## COMMUNITY HEALTH NEEDS ASSESSMENT



## ELLIS COUNTY HEALTH COMMUNITY

METHODIST MIDLOTHIAN MEDICAL CENTER

[^0]
## TABLE OF CONTENTS

METHODIST HEALTH SYSTEM ..... 3
COMMUNITY HEALTH NEEDS ASSESSMENT (CHNA) REPORT ..... 5
DEMOGRAPHIC AND SOCIOECONOMIC SUMMARY ..... 7
HEALTH COMMUNITY DATA SUMMARY ..... 7
PRIORITY HEALTH NEEDS ..... 8
PRIORITY 1: ACCESS TO PRIMARY CARE RESOURCES ..... 9
PRIORITY 2: CHRONIC CONDITIONS MANAGEMENT ..... 10
PRIORITY 3: ESCALATING HEALTH NEEDS OF AGING COMMUNITY ..... 13
PRIORITY 4: ACCESS TO BEHAVIORAL HEALTH AND SUBSTANCE ABUSE RESOURCES ..... 14
PRIORITY 5: CANCER INCIDENCE ..... 17
PRIORITY 6: PRENATAL CARE ISSUES ..... 19
APPENDIX A: CHNA REQUIREMENT DETAILS ..... 21
APPENDIX B: KEY PUBLIC HEALTH INDICATORS ..... 27
APPENDIX C: COMMUNITY INPUT PARTICIPATING ORGANIZATIONS ..... 36
APPENDIX D: DEMOGRAPHIC AND SOCIOECONOMIC SUMMARY ..... 37
APPENDIX E: PROPRIETARY COMMUNITY DATA ..... 44
APPENDIX F: COMMUNITY RESOURCES IDENTIFIED TO POTENTIALLY ADDRESS ..... 48SIGNIFICANT HEALTH NEEDS

## COMPASSIONATE HEALTHCARE IN NORTH TEXAS

The Methodist ministers and civic leaders who opened their doors in 1927 could not have imagined where Methodist Health System would be today. From humble beginnings, their renowned health system has become one of the leading healthcare providers in North Texas, with several locations across the region.

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

## MISSION, VISION, AND VALUES OF METHODIST HEALTH SYSTEM

## MISSION

To improve and save lives through compassionate quality healthcare.

## VISION

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


# Where compassion is our compass. Where hearts and minds operate as one. Where a glass half empty is filled with hope. Where healing is believing. 

Whatever the medical need, Methodist Health System is honored that patients entrust them with their health and safety. They understand that Methodist has a solemn responsibility to each patient and patient families, and they can trust that the Methodist team takes that commitment very seriously.

Methodist further illustrates this commitment through periodic community health needs assessments, which include plans on addressing those needs with a wide range of outreach initiatives. These Community Heath Needs Assessment (CHNA) activities also satisfy federal requirements outlined in the Patient Protection and Affordable Care Act.

Methodist conducts periodic reviews of public health indicators and benchmark analyses comparing communities it serves to an overall state of Texas value. In this way, it can determine where deficiencies lie and the opportunities for improvement are greatest.

Through interviews, focus groups, and surveys, Methodist gains a clearer understanding of the community needs from the perspective of the members of each community. This helps it identify the most pressing needs a community is facing and develop implementation plans to focus on those prioritized needs.

The process includes input from a wide range of knowledgeable people who represent the myriad interests of the community in compliance with 501(r)(3) regulations. The CHNA process overview can be found in Appendix $\mathbf{A}$.

The CHNA serves as the foundation for community health improvement planning efforts over the next three years, while the implementation plans will be evaluated annually.

## COMMUNITY HEALTH NEEDS ASSESSMENT (CHNA) REPORT

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

## - Methodist Midlothian Medical Center

The community served is Ellis County. The community includes the geographic area where more than 60 percent of the admitted patients live according to the hospital facilities' in-patient admissions over the 12-month period of 2019Q2-2020Q1. Those facilities with overlapping counties of patient origin collaborated to provide a joint CHNA report in accordance with the U.S. Treasury regulations and 501(r)(3) of the Internal Revenue Code. All of the collaborating hospital facilities included in a joint CHNA report define their communities to be the same for the purposes of the CHNA report.


Ellis County Health Community Map

Methodist Health System engaged with IBM Watson Health, a nationally respected consulting firm, to conduct a Community Health Needs Assessment (CHNA) in accordance with the requirements of the Patient Protection and Affordable Care Act (PPACA) for the health communities they serve.

THE CHNA PROCESS INCLUDED:


1 Gathering and analyzing 59 public and 45 proprietary health data indicators to provide a comprehensive assessment of the health status of the communities. The complete list of health data indicators is included in Appendix B.

2 Creating a benchmark analysis comparing the communities to overall State of Texas and U.S. values.

3 Conducting focus groups, key informant interviews, and stakeholder surveys, including input from public health experts, to gain direct input from the community for a qualitative analysis.

- Gathering input from state, local and/or regional public health department members who have the pulse of the community's health.
- Identifying and considering input from individuals or organizations serving and/or representing the interests of medically underserved low-income and minority populations in the community to help prioritize the community's health needs.
- The represented organizations that participated are included in Appendix C.

IBM Watson Health provided current and forecasted demographic, socioeconomic, and utilization estimates for each of the communities.

## Demographic and Socioeconomic Summary

The most important demographic and socioeconomic findings for the Ellis County Health Community CHNA are:
(1) The community is growing as fast as the state of Texas.

2 The median age of the population is younger than the U.S. and slightly younger than Texas overall.

3 The median household income is below both the state and the U.S.
4 The community served has a lower percentage of uninsured and underinsured than Texas.
Further demographic and socioeconomic information for the Ellis County Health Community is included in Appendix D.

## Health Community Data Summary

IBM Watson Health's utilization estimates and forecasts indicate the following for the Ellis County Health Community:
(1) Inpatient discharges in the community are expected to grow by $12.7 \%$ by 2030 with the largest growing product lines to include:

- Pulmonary medicine
- General medicine
- Cardiovascular diseases

2 Outpatient procedures are expected to increase by $38 \%$ by 2030 with the largest areas of growth to include:

- Labs
- General \& internal medicine
- Physical \& occupational therapy
(3) Emergency Department visits are expected to grow by 10.4\% by 2025.
(4) Hypertension represents $72.5 \%$ of all heart disease cases.

5 Cancer incidence is expected to increase by $11.7 \%$ by 2025.

Further health community information for the Ellis County Health Community is included in Appendix E.

## Priority Health Needs

Using these and other data collection and interpretation methods, Methodist Health System identified what it considers to be the community's key health needs. The resulting prioritized health needs for this community include:

| Priority | Need | Category of Need |
| :---: | :---: | :---: |
| $\mathbf{1}$ | Access to Primary Care Resources | Access to Care |
| $\mathbf{2}$ | Chronic Conditions Management | Conditions/Diseases |
| $\mathbf{3}$ | Escalating Health Needs of an <br> Aging Community | Utilization |
| $\mathbf{4}$ | Access to Behavioral Health and <br> Substance Abuse Resources | Mental Health |
| $\mathbf{5}$ | Cancer Incidence | Conditions/Diseases |
| $\mathbf{6}$ | Prenatal Care Issues | Maternal and Child Health |

## PRIORITY 1: ACCESS TO PRIMARY CARE RESOURCES

The following data indicates greater need for population to one primary care physician and population to one non-physician primary care provider.

| Category | Data Shows <br> Greater Need | Key Informants Indicate <br> Greater Need |
| :---: | :---: | :---: |
| Access to | Population to <br> one primary care <br> physician | -Limited healthcare work <br> force |
| -Population to one <br> non-physician <br> primary care provider | -Shortage of physicians and <br> healthcare personnel |  |

## Access to Care: Population to One Primary Care Physician

(Number of Individuals Served by One Physician by County)

The Population to One Primary Care Physician indicator is defined as the ratio of population to one primary care physician if the population was equally distributed across physicians and is based on data from County Health Rankings \& Roadmaps; and Health Resources and Services Administration File/American Medical Association.

Ellis County has 2,361 individuals per every one primary care physician, which is $43.8 \%$ higher than the state benchmark of 1,642 . This indicates a greater need than the state and a larger vulnerable population.

This indicator ranked fourth among all 59 public indicators within Ellis County, which indicates higher need and a larger vulnerable population.


