



MEMORIAL HERMANN MEMORIAL CITY MEDICAL CENTER

2019 Community
Health Needs
Assessment

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HERMANN
Memorial City

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Executive Summary

Introduction & Purpose

Memorial Hermann Memorial City Medical Center (MHMC) is pleased to present its 2019 Community Health Needs Assessment (CHNA). This CHNA report provides an overview of the process and methods used to identify and prioritize significant health needs across Memorial Hermann Health System's regional service area (including MHMC), as federally required by the Affordable Care Act. Memorial Hermann Health System partnered with Conduent Healthy Communities Institute (HCI) to conduct the CHNA for 13 facilities:

- Memorial Hermann Katy Hospital
- Memorial Hermann Memorial City Medical Center
- Memorial Hermann Greater Heights Hospital
- Memorial Hermann Northeast Hospital
- Memorial Hermann Southeast Hospital
- Memorial Hermann Sugar Land Hospital
- Memorial Hermann Southwest Hospital
- Memorial Hermann The Woodlands Medical Center
- Memorial Hermann Rehabilitation Hospital – Katy
- Memorial Hermann – Texas Medical Center
- TIRR Memorial Hermann
- Memorial Hermann Surgical Hospital Kingwood
- Memorial Hermann Surgical Hospital First Colony

The purpose of this CHNA is to offer a comprehensive understanding of the health needs in MHMC's service area and guide the hospital's planning efforts to address those needs. Special attention has been given to the needs of vulnerable populations, unmet health needs or gaps in services, and input from the community. To standardize efforts across the Memorial Hermann Health System and increase the potential for impacting top health needs in the greater Houston region, community health needs were assessed and prioritized at a regional/system level.

Findings from this report will be used to identify and develop efforts to improve the health and quality of life of residents in the community.

Summary of Findings

The CHNA findings in this report result from the analysis of an extensive set of secondary data (over 100 indicators from national and state data sources) and primary data collected from community leaders, non-health professionals, and organizations serving the community at large, vulnerable populations, and/or populations with unmet health needs.

Through an examination of the primary and secondary data, the following top health needs were identified:

Memorial Hermann Health System's Significant Health Needs

- Access to Health Services
- Cancers
- Children's Health
- Diabetes
- Economy
- Education
- Food Insecurity
- Heart Disease/Stroke
- Lack of Health Insurance
- Low-Income/Underserved
- Mental Health
- Obesity
- Older Adults/Aging
- Substance Abuse
- Transportation

Prioritized Areas

In March 2019, stakeholders from the 13 hospital facilities in the Memorial Hermann Health System completed a survey to prioritize the significant health issues, based on criteria including health impact and risk as well as consideration of Memorial Hermann's strategic focus. The following four topics were identified as priorities to address:

Memorial Hermann Health System's CHNA Priorities

- Access to Healthcare
- Emotional Well-Being
- Food as Health
- Exercise Is Medicine

MHMC will develop strategies to address these priorities in its 2019 Implementation Strategy.

Introduction

Memorial Hermann Memorial City

Located in the heart of West Houston, Memorial Hermann Memorial City (MHMC) Medical Center has been providing proven, trusted healthcare to the residents of Greater and West Houston since 1971. A 444-bed facility, MHMC has more than 1,300 affiliated medical staff physicians, representing 91 medical specialties including heart and vascular care, women's care, children's care, orthopedics and sports medicine, cancer treatment, neuroscience, digestive care, amputation prevention and wound care, pelvic floor health, and urologic care.

Vision

Memorial Hermann will be the preeminent health system in the U.S. by advancing the health of those we serve through trusted partnerships with physicians, employees and others to deliver the best possible health solutions while relentlessly pursuing quality and value.

Mission Statement

Memorial Hermann is a not-for-profit, community-owned, health care system with spiritual values, dedicated to providing high quality health services in order to improve the health of the people in Southeast Texas.

Memorial Hermann Health System

One of the largest not-for-profit health systems in the nation, Memorial Hermann Health System is an integrated system with an exceptional affiliated medical staff and more than 26,000 employees. Governed by a Board of community members, the System services Southeast Texas and the Greater Houston community with more than 300 care delivery sites including 19 hospitals; the country's busiest Level 1 trauma center; an academic medical center affiliated with McGovern Medical School at UTHealth; one of the nation's top rehabilitation and research hospitals; and numerous specialty programs and services.

Memorial Hermann has been a trusted healthcare resource for more than 110 years and as Greater Houston's only full-service, clinically integrated health system, we continue to identify and meet our region's healthcare needs. Among our diverse portfolio is Life Flight, the largest and busiest air ambulance service in the United States; the Memorial Hermann Physician Network, MHMD, one of the largest, most advanced, and clinically integrated physician organizations in the country; and, the Memorial Hermann Accountable Care Organization, operating a care delivery model that generates better outcomes at lower costs to consumers, while providing residents of the Greater Houston area broad access to health insurance through the Memorial Hermann Health Insurance Company. Specialties span burn treatment, cancer, children's health, diabetes and endocrinology, digestive health, ear, nose and throat, heart and vascular, lymphedema, neurosurgery, neurology, stroke, nutrition, ophthalmology, orthopedics, physical and occupational therapy, rehabilitation, robotic surgery, sleep studies, transplant, weight loss, women's health, maternity and wound care. Supporting the System in its impact on overall population health is the Community Benefit Corporation. At a market share of 26.1% in the 'expanded' greater Houston area of 12 counties, our vision is that Memorial Hermann will

be a preeminent integrated health system in the U.S. by advancing the health of those we serve.

Memorial Hermann Memorial City Service Area

The service area for MHMC includes Fort Bend and Harris counties in Texas. The geographic boundaries of the service area are shown in Figure 1. The zip codes within MHMC’s primary service area are listed in Table 1 and represent approximately 75% of inpatient discharges (2.9% in Fort Bend County and 72.2% in Harris County).

