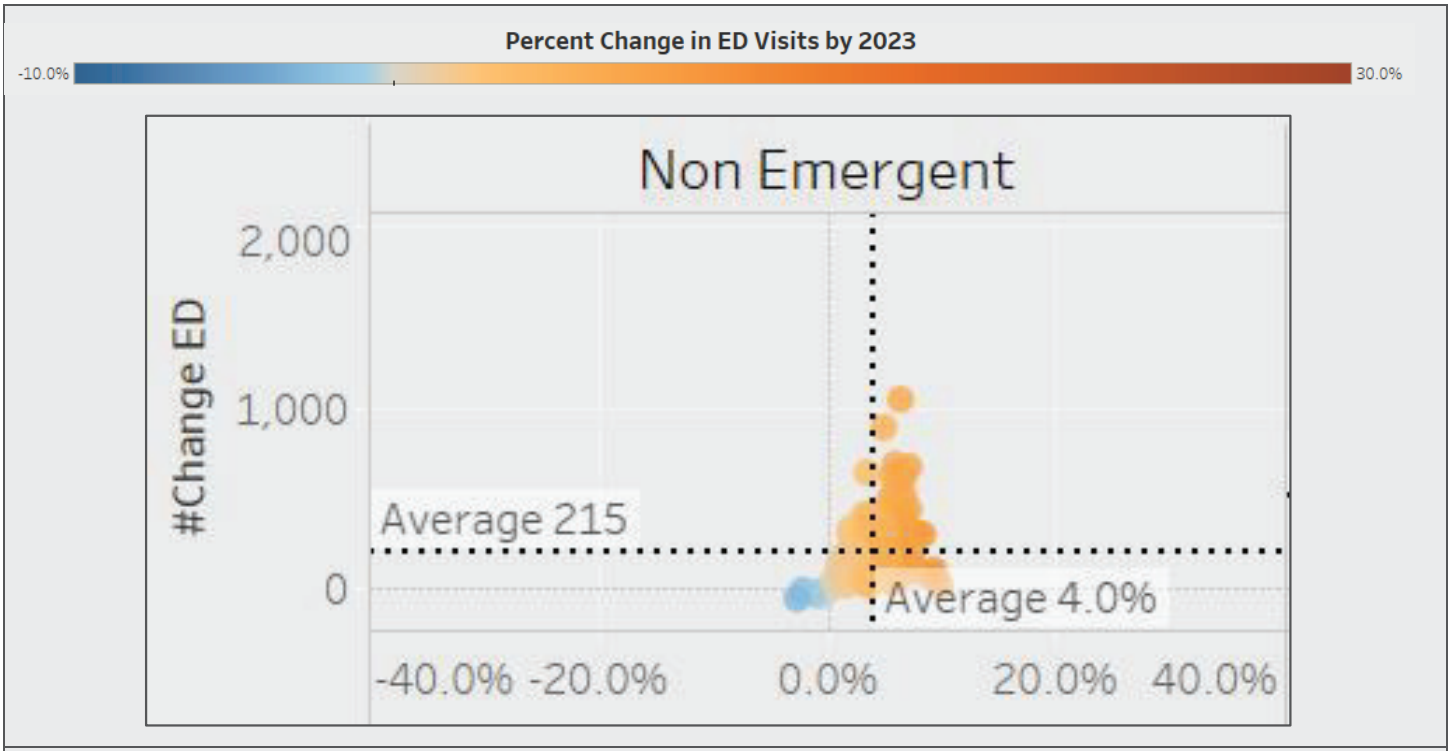
Estimated 2018 Emergency Department Visit Rate



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 Methodist ED visit rates. These are statistical estimates of ED visits for the population.

Projected 5 Year Change in Non-Emergent Emergency Department Visits by ZIP Code



This chart show sthe percent change in Emergency Department visits by 2023 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 urgent care treatment center, or a clinical or a physician's private office.

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

Source: IBM Watson Health, 2018

Focus Groups & Interviews

Methodist worked jointly with Baylor Scott & White Health, Parkland Health & Hospital System, and Texas Health Resources 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 health community there were four (4) focus group sessions with a total of 45 participants and ten (10) interviews were conducted July 2018 through March 2019.

This health community contained many disparate populations and included urban areas with high poverty levels, wealthy suburbs, housing shortages, and agricultural areas. Dallas County contained growth areas as well as concentrated poverty and segregation, Denton was a growing region recently ranked the healthiest county in Texas but fragmented, and Collin County was a fast-growing, increasingly diverse area with a high cost of living.