## Access to Care: Population to One Non-Physician Primary Care Resource

(Number of Individuals Served by One Non-Physician Primary Care Resource by County)

The indicator for Population to One Non-physician Primary Care Provider is defined as the ratio of population to primary care providers other than physicians and is based on data from County Health Rankings \& Roadmaps; and Centers for Medicare and Medicaid Services (CMS), National Provider Identification Registry (NPPES).

Ellis County has 1,727 individuals per every one non-physician primary care resource which is $53.1 \%$ higher than the state benchmark of 1,128 . This indicates a greater need than the state and a larger vulnerable population.

This indicator ranked third among all 59 public indicators within Ellis County, which indicates higher need and a larger vulnerable population.


The focus group participants cited that there is limited access to primary care physicians due to a shortage of doctors and limited-service hours. Those limited-service hours are hardest on the working population that cannot afford to take time off work to seek out primary care.

In the prioritization session, the hospital and community leaders agreed that there is a need to add primary care providers in Ellis County.

## PRIORITY 2: CHRONIC CONDITIONS MANAGEMENT

The following data indicates greater need for diabetes management in terms of diabetes admission, diabetes diagnoses in adults, and diabetes prevalence.

| Category | Data Shows <br> Greater Need | Key Informants Indicate <br> Greater Need |
| :---: | :---: | :---: |
| Conditions/ <br> Diseases | • Diabetes admission | Diabetes diagnoses <br> in adults |
| Diabetes prevalence |  |  |

## Conditions/Diseases: Diabetes Admission

(Number of Diabetes Patients Observed/Adult Population Age 18+ by County)

The indicator of Diabetes Admission is defined as the number of diabetes admissions observed divided by the adult population (age 18 and older) and is based on data from Texas Health and Human Services, Center for Health Statistics, Preventable Hospitalizations.

Ellis County has 40.55 diabetes patients per 100,000 adult individuals, which is $2.7 \%$ higher than the state benchmark of 39.50 . This indicates a slightly greater need than the state and a slightly larger vulnerable population.

This indicator ranked 25th among all 59 public indicators within Ellis County, which indicates higher need and a larger vulnerable population.


| RANK <br> WITHIN <br> COUNTY | 5 | 10 | 15 | 20 | 25 | 30 | 35 | 40 |
| ---: | ---: | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

## Conditions/Diseases: Diabetes Diagnoses in Adults <br> (Prevalence of Diabetes in all Medicare Beneficiaries by County)

The indicator of Diabetes Diagnoses in Adults is defined as prevalence of the chronic condition of diabetes across all Medicare beneficiaries and is based on data from CMS.gov Chronic Conditions.

Ellis County has $28.65 \%$ prevalence of diabetes patients among Medicare beneficiaries, which is $0.5 \%$ higher than the state benchmark of $28.50 \%$. This indicates a slightly greater need than the state and a slightly larger vulnerable population.

This indicator ranked 30th among all 59 public indicators within Ellis County, which indicates higher need and a larger vulnerable population.


## Conditions/Diseases: Diabetes Prevalence

(Percent of Diabetes in Population by County)
The indicator of Diabetes Prevalence is defined as prevalence of diagnosed diabetes in a given county. Respondents were considered to have diagnosed diabetes if they responded "yes" to the question, "Has a doctor ever told you that you have diabetes?" Women who indicated that they only had diabetes during pregnancy were not considered to have diabetes. This is based on data from Centers for Disease Control and Prevention (CDC), Diabetes Interactive Atlas, County Health Rankings.

Ellis County has $12.50 \%$ diabetes patients among the population, which is $25 \%$ higher than the state benchmark of $10 \%$. This indicates a greater need than the state and a larger vulnerable population.

This indicator ranked sixth among all 59 public indicators within Ellis County, which indicates higher need and a larger vulnerable population.


The focus group participants cited that in the health community, patient support for chronic illness is a big challenge due to lack of preventive education, and patients are unable to afford expensive medication. This limits diabetes management for diagnosed patients.

In the prioritization session, the hospital and community leaders agreed that there is a lack of sufficient diabetes education efforts. They added that there is an opportunity for the community to increase diabetes awareness and education and to improve diabetes medication access.

| Category | Data Shows Greater Need | Key Informants Indicate <br> Greater Need |
| :---: | :---: | :---: |
| Utilization | Medicare population: <br> Emergency department use rate | No space in emergency <br> rooms for specialty care |

Utilization: Medicare Population: Emergency Department Use Rate<br>(Number of Patients with ED Visit/Total Beneficiaries by County)

The data below indicates a greater need to manage the emergency department use rate for the Medicare population. This is defined as unique patients having an emergency department visit divided by the total beneficiaries. This value is based on data from CMS Outpatient 100\% Standard Analytical File (SAF) and CMS Standard Analytical Files (SAF) Denominator File.

Ellis County has $15.98 \%$ emergency department patients among the total Medicare beneficiaries which is $22.9 \%$ higher than the state benchmark of $13 \%$. This indicates a greater need than the state and a larger vulnerable population.

This indicator ranked seventh among all 59 public indicators within Ellis County, which indicates higher need and a larger vulnerable population.


The focus group participants noted that there is no space in emergency rooms for specialty care. The use of emergency departments is too high and cannot meet the demand.

In the prioritization session, the hospital and community leaders agreed that the emergency department is overutilized by the Medicare population and suggested increased screenings and education at senior centers to allevaite the high utilization.

## PRIORITY 4: ACCESS TO BEHAVIORAL HEALTH AND SUBSTANCE ABUSE RESOURCES

The following data indicates greater need in the area of behavioral health and substance abuse, specifically in the measures of mentally unhealthy days, population to one mental health provider, Medicare population: depression, and binge drinking.

| Category | Data Shows Greater Need | Key Informants Indicate Greater Need |
| :---: | :---: | :---: |
| Mental Health Behaviors | - Mentally unhealthy days <br> - Population to one mental health provider <br> - Medicare population: Depression <br> - Binge drinking | - Huge gap in mental health services <br> - Limited mental health providers <br> - Access to alcohol and drinking enhanced by COVID <br> - Difficult to access alcohol abuse services |

## Mental Health: Mentally Unhealthy Days <br> (Average Number of Mentally Unhealthy Days Reported in the Past 30 Days by County)

The Mentally Unhealthy Days indicator is defined as the average number of mentally unhealthy days reported in the past 30 days (age-adjusted). The measure is based on data from County Health Rankings \& Roadmaps; the Behavioral Risk Factor Surveillance System (BRFSS); and CMS, National Provider Identification Registry (NPPES).

Ellis County has 3.96 average mentally unhealthy days per the past 30 days, which is $5.3 \%$ higher than the state benchmark of 3.76 . This indicates a greater need than the state and a larger vulnerable population.

This indicator ranked 21st among all 59 public indicators within Ellis County, which indicates higher need and a larger vulnerable population.


## Mental Health: Population to One Mental Health Provider

(Ratio of Population to Mental Health Providers by County)

The Population to One Mental Health Provider indicator is defined as the ratio of population to mental health providers. The measure is based on data from County Health Rankings \& Roadmaps; the Behavioral Risk Factor Surveillance System (BRFSS); and CMS, National Provider Identification Registry (NPPES).

Ellis County has 1,515 individuals per every one mental health provider, which is $83.2 \%$ higher than the state benchmark of 827 . This indicates a greater need than the state and a larger vulnerable population.

This indicator ranked first among all 59 public indicators within Ellis County, which indicates higher need and a larger vulnerable population.


## Mental Health: Medicare Population: Depression

(Percent of Depression Prevalence Over All Beneficiaries by County)

The indicator Medicare Population: Depression is defined as the prevalence of depression across all Medicare beneficiaries. The measure is based on data from CMS.gov Chronic conditions.

Ellis County has $19.07 \%$ prevalence of depression among Medicare beneficiaries, which is $16.1 \%$ higher than the state benchmark of $16.43 \%$. This indicates a greater need than the state and a larger vulnerable population.

This indicator ranked 12th among all 59 public indicators within Ellis County, which indicates higher need and a larger vulnerable population.


## Health Behaviors: Binge Drinking

(Percent of Adults Binge Drinking or Heavy Drinking in the Past 30 Days by County)

The indicator Binge Drinking is defined as a percentage of a county's adult population that reports binge drinking or heavy drinking in the past 30 days. The measure is based on data from County Health Rankings \& Roadmaps; and the Behavioral Risk Factor Surveillance System (BRFSS).