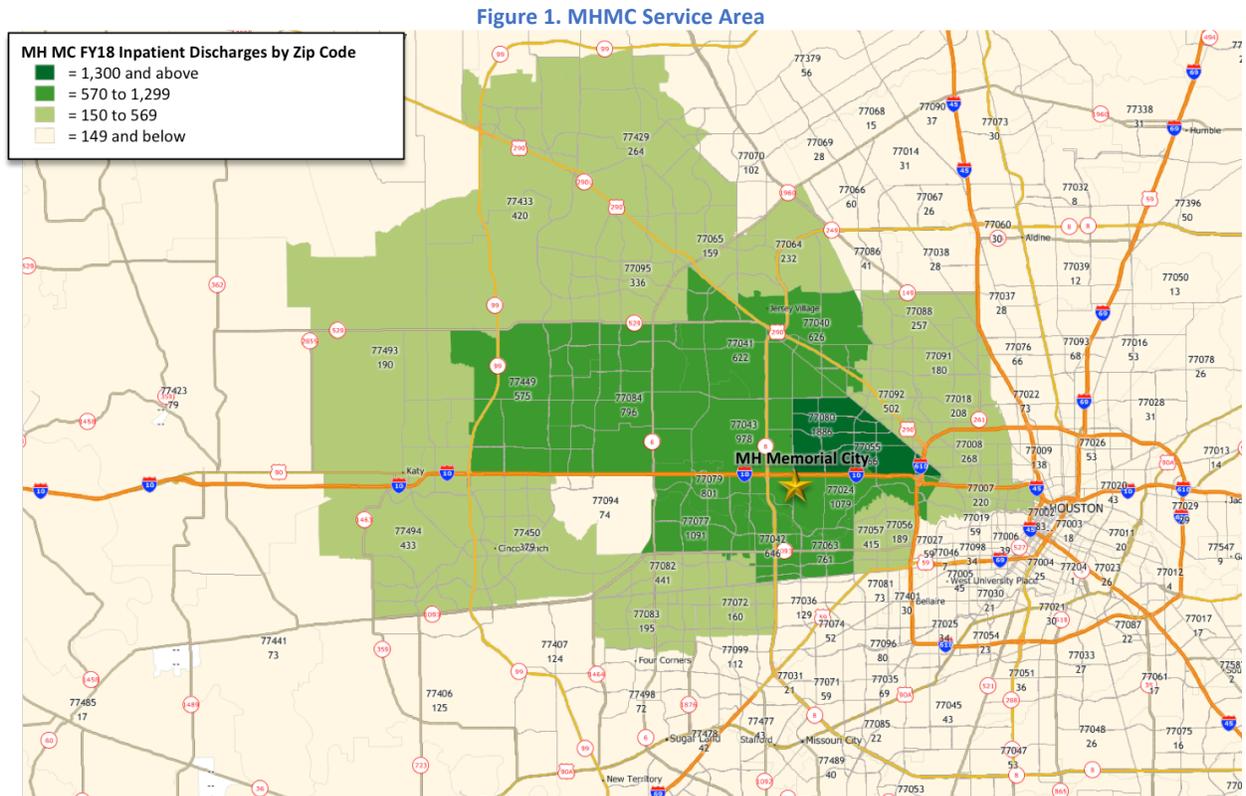


Table 1. Proportion of Patient Population Served by Zip Code

ZIP Code	County	Percent of Patient Population
77080	Harris	8.1%
77055	Harris	5.9%
77024	Harris	4.7%
77077	Harris	4.7%
77043	Harris	4.2%
77079	Harris	3.5%
77084	Harris	3.4%
77063	Harris	3.3%
77042	Harris	2.8%
77040	Harris	2.7%
77041	Harris	2.7%

ZIP Code	County	Percent of Patient Population
77449	Harris	2.5%
77092	Harris	2.2%
77082	Harris	1.9%
77494	Fort Bend	1.9%
77057	Harris	1.8%
77433	Harris	1.8%
77450	Harris	1.6%
77095	Harris	1.5%
77008	Harris	1.2%
77088	Harris	1.1%
77429	Harris	1.1%
77064	Harris	1.0%
77007	Harris	0.9%
77018	Harris	0.9%
77056	Harris	0.8%
77083	Harris	0.8%
77091	Harris	0.8%
77493	Harris	0.8%
77065	Harris	0.7%
77072	Harris	0.7%
77009	Harris	0.6%
77036	Harris	0.6%
77099	Harris	0.5%
77406	Fort Bend	0.5%
77407	Fort Bend	0.5%
77070	Harris	0.4%

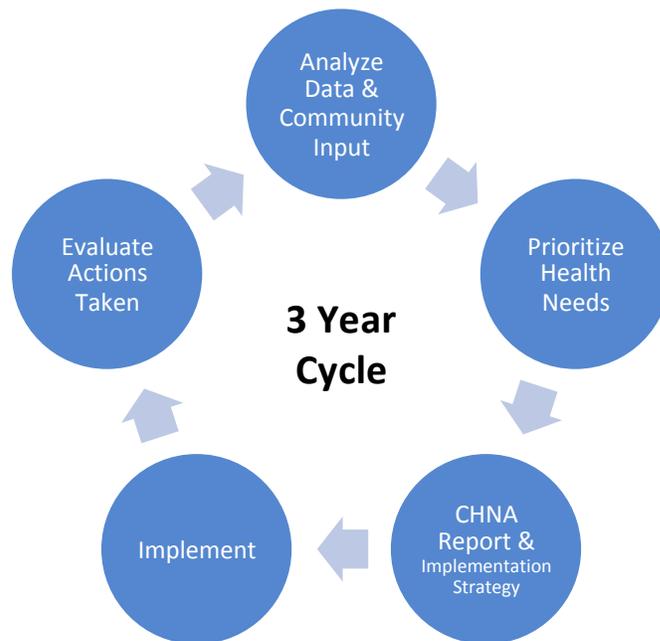
Consultants

Memorial Hermann Health System commissioned Conduent Healthy Communities Institute (HCI) to conduct its 2019 Community Health Needs Assessment. HCI works with clients across the nation to drive community health outcomes by assessing needs, developing focused strategies, identifying appropriate intervention programs, establishing monitoring systems, and implementing performance evaluation processes. To learn more about Conduent Healthy Communities Institute, please visit <https://www.conduent.com/community-population-health>.

