

Community Health Needs Assessment



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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:

- Servant Heart compassionately putting others first
- Hospitality offering a welcoming and caring environment
- Innovation courageous creativity and commitment to quality
- Noble unwavering honesty and integrity
- Enthusiasm celebration of individual and team accomplishment
- Skillful 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 McKinney Hospital

For the 2019 assessment, the community includes the geographic area where at least 60% of the hospital facility's admitted patients live. Methodist McKinney Hospital defined their community as the geographical area of Collin County. 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 McKinney Hospital are as follows:

- Access to Care: Primary Care and Cost
- Coordination of Services/Care

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 McKinney Hospital 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 McKinney Hospital.

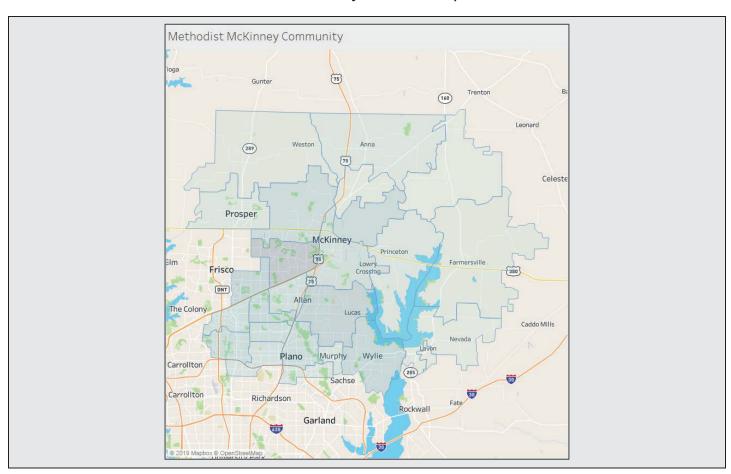
Consultant Qualifications & Collaboration

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 McKinney Hospital defined the facility's community using the county in which at least 60% of patients reside. Using this definition, Methodist McKinney Hospital has defined its community to be the geographical area of Collin County 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**.

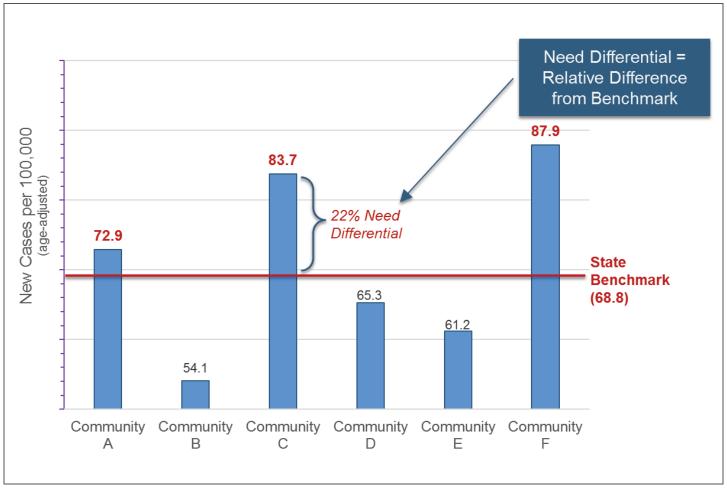
A benchmark analysis, conducted for each indicator collected for the community served, determined which public health indicators demonstrated a community health need from a quantitative perspective. Benchmark health indicators collected included (when available): overall U.S. values; state of Texas values; 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, one (1) focus group with a total of 11 participants, as well as five (5) key informant interviews, were conducted to take into account the input of persons representing the broad interests of the community served. The focus group and interviews solicited feedback from leaders and representatives who serve the community and have insight into community needs.

The focus group 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 <u>at least</u> 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 |
|------------------------------------|---------------|------------------------|------------|-----------------------|----------------------|-------------------------------------|--------------------------------------|
| City of Plano | X | Х | Х | Х | X | | |
| Community Lifeline Center | | Х | Х | Х | Х | | |
| Frisco Family Services | | Х | Х | | | | |
| Hope Clinic of McKinney | | Х | Х | Х | Х | | |
| LifePath Systems | Х | | Х | Х | | | Х |
| McKinney City Council | | | | | Х | | |
| Plano Fire-Rescue | Х | Х | Х | Х | Х | | Х |
| Project Access-Collin County | | | Х | | | | |
| Texas Muslim Women's Foundation | | | | | Х | | |
| The Samaritan Inn | | | Х | | | | |
| Veterans Center of North Texas | | | Х | | | | Х |
| Cancer Care Services | Х | Х | Х | Х | Х | | Х |
| Metrocare | Х | Х | Х | Х | Х | | Х |
| PCI ProComp Solutions, LLC | | Х | Х | | | | |
| University of Texas – Dallas | | Х | Х | | | | |
| Assistance Center of Collin County | | Х | Х | | Х | | Х |

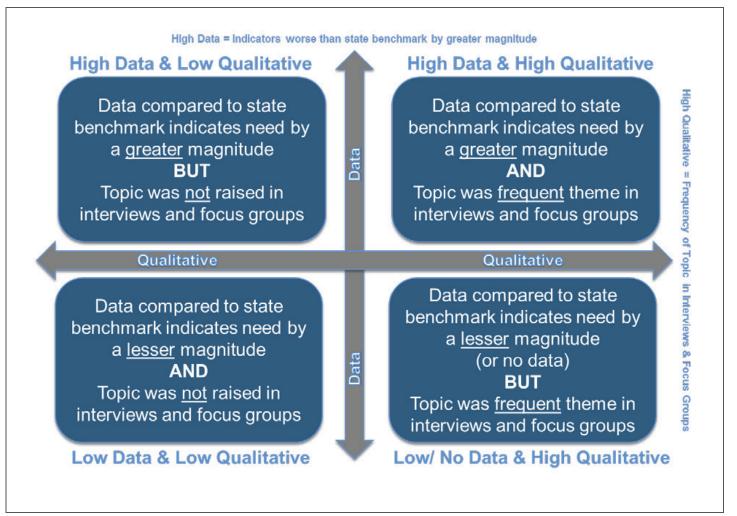
In addition to soliciting input from public health and various interests of the community, the hospital was also required to consider written input received on their most recently conducted CHNA and subsequent implementation strategies. The assessment is available to receive public comment or feedback 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 group, 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