Ellis County has 19.35\% adults that reported binge drinking or heavy drinking in the past 30 days, which is $2 \%$ higher than the state benchmark of $18.97 \%$. This indicates a slightly greater need than the state and a slightly larger vulnerable population.

This indicator ranked 26th among all 59 public indicators within Ellis County, which indicates slightly higher need and a slightly larger vulnerable population.


The focus group participants stated that mental health and substance abuse services are not available in the county. They believe that isolation enhanced by the COVID-19 pandemic is contributing to substance abuse, mental health, domestic abuse, and other challenges. Therefore, the need exceeds capacity for mental health and substance abuse services. They noted access to alcohol and drinking was enhanced by the pandemic, but it is difficult to access alcohol abuse services to seek treatment.

In the prioritization session, hospital leadership also confirmed there are not enough mental health providers to meet the needs of the community, especially for those who are uninsured or underinsured on the inpatient side.

## PRIORITY 5: CANCER INCIDENCE

The following data indicates greater need in the areas of cancer incidence (all causes, colon and lung) although it was not discussed by the key informants specifically.

| Category | Data Shows <br> Greater Need | Key Informants Indicate <br> Less Need or Not Mentioned |
| :---: | :---: | :---: |
| Conditions/ <br> Diseases | - Cancer incidence: All causes <br> - Cancer incidence: Colon <br> Cancer incidence: Lung | - Not specifically mentioned |

## Conditions/Diseases: Cancer Incidence: All Causes

(Cases per 100,000 Population in County)

The indicator Cancer Incidence: All Causes is defined as the age-adjusted cancer (all) incidence rate of cases per 100,000 population. It includes all races, including Hispanic; both sexes; and all ages. The measure is based on data from State Cancer Profiles from the National Cancer Institute and the CDC.

Ellis County has 444.90 cancer cases per 100,000 population, which is $9.1 \%$ higher than the state benchmark of 407.70 . This indicates a greater need than the state and a larger vulnerable population.

This indicator ranked 17th among all 59 public indicators within Ellis County, which indicates higher need and a larger vulnerable population.


## Conditions/Diseases: Cancer Incidence: Colon

(Cases per 100,000 Population in County)
The indicator Cancer Incidence: Colon is defined as the age-adjusted colon and rectum cancer incidence rate of cases per 100,000. It includes all races, including Hispanic; both sexes; and all ages. The measure is based on data from State Cancer Profiles from the National Cancer Institute and the CDC.

Ellis County has 42.70 colon cancer cases per 100,000 population, which is $13.6 \%$ higher than the state benchmark of 37.60 . This indicates a greater need than the state and a larger vulnerable population.

This indicator ranked 14th among all 59 public indicators within Ellis County, which indicates higher need and a larger vulnerable population.


## Conditions/Diseases: Cancer Incidence: Lung

(Cases per 100,000 Population in County)
The indicator Cancer Incidence: Lung is defined as the age-adjusted lung and bronchus cancer incidence rate of cases per 100,000. It includes all races, including Hispanic; both sexes; and all ages. The measure is based on data from State Cancer Profiles from the National Cancer Institute and the CDC.

Ellis County has 56.90 lung cancer cases per 100,000 population, which is $12.5 \%$ higher than the state benchmark of 50.60. This indicates a greater need than the state and a larger vulnerable population.

This indicator ranked 16th among all 59 public indicators within Ellis County, which indicates higher need and a larger vulnerable population.


In the prioritization session, hospital leadership agreed that despite improved preventive services seen in breast cancer and prostate cancer, there is a need to increase screenings and education on prevention and early detection.

## PRIORITY 6: PRENATAL CARE ISSUES

| Category | Data Shows <br> Greater Need | Key Informants Indicate <br> Greater Need |
| :---: | :---: | :---: |
| Maternal and <br> Child Health | - Prenatal care: First trimester <br> entry into prenatal care | • Insufficient prenatal care |

## Maternal and Child Health: Prenatal Care: First Trimester Entry Into Prenatal Care (Percent of Births with Prenatal Care in First Trimester in County)

The data below indicates a greater need to provide prenatal care. The indicator Prenatal Care: First Trimester Entry Into Prenatal Care is defined as the percent of births with prenatal care onset in the first trimester. This value is based on data from Texas Health and Human Services, vital statistics annual report.

Ellis County has $59.10 \%$ births with prenatal care in the first trimester, which is $4.1 \%$ lower than the state benchmark of $61.60 \%$. This indicates a greater need than the state and a larger vulnerable population.

This indicator ranked 22nd among all 59 public indicators within Ellis County, which indicates higher need and a larger vulnerable population.



The focus group participants stated that there is insufficient prenatal care in many areas, which is attributed to the lack of or limited insurance coverage, quoting that $60 \%$ of babies in Texas have been born in the Medicaid program in recent years.

In the prioritization session, hospital leadership also confirmed there are not enough obstetric providers to meet the needs of the community, especially for those who are uninsured or underinsured.

The Community Health Dashboards data referenced above, the prioritized list of significant health needs approved by the hospital's governing body, and the full assessment can be found at https://www.methodisthealthsystem.org/about/community-involvement.

## Existing Resources to Address Health Needs

One part of the assessment process included gathering input on potentially available community resources. A statewide Community Resource Guide and suggestions from some of our assessment participants helped identify community resources that may help address this community's known health needs.

The available community's resources can be referenced in Appendix F.

## Next Steps

Methodist Midlothian Medical Center started the Community Health Needs Assessment process in March 2021. Using both qualitative community feedback as well as publicly available and proprietary health indicators, Methodist Midlothian was able to identify and prioritize community health needs for its facility. 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 that Methodist Midlothian chooses to address for the community served.

## APPENDIX A: CHNA REQUIREMENT DETAILS

The Patient Protection and Affordable Care Act (PPACA) requires all tax-exempt organizations operating hospital facilities to assess the health needs of its community every three years. The resulting Community Health Needs Assessment (CHNA) report must include descriptions of the following:

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

Hospitals also must adopt an Implementation Strategy to address prioritized community health needs identified through the assessment.

## CHNA Process

Methodist Health System began the 2022 CHNA process in March 2021. The following is an overview of the timeline and major milestones:


## Consultant Qualifications

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

## Health Needs Assessment

To identify the health needs of the community, the hospital established a comprehensive method using all available relevant data including community input. They used the qualitative and quantitative data obtained when assessing the community to identify its community health needs. Surveyors conducted interviews and focus groups with individuals representing public health, community leaders/groups, public organizations, and other providers. In addition, data collected from public sources compared to the state benchmark indicated the level of severity. The outcomes of the quantitative data analysis were compared to the qualitative data findings.

## Data Gathering: Quantitative Assessment of Health Needs - Methodology and Data Sources

The team used quantitative data collection and analysis obtained from public health indicators to assess community health needs. This included over 100 data elements grouped into over 11 categories evaluated for the counties where data was available. Recently, regulations expanded to include new categories addressing mental health, healthcare costs, opioids, and social determinants of health. A table depicting the categories, indicators, and a list of sources is in Appendix B.

A benchmark analysis of each indicator determined which public health indicators demonstrated a community health need. Benchmark health indicators included overall U.S. values, State of Texas values, and other goal-setting benchmarks, such as Healthy People 2020.

According to America's Health Rankings 2021 Annual Report, Texas ranks 22nd out of the 50 states in the area of Health Outcomes (which includes behavioral health, mortality, and physical health) and 50th in the area of Clinical Care (which includes avoiding care due to cost, providers per 100,000 population, and preventative services).

The quantitative analysis of the health community used the following methodology:

- Benchmarks were set for each health community using state value for comparison.
- Community indicators not meeting state benchmarks were identified.
- From this, a need differential analysis of the indicators was completed, which helped bring additional understanding of the community's relative severity of need.
- Using the need differentials, a standardized way to evaluate the degree each indicator differed from its benchmark was established.
- This quantitative analysis showed which health community indicators were below the 25th percentile in order of severity and, therefore, which health indicators needed their focus.

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

## Information Gaps

In some areas of Texas, the small population size has an impact on reporting and statistical significance. The team has attempted to understand the most significant health needs of the entire community. It is understood that there is variation of need within the community and Methodist Midlothian may not be able to impact all of the population that truly need the services.