Evaluation of Progress Since Prior CHNA

The CHNA process should be viewed as a three-year cycle. An important part of that cycle is revisiting the progress made on priority topics from previous CHNAs. By reviewing the actions taken to address priority areas and evaluating the impact of these actions in the community, an organization can better focus and target its efforts during the next CHNA cycle.

Figure 2. CHNA Process



Priority Health Needs and Impact from Prior CHNA

MHMC's last CHNA was conducted in 2016. The priority areas in FY16-18 were:

- **Healthy Living:** Encourage and foster healthy lifestyles through education, awareness and early detection to prevent illness.
- **Healthcare Access:** Improve community knowledge about healthcare access points and reduce perceived barriers to care.
- **Behavioral Health:** Ensure that all community members who are experiencing a mental health crisis have access to appropriate psychiatric specialists at the time of their crisis, are redirected away from the ER, are linked to a permanent, community based mental health provider, and have the necessary knowledge to navigate the system, regardless of their ability to pay.

Each of the above health topics correlates well with the priorities identified for the current CHNA (detailed below); thus MHMC will be building upon efforts of previous years. A detailed

table describing the strategies/action steps and indicators of success for each of the preceding priority health topics can be found in Appendix A. MHMC's preceding CHNA was made available to the public via the website and community feedback directed to Memorial Hermann's Community Benefit Department: <http://www.memorialhermann.org/locations/memorial-city/community-health-needs-assessment-memorial-city>. No comments or feedback were received on the preceding CHNA at the time this report was written.

Methodology

Overview

Two types of data were used in this assessment: primary and secondary data. Primary data are data that have been collected for the purposes of this community assessment. Primary data were obtained through a community survey and key informant interviews. Secondary data are health indicator data that have already been collected by public sources such as government health departments. Each type of data was analyzed using a unique methodology. Findings were organized by health topics and then synthesized for a comprehensive overview of the health needs in MHMC's service area.

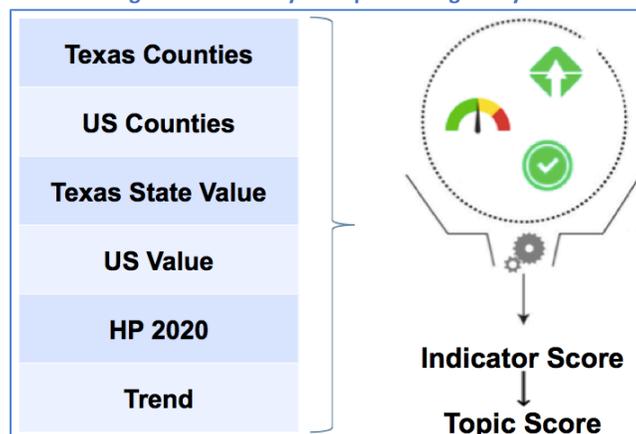
Secondary Data Sources & Analysis

Secondary data used for this assessment were collected and analyzed from HCI's community indicator database. This database, maintained by researchers and analysts at HCI, includes over 100 community indicators from at least 15 state and national data sources. HCI carefully evaluates sources based on the following three criteria: the source has a validated methodology for data collection and analysis; the source has scheduled, regular publication of findings; and the source has data values for small geographic areas or populations.

Secondary Data Scoring

HCI's Data Scoring Tool[®] was used to systematically summarize multiple comparisons in order to rank indicators based on highest need. For each indicator, the community value was compared to a distribution of Texas and US counties, state and national values, Healthy People 2020, and significant trends were noted. These comparison scores range from 0-3, where 0 indicates the best outcome and 3 the worst. Availability of each type of comparison varies by indicator and is dependent upon the data source, comparability with data collected for other communities, and changes in methodology over time. The comparison scores were summarized for each indicator, and indicators were then grouped into topic areas for a systematic ranking of community health needs. Please see Appendix B for further details on the quantitative data scoring methodology as well as secondary data scoring results.

Figure 3. Summary of Topic Scoring Analysis



Disparities Analysis

When a given indicator has data available for subgroups like race/ethnicity, age or gender – and values for these subgroups include confidence intervals – significant differences between the subgroups’ value and the overall value can be determined. A significant difference is defined as two values with non-overlapping confidence intervals. Only significant differences in which the value for a subgroup is worse than the overall value are identified. Confidence intervals are not available for all indicators. In these cases, there are not enough data to determine if two values are significantly different from each other.

Primary Data Methods & Analysis

Community input for Memorial Hermann Health System was collected to expand upon the information gathered from the secondary data. Primary data used in this assessment consisted of a community survey in English and Spanish as well as key informant interviews. See Appendix C for the survey and interview questions.

Community Survey

Input from community residents was collected through an online survey. This survey consisted of 11 questions related to top health needs in the community, individuals’ perception of their overall health, and weekly exercise habits. The community survey was distributed online through SurveyMonkey® from October 23rd through November 27th of 2018. The survey was made available in both English and Spanish. Paper surveys were also made available and answers to the paper survey were entered into the SurveyMonkey tool. A total of 285 responses were collected. Results in this report are based on the service area for Memorial Hermann Health System. This was a convenience sample, which means results may be vulnerable to selection bias and make the findings less generalizable to the population as a whole.