Source: IBM Watson Health, 2019

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 McKinney Hospital 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. <u>Magnitude</u>: The need impacts a large number of people, actually or potentially.
- 2. <u>Severity</u>: 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. <u>Vulnerable Populations</u>: 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 McKinney Hospital collectively as a group rated each of the prioritized significant health needs on the following selection criteria:

- 1. <u>Expertise & Collaboration</u>: 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. <u>Feasibility</u>: 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**.

Methodist Health System Community Health Needs Assessment

Demographic and Socioeconomic Summary

According to population statistics, the population in this health community is expected to grow 9.9% 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 notably above both the state and the country. The community served had a much lower proportion of Medicaid beneficiaries than the state of Texas.

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

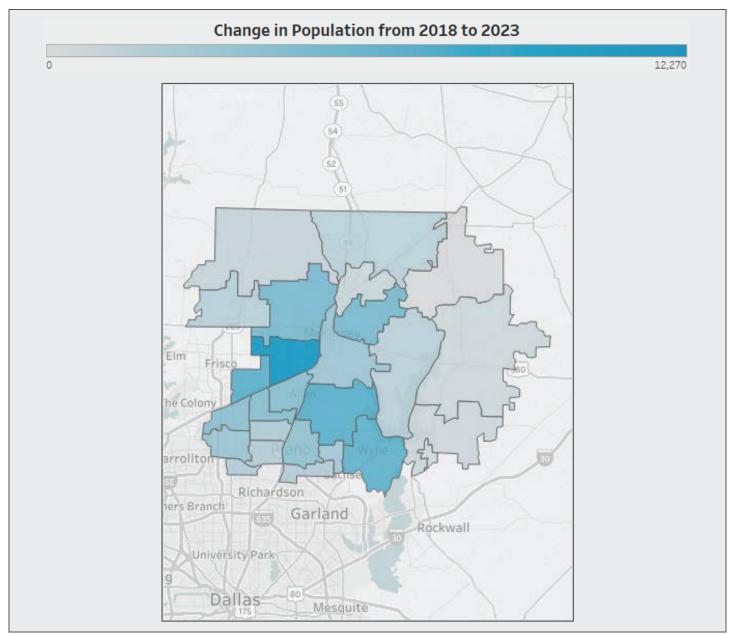
| | | Bench | marks | Community |
|-----------------------|-----------------|------------------|------------|-----------|
| Geogr | арпу | United States | Texas | Served |
| Total Current | Population | 326,533,070 | 28,531,631 | 915,938 |
| 5 Yr Projected Po | pulation Change | 3.5% | 7.1% | 9.9% |
| Mediar | n Age | 42.0 | 38.9 | 38.2 |
| Populatio | on 0-17 | 22.6% | 25.9% | 25.9% |
| Populati | on 65+ | 15.9% | 12.6% | 11.2% |
| Women A | ge 15-44 | 19.6% | 20.6% | 20.5% |
| Non-White F | opulation | 30.0% | 32.2% | 33.4% |
| Hispanic P | opulation | 18.2% | 39.4% | 15.3% |
| | Uninsured | 9.4% | 19.0% | 8.2% |
| | Medicaid | 19.0% | 13.4% | 5.5% |
| Insurance Coverage | Private Market | 9.6% | 9.9% | 10.7% |
| _ | Medicare | 16.1% | 12.5% | 9.2% |
| | Employer | 45.9% | 45.3% | 66.4% |
| Median H | ł Income | \$61,372 | \$60,397 | \$96,934 |
| Limited I | English | 26.2% | 39.9% | 30.5% |
| No High Scho | ool Diploma | 7.4% | 8.7% | 3.1% |
| Unemp | loyed | 6.8% | 5.9% | 4.1% |

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

The population of the community served is expected to grow 9.9% by 2023, an increase of more than 90,000 people. The 9.9% projected population growth is notably higher than the state's 5-year projected growth rate (7.1%) and even 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
- 75002 Allen 7,892 people
- 75035 Frisco 7,697 people
- 75098 Wylie 7,536 people

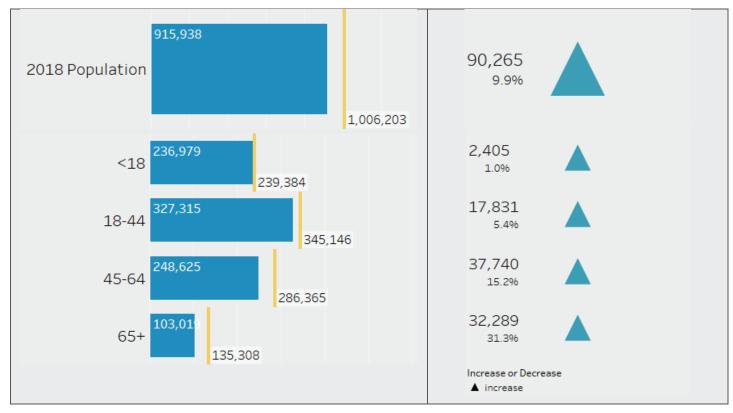
2018 - 2023 Total Population Projected Change by ZIP Code



Source: IBM Watson Health / Claritas, 2018

The community's population skewed younger with 35.7% of the population ages 18-44 and 25.9% under age 18. The largest cohort (18-44) is expected to grow by 17,831 people by 2023. The age 65 plus cohort was the smallest but is expected to experience the fastest growth (31.3%) over the next five years adding 32,289 seniors to the community. Growth in the senior population will likely contribute to increased utilization of services as the population continues to age.