Public transportation was extremely limited in most of the health community, and compounded challenges to residents without a car. The focus groups described community poverty, generational habits, and limited healthy eating habits. The food pantries were working to alleviate hunger and to provide healthier and fresh food options, but language and culture were barriers to developing trust and increased access. There were food deserts in all three counties, and some residents used local convenience stores and inexpensive fast food frequently, both poor nutrition options. Participants who worked with the community said that hunger metrics were getting worse and many parts of the area lacked access to healthy food options.

One of the primary barriers to good health in Dallas County and other parts of this health community was the lack of living wage jobs to pay for insurance, health services, and healthy food. Denton County lacked affordable housing for its vulnerable populations, especially low-income families, seniors on a fixed income, and people with disabilities. This has led to a growing homeless population living in crisis mode. Many residents worked but didn't have health insurance, part of the "working poor" population. Even if residents did have insurance coverage, many were hourly workers and could not afford taking time off to manage health needs.

Participants identified service gaps in all clinical areas; primary, maternal, vision, dental, specialty, and behavioral health care were the most acute. The needs for more mental health services were frequently mentioned as a high need area, especially for low income residents; there was limited coordination of available services, the topic was highly stigmatized, very few services were available, and it affected all age groups. Interview participants shared that drug issues disproportionately affected the younger people in the community, and frequently linked to mental health needs.

Focus groups shared that the diversity in the community also presented barriers to good health. 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 non-emergent medical services.

Prioritized Significant Health Needs

The Health Needs Matrix identified through the community health needs assessment (see Methodology for Defining Community Need section) shows the convergence of needs identified in the qualitative data (interview and focus group feedback) and quantitative data (health indicators). The significant health needs for this community were identified, reviewed, and prioritized by Methodist leadership (see Approach to Identify and Prioritize Significant Health Needs section) and the resulting prioritized health needs for this community were:

Significant Community Health Needs Identified

Priority	Needs Identified	Category of Need	Public Health Indicator
1	Food Insecurity	Environment	Food Insecurity (Hunger)
2	Alcohol Abuse	Health Behaviors - Substance Abuse	Adults Engaging in Binge Drinking During the Past 30 Days
2	Alcohol Abuse	Health Behaviors - Substance Abuse	Motor Vehicle Driving Deaths with Alcohol Involvement
2	Drug Overdose Deaths	Health Behaviors - Substance Abuse	Drug Poisoning Death Rate
3	Diabetes	Chronic Conditions	Diabetes Short-term Complications Admission: Pediatric (Risk Adjusted)
4	Housing	Environment	Severe Housing Problems
4	Housing	Environment	Renter-Occupied Housing
5	Drug Overdose Deaths - Opioids	Health Behaviors - Substance Abuse	Accidental Poisoning Deaths where Opioids were Involved
6	Uninsured Population	Access to Care	Percent of Population under Age 65 without Health Insurance
6	Uninsured Population	Access to Care	Uninsured Children
7	Poverty	Social Determinants of Health	Individuals Living Below the Poverty Level
7	Poverty	Social Determinants of Health	Children in Poverty
7	Poverty	Social Determinants of Health	Children Eligible for Free Lunch Enrolled in Public Schools
8	Air Quality	Environment	Air Pollution - Particulate Matter Daily Density
9	Transportation	Access to Care	No Vehicle Available

Priority	Needs Identified	Category of Need	Public Health Indicator
9	Cardiovascular Disease	Chronic Conditions	Atrial Fibrillation in Medicare Population
9	Cardiovascular Disease	Chronic Conditions	Hyperlipidemia in Medicare Population
10	Cancer	Cancer	Cancer Incidence - Female Breast
10	Cancer	Cancer	Cancer Incidence - Prostate
10	Language Barriers	Social Determinants of Health	Non-English Speaking Households
11	Mental Health	Mental Health	Depression in Medicare Population
11	Mental Health	Mental Health	Schizophrenia and Other Psychotic Disorders in Medicare Population
12	Perforated Appendix Admission	Preventable Hospitalizations	Perforated Appendix Admission: Pediatric (Risk-Adjusted Rate for Appendicitis)
12	Perforated Appendix Admission	Preventable Hospitalizations	Perforated Appendix Admission: Adult (Risk-Adjusted Rate per 100 Admissions for Appendicitis)
13	Primary Care	Access to Care	Ratio of Population to one Non-Physician Primary Care Provider
14	Social Isolation	Social Determinants of Health	Social Associations/Memberships
15	Infant and Child Mortality	Injury and Death - Children	Infant Mortality Rate
15	Infant and Child Mortality	Injury and Death - Children	Child Mortality Rate