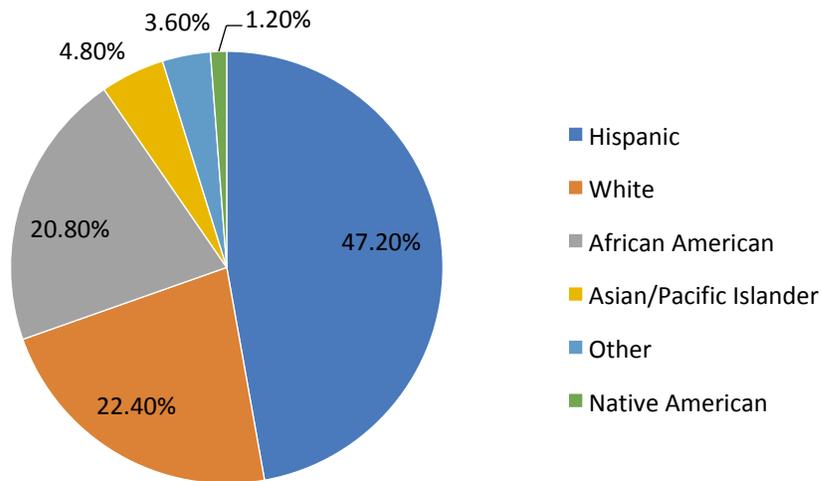
Table 2. Community Survey Outreach

Community Event	Description
Step Health Event – Moody Park, 77009	Community event hosted by Memorial Hermann providing park activation, walking tours, Zumba instruction, and (through a partnership with Houston Food Bank) food distribution to low-income, at-risk, and mostly uninsured residents.
Step Health Event – Castillo Park, 77009	Community event hosted by Memorial Hermann providing park activation, walking tours, Zumba instruction, and (through a partnership with Houston Food Bank) food distribution to low-income, at-risk, and mostly uninsured residents.
Memorial Hermann Health Centers for Schools	10 school-based health clinics in 5 school districts (74 schools) in Harris and Fort Bend Counties, providing medical, mental health, and dental care, along with nutrition, navigation, and summer boot camp programs to uninsured and underinsured children throughout the Greater Houston area.
West Orem YMCA, 77085	A community-centered organization that brings people together to bridge the gaps in community needs (underserved residents), nurtures residents’ potential to learn, grow, and thrive, and mobilizes the local community to effect lasting, meaningful change.
Spring Branch Community	A Federally Qualified Health Center (FQHC) providing quality, affordable healthcare services to the underserved and uninsured communities of Spring

HealthCenter, 77080	Branch and West Houston.
Wesley Community Center, 77009	A multi-purpose social service agency providing residents of Houston: short-term rent, utility, and food assistance to prevent homelessness and maintain family financial stability; a career and personal financial service center; and Early Head Start, a child development program serving infants to toddlers to promote school readiness.
Complete Communities, Houston	Program initiated by the Mayor of Houston in five communities - all historically under-resourced, each with a base level of community involvement and support, and with diverse populations. The program is designed to enhance access to quality affordable homes, jobs, well-maintained parks and greenspace, improved streets and sidewalks, grocery stores and other retail, good schools and transit options. Communities: Acres Homes [77018, 77088, 77091], Gulfton [77056, 77057, 77081], Near Northside [77009, 77022, 77026], Second Ward [77003, 77011, 77020], and Third Ward [77003, 77004, 77204].
Healthy Living Matters	A Houston/Harris County Childhood Obesity Collaborative - A collaborative of multi-sector leaders that promote policy aimed at system-level and environmental change to reduce the incidence of childhood obesity. Priority communities were selected due to the lack of access to healthy food options and opportunities to engage in physical activity as well as for their community assets and readiness for change. Priority Communities: City of Pasadena [77058, 77059, 77502, 77503, 77504, 77505, 77506, 77507, 77536, 77571, 77586], Near Northside [77009, 77022, 77026], and Fifth Ward/Kashmere Gardens [77020, 77026, and 77028]
Greater Northside Health Collaborative	Non-profit collaborative whose goal is to expand active living resources and increase access to quality healthcare and healthy food by promoting resident leadership and civic participation.

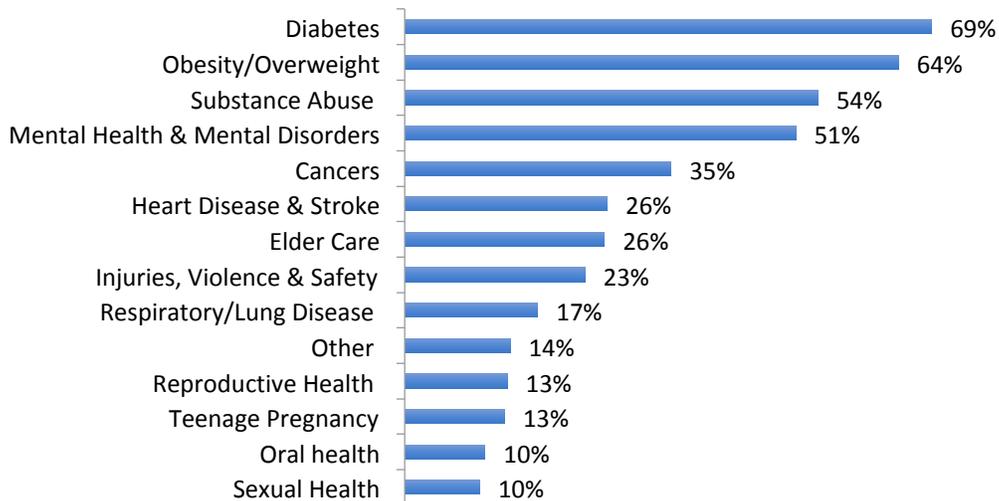
The race/ethnicity make-up of survey respondents is shown in Figure 4. The largest proportion of respondents identified as Hispanic/Latino (47.2%), 22.4% as White, 20.8% as Black/African American, and the remaining 9.6% of respondents as Asian/Pacific Islander, Other and Native American.

Figure 4. Survey Respondents by Race/Ethnicity



Survey respondents were asked to select top issues most affecting the community’s quality of life. As shown in Figure 5, the majority of respondents identified Diabetes, Obesity/Overweight, Substance Abuse, and Mental Health & Mental Disorders as top issues in the community.

Figure 5. Top Issues Affecting Quality of Life (Survey)



Key Informant Interviews

Community input was also collected through key informant interviews.

Memorial Hermann Health System joined with the Episcopal Health Foundation (EHF) in their key informant interview initiative supporting four Greater Houston area hospital systems in preparing their community health needs assessments. The collaborating hospitals of this initiative include Memorial Hermann, CHI St. Luke’s Health, Houston Methodist, and Texas Children’s (Table 3). Through this partnership, a total of 53 interviews were conducted with

stakeholders from a range of sectors such as government, healthcare, business, and community service organizations. Community leaders with specific experience working with priority populations, such as women, children, people of color, the disabled, and more, were also interviewed.