## Community Input: Qualitative Health Needs Assessment - Approach

To obtain a qualitative assessment of the health community, the team:

- Assembled a focus group representing the broad interests of the community served;
- Conducted interviews and surveys with key informants - leaders and representatives who serve the community and have insight into its needs; and
- Held prioritization sessions with hospital clinical leadership and community leaders to review collection results and identify the most significant healthcare needs based on information gleaned from the focus groups and key informants.

Focus groups helped identify barriers and social factors influencing the community's health needs. Key informant interviews gave the team even more understanding and insight about the general health status of the community and the various drivers that contributed to health issues.

Multiple governmental public health department individuals were asked to contribute their knowledge, information, and expertise relevant to the health needs of the community. Individuals or organizations that served and/or represented the interests of medically underserved, low-income, and minority populations in the community also took part in the process. NOTE: In some cases public health officials were unavailable due to obligations concerning the COVID-19 pandemic.

The hospitals also considered written input received on their most recently conducted CHNA and subsequent implementation strategies. While no input has been received yet for Methodist Midlothian Medical Center as this is the first CHNA conducted, the assessment is available for public comment or feedback on the report findings by emailing CHNAfeedback@mhd.com.

The CHNA assessment is available on the Methodist website at: https://www. methodisthealthsystem.org/about/community-involvement.

## Approach to Prioritizing Significant Health Needs

On January 19, 2022, a session with key leaders from Methodist Midlothian Medical Center and community leaders was convened to review the qualitative and quantitative data findings of the CHNA to date, discuss at length the significant needs identified, and complete prioritization exercises to rank the community needs. Prioritizing health needs was a two-step process. The two-step process allowed participants to consider the quantitative needs and qualitative needs as defined by the indicator dataset and input from focus groups, interviews and survey participants.


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


1. High Data and High Qualitative: The community indicators that showed a greater need in the health community overall when compared to the State of Texas comparative benchmark and were also identified as a greater need by the key informants.

2. High Data and Low Qualitative: The community indicators that showed a greater need in the health community overall when compared to the state of Texas comparative benchmark but were not identified as a greater need or not specifically identified by the key informants.

3. Low/No Data and High Qualitative: The community indicators that showed less need or had no data available in the health community overall when compared to the state of Texas comparative benchmark but were identified as a greater need by the key informants.

Participants held a group discussion about which needs were most significant using the professional experience and community knowledge of the group. A virtual voting method was invoked for individuals to provide independent opinions. This process helped the group define and identify the community's significant health needs.

## Prioritization of Significant Needs

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

1 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?

2 Social justice: Is the problem more concentrated to a specific vulnerable population? Does addressing this issue lead to unfair social benefit? Are we equitable to all vulnerable populations in our approach?

3 Root cause: Is the issue a root cause of other problems thereby possibly affecting multiple issues?

Participants voted individually for the needs they considered the most significant for this community. When the votes were tallied, the top identified needs emerged and were ranked based on the number of votes. They prioritized the list of significant health needs based on the overall scores. The outcome of this process was the list of prioritized health needs for this community.

IBM Watson Health collected and analyzed 59 public health indicators to assess and evaluate community health needs. For each health indicator, a comparison between the most recently available community data and benchmarks for the same/similar indicator was made. The basis of benchmarks was available data for the U.S. and the State of Texas.

The indicators used and the sources are listed below:

| Indicator Name | Indicator Source | Indicator Definition |
| :---: | :---: | :---: |
| Adult Obesity | 2021 County Health Rankings \& Roadmaps; CDC Diabetes Interactive Atlas, The National Diabetes Surveillance System | 2017 Percentage of the Adult Population (Age 20 and Older) that Reports a Body Mass Index (BMI) Greater than or Equal to $30 \mathrm{~kg} / \mathrm{m} 2$ |
| Adults Reporting Fair or Poor Health | 2021 County Health Rankings \& Roadmaps; The Behavioral Risk Factor Surveillance System (BRFSS) | 2018 Percentage of Adults Reporting Fair or Poor Health (Age-Adjusted) |
| Binge Drinking | 2021 County Health Rankings \& Roadmaps; The Behavioral Risk Factor Surveillance System (BRFSS) | 2018 Percentage of a County's Adult Population that Reports Binge or Heavy Drinking in the Past 30 Days |
| Cancer Incidence: All Causes | State Cancer Profiles, National Cancer Institute (CDC) | 2013-2017 Age-Adjusted Cancer (AII) Incidence Rate Cases Per 100,000 (All Races, includes Hispanic; Both Sexes; All Ages. Age Adjusted to the 2000 U.S. Standard Population) |
| Cancer Incidence: Colon | State Cancer Profiles, National Cancer Institute (CDC) | 2013-2017 Age-Adjusted Colon and Rectum Cancer Incidence Rate Cases per 100,000 (All Races, includes Hispanic; Both Sexes; All Ages. Age Adjusted to the 2000 U.S. Standard Population). Data has been suppressed to ensure confidentiality and stability of rate estimates. Counts are suppressed if fewer than 16 records were reported in a specific area-sexrace category. If an average count of 3 is shown, the total number of cases for the time period is 16 or more which exceeds suppression threshold (but is rounded to 3). |



2013-2017 Age-Adjusted Female Breast Cancer Incidence Rate Cases Per 100,000 (All Races, includes Hispanic; Female; All Ages. Age Adjusted to the 2000 U.S. Standard Population). Data has been suppressed to ensure confidentiality and stability of rate estimates. Counts are suppressed if fewer than 16 records were reported in a specific area-sexrace category. If an average count of 3 is shown, the total number of cases for the time period is 16 or more which exceeds suppression threshold (but is rounded to 3).

## 2013-2017 Age-Adjusted Lung and

 Bronchus Cancer Incidence Rate Cases per 100,000 (All Races, includes Hispanic; Both Sexes; All Ages. Age Adjusted to the 2000 U.S. Standard Population)
## 2013-2017 Age-Adjusted Prostate

 Cancer Incidence Rate Cases per 100,000 (All Races, includes Hispanic; Males; All Ages. Age Adjusted to the 2000 U.S. Standard Population)
## 2019 Percentage of Children Under Age 18 in Poverty

## 2015-2019 Percentage of Children Who Live in a Household Headed by Single Parent

2018 Percentage of Children Under Age 19 Without Health Insurance

## Number Observed/Adult Population

 Age 18 and Older. Risk Adjusted Rates not calculated for counties with fewer than 5 admissions.

Prevalence of chronic condition across all Medicare beneficiaries

2017 prevalence of diagnosed diabetes in a given county. Respondents were considered to have diagnosed diabetes if they responded "yes" to the question, "Has a doctor ever told you that you have diabetes?" Women who indicated that they only had diabetes during pregnancy were not considered to have diabetes.

2017-2019 Number of Drug Poisoning Deaths (Drug Overdose Deaths) per 100,000 Population. Death rates are NULL when the rate is calculated with a numerator of 20 or less.

Percent of Non-family households, Householder living alone, 65 years and over

2019 percentage of households that "speak English less than 'very well"" within all households that "speak a language other than English"

## 2015 \& 2018 Index of Factors that

 Contribute to a Healthy FoodEnvironment, 0 (Worst) to 10 (Best)

2018 Percentage of Population Who Lack Adequate Access to Food During the Past Year

2015 Percentage of Population Who are Low-Income and Do Not Live Close to a Grocery Store

| High School Graduation | Texas Education Agency | 2019 A four-year longitudinal graduation rate is the percentage of students from a class of beginning ninth graders who graduate by their anticipated graduation date, or within four years of beginning ninth grade. |
| :---: | :---: | :---: |
| Household Income | 2021 County Health Rankings (Small Area Income and Poverty Estimates) | 2019 Median Household Income is the income where half of households in a county earn more and half of households earn less. |
| Income Inequality | 2021 County Health Rankings \& Roadmaps; American Community Survey (ACS), 5 Year Estimates (U.S. Census Bureau) | 2015-2019 Ratio of Household Income at the 80th Percentile to Income at the 20th Percentile. Absolute Equality = 1.0. Higher ratio is greater inequality. |
| Individuals Below Poverty Level | 2018 American Community <br> Survey 5-Year Estimates, U.S. <br> Census Bureau, American FactFinder | Individuals below poverty level |
| Low Birth Weight Rate | 2019 Texas Certificate of Live Birth | Number Low Birthweight Newborns / Number of Newborns. Newborn's birthweight - low or very low birthweight includes birthweights under 2,500 grams. Blanks indicate low counts or unknown values. A NULL value indicates unknown or low counts. The location variables (region, county, ZIP) refer to the mother's residence. |
| Medicare <br> Population: <br> Alzheimer's <br> Disease/Dementia | CMS.gov Chronic conditions 2007-2018 | Prevalence of chronic condition across all Medicare beneficiaries. A NULL value indicates that the data have been suppressed because there are fewer than 11 Medicare beneficiaries in the cell or for necessary complimentary cell suppression. |


| Medicare |
| :--- |
| Population: Atrial |
| Fibrillation |
|  |
|  |
| Medicare |
| Population: COPD |
|  |
| Medicare |
| Medicare |
| Population: |
| Depression |
| Population: |
| Inpatient Use Rate |
| Population: |
| Hypertension |
| Medicare |
| Population: |
| Emergency |
| Hepulation: |
| Hyperlipidemia |
| Rate |
| Medicare |
| Population: Heart |
| Failure |