Source: IBM Watson Health, 2019

Health Needs to be Addressed by Methodist

Using the approach outlined in the methodology section of this report (see *Selecting the Health Needs to be Addressed by Methodist* section), participants from Methodist Hospital for Surgery collectively rated, ranked, and selected the following significant needs to be addressed by implementation strategies:

1. Poverty
2. Food Insecurity

Description of Significant Health Needs

The CHNA process identified significant community health needs that can be categorized as issues related to poverty and food access. Regionalized health needs affect all age levels to some degree; however, it is often the most vulnerable populations that are negatively affected. Community health gaps help to define the resources and access to care within the county or region. Health and social concerns were validated through key informant interviews, focus groups and county data. The health needs selected by Methodist to be addressed are briefly described below with public health indicator and benchmark information.

Food Insecurity

Food insecurity is a measurement of the prevalence of hunger in the community; it reflects the percentage of the population who did not have access to a reliable source of food. The CHNA identified concerns around food access and nutrition. Lacking consistent access to food is related to negative health outcomes such as weight-gain and premature mortality. Individuals and families with an inability to provide and eat balanced meals create additional barriers to healthy eating.[2]

It is equally important to eat a balanced diet that includes the consumption of fruits and vegetables as well as to have adequate access to a consistent supply of food. Dallas County showed a need related to food insecurity. Within Dallas County 18.2% of the population lacked adequate access to food during the past year, indicating a potentially larger vulnerable population when comparted to the overall Texas state benchmark of 15.7%. The numbers were similar for Denton at 15.9% and Collin at 16%. It is notable that the overall Texas proportion of food insecure population was also greater than the U.S. benchmark of 13%.[3]

Poverty

The social and physical environments of those living below the poverty level affects a spectrum of factors such as housing, transportation and health outcomes. Poverty is both a cause and a consequence of poor health. Poverty increases the chances of poor health while poor health, in turn, traps communities in poverty. Limited income and poverty often require individuals to make difficult choices on a routine basis; such as choosing to feed one's family over personal health needs. Marginalized groups and vulnerable individuals are often the most affected, deprived of the information, money or access to health services that would help them prevent and treat disease.[4] Moving beyond the limitations of poverty is challenging on nearly every level.

Within the community, 18.6% of Dallas County was living below the poverty level, 11% higher than the Texas state benchmark.[5] The numbers were more dire for children;

[2] Gundersen C, Satoh A, Dewey A, Kato M, Engelhard E. Map the Meal Gap 2015: Food Insecurity and Child Food Insecurity Estimates at the County Level. Feeding America, 2015
[3] Map the Meal Gap, Feeding America; County Health Rankings & Roadmaps, 2018
[4] Health Poverty Action, **Key Facts Poverty and Poor Health**, 2018
[5] American Community Survey 5-Year Estimates, Individuals below poverty level, 2012-2016

almost 25% of children in Dallas lived below the poverty level, indicating this community had a significant vulnerable population with potentially greater health and social needs.

Summary

Methodist 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, Methodist was able to identify and prioritize community health needs for their healthcare system. With the goal of improving the health of the community, implementation plans with specific tactics and time frames will be developed for the health needs Methodist chose 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

Appendix A: Key Health Indicator Sources

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)

Appendix A: Key Health Indicator Sources

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

Appendix A: Key Health Indicator Sources

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 identified via community input:

Resource	County
Assistance Center of Collin County	Collin
Collin County Adult Clinic	Collin
Collin County Alliance for Children	Collin
Collin County Social Services Association	Collin
Community Dental Care	Collin
Community Lifeline Center	Collin
Family Guidance	Collin
Family Health Center	Collin
Frisco Family Services	Collin
Geriatric Wellness Center	Collin
Grace to Change	Collin
Holy Family Day School	Collin
Hope Clinic of McKinney	Collin
LifePath Systems	Collin
Plano Adult Clinic	Collin
Plano Children's Medical Clinic	Collin
Plano Indigent Care Clinic	Collin
Project Access	Collin
Veterans Assistance Center	Collin
Wellness Center for Older Adults	Collin
Churches	Dallas
City of Dallas	Dallas
City Square	Dallas
Community Health Centers	Dallas
Dallas Concilio	Dallas
Dallas Housing Authority	Dallas
Dallas Life Foundation	Dallas
DART	Dallas