Table 3. Memorial Hermann Collaborative Partners

Episcopal Health Foundation’s mission is to advance the Kingdom of God with specific focus on human health and well-being through grants, research, and initiatives in support of the work of the Diocese, spanning 57 counties. Through informed action, collaboration, empowerment, stewardship, transparency, and accountability the foundation strives for the transformation of human lives and organizations with compassion for the poor and powerless.

CHI St. Luke’s Health, a part of Catholic Health Initiatives (CHI), one of the nation’s largest health systems, is dedicated to a mission of enhancing community health through high-quality, cost-effective care. Through partnerships with physicians and community partners, CHI St. Luke’s Health serves Greater Houston with its commitment to excellence and compassion in caring for the whole person while creating healthier communities.

Houston Methodist is a nonprofit health care organization serving Greater Houston, dedicated to excellence in research, education, and patient care. Houston Methodist brings compassion and spirituality to all its endeavors to help meet the health needs of the community through the system’s I CARE values: integrity, compassion, accountability, respect, and excellence.

Texas Children’s Hospital is a not-for-profit organization whose mission is to create a healthier future for children and women throughout Greater Houston and the global community by leading in patient care, education, and research. Texas Children’s is committed to creating a healthy community for children by providing the best pediatric care possible, through groundbreaking research and emphasis on education, while also offering a full continuum of family-centered care for women, from obstetrics to well-woman care.

In total, 64 key informant interviews were conducted by phone from August through November 2018; 53 key informant interviews were conducted through the collaborative and 11 interviews were conducted by HCI.

Interviewees who were asked to participate were recognized as having expertise in public health, special knowledge of community health needs and/or represented the broad interest of the community served by the hospital, and/or could speak to the needs of medically underserved or vulnerable populations. Efforts were made to identify interviewees working in and/or knowledgeable about the counties in Memorial Hermann Health System’s service area. As seen in Table 4, some interviewees were identified with knowledge of multiple counties.

Table 4. Key Informants by County

County	Key Informants
Austin	<i>Included in Multiple Counties</i>
Brazoria	3
Chambers	2

County	Key Informants
Fort Bend	10
Galveston	7
Harris	28
Liberty	1
Montgomery	4
San Jacinto	<i>Included in Multiple Counties</i>
Walker	<i>Included in Multiple Counties</i>
Waller	2
Wharton	2
<i>Multiple Counties*</i>	5
Total	64

**Five (5) of the Key Informant Interviews represented 2 or more counties, including: Austin, Brazoria, Chambers, Fort Bend, Galveston, Harris, Liberty, Montgomery, San Jacinto, Walker, Waller, and Wharton counties.*

Interviews were transcribed and analyzed using the qualitative analytic tool, Dedoose¹. Interview excerpts were coded by relevant topic areas and key health themes. Three approaches were used to assess the relative importance of the needs discussed in these interviews. These approaches included: the frequency by which a health topic was discussed across all interviews; the frequency by which a topic was described by the key informant as a barrier/challenge; and the frequency by which a topic was mentioned per interviewee.

Data Considerations

Several limitations of data should be considered when reviewing the findings presented in this report. Although the topics by which data are organized cover a wide range of health and health-related areas, data availability varies by health topic. Some topics contain a robust set of secondary data indicators, while others may have a limited number of indicators or limited subpopulations covered by those specific indicators.

Data scores represent the relative community health need according to the secondary data for each topic and should not be considered to be a comprehensive result on their own. In addition, these scores reflect the secondary data results for the population as a whole, and do not represent the health or socioeconomic need that is much greater for some subpopulations. Moreover, many of the secondary data indicators included in the findings are collected by survey, and though specific methods are used to best represent the population at large, these measures are subject to instability, especially for smaller populations. The Index of Disparity is also limited by data availability, where indicator data varies based on the population groups and service areas being analyzed.

¹ Dedoose Version 8.0.35, web application for managing, analyzing, and presenting qualitative and mixed method research data (2018). Los Angeles, CA: SocioCultural Research Consultants, LLC www.dedoose.com

Race/Ethnic Groupings

The secondary data presented in this report derive from multiple sources, which may present race and ethnicity data using dissimilar nomenclature. For consistency with data sources throughout the report, subpopulation data may use different terms to describe the same or similar groups of community members.

Zip Codes and Zip Code Tabulation Areas

This report presents both ZIP Code and ZIP Code Tabulation Area (ZCTA) data. ZIP or Zone Improvement Plan Codes were created by the U.S. Postal Service to improve mail delivery service. They are based on postal routes, which factor in delivery-area, mail volume and geographic location. They are not designed to be used for statistical reporting and may change frequently. Some ZIP Codes may only include P.O. boxes or cover large unpopulated areas. ZCTAs or ZIP Code Tabulation Areas were created by the U.S. Census Bureau and are generalized representations of ZIP Codes that have been assigned to census blocks. Therefore, ZCTAs are representative of geographic locations of populated areas. In most cases, the ZCTA will be the same as its ZIP Code. ZCTAs will not necessarily exist for ZIP Code areas with only businesses, single or multiple addresses, or for large unpopulated areas. Since ZCTAs are based on the most recent Census data, they are more stable than ZIP Codes and do not change as frequently.

Demographics for this report are sourced from the United States Census Bureau, which presents ZCTA estimates. Tables and figures in the Demographics section of this report reference ZIP Codes in title (for purposes of familiarity) but show values of ZCTAs. Data from other sources is representative by ZIP Codes and are labeled as such.

Prioritization

In order to focus efforts on a smaller number of the most significant community issues, sixteen representatives from the Memorial Hermann Health System (one or more representing each facility) participated in an online prioritization process to prioritize the fifteen significant health needs identified through the secondary and primary data analyses. The prioritized health needs will be under consideration for the development of an implementation plan that will address some of the community's most pressing health issues.