CMS.gov Chronic conditions
2007-2018

CMS.gov Chronic conditions
2007-2018

CMS.gov Chronic conditions
2007-2018

CMS 2019 Outpatient 100\%
Standard Analytical File (SAF) and 2019 Standard Analytical Files (SAF) Denominator File

CMS.gov Chronic conditions 2007-2018

CMS.gov Chronic conditions 2007-2018

CMS.gov Chronic conditions 2007-2018

CMS 2019 Inpatient 100\% Standard Analytical File (SAF) and 2019 Standard Analytical Files (SAF) Denominator File

Prevalence of chronic condition across all Medicare beneficiaries. A NULL value indicates that the data have been suppressed because there are fewer than 11 Medicare beneficiaries in the cell or for necessary complimentary cell suppression.

Prevalence of chronic condition across all Medicare beneficiaries. A NULL value indicates that the data have been suppressed because there are fewer than 11 Medicare beneficiaries in the cell or for necessary complimentary cell suppression.

Prevalence of chronic condition across all Medicare beneficiaries

Unique patients having an Emergency Department visit / total beneficiaries, CY 2019

Prevalence of chronic condition across all Medicare beneficiaries. A NULL value indicates that the data have been suppressed because there are fewer than 11 Medicare beneficiaries in the cell or for necessary complimentary cell suppression.

Prevalence of chronic condition across all Medicare beneficiaries

Prevalence of chronic condition across all Medicare beneficiaries

Unique patients being hospitalized / total beneficiaries, CY 2019


Prevalence of chronic condition across all Medicare beneficiaries. A NULL value indicates that the data have been suppressed because there are fewer than 11 Medicare beneficiaries in the cell or for necessary complimentary cell suppression.

Medicare Spending Per Beneficiary (MSPB): For each hospital, CMS calculates the ratio of the average standardized episode spending over the average expected episode spending. This ratio is multiplied by the average episode spending level across all hospitals. Blank values indicates missing hospitals or missing score. associated to the hospitals

2018 Average Number of Mentally Unhealthy Days Reported in Past 30 Days (Age-Adjusted)

2017 Cancer (All) Age Adjusted Death Rate (Per 100,000 - All Ages. Ageadjusted using the 2000 U.S. Standard Population). Death rates are NULL when the rate is calculated with a numerator of 20 or less.

## 2017 Heart Disease Age Adjusted

 Death Rate (Per 100,000 - All Ages. Age-adjusted using the 2000 U.S. Standard Population). Death rates are NULL when the rate is calculated with a numerator of 20 or less.2013-2019 Number of All Infant Deaths (Within 1 year), per 1,000 Live Births. Blank values reflect unreliable or missing data.


2017 Cerebrovascular Disease (Stroke) Age Adjusted Death Rate (Per 100,000 - All Ages. Age-adjusted using the 2000 U.S. Standard Population). Death rates are NULL when the rate is calculated with a numerator of 20 or less.

2019 Households with no vehicle available (percent of households). A NULL value entry indicates that either no sample observations or too few sample observations were available to compute an estimate, or a ratio of medians cannot be calculated because one or both of the median estimates falls in the lowest interval or upper interval of an open-ended distribution, or the margin of error associated with a median was larger than the median itself.

Annual Estimates of the Resident Population: April 1, 2010 to July 1, 2017. 2019 Accidental Poisoning Deaths where Opioids Were Involved are those deaths which include at least one of the following ICD-10 codes among the underlying causes of death: X40-X44, and at least one of the following ICD-10 codes identifying opioids: T40.0, T40.1, T40.2, T40.3, T40.4, T40.6. Blank values reflect unreliable or missing data.

2017 Percentage of Adults Ages 20 and Over Reporting No Leisure-Time Physical Activity in the Past Month

2018 Average Number of Physically Unhealthy Days Reported in Past 30 Days (Age-Adjusted)

2019 Ratio of Population to Dentists

| Population to one |
| :--- |
| Mental Health |
| Provider |

Population to One Non-Physician
Primary Care Provider

Population to One Primary Care Physician

Population under Age 65 without Health Insurance

Prenatal Care: First Trimester Entry into Prenatal Care

Renter-Occupied Housing

2021 County Health Rankings \& Roadmaps; CMS, National Provider Identification Registry (NPPES)

2020 County Health Rankings \& Roadmaps; CMS, National
Provider Identification Registry (NPPES)

2021 County Health Rankings \& Roadmaps; Area Health Resource File/American Medical Association

2021 County Health Rankings \& Roadmaps; Small Area Health Insurance Estimates (SAHIE), United States Census Bureau

2020 Texas Health and Human Services, Vital statistics annual report
U.S. Census Bureau, 2019

American Community Survey 1-Year Estimates

2020 Ratio of Population to Mental Health Providers

## 2020 Ratio of Population to Primary

 Care Providers Other than Physicians2018 Number of Individuals Served by One Physician in a County, if the Population was Equally Distributed Across Physicians

2018 Percentage of Population Under Age 65 Without Health Insurance

2016 Percent of births with prenatal care onset in first trimester

## 2019 Renter-occupied housing

 (percent of households). A NULL value entry indicates that either no sample observations or too few sample observations were available to compute an estimate, or a ratio of medians cannot be calculated because one or both of the median estimates falls in the lowest interval or upper interval of an open-ended distribution, or the margin of error associated with a median was larger than the median itself.
## 2013-2017 Percentage of Households

 with at Least 1 of 4 Housing Problems: Overcrowding, High Housing Costs, or Lack of Kitchen or Plumbing Facilities

## APPENDIX C: COMMUNITY INPUT PARTICIPATING ORGANIZATIONS

Representatives from the following organizations participated in the focus group and a number of key informant interviews/surveys:

- Baylor Scott \& White Health
- Daniel's Den
- Emergency Management Midlothian Police Department
- Hope Clinic
- Meals on Wheels
- Mansfield Independent School District
- Presbyterian Children's Homes \& Services
- REACH Council
- St. Joseph Church
- United Way
- Waxahachie Independent School District
- Waxahachie Care Services


## APPENDIX D: DEMOGRAPHIC AND SOCIOECONOMIC SUMMARY

According to population statistics, the community served is similar to Texas in terms of projected population growth; both outpace the country. The median age is slightly older than Texas but younger than the U.S. Median income is significantly higher than both the state and the country. The community served has fewer Medicaid beneficiaries and uninsured individuals than Texas.

| GEOGRAPHY |  | Benchmarks |  | Community Served |
| :---: | :---: | :---: | :---: | :---: |
|  |  | United States | Texas | Ellis County |
| Total Current Population |  | 330,342,293 | 29,321,501 | 194,892 |
| 5-Year Projected Population Change |  | 3.3\% | 6.6\% | 8.2\% |
| Median Age |  | 38.6 | 35.2 | 36.3 |
| Population 0-17 |  | 22.4\% | 25.7\% | 26.3\% |
| Population 65+ |  | 16.6\% | 13.2\% | 13.4\% |
| Women Age 15-44 |  | 19.5\% | 20.5\% | 20.1\% |
| Hispanic Population |  | 19.0\% | 40.7\% | 27.7\% |
| INSURANCE COVERAGE | Uninsured | 9.9\% | 18.8\% | 10.7\% |
|  | Medicaid | 20.9\% | 13.0\% | 10.8\% |
|  | Private Market | 8.3\% | 8.4\% | 7.9\% |
|  | Medicare | 13.8\% | 12.7\% | 13.6\% |
|  | Employer | 47.2\% | 47.1\% | 56.9\% |
| Median Household Income |  | \$65,618 | \$63,313 | \$80,656 |
| No High School Diploma |  | 12.2\% | 16.7\% | 14.5\% |

The community served expects to grow $8.2 \%$ by 2025 , an increase by almost 16,000 people. The projected population growth is higher than the state's five-year projected growth rate (6.6\%) and higher compared to the national projected growth rate (3.3\%).