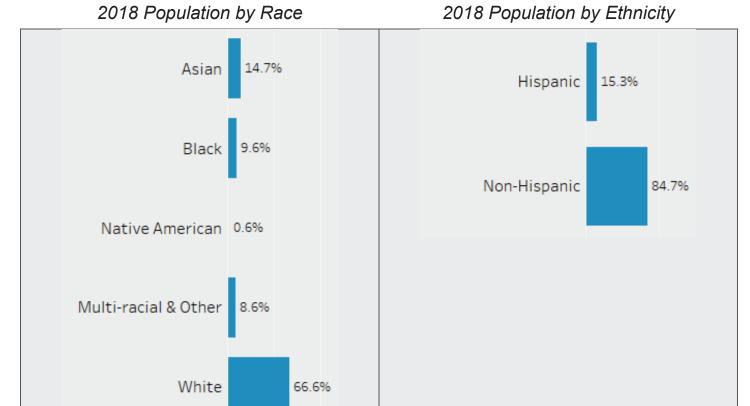
Population Distribution by Age
2018 Population by Age Cohort Change by 2023



Source: IBM Watson Health / Claritas, 2018

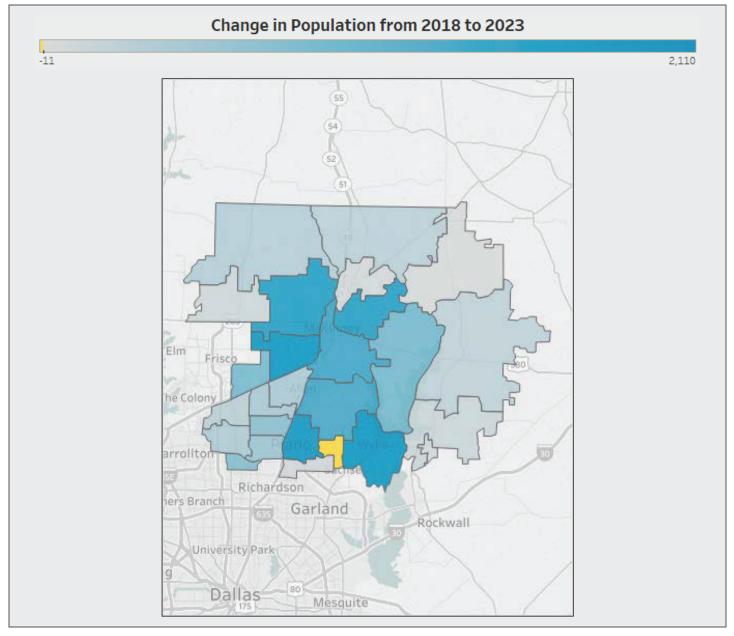
Population statistics are analyzed by race and by Hispanic ethnicity. The largest groups in the community were White Non-Hispanic (57.6%), Asian/Pacific Islander Non-Hispanic (14.6%), and Black Non-Hispanic (9.4%). The expected growth rate of the Hispanic population (all races) is over 18,500 people (13.2%) by 2023, while the non-Hispanic population (all races) is expected to grow by over 71,700 people (9.2%) by 2023.

Population Distribution by Race and Ethnicity



Source: IBM Watson Health / Claritas, 2018

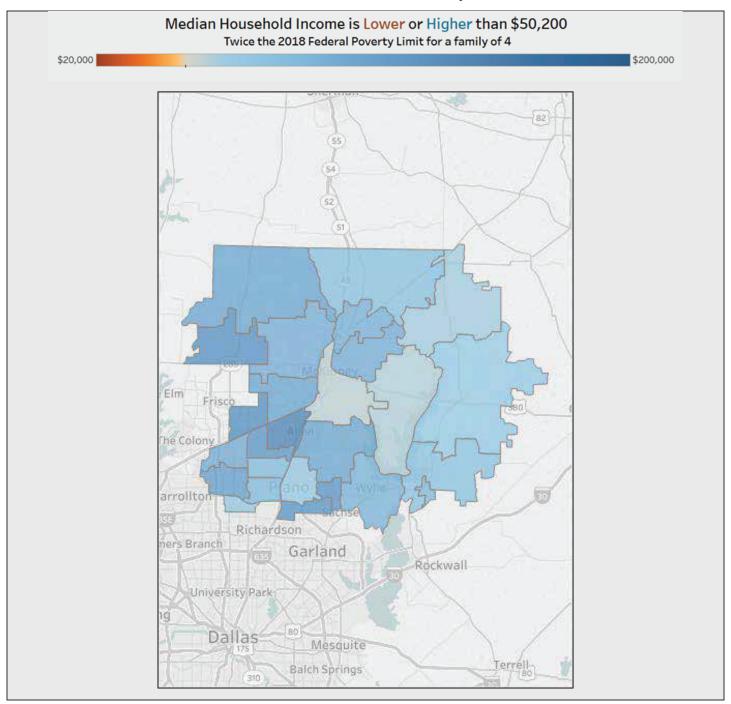
2018 - 2023 Hispanic Population Projected Change by ZIP Code



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 overall community served by McKinney was \$96,934 with median incomes ranging from \$56,509 for 75069-McKinney to \$139,225 for 75013-Allen. There were no ZIP Codes in the community with median household incomes less than \$50,200, twice the 2018 Federal Poverty Limit for a family of four.