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

Resource	County
DCHHS	Dallas
Food Pantries	Dallas
FQHCs or charity clinics(Agape, etc.)	Dallas
Genesis Women's Shelter	Dallas
Habitat for Humanity	Dallas
Hospital and Hospital Affiliated Clinics	Dallas
local health clinics	Dallas
North Texas Food Bank	Dallas
Parkland	Dallas
Parkland Irving Health Center	Dallas
Sharing Life Outreach	Dallas
St. Vincent de Paul	Dallas
The Bridge Homeless Shelter	Dallas
WIC Clinics	Dallas
Denton County Friends of the Family	Denton
Denton County Public Health	Denton
First Refuge Ministries	Denton
Giving HOPE	Denton
Metro Relief-DFW	Denton
Ministerial Alliance	Denton
Our Daily Bread	Denton
Refuge for Women North Texas	Denton
Solutions of North Texas	Denton
Texas Women's University	Denton
United Way	Denton
University of North Texas	Denton
Visions Ministry	Denton

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

Health Professional Shortage Areas (HPSA)[6]

County Name	HPSA ID	HPSA Name	HPSA Discipline Class	Designation Type
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
Denton	7487902282	Low Income-Denton County	Mental Health	Low Income Population HPSA
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	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	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	14899948P6	Dallas County Hospital District Homeless Programs	Primary Care	Federally Qualified Health Center
Dallas	64899948C2	Dallas County Hospital District Homeless Programs	Dental Health	Federally Qualified Health Center

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

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

Dallas	1482645075	Southeast Dallas	Primary Care	Geographic HPSA
Dallas	14899948OZ	Mission East Dallas (Medical) and Metroplex Project	Primary Care	Federally Qualified Health Center
Dallas	64899948MO	Mission East Dallas (Medical) and Metroplex Project	Dental Health	Federally Qualified Health Center
Dallas	74899948MN	Mission East Dallas (Medical) and Metroplex Project	Mental Health	Federally Qualified Health Center
Dallas	14899948OY	Urban Inter-Tribal Center of Texas	Primary Care	Native American/Tribal Facility/Population
Dallas	64899948MP	Urban Inter-Tribal Center of Texas	Dental Health	Native American/Tribal Facility/Population
Dallas	74899948MP	Urban Inter-Tribal Center of Texas	Mental Health	Native American/Tribal Facility/Population
Dallas	7481857339	South Irving Service Area	Mental Health	Geographic HPSA
Dallas	14899948Q0	Healing Hands Ministries, Inc.	Primary Care	Federally Qualified Health Center
Dallas	64899948NX	Healing Hands Ministries, Inc.	Dental Health	Federally Qualified Health Center
Dallas	74899948O2	Healing Hands Ministries, Inc.	Mental Health	Federally Qualified Health Center
Dallas	1487790622	Ofac-Parkland Center for Internal Medicine (Pcim)	Primary Care	Other Facility
Dallas	1488147611	Simpson-Stuart	Primary Care	Geographic HPSA
Dallas	1487732421	Trinity Area	Primary Care	Geographic HPSA

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

County Name	HPSA ID	HPSA Name	HPSA Discipline Class	Designation Type
Dallas	6488138803	Lisbon Service Area	Dental Health	Geographic HPSA
Dallas	6486350827	West Dallas/Cliff Hall	Dental Health	High Needs Geographic HPSA
Dallas	7482132665	West Dallas	Mental Health	High Needs Geographic HPSA
Collin	7485109304	Low Income-Collin County	Mental Health	Low Income Population HPSA

Medically Underserved Areas and Populations (MUA/P)[7]

County Name	MUA/P Source Identification Number	Service Area Name	Designation Type	Rural Status
Collin	3471	Collin Service Area	Medically Underserved Area	Non-Rural
Dallas	3453	Pleasant Grove Service Area	Medically Underserved Area	Non-Rural
Dallas	3468	Dallas Service Area	Medically Underserved Area	Non-Rural
Dallas	3469	Dallas Service Area	Medically Underserved Area	Non-Rural
Dallas	3490	Dallas Service Area	Medically Underserved Area	Non-Rural
Dallas	3491	Dallas Service Area	Medically Underserved Area	Non-Rural
Dallas	3526	Dallas Service Area	Medically Underserved Area	Non-Rural
Dallas	5210	Brooks Manor Service Area	Medically Underserved Area	Non-Rural
Dallas	5211	Cedar Glenn Service Area	Medically Underserved Area	Non-Rural