The ZIP Codes expected to experience the most growth in five years are:

- 75154 Red Oak - 3,978 additional people
- 76065 Midlothian - 3,792 additional people
- 75165 Waxahachie - 3,607 additional people

The community's population is younger with $48.2 \%$ of the population ages $18-54$ and $21.5 \%$ under age 18. The age 65 -plus cohort is expected to experience the fastest growth ( $>26 \%$ ) over the next five years. Growth in the senior population will likely contribute to increased utilization of services as the population continues to age.

Population statistics are analyzed by race and by Hispanic ethnicity. The community was primarily white, non-Hispanic, but diversity in the community will increase due to the projected growth of minority populations over the next five years. The expected growth rate of the Hispanic population (all races) is 8,558 people ( $16.7 \%$ ) by 2025 . The non-Hispanic white population is expected to have the slowest growth at $1.6 \%$.

POPULATION DISTRIBUTION

| Age Group | Age Distribution |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2020 | \% of Total | 2025 | \% of Total | $\begin{aligned} & \text { USA } 2020 \\ & \% \text { of Total } \end{aligned}$ |
| 0-14 | 41,949 | 21.52\% | 42,709 | 20.3\% | 18.47\% |
| 15-17 | 9,224 | 4.73\% | 9,758 | 4.6\% | 3.88\% |
| 18-24 | 19,006 | 9.8\% | 21,763 | 10.3\% | 9.5\% |
| 25-34 | 24,284 | 12.5\% | 26,126 | 12.4\% | 13.5\% |
| 35-54 | 50,606 | 26.0\% | 52,148 | 24.7\% | 25.2\% |
| 55-64 | 23,790 | 12.2\% | 25,339 | 12.0\% | 12.9\% |
| 65+ | 26,033 | 13.4\% | 32,945 | 15.6\% | 16.6\% |
| TOTAL | 194,892 | 100\% | 210,788 | 100\% | 100\% |

HOUSEHOLD INCOME DISTRIBUTION

| 2020 Household Income | Income Distribution |  |  |
| :--- | ---: | ---: | ---: |
|  | HH Count | \% of Total | USA <br> $\%$ of Total |
| <\$15K | 3,798 | $5.8 \%$ | $10.0 \%$ |
| $\$ 15-25 \mathrm{~K}$ | 3,596 | $5.5 \%$ | $8.6 \%$ |
| $\$ 25-50 \mathrm{~K}$ | 11,206 | $17.0 \%$ | $20.7 \%$ |
| $\$ 50-75 \mathrm{~K}$ | 12,137 | $18.4 \%$ | $16.7 \%$ |
| $\$ 75-100 \mathrm{~K}$ | 10,677 | $16.2 \%$ | $12.4 \%$ |
| Over \$100K | 24,463 | $37.1 \%$ | $31.5 \%$ |
| TOTAL | 65,877 | $100 \%$ | $100 \%$ |

Source: IBM Watson Health / Claritas, 2020.

## EDUCATION LEVEL

| 2020 Adult Education Level | Education Level Distribution |  |  |
| :--- | ---: | ---: | ---: |
|  | Pop Age 25+ | \% of Total | USA <br> \% of Total |
|  | Less than High School | 8,421 | $6.8 \%$ |
| Some High School | 9,710 | $7.8 \%$ | $7.2 \%$ |
| High School Degree | 36,939 | $29.6 \%$ | $27.2 \%$ |
| Some College/Associate Degree | 42,080 | $33.7 \%$ | $28.9 \%$ |
| Bachelor's Degree or Greater | 27,563 | $22.1 \%$ | $31.6 \%$ |
| TOTAL | 124,713 | $100 \%$ | $100 \%$ |

## RACE/ETHNICITY

| Race/Ethnicity |  | Race/Ethnicity Distribution |  |  |
| :--- | ---: | ---: | ---: | :---: |
|  |  | $\%$ of Total | USA <br> \% of Total |  |
| White Non-Hispanic | 108,456 | $55.6 \%$ | $59.3 \%$ |  |
| Black Non-Hispanic | 26,704 | $13.7 \%$ | $12.4 \%$ |  |
| Hispanic | 54,068 | $27.7 \%$ | $19.0 \%$ |  |
| Asian and Pacific Is. Non-Hispanic | 1,611 | $0.8 \%$ | $6.0 \%$ |  |
| All Others | 4,053 | $2.1 \%$ | $3.3 \%$ |  |
| TOTAL | 194,892 | $100 \%$ | $100 \%$ |  |

Source: IBM Watson Health / Claritas, 2020.

## POPULATION GROWTH

|  | National | Selected Area |
| :--- | ---: | ---: |
| 2010 Total Population | $308,745,538$ | 157,335 |
| 2020 Total Population | $330,342,293$ | 194,892 |
| 2025 Total Population | $341,132,738$ | 210,788 |
| 2030 Total Population | $353,513,931$ | 230,703 |
| \% Change 2020-2025 | $3.27 \%$ | $8.16 \%$ |
| \% Change 2020-2030 | $7.01 \%$ | $18.37 \%$ |

POPULATION GENDER DISTRIBUTION

|  | Males All Ages | Females All Ages | Females Child Bearing |
| :--- | ---: | ---: | ---: |
|  | 77,498 | 79,837 | 32,493 |
| 2010 Total Population | 95,875 | 99,017 | 39,088 |
| 2020 Total Population | 103,630 | 107,158 | 41,608 |
| 2030 Total Population | 113,356 | 117,347 | 45,026 |
| \% Change 2020-2030 | $18.23 \%$ | $18.51 \%$ | $15.19 \%$ |
| National | $7.02 \%$ | $7.01 \%$ | $4.01 \%$ |

[^1]
## 2020 Race/Ethnicity with Total Population



Population by Age Group 2010-2030


Population by Sex 2010-2030


Source: IBM Watson Health / Claritas, 2020.

The 2020 median household income for the U.S. was $\$ 65,618$ and $\$ 63,313$ for the state of Texas. The median household income for the ZIP codes within this community ranged from $\$ 255,851$ for 76670 (Milford) to $\$ 100,990$ for 76065 (Midlothian). There were no ZIP codes with median household incomes less than $\$ 52,400$ - twice the 2020 federal poverty limit for a family of four.

The median household income ZIP code map below illustrates ZIP codes that are lower or higher than twice the federal poverty level for a family of four in 2020

Median Household Income is Lower or Higher than \$52,400
Twice the Federal Poverty Limit for a Family of 4


ZIP code map color shows 2020 Median Household Income. ZIP codes are colored on a scale from orange to blue. Orange color indicates median income less than twice the federal poverty level for a family of 4 , which is $\$ 52,400$, blue color indicates median is greater, and gray colors are similar to this benchmark.

## Insurance Coverage Estimates

A majority of the population (57\%) were insured through employer-sponsored health coverage. The remainder of the population was fairly equally divided between Medicaid, Medicare, and private market (the purchasers of coverage directly or through the health insurance marketplace).


Source: IBM Watson Health Insurance Coverage Estimates, 2020.

## Health Professional Shortages

The community includes three health professional shortage areas and one medically underserved area as designated by the U.S. Department of Health and Human Services Health Resources Services Administration.

| HEALTH PROFESSIONAL <br> SHORTAGE AREAS <br> (HPSA) | MEDICALLY <br> UNDERSERVED |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: |
|  | Mental <br> AREA/ POPULATION <br> (MUA/P) |  |  |  |
|  | Dental <br> Health | Primary <br> Care | Grand <br> Total | MUA/P |

Source: U.S. Department of Health and Human Services, Health Resources and Services Administration, 2021.