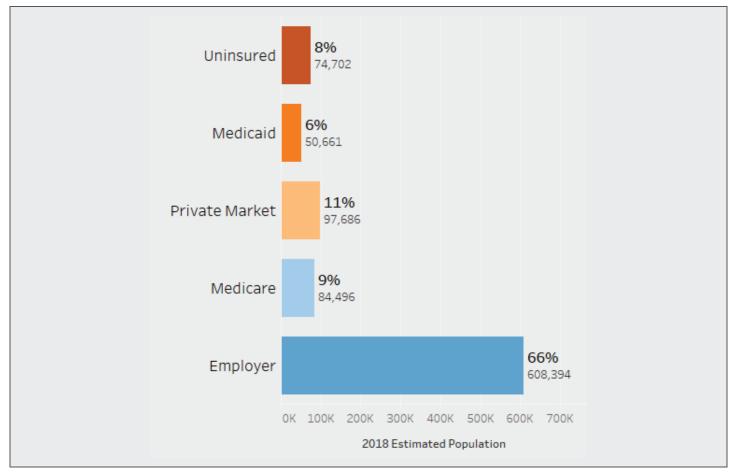
2018 Median Household Income by ZIP Code



Source: IBM Watson Health / Claritas, 2018

A majority of the population (66%) were insured through employer sponsored health plans while those on Medicaid (6%) represented the smallest share. The remainder of the population was divided among the private market (the purchasers of coverage directly or through the health insurance marketplace), Medicare, and the uninsured (8%).

2018 Estimated Distribution of Covered Lives by Insurance Category



Source: IBM Watson Health / Claritas, 2018

The community includes one (1) Health Professional Shortage Area and one (1) Medically Underserved Area as designated by the U.S. Department of Health and Human Services Health Resources Services Administration. Appendix C includes the details on each of these designations.

Health Professional Shortage Areas and Medically Underserved Areas and Populations

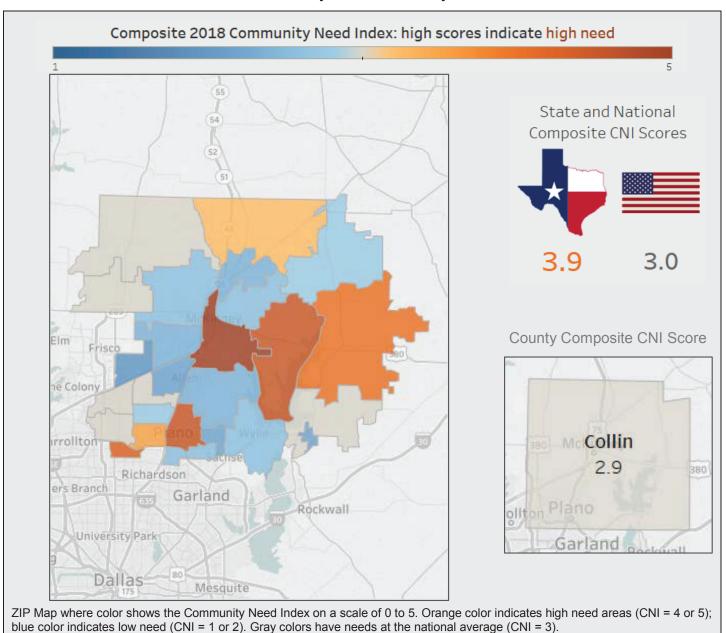
| | Health Prov | essional Sho (HPSA) | rtage Areas | | Medically Underserved Area/Population (MUA/P) |
|--------------------------------|------------------|------------------------|-----------------|----------------|---|
| 2. Methodist Mckinney Hospital | Dental Health | Mental Health | Primary Care | Grand Total | MUA/P |
| Collin | | 1 | | 1 | 1 |
| Total | 0 | 1 | 0 | 1 | 1 |

Source: 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 2.9, slightly lower than the CNI national average of 3.0, potentially indicating fewer health care needs in this community. In portions of the community (75069-McKinney, 75074-Plano and 75407-Princeton) the CNI score was greater than 4.0, pointing to potentially higher health needs among these pockets of the population.

2018 Community Need Index by ZIP Code



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). 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 almost 235,000 estimated cases in the community overall. The 75070 ZIP code of McKinney had the most estimated cases of each heart disease type. The 75075 ZIP code of Plano had the highest estimated prevalence rates for Arrhythmia (705 cases per 10,000 population), Heart Failure (247 cases per 10,000 population), Hypertension (3,332 cases per 10,000 population), and Ischemic Heart Disease (654 cases per 10,000 population).

Arrhythmia 39.929 436 Heart Failure 13,536 148 2,563 234,778 Hypertension Ischemic Heart Disease 34,251 250K 500 2.500 3.000 50K 100K 150K 200K 1 000 1 500 2 000 2018 Cases Diagnoses per 10,000 population

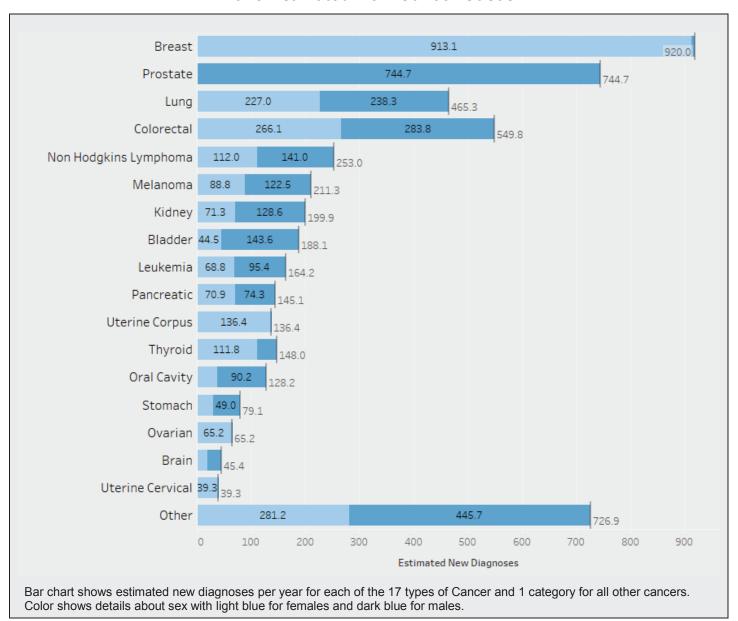
2018 Estimated Heart Disease Cases

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.