Prioritization Process

To prioritize significant health needs, Memorial Hermann stakeholders participated in an online webinar on March 7, 2019 to review data synthesis results followed by completion of a prioritization matrix listing significant health needs and four criteria by which to rate each need. Participants scored each need for each of the criteria on a scale from 1-5, with 1 meaning the respondent strongly disagrees to 5 meaning the respondent strongly agrees that the health need meets the criterion. Respondents were also able to select "Don't Know/Unsure" for each health need.

The criteria for prioritization included to what extent an issue:

- Impacts many people in the community
- Significantly impacts subgroups in the community (gender, race/ethnicity, LGBTQ, etc.)

- Has inadequate existing resources in the community
- Has high risk for disease or death

Completion of the prioritization matrix in Appendix D resulted in numerical scores for each health need that corresponded to how well each health need met the criteria for prioritization. The scores were ranked from highest to lowest (Table 5).

Table 5. Results from Memorial Hermann Prioritization Matrix

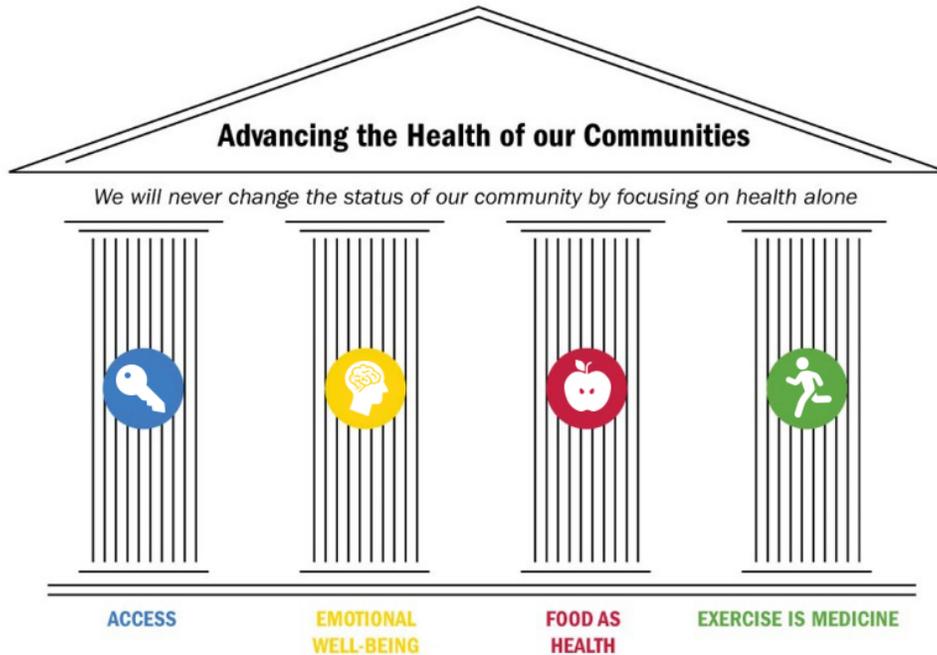
Significant Health Need	Impact on Community	Impact on Subgroups	Inadequate Resources	High Risk	Average Score
Obesity (Exercise, Nutrition and Weight)	4.69	4.00	3.19	4.50	4.09
Mental Health	4.44	3.44	4.50	3.75	4.03
Diabetes	4.50	4.00	3.25	4.19	3.98
Lack of Health Insurance	4.31	4.19	3.38	4.00	3.97
Low-Income/Underserved	4.19	4.19	3.44	4.00	3.95
Heart Disease/ Stroke	4.44	3.82	2.81	4.44	3.88
Substance Abuse	3.56	3.88	3.63	4.19	3.81
Access to Health Services	4.00	3.94	3.25	3.88	3.77
Older Adults and Aging	4.38	3.81	3.13	3.75	3.76
Food Insecurity	3.88	4.00	3.44	3.50	3.70
Cancers	4.19	3.19	3.00	4.31	3.67
Education	3.88	3.81	3.00	3.13	3.45
Transportation	4.00	3.88	2.81	3.00	3.42
Children's Health	4.00	3.50	3.00	3.19	3.42
Economy	3.31	3.31	2.69	2.88	3.05

In addition to rating each need in the matrix, prioritization participants were asked to rate the level of importance of Memorial Hermann’s 4 strategic pillars.

1. Improving **Access to Healthcare** through programming, education, and social service support;
2. Addressing **Emotional Well-being** (mental and behavioral health) through innovative access points;
3. Promoting the importance of a healthy diet through screening and creating access to nutritious **Food as Health**; and,
4. Fostering improved health through **Exercise Is Medicine** with culturally appropriate activities.

Each of these intersecting pillars connect to each other through various points in Memorial Hermann programs and initiatives advancing the health of our communities (Figure 6).

Figure 6. Memorial Hermann's Four Pillars for Community Health



Over 93% of participants responded that the 4 pillars were important or very important. The Memorial Hermann Community Benefit team reviewed these findings, and taking into account the alignment of top needs with Memorial Hermann's strategic focus areas, a decision was made to integrate:

- Lack of Health Insurance, Low-Income/Underserved, and Access to Health Services into Pillar 1: **Access to Healthcare**
- Mental Health and Substance Abuse into Pillar 2: **Emotional Well-Being**
- Diabetes, Food Insecurity and Heart Disease/Stroke into Pillar 3: **Food as Health**
- Obesity (Exercise, Nutrition and Weight) into Pillar 4: **Exercise Is Medicine**

Through this system-wide prioritization process, the following four priorities for Memorial Hermann Health System are:

- **Access to Healthcare** (addressing Access to Health Services, Lack of Health Insurance, and Low-Income/Underserved)
- **Emotional Wellbeing** (addressing Mental Health and Substance Abuse)
- **Food as Health** (addressing Diabetes, Food Insecurity, and Heart Disease/Stroke)
- **Exercise Is Medicine** (addressing Obesity)

These four health topics will be explored further in order to understand how findings from the secondary and primary data analyses resulted in each issue being a high priority health need for Memorial Hermann Health System.

Demographics

The following section explores the demographic profile of MHMC's service area, including Fort Bend and Harris counties. The demographics of a community significantly impact its health profile. Different race/ethnic, age, and socioeconomic groups have unique needs and require different approaches to health improvement efforts. All demographic estimates are sourced from the U.S. Census Bureau's 2013-2017 American Community Survey unless otherwise indicated. Furthermore, tables in this section list indicator values for the top 75% of zip codes within MHMC's service area in descending order of inpatient discharges unless otherwise noted.