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

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

County Name	MUA/P Source Identification Number	Service Area Name	Designation Type	Rural Status
Dallas	5212	Cliff Manor Service Area	Medically Underserved Area	Non-Rural
Dallas	5213	Forest Glenn Service Area	Medically Underserved Area	Non-Rural
Dallas	5214	Cedar Glenn South Service Area	Medically Underserved Area	Non-Rural
Dallas	7294	Oak Cliff Service Area	Medically Underserved Area	Non-Rural
Dallas	7392	Grand Prairie	Medically Underserved Area	Non-Rural
Dallas	7631	Cockrell Hill Service Area	Medically Underserved Area	Non-Rural
Dallas	7753	Mission East Dallas Area	Medically Underserved Population	Non-Rural
Dallas	7921	Balch Springs	Medically Underserved Area	Non-Rural
Dallas	7942	Southwest Dallas	Medically Underserved Area	Non-Rural
Dallas	7959	Lillycare Dallas	Medically Underserved Area	Non-Rural
Dallas	7973	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

Public Health Indicator	Category	Indicator Definition
Chronic Lower Respiratory Disease (CLRD) Mortality Rate	Chronic Condition - Chronic Lower Respiratory Disease	2013 Chronic Lower Respiratory Disease (CLRD) Age-Adjusted Death Rate per 100,000 (Age-Adjusted using the 2000 U.S. Standard Population)
Uncontrolled Diabetes Admission: Adult (Risk-Adjusted-Rate)	Chronic Condition - Diabetes	2016 Number Observed / Adult Population Age 18 and Older
Diabetes Short-term Complications Admission: Pediatric (Risk-Adjusted-Rate)	Chronic Condition - Diabetes	2016 Number Observed / Adult Population Age 18 and Older
Chronic Kidney Disease in Medicare Population	Chronic Condition - Kidney Disease	2007-2015 Prevalence of Chronic Condition Across all Medicare Beneficiaries
Adult Obesity (Percent)	Chronic Condition - Obesity	2014 Percentage of the Adult Population (Age 20 and Older) that Reports a Body Mass Index (BMI) Greater than or Equal to 30 kg/m2
Osteoporosis in Medicare Population	Chronic Condition - Osteoporosis	2007-2015 Prevalence of Chronic Condition Across all Medicare Beneficiaries
Some College	Education	2012-2016 Percentage of Adults Ages 25-44 with Some Post-Secondary Education
High School Dropout	Education	2016 Percentage of Students from the Same Class who Drop out Before Completing their High School Education
High School Graduation	Education	2016 Percentage of Students from a Class of Beginning Ninth Graders who Graduate by their Anticipated Graduation Date, or Within Four Years of Beginning Ninth Grade
Air Pollution - Particulate Matter Daily Density	Environment	2012 Average Daily Density of Fine Particulate Matter in Micrograms per Cubic Meter (PM2.5)
Driving Alone to Work	Environment	2012-2016 Percentage of the Workforce that Drives Alone to Work
Food Insecure	Environment - Food	2015 Percentage of Population Who Lacked Adequate Access to Food During the Past Year
Severe Housing Problems	Environment - Housing	2010-2014 Percentage of Households with at Least 1 of 4 Housing Problems: Overcrowding, High Housing Costs, or Lack of Kitchen or Plumbing Facilities
Renter-Occupied Housing	Environment - Housing	2017 Percentage of Households that are Renter-Occupied
Homicides	Environment - Violence	2010-2016 Number of Deaths Due to Homicide, Defined as ICD-10 Codes X85-Y09, per 100,000 Population
Violent Crime Offenses	Environment - Violence	2012-2014 Number of Reported Violent Crime Offenses per 100,000 Population
Death Rate due to Firearms	Environment - Violence	2012-2016 Number of Deaths due to Firearms per 100,000 Population