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, uterine corpus, and kidney respectively; based on both population changes and disease rates. The cancers estimated to have the greatest number of new cases in 2018 were breast, prostate, colorectal, and lung.

2018 Estimated New Cancer Cases



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 | 188 | 233 | 23.9% |
| Brain | 45 | 52 | 14.5% |
| Breast | 920 | 1,110 | 20.6% |
| Colorectal | 550 | 602 | 9.5% |
| Kidney | 200 | 246 | 23.0% |
| Leukemia | 164 | 197 | 20.0% |
| Lung | 465 | 563 | 21.0% |
| Melanoma | 211 | 254 | 20.2% |
| Non Hodgkins Lymphoma | 253 | 307 | 21.4% |
| Oral Cavity | 128 | 157 | 22.5% |
| Ovarian | 65 | 77 | 18.1% |
| Pancreatic | 145 | 184 | 27.0% |
| Prostate | 745 | 858 | 15.2% |
| Stomach | 79 | 96 | 21.6% |
| Thyroid | 148 | 181 | 22.3% |
| Uterine Cervical | 39 | 44 | 11.5% |
| Uterine Corpus | 136 | 168 | 23.2% |
| All Other | 727 | 890 | 22.4% |
| Grand Total | 5,210 | 6,220 | 19.4% |

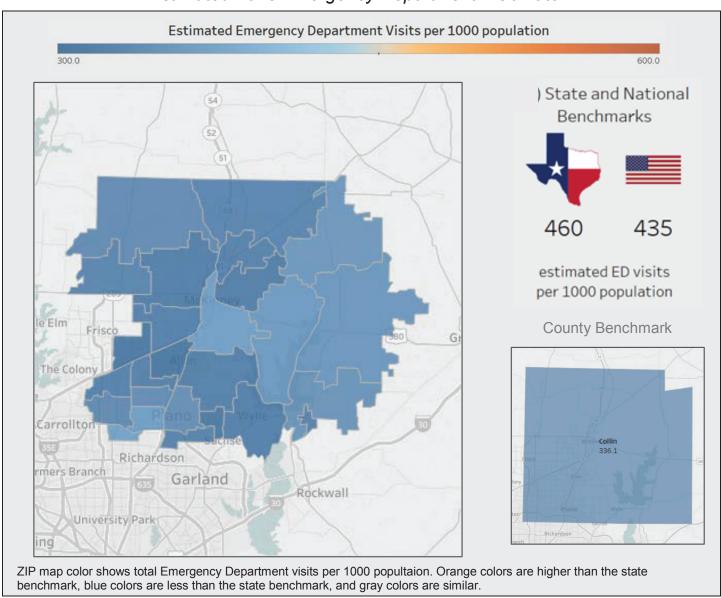
Source: IBM Watson Health, 2018

Based on population characteristics and regional utilization rates, Watson Health projected all emergency department (ED) visits in this community to increase by 10.7% over the next 5 years. The highest estimated ED use rates were in two ZIP codes: ZIP code 75252-Dallas with 378.9 and ZIP code 75075-Plano with 372.7 ED visits per 1,000 residents. Both ZIP codes had lower ED utilization when 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.

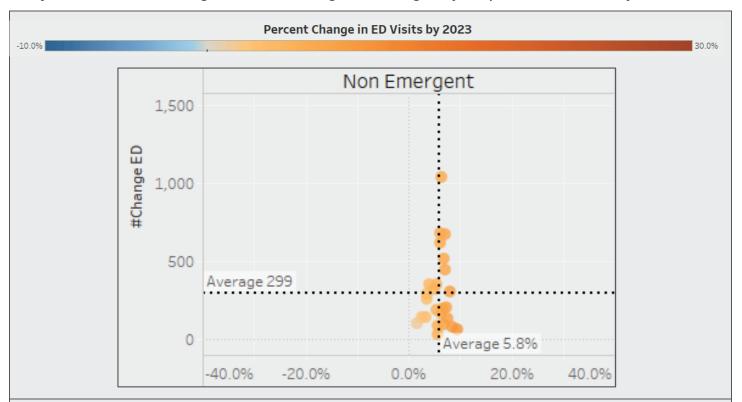
Non-emergent outpatient ED visits could be an indication of systematic issues within the community regarding access to primary care, managing chronic conditions, or other access to care issues such as ability to pay. Watson Health estimated non-emergent ED visits to increase by an average of 5.8% over the next five years in this community.

Estimated 2018 Emergency Department Visit Rate



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

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Focus Groups & Interviews

Methodist McKinney Hospital worked jointly with Texas Health Resources and Baylor Scott & White Health hospital facilities in collecting and sharing qualitative data (community input) on the health needs of this community.

In the focus group session 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 was one (1) focus group session with a total of 11 participants and five (5) interviews were conducted July 2018 through March 2019.

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

- Access to care issues: High cost of care and limited public transit
- Social determinants of health: language, culture and immigration status
- Collaboration/coordination between providers

Participants described Collin County as a partially rural, 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 attracted new residents, but the increased cost of housing and taxes were putting some longtime residents and fixed-income seniors at risk for homelessness. Lower income residents had limited access to health care due to insufficient public transportation, lack of insurance, and unwillingness to use free services. Participants discussed the top barriers to health care in the area, including political will for change, coordination and knowledge of resources, public transportation, services for low income residents, mental health resources, and affordable housing.