Population

According to the U.S. Census Bureau's 2013-2017 American Community Survey, the two counties in MHMC's service area had populations of 764,828 (Fort Bend County) and 4,652,980 (Harris County). Figure 7 illustrates the population size by county and Table 6 by zip code. As shown in Table 6, the most populous zip codes in MHMC's service area are 77449 (Harris County), 77494 (Fort Bend County) and 77084 (Harris County).

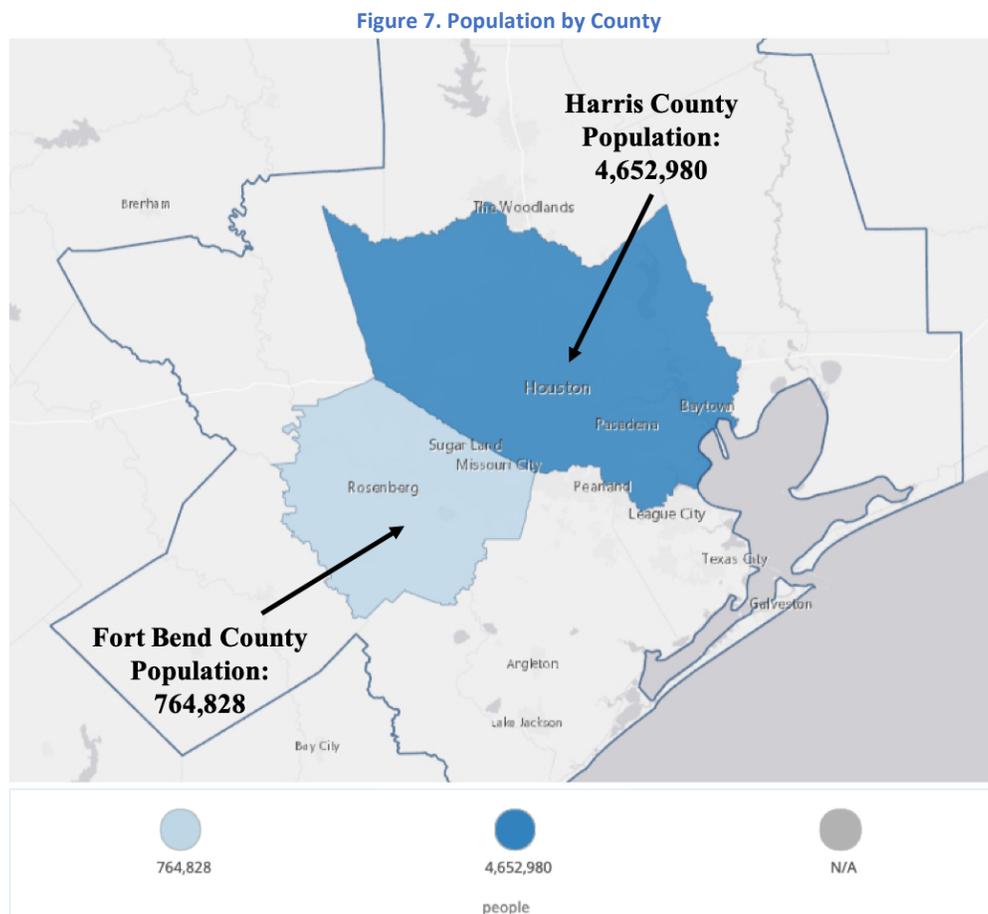


Table 6. Population by Zip Code

ZIP Code	County	Total Population Estimate
77080	Harris	45,665
77055	Harris	45,003
77024	Harris	38,110
77077	Harris	57,757
77043	Harris	25,838
77079	Harris	33,577
77084	Harris	104,582
77063	Harris	38,931
77042	Harris	42,098
77040	Harris	48,273
77041	Harris	35,372
77449	Harris	119,204
77092	Harris	38,476
77082	Harris	56,641
77494	Fort Bend	105,854
77057	Harris	40,130
77433	Harris	75,008
77450	Harris	74,631
77095	Harris	72,081
77008	Harris	34,491
77088	Harris	56,716
77429	Harris	86,399
77064	Harris	49,578
77007	Harris	35,822
77018	Harris	28,073
77056	Harris	21,732
77083	Harris	79,408
77091	Harris	25,277
77493	Harris	29,984
77065	Harris	38,820
77072	Harris	62,162
77009	Harris	37,751
77036	Harris	76,605
77099	Harris	51,905
77406	Fort Bend	41,008
77407	Fort Bend	48,157
77070	Harris	51,080

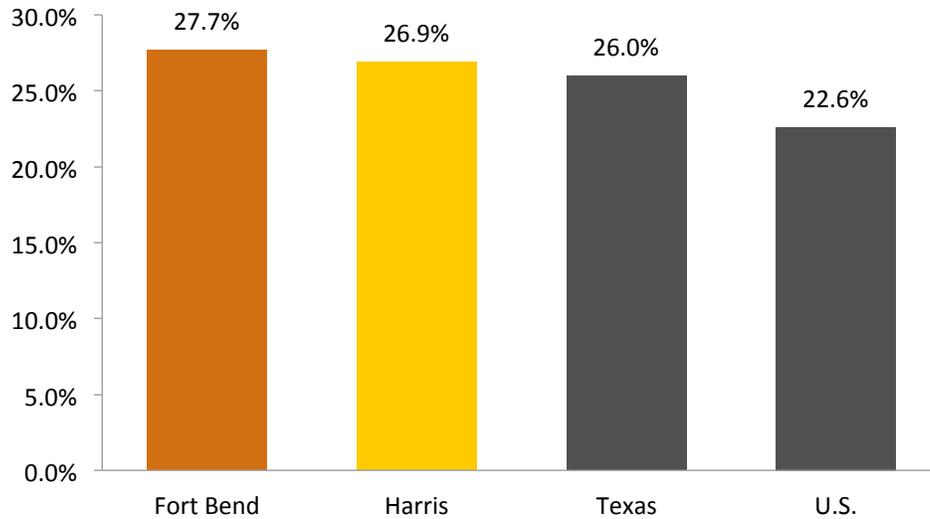
American Community Survey, 2013-2017

Age

Figure 8 shows MHMC’s service area population that is under 18 years old. Almost 28% of Fort Bend County’s population is under 18 and nearly 27% of Harris County’s population is under 18.