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

Public Health Indicator	Category	Indicator Definition
Physical Inactivity	Health Behaviors - Exercise	2014 Percentage of Adults Ages 20 and Over Reporting No Leisure-Time Physical Activity in the Past Month
Motor Vehicle Driving Deaths with Alcohol Involvement	Health Behaviors - Substance Abuse	2012-2016 Percentage of Motor Vehicle Crash Deaths that had Alcohol Involvement
Drug Poisoning Deaths Rate	Health Behaviors - Substance Abuse	2014-2016 Number of Drug Poisoning Deaths (Drug Overdose Deaths) per 100,000 Population
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
Adult Smoking	Health Behaviors - Substance Abuse	2016 Percentage of the Adult Population in a County Who Both Report that They Currently Smoke Every Day or Most Days and Have Smoked at Least 100 Cigarettes in Their Lifetime
Accidental Poisoning Deaths where Opioids were Involved	Health Behaviors - Substance Abuse	2010-2017 Accidental Poisoning Deaths where Opioids were Involved (Underlying Causes of Death: X40-X44, and One of the Following ICD-10 Codes Identifying Opioids: T40.0, T40.1, T40.2, T40.3, T40.4, T40.6)
Teen Birth Rate per 1,000 Female Population, Ages 15-19	Health Behaviors - Teen Pregnancy	2010-2016 Number of Births to Females Ages 15-19 per 1,000 Females in a County
Long Commute Alone	Health Status	2012-2016 Among Workers Who Commute in Their Car Alone, the Percentage that Commute More than 30 Minutes
Premature Death (Potential Years Lost)	Health Status	2014-2016 Premature Death; Years of Potential Life Lost Before Age 75 per 100,000 Population (Age-Adjusted)
Adults Reporting Fair or Poor Health	Health Status	2016 Percentage of Adults Reporting Fair or Poor Health (Age-Adjusted)
Frequent Physical Distress	Health Status	2016 Percentage of Adults who Reported ≥14 Days of Poor Physical Health in the Past 30 Days
HIV Prevalence	Infectious Disease - HIV	2015 Number of Persons Aged 13 Years and Older Living with a Diagnosis of Human Immunodeficiency Virus (HIV) Infection per 100,000 Population
Sexually Transmitted Infection Incidence	Infectious Disease - Sexually Transmitted	2015 Number of Newly Diagnosed Chlamydia Cases per 100,000 Population
Infant Mortality Rate	Injury & Death - Children	2010-2016 Number of All Infant Deaths (Within 1 year), per 1,000 Live Births
Child Mortality Rate	Injury & Death - Children	2013-2016 Number of Deaths Among Children under Age 18 per 100,000
Low Birth Weight Percent	Maternal and Child Health	2010-2016 Percentage of Live Births with Low Birthweight; < 2500 Grams
Very Low Birth Weight (VLBW)	Maternal and Child	2016 Live Births Weighing Less than 1,500 Grams (3.4 Pounds)

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

Public Health Indicator	Category	Indicator Definition
	Health	
Low Birth Weight Rate	Maternal and Child Health	2016 Number Observed / Adult Population Age 18 and Older
First Trimester Entry into Prenatal Care	Maternal and Child Health	2014 Percent of Births with Onset of Prenatal Care within the First Trimester
Intentional Self-Harm; Suicide	Mental Health	2015 Intentional Self-Harm (Suicide) (X60-X84, Y87.0)
Average Number of Mentally Unhealthy Days Reported in Past 30 days (Age-Adjusted)	Mental Health	2016 Average Number of Mentally Unhealthy Days Reported in Past 30 Days (Age-Adjusted)
Frequent Mental Distress	Mental Health	2016 Percentage of Adults who Reported ≥14 Days of Poor Mental Health in the Past 30 Days
Ratio of Population to One Mental Health Provider	Mental Health	2017 Ratio of Population to Mental Health Providers
Depression in Medicare Population	Mental Health	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
Alzheimer's Disease/Dementia 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
Perforated Appendix Admission: Pediatric (Risk-Adjusted-Rate for Appendicitis)	Preventable Hospitalizations	2016 Number Observed / Adult Population Age 18 and Older
Asthma Admission: Pediatric (Risk-Adjusted-Rate)	Preventable Hospitalizations	2016 Number Observed / Adult Population Age 18 and Older
Children in Single-Parent Households	SDH	2012-2016 Percentage of Children that Live in a Household Headed by Single Parent
Individuals Living Below Poverty Level	SDH - Income	2012-2016 American Community Survey 5-Year Estimates, Individuals below Poverty Level
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
Household Income, Median	SDH - Income	2016 Income where Half of Households in a County Earn More and Half of Households Earn Less

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

Public Health Indicator	Category	Indicator Definition
Children in Poverty	SDH - Income	2016 Percentage of Children Under Age 18 in Poverty
Non-English Speaking Households	SDH - Language	2012 Percent of Households with Language other than English
Disconnected Youth	SDH - Social Isolation	2010-2014 Population Between the Ages of 16 and 24 who are Neither Working nor in School
Social/Membership Associations	SDH - Social Isolation	2015 Number of Membership Associations per 10,000 Population

Appendix E: Evaluation of Prior Implementation Strategy Impact