The area had limited health care services for the uninsured but an abundance of services for those with both insurance and a high income. According to the participants, the community lacked free and low-cost dental services for the uninsured. Even with insurance, low- and middle-income residents could not afford the high cost of care. The community had high rates of chronic disease and mental health issues, likely due to a lack of affordable primary and preventive care. Residents often used the Emergency Room for non-emergent care. While the county did boast a local community health clinic and fifteen charitable clinics that provided services for no or low cost, the people who could most benefit from these services could not reach them due to lack of transportation.

According to focus group members, the limited public transportation created transportation "deserts" in the community. The transit system lacked north to south routes and did not connect with other cities. The few bus routes that existed did not transport residents to health care facilities. The lack of public transit interfered with follow up care and was ineffectual in assisting residents to get to their places of employment.

The group thought some innovative solutions to these issues were possible given the high numbers of medical professionals in the area. Participants suggested tapping this local talent pool, as well as requiring local corporations to invest in the community. Suggestions included asking these companies for grant monies for needed services such as dental care, transportation services, and behavioral health resources.

According to the participants, 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. 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. Providers were also dealing with a lack of trust. The focus group noted that minorities living in the area had an overall mistrust of authority (police, fire, hospitals). The group thought that increased political will and accompanying outreach would make a big difference in bridging the gap. They also said that additional education for health care providers on addressing trust issues would help.

The group suggested agencies needed to collaborate and partner with each other more often. The community lacked a strong public health infrastructure, making coordination and networking that much more critical. Increased cooperation would help avoid duplication of services and assist in monitoring treatment of residents who required various community services such as the growing homeless population. Participants also recommended that community-based organizations partner with health care providers to better meet the needs of the county. The focus group suggested expanded community partnerships, including partnering with cities and schools to provide preventative care, partnering on ancillary services for surgical patients, and partnering with medical homes to provide a continuity of 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 | Coordination of Services/Care | Access to Care | No Data |
| 2 | Motor Vehicle Driving Deaths with Alcohol Involvement | Health Behaviors - Substance Abuse | Motor Vehicle Driving Deaths with Alcohol Involvement |
| 3 | Primary Care | Access to Care | Ratio of Population to One Primary Care Physician |
| 3 | Primary Care | Access to Care | Ratio of Population to one Non- Physician Primary Care Provider |
| 3 | Preventable Hospitalizations | Preventable Hospitalizations | Perforated Appendix Admission: Pediatric (Risk-Adjusted Rate for Appendicitis) |
| 3 | Preventable Hospitalizations | Preventable Hospitalizations | Perforated Appendix Admission: Adult (Risk-Adjusted Rate per 100 Admissions for Appendicitis) |
| 4 | Transportation | Access to Care | No Vehicle Available |
| 5 | Social Isolation | Social Determinants of Health | Social Membership Associations |
| 5 | Social Isolation | Social Determinants of Health | Elderly Isolation - 65+ Householder Living Alone |
| 6 | Breast Cancer | Cancer | Cancer Incidence - Female Breast |
| 7 | Mental Health | Mental Health | Intentional Self-Harm; Suicide |
| 7 | Mental Health | Mental Health | Ratio of Population to One Mental Health Provider |

Note: Listed alphabetically, not in order of significance

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 McKinney Hospital collectively rated, ranked, and selected the following significant needs to be addressed by implementation strategies:

- 1. Access to Care: Primary Care and Cost
- Coordination of Services/Care

Description of Needs to be Addressed by Methodist

The CHNA process identified significant community health needs that can be categorized as access to care and coordination of care issues. 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.

Access to Care

Primary Care

Primary care includes family medicine, internal medicine, nursing, nurse practitioners, pharmacy, pediatrics, general obstetrics/gynecology, gerontology, behavioral health, community health, and the other people and professions who fulfill the general medical needs of patient populations.

Primary care professionals serve on the front lines of healthcare. For many individuals, they are the first point of contact with the healthcare system. They are often the first to recognize signs of depression, early signs of cancer or chronic disease, and other health concerns. Primary care providers ensure patients receive the right care, in the right setting, by the most appropriate provider, and in a manner consistent with the patient's desires and values. Primary care is also important because it lowers costs. Access to primary care helps to keep people out of emergency rooms, where care costs are much higher than outpatient care settings. Annual check-ups can catch and treat problems earlier, which is also less costly than treating severe or advanced illness.²

There is a nationwide 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

² **Primary Care Progress**, The Case for Primary Care, 2019

additional caregivers will be needed to meet the future healthcare needs of a 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 in the 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 can help bridge the gap in access to care and reduce healthcare costs.

Access to non-physician primary care providers was identified through the CHNA as a need for Collin County. The Texas state benchmark for non-physician providers is one provider for every 1,497 residents. The Collin County ratio was one provider to every 1,828 residents, or 22.1% higher than the state benchmark.³

Health Care Costs

Nationally, the subject of health care costs is a topic of concern and ultimately affects all age ranges. The burden of rising healthcare costs on populations with limited incomes and resources is a global issue. Communities with growth in the elderly population will need to act proactively to ward off future economic and social crisis. The number of Americans aged 65 and older is <u>projected to more than double</u>, from 46 million in 2016 to over 98 million by 2060 across the United States. Growth in the senior population will likely contribute to increased utilization of healthcare services and contribute to the national total of health care costs as the population continues to age.