The details on each of these designations is listed below:

Health Professional Shortage Areas (HPSA)

| $\begin{aligned} & \text { COUNTY } \\ & \text { NAME } \end{aligned}$ | HPSA ID | HPSA ID NAME | $\begin{gathered} \text { HPSA } \\ \text { DISCIPLINE } \\ \text { CLASS } \end{gathered}$ | $\begin{gathered} \text { DESIGNATION } \\ \text { TYPE } \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: |
| Ellis | 14899948J2 | ELLIS COUNTY COALITION FOR HEALTH OPTIONS | Primary Care | Federally Qualified Health Center |
| Ellis | 74899948A4 | ELLIS COUNTY COALITION FOR HEALTH OPTIONS | Mental Health | Federally Qualified Health Center |
| Ellis | 64899948L9 | ELLIS COUNTY COALITION FOR HEALTH OPTIONS | Dental Health | Federally Qualified Health Center |

Medically Underserved Areas and Populations (MUA/P)

| COUNTY <br> NAME | MUA/P SOURCE IDENTIFICATION NUMBER | SERVICE <br> AREA <br> NAME | $\begin{aligned} & \text { DESIGNATION } \\ & \text { TYPE } \end{aligned}$ | RURAL STATUS |
| :---: | :---: | :---: | :---: | :---: |
| Ellis | 03496 | Ellis Service Area | Medically Underserved Area | Non-Rural |

## Community Needs Index

The IBM Watson Health Community Need Index (CNI) is a statistical approach that identifies areas within a community where there are likely gaps in health care. The CNI takes into account vital socioeconomic factors, including income, culture, education, insurance, and housing, about a community to generate a CNI score for every population ZIP code in the U.S.

The CNI is strongly linked to variations in community healthcare needs and is a good indicator of a community's demand for a range of healthcare services. Not-for-profit and community-based hospitals, for whom community need is central to the mission of service, are often challenged to prioritize and effectively distribute hospital resources. The CNI can be used to help them identify specific initiatives best designed to address the health disparities of a given community.

The CNI score by ZIP code shows specific areas within a community where healthcare needs may be greater.
Composite CNI Score
Low need.................igh need

(a) ZIP Composite CNI Score Methodist Midlothian


Methodist Midlothian
Health Community Composite CNI Score

### 3.45

| State and National Composite CNI Scores |  |  |
| :---: | :---: | :---: |
|  |  |  |
| 3.85 | 3.00 |  |
| Barrier | State | U.S. |
| Income | 3.0 | 3.0 |
| Culture | 4.7 | 3.0 |
| Education | 3.5 | 3.0 |
| Insurance | 4.3 | 3.0 |
| Housing | 3.9 | 3.0 |

ZIP Map where color shows the 2020 Community Need Index on a scale of 1 to 5 . Orange color indicates high need areas (CNI = 4 or 5 ); blue color indicates low need ( $\mathrm{CNI}=1$ or 2 ). Gray colors have needs at the national average $(\mathrm{CNI}=3)$.

The overall CNI score for the Ellis County Health Community was 3.45 . The difference in the numbers indicates both a strong link to community healthcare needs and a community's demand for various healthcare services. In portions of the community the CNI score was greater than 4.5, indicating more significant healthcare needs among the population.

## APPENDIX E: PROPRIETARY COMMUNITY DATA

IBM Watson Health supplemented the publicly available data with estimates of localized inpatient demand discharges, outpatient procedures, emergency department visits, heart disease, and cancer incidence estimates.

Social determinants of health are the structural determinants and conditions in which people are born, grow, live, work, and age, all of which can greatly impact healthcare utilization and play a major role in the shifting healthcare landscape. Social determinants, such as education, income, and race are factored into Inpatient Demand Estimates and Outpatient Procedure Estimates utilization rate creation methodologies.

## Inpatient Demand Estimates

Inpatient Demand Estimates provides the total volume of annual acute care admissions by ZIP code and DRG Product Line for every market in the U.S. IBM uses all-payor state discharge data for publicly available states and Medicare (MEDPAR) data for the entire U.S. These rates are applied to demographic projections by ZIP code to estimate inpatient utilization for 2020 through 2030.

The following summary is reflective of the inpatient utilization trends for the Ellis County Health Community. Total discharges in the community are expected to grow by $12.7 \%$ by 2030 , with pulmonary medicine, general medicine, and cardiovascular diseases projecting the largest growth.

| Product line | $2020$ <br> Discharges | $\begin{gathered} 2025 \\ \text { Discharges } \end{gathered}$ | $2030$ <br> Discharges | 2020-2025 <br> Discharges Change | 2020-2025 <br> Discharges <br> \% Change | 2020-2030 Discharges Change | 2020-2030 Discharges \% Change |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Alcohol and Drug Abuse | 201 | 206 | 229 | 5 | 2.5\% | 28 | 14.1\% |
| Cardiovasc-Thor Surgery | 539 | 567 | 594 | 28 | 5.2\% | 55 | 10.2\% |
| Cardiovascular Diseases | 1,224 | 1,349 | 1,555 | 125 | 10.2\% | 331 | 27.1\% |
| ENT | 94 | 88 | 86 | (6) | -6.2\% | (8) | -8.4\% |
| General Medicine | 2,855 | 2,974 | 3,204 | 119 | 4.2\% | 349 | 12.2\% |
| General Surgery | 1,351 | 1,358 | 1,428 | 7 | 0.5\% | 77 | 5.7\% |
| Gynecology | 111 | 54 | 32 | (57) | -51\% | (79) | -71\% |
| Nephrology/Urology | 703 | 742 | 808 | 39 | 5.6\% | 105 | 15\% |
| Neurosciences | 798 | 853 | 964 | 55 | 6.8\% | 165 | 20.7\% |
| Obstetrics Deliveries | 2,009 | 1,940 | 2,006 | (69) | -3.4\% | (3) | -0.2\% |
| Obstetrics Non-deliveries | 184 | 166 | 163 | (18) | -9.8\% | (21) | -11.5\% |
| Oncology | 328 | 338 | 359 | 9 | 2.8\% | 31 | 9.3\% |
| Ophthalmology | 17 | 16 | 16 | (1) | -4.2\% | (1) | -6.1\% |
| Orthopedics | 1,548 | 1,571 | 1,686 | 23 | 1.5\% | 138 | 8.9\% |
| Psychiatry | 63 | 66 | 68 | 3 | 4.1\% | 5 | 7.6\% |
| Pulmonary Medicine | 1,393 | 1,647 | 1,929 | 253 | 18.2\% | 536 | 38.4\% |
| Rehabilitation | 5 | 5 | 6 | 0 | 7.1\% | 1 | 20.8\% |
| TOTAL | 13,423 | 13,939 | 15,132 | 516 | 3.8\% | 1709 | 12.7\% |

[^2]
## Outpatient Procedures Estimates

Outpatient Procedure Estimates predict the total annual volume of procedures performed by ZIP code for every market in the U.S. using proprietary and public health claims, as well as federal surveys. Procedures are defined and reported procedure codes and are further grouped into clinical service lines. The Ellis County Health Community outpatient procedures are expected to increase by $38 \%$ by 2030 with the largest growth in the categories of labs, general and internal medicine, and physical and occupational therapy.