Fort Bend and Harris counties have higher proportions of residents under 18 compared to the state and national values.

Figure 8. Population Under 18



As shown in Figure 9, Fort Bend and Harris counties have smaller proportions of older adults compared to Texas and the U.S. In Fort Bend County, 10.6% of the population is over 65 years old. In Harris County, 10.2% of residents are over 65.

Figure 9. Population Over 65

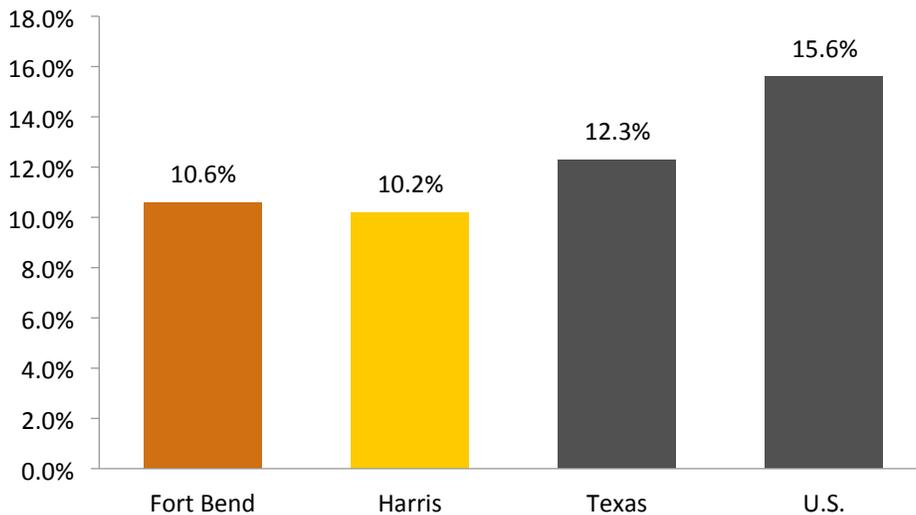
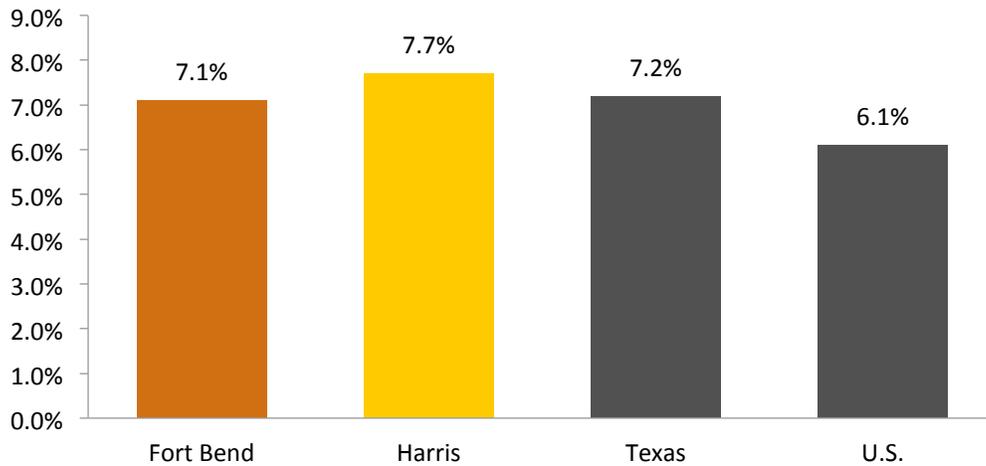


Figure 10 shows that both Fort Bend and Harris counties have larger proportions of residents under 5 years old compared to the U.S. A little over 7% of Fort Bend County's population is under 5 while Harris County has 7.7% of its population under 5.

Figure 10. Population Under 5



Race/Ethnicity

The race and ethnicity composition of a population is important in planning for future community needs, particularly for schools, businesses, community centers, health care and child care. Race and ethnicity data are also useful for identifying and understanding disparities in housing, employment, income, and poverty.

A larger number of residents in Fort Bend County identify as White, non-Hispanic (34.4%) while Harris County has a larger number of residents who identify as Hispanic or Latino (42.2%). Figure 11 shows the racial composition of residents in Fort Bend County with 34.4% of residents identifying as White, non-Hispanic; 24.2% as Hispanic or Latino (of any race); 20.2% as Black or African American; 19.2% as Asian; and 2% as American Indian and Alaska Native, Native Hawaiian and Other Pacific Islander, “Some other race”, or “Two or more races”.

Figure 11. Race/Ethnicity in Fort Bend County

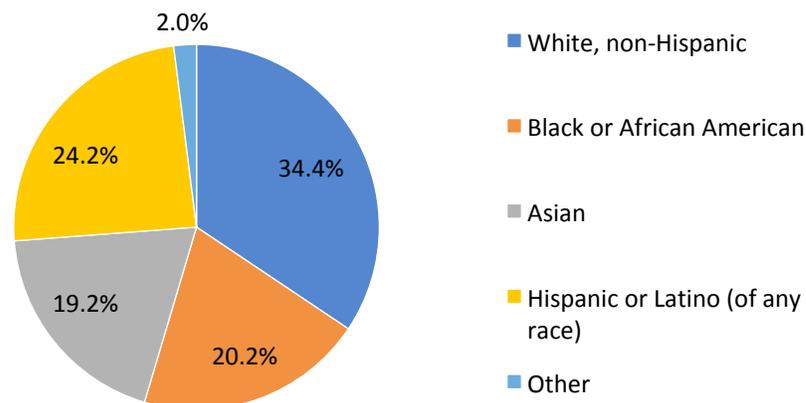