Data on the cost of health care 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 health care costs is available for the Medicare population. For the purposes of understanding health care costs, the CHNA utilized price-adjusted Medicare reimbursements (Parts A and B) per enrollee to understand the impact of health care costs. Health Care costs per Medicare enrollee in Collin County are \$11,575, which is 4.1% higher than the overall Texas per enrollee costs. The U.S. median value is \$9,603 and the value for the tenth percentile of counties in the nation is \$7.821.6

Coordination of Services and Care

Coordination of services is essential to ensure that residents in a community have appropriate access to essential needs and services. The approach is multi-dimensional and includes healthcare, counseling, transportation, recreation, housing, child care, utilities, job training, etc. Some of the most effective programs will have an "all-in-one"

⁶ County Health Rankings & Roadmaps, 2018

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³ CMS, National Provider Identification Registry (NPPES); County Health Rankings & Roadmaps, 2018

⁴ Population Reference Bureau, 2016

⁵ Dartmouth Atlas of Health Care, CMS; County Health Rankings & Roadmaps, 2018

resource center that provides access to a one-stop shop for key programs. Resource centers can leverage the improved coordination of services to better serve the community, increase utilization, and improve compliance to follow through.

Community-based transportation to services is an important factor in planning and delivering services. Lack of reliable transportation is often a deterrent to seeking out services that people require in order to improve their living situations. Transportation challenges disproportionately affect those with low incomes, youth, the disabled, and the elderly. There are significant benefits to the community such as improved health conditions and outcomes, improved mental health, improved cognitive function, and improved quality of life. Providing a comprehensive approach to coordinating services will allow constituents to learn skills, achieve goals, and improve their lives overall.

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.

| | Dublic Health Indicates | School |
|----------|---|---|
| category | rubiic nealth maicator | oonice |
| | Hospital Stays for Ambulatory-Care Sensitive Conditions- Medicare | 2018 County Health Rankings & Roadmaps; Dartmouth Atlas of Health Care, CMS |
| re re | Percentage of Population under age 65 without Health Insurance | 2018 County Health Rankings & Roadmaps; Small Area Health Insurance Estimates (SAHIE), United States Census Bureau |
| გე | Price-Adjusted Medicare Reimbursements per Enrollee NEW 2019 | 2018 County Health Rankings & Roadmaps; Dartmouth Atlas of Health Care, CMS |
| ot sa | Ratio of Population to One Dentist | 2018 County Health Rankings & Roadmaps; Area Health Resource File/National Provider Identification file (CMS) |
| sə၁: | Ratio of Population to One Non-Physician Primary Care Provider | 2018 County Health Rankings & Roadmaps; CMS, National Provider Identification Registry (NPPES) |
| ρA | 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 |
| | 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) |
| s | Cancer Incidence - Lung | 2011-2015 State Cancer Profiles, National Cancer Institute (CDC) |
| əse | Cancer Incidence - Prostate | 2011-2015 State Cancer Profiles, National Cancer Institute (CDC) |
| səsi | Chronic Kidney Disease in Medicare Population | CMS.gov Chronic conditions 2007-2015 |
| ₫/s | COPD in Medicare Population | CMS.gov Chronic conditions 2007-2015 |
| uoi | Diabetes Diagnoses in Adults | CMS.gov Chronic conditions 2007-2015 |
| tibn | Diabetes prevalence | 2018 County Health Rankings (CDC Diabetes Interactive Atlas) |
| ၊၀၁ | 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 |
|----------|---|--|
| | 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) |
| ĵu: | Food Insecure | 2018 County Health Rankings & Roadmaps; Map the Meal Gap, Feeding America |
| əwu | Limited Access to Healthy Foods (Percent of Low Income) | 2018 County Health Rankings & Roadmaps; USDA Food Environment Atlas, United States Department of Agriculture (USDA) |
| nvirc | Long Commute Alone | 2018 County Health Rankings & Roadmaps; American Community Survey, 5-Year Estimates, United States Census Bureau |
| 3 | 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) |
| | 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) |
| ĸ | Disconnected youth NEW 2019 | 2018 County Health Rankings (Measure of America) |
| oivi | Drug Poisoning Deaths Rate | 2018 County Health Rankings & Roadmaps, CDC WONDER Mortality Data |
| eyə | Insufficient sleep NEW 2019 | 2016 Behavioral Risk Factor Surveillance System (BRFSS) |
| 8 Y | Motor Vehicle Driving Deaths with Alcohol Involvement | 2018 County Health Rankings & Roadmaps; Fatality Analysis Reporting System (FARS) |
| tlsəf | Physical Inactivity | 2018 County Health Rankings & Roadmaps; CDC Diabetes Interactive Atlas, The National Diabetes Surveillance System |
| 1 | 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 | Adults Reporting Fair or Poor Health | 2018 County Health Rankings & Roadmaps; The Behavioral Risk Factor Surveillance System (BRFSS) |
| Status | 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 |
|----------------|---|--|
| | 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 |
| ath | Death rate due to fireams NEW 2019 | 2018 County Health Rankings (CDC WONDER Environmental Data) |
| : De | Heart Disease Mortality Rate | 2013 Texas Health Data, Center for Health Statistics, Texas Department of State Health Services |
| s (n | Infant Mortality Rate | 2018 County Health Rankings & Roadmaps, CDC WONDER Mortality Data |
| nļuļ | 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 |
| pį | First Trimester Entry into Prenatal Care | 2016 Texas Health and Human Services - Vital statistics annual report |
| ц: ў СР! | Low Birth Weight Percent | 2018 County Health Rankings & Roadmaps; National Center for Health Statistics - Natality files, National Vital Statistics System (NVSS) |
| 3 Isr Ilsəl | 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 |
| ≥M | Very Low Birth Weight (VLBW) | Centers for Disease Control and Prevention WONDER |
| | 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 |
| alth | 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) |
| ән І | Depression in Medicare Population | CMS.gov Chronic conditions 2007-2015 |
| sju | Frequent mental distress | 2016 Behavioral Risk Factor Surveillance System (BRFSS) |
| ÐΜ | 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 |
|----------|---|---|
| | 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 |
| uo | Homicides | 2018 County Health Rankings & Roadmaps, CDC WONDER Mortality Data |
| ilati | Household income, median NEW 2019 | 2018 County Health Rankings (2016 Small Area Income and Poverty Estimates) |
| ndod | Income Inequality | 2018 County Health Rankings & Roadmaps; American Community Survey (ACS), 5 Year Estimates (United States Census Bureau) |
| l | 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) |
| SI | Asthma Admission: Pediatric (Risk-Adjusted-Rate) | 2016 Texas Health and Human Services Center for Health Statistics Preventable Hospitalizations |
| noits | Diabetes Lower-Extremity Amputation Admission: Adult (Risk-Adjusted-Rate) | 2016 Texas Health and Human Services Center for Health Statistics Preventable Hospitalizations |
| zilati | Diabetes Short-term Complications Admission: Pediatric (Risk-Adjusted-Rate) | 2016 Texas Health and Human Services Center for Health Statistics Preventable Hospitalizations |
| dsc | Gastroenteritis Admission: Pediatric (Risk-Adjusted-Rate) | 2016 Texas Health and Human Services Center for Health Statistics Preventable Hospitalizations |
| PH ƏI | Perforated Appendix Admission: Adult (Risk-Adjusted-Rate per 100 Admissions for Appendicitis) | 2016 Texas Health and Human Services Center for Health Statistics Preventable Hospitalizations |
| dstn | Perforated Appendix Admission: Pediatric (Risk-Adjusted-Rate for Appendicitis) | 2016 Texas Health and Human Services Center for Health Statistics Preventable Hospitalizations |
| e∧e. | Uncontrolled Diabetes Admission: Adult (Risk-Adjusted-Rate) | 2016 Texas Health and Human Services Center for Health Statistics Preventable Hospitalizations |
| Ы | 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 |
|----------|---|---|
| Droword | 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 |