| Clinical Service Category | $\begin{gathered} 2020 \\ \text { Procedures } \end{gathered}$ | 2025 <br> Procedures | 2020-2025 <br> Procedures <br> \% Change | $\stackrel{2030}{\text { Procedures }}$ | 2020-2030 <br> Procedures <br> \% Change |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Allergy and Immunology | 28,939 | 32,551 | 12.5\% | 36,829 | 27.3\% |
| Anesthesia | 17,307 | 20,587 | 19.0\% | 23,920 | 38.2\% |
| Cardiology | 103,795 | 136,017 | 31.0\% | 180,138 | 73.6\% |
| Cardiothoracic | 127 | 146 | 15.7\% | 169 | 33.6\% |
| Chiropractic | 70,132 | 70,791 | 0.9\% | 69,612 | -0.7\% |
| Colorectal Surgery | 1,011 | 1,064 | 5.2\% | 1,132 | 12.0\% |
| CT Scan | 39,365 | 53,969 | 37.1\% | 73,589 | 86.9\% |
| Dermatology | 33,216 | 40,184 | 21.0\% | 48,365 | 45.6\% |
| Diagnostic Radiology | 201,611 | 224,838 | 11.5\% | 251,519 | 24.8\% |
| Emergency Medicine | 112,624 | 123,407 | 9.6\% | 136,909 | 21.6\% |
| Gastroenterology | 12,559 | 14,557 | 15.9\% | 16,823 | 34.0\% |
| General and Internal Medicine | 1,546,887 | 1,829,102 | 18.2\% | 2,114,414 | 36.7\% |
| General Surgery | 11,242 | 12,753 | 13.4\% | 14,594 | 29.8\% |
| Hematology and Oncology | 290,739 | 355,461 | 22.3\% | 422,885 | 45.5\% |
| Labs | 1,776,436 | 2,053,430 | 15.6\% | 2,381,941 | 34.1\% |
| Miscellaneous | 72,791 | 82,070 | 12.7\% | 92,060 | 26.5\% |
| MRI | 16,312 | 18,645 | 14.3\% | 21,428 | 31.4\% |
| Nephrology | 43,596 | 51,603 | 18.4\% | 61,013 | 40.0\% |
| Neurology | 24,205 | 26,480 | 9.4\% | 29,218 | 20.7\% |
| Neurosurgery | 882 | 1,209 | 37.0\% | 1,423 | 61.3\% |
| Obstetrics/Gynecology | 25,957 | 28,047 | 8.1\% | 30,658 | 18.1\% |
| Ophthalmology | 84,548 | 104,808 | 24.0\% | 127,755 | 51.1\% |
| Oral Surgery | 1,008 | 1,146 | 13.7\% | 1,323 | 31.3\% |
| Orthopedics | 36,020 | 41,071 | 14.0\% | 46,835 | 30.0\% |
| Otolaryngology | 53,185 | 60,848 | 14.4\% | 69,375 | 30.4\% |
| Pain Management | 26,458 | 30,679 | 16.0\% | 35,234 | 33.2\% |
| Pathology | 51 | 61 | 19.5\% | 73 | 42.8\% |
| PET Scan | 1,241 | 1,490 | 20.1\% | 1,764 | 42.2\% |
| Physical and occupational therapy | 485,128 | 585,523 | 20.7\% | 707,191 | 45.8\% |
| Plastic Surgery | 1,635 | 1,907 | 16.7\% | 2,242 | 37.2\% |
| Podiatry | 10,317 | 11,714 | 13.5\% | 13,212 | 28.1\% |
| Psychiatry | 119,077 | 169,735 | 42.5\% | 231,585 | 94.5\% |
| Pulmonary | 41,480 | 46,869 | 13.0\% | 53,418 | 28.8\% |
| Radiation Therapy | 18,767 | 21,687 | 15.6\% | 24,922 | 32.8\% |
| Single Photon Emission CT Scan | 2,314 | 2,652 | 14.6\% | 3,121 | 34.9\% |
| Urology | 13,678 | 16,134 | 18.0\% | 19,002 | 38.9\% |
| Vascular Surgery | 5,705 | 6,702 | 17.5\% | 7,819 | 37.1\% |
| TOTAL | 5,330,344 | 6,279,939 | 17.8\% | 7,353,510 | 38.0\% |

## Emergency Department Visits

Emergency Department Estimates predict the total annual volume of emergency department (ED) visits by ZIP code and level of acuity for every market in the U.S. IBM uses an extensive supply of proprietary claims, public claims, and federal surveys to construct population-based use rates for all payors by age and sex. These use rates are then applied to demographic and insurance coverage projections by ZIP code to estimate ED utilization for 2020 through 2030.


Visits are broken out into emergent and non-emergent ambulatory visits to identify the volume of visits that could be seen in a less-acute setting, for example, a fast-track ED or an urgent care facility. In addition, visits that result in an inpatient admission are broken out into a third, separate category. In the Ellis County Health Community, ED visits are expected to grow by over 10\% by 2025.

| Emergent Status | 2020 <br> Visits | 2025 <br> Visits | 2020-2025 <br> Visits Change | 2020-2025 <br> Visits \% Change |
| :--- | ---: | ---: | ---: | ---: |
| Emergent | 51,750 | 58,552 | 6,802 | $13.1 \%$ |
| Inpatient Admission | 14,976 | 17,530 | 2,555 | $17.1 \%$ |
| Non Emergent | 48,812 | 51,440 | 2,629 | $5.4 \%$ |
| TOTAL | 115,537 | 127,523 | 11,985 | $10.4 \%$ |

IBM Watson Health Emergency Department Visits, 2020.

## Heart Disease Estimates

The Heart Disease Estimates data set predicts the number of cases by heart disease type and ZIP code for every market in the U.S. IBM uses public and private claims data as well as epidemiological data from the National Health and Nutritional Examination Survey (NHANES) to build local estimates of heart disease prevalence for the current population. County-level models by age and sex are applied to the underlying demographics of specific geographies to estimate the number of patients with specific types of heart disease.

| Disease Type | 2020 <br> Prevalence | 2020 <br> \% Prevalence |
| :--- | ---: | ---: |
| Arrhythmia | 8,206 | $11.7 \%$ |
| Heart Failure | 4,309 | $6.1 \%$ |
| Hypertension | 50,865 | $72.5 \%$ |
| Ischemic Heart Disease | 6,750 | $9.6 \%$ |
| TOTAL | 70,130 | $100 \%$ |

[^3]
## Cancer Estimates

IBM Watson Health builds county-level Cancer Incidence models that are applied to the underlying demographics of specific geographies to estimate incidence (i.e., the number of new cancer cases annually) of all cancer patients. Cancer incidence is expected to increase by almost $12 \%$ in the Ellis County Health Community by 2025.

| Cancer Type | $\begin{aligned} & 2020 \\ & \text { ncidence } \end{aligned}$ | $\begin{aligned} & 2025 \\ & \text { Incidence } \end{aligned}$ | $\begin{gathered} \text { 2020-2025 } \\ \text { Change } \end{gathered}$ | $\begin{aligned} & 2020-2025 \\ & \text { \% Change } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: |
| Bladder | 42 | 50 | 8 | 19.3\% |
| Brain | 19 | 21 | 2 | 11.7\% |
| Breast | 213 | 245 | 32 | 15.2\% |
| Colorectal | 112 | 105 | -7 | -6\% |
| Kidney | 46 | 55 | 9 | 19.8\% |
| Leukemia | 29 | 34 | 5 | 17.2\% |
| Lung | 101 | 115 | 14 | 13.6\% |
| Melanoma | 45 | 54 | 9 | 19.5\% |
| Non-Hodgkins Lymphoma | 47 | 55 | 8 | 17.1\% |
| Oral Cavity | 30 | 35 | 5 | 16.6\% |
| Other | 89 | 104 | 16 | 17.8\% |
| Overian | 16 | 17 | 2 | 10.9\% |
| Pancreatic | 28 | 34 | 6 | 22.1\% |
| Prostate | 121 | 119 | -2 | -1.5\% |
| Stomach | 17 | 19 | 2 | 12.2\% |
| Thyroid | 29 | 33 | 5 | 15.8\% |
| Uterine Cervical | 7 | 7 | 0 | 4\% |
| Uterine Corpus | 31 | 37 | 5 | 17.4\% |
| TOTAL | 1,021 | 1,141 | 120 | 11.4\% |

Source: IBM Watson Health Cancer Estimates, 2020.

## APPENDIX F: COMMUNITY RESOURCES IDENTIFIED TO POTENTIALLY ADDRESS SIGNIFICANT HEALTH NEEDS

Below is a list of community resources that may help address this community's known health needs:

- Boys and Girls Club After School Program (Salvation Army of Ellis County)
- Caregiver Services (Meals-on-Wheels of Johnson and Ellis Counties)
- Celebrate Recovery
- Churches
- County Indigent Health Care Program
- Daniel's Den transitional housing assistance
- Ellis County Children's Advocacy Center
- Ellis County Department of Emergency Management
- Ellis County HEALS
- Emergency Family Services (Salvation Army)
- Food Pantry (Salvation Army of Ellis County)
- Habitat for Humanity of Ellis County
- Hope Clinic health care services
- Meals-on-Wheels
- Meals-on-Wheels (Midlothian Senior Citizens Center)
- Mint Cares Financial Assistance
- Mobility Assistance Program (Inclusive Communities Project)
- Seed of Love garden
- Summer Heat Relief - Cooling Station
- Veterans Services of Ellis Conty
- Waxhachie CARE


[^0]:    Approved by: Methodist Health System Board of Directors on July 12, 2022
    Posted to http://www.methodisthealthsystem.org by September 30, 2022

[^1]:    Source: IBM Watson Health / Claritas, 2020.

[^2]:    Source: IBM Watson Health Inpatient Demand Estimates, 2020.

[^3]:    Source: IBM Watson Heart Disease Estimates, 2020.