<u>Appendix B: Community Resources Identified to Potentially Address Significant Health Needs</u>

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 |

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

Health Professional Shortage Areas (HPSA)⁷

| County Name | HPSA ID | HPSA Name | HPSA Discipline Class | Designation Type |
|-------------|------------|--------------------------|-----------------------|----------------------------|
| Collin | 7485109304 | Low Income-Collin County | Mental Health | Low Income Population HPSA |

Medically Underserved Areas and Populations (MUA/P) 8

| County Name | MUA/P Source Identification Number | Service Area Name | Designation Type | Rural Status |
|-------------|---------------------------------------|---------------------|----------------------------|--------------|
| Collin | 3471 | Collin Service Area | Medically Underserved Area | Non-Rural |

⁷ U.S. Department of Health and Human Services, Health Resources and Services Administration, 2018 ⁸ 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

| Public Health Indicator | Category | Indicator Definition |
|--|---|--|
| Price-Adjusted Medicare Reimbursements per Enrollee | Access to Care | 2015 Amount of Price-Adjusted Medicare Reimbursements (Part A and B) per Enrollee |
| Ratio of Population to One Non-Physician Primary Care Provider | Access to Care | 2017 Ratio of Population to Primary Care Providers Other than Physicians |
| Cancer Incidence - Female Breast | Cancer | 2011-2015 Age-Adjusted Female Breast Cancer Incidence Rate Cases per 100,000 |
| Arthritis in Medicare Population | Chronic Condition - Arthritis | 2007-2015 Prevalence of Chronic Condition Across all Medicare Beneficiaries |
| Hyperlipidemia in Medicare Population | Chronic Condition - Cardiovascular | 2007-2015 Prevalence of Chronic Condition Across all Medicare Beneficiaries |
| Atrial Fibrillation in Medicare Population | Chronic Condition - Cardiovascular | 2007-2015 Prevalence of Chronic Condition Across all Medicare Beneficiaries |
| Osteoporosis in Medicare Population | Chronic Condition - Osteoporosis | 2007-2015 Prevalence of Chronic Condition Across all Medicare Beneficiaries |
| 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 |
| Motor Vehicle Driving Deaths with Alcohol Involvement | Health Behaviors - Substance Abuse | 2012-2016 Percentage of Motor Vehicle Crash Deaths that had Alcohol Involvement |
| Long Commute Alone | Health Status | 2012-2016 Among Workers Who Commute in Their Car Alone, the Percentage that Commute More than 30 Minutes |
| Sexually Transmitted Infection Incidence | Infectious Disease - Sexually Transmitted | 2015 Number of Newly Diagnosed Chlamydia Cases per 100,000 Population |
| Ratio of Population to One Mental Health Provider | Mental Health | 2017 Ratio of Population to Mental Health Providers |

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

| Public Health Indicator | Category | Indicator Definition |
|---|---------------------------------|---|
| 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 |
| 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 |
| Social/Membership Associations | SDH - Social Isolation | 2015 Number of Membership Associations per 10,000 Population |

Appendix E: Evaluation of Prior Implementation Strategy Impact

Methodist McKinney Hospital intended to address access to care by continuing to recruit primary care physicians to the market, recruiting specialty physicians to clinic in Prosper, providing ongoing mammograms, free sports physicals at the McKinney High School, financial assistance to the Community Health Clinic and the placement of either urgent care, imaging or family health centers in the market. The facility further intended to address prevention by providing flu shots to the community and address awareness and collaboration of community resources by collaborating with local municipalities and coalitions to expand outreach and awareness.

To that end, the facility recruited three new primary care physicians to the market as well as opened a new specialty physician clinic in the market that includes a pediatric cardiologist, orthopedic surgeon and gastroenterologist. In addition, a new imaging center, a new physical therapy clinic and two ambulatory surgery centers were opened. The facility also provided screening colonoscopies, flu shots, free sports physicals and provided financial assistance to the Community Health Clinic (a free health clinic in McKinney).

The facility also provided uncompensated care to uninsured or underinsured patients, which has trended upward over the past three years. Methodist McKinney Hospital is part of the larger Methodist Health System, which is actively involved in providing care to underinsured residents in the service area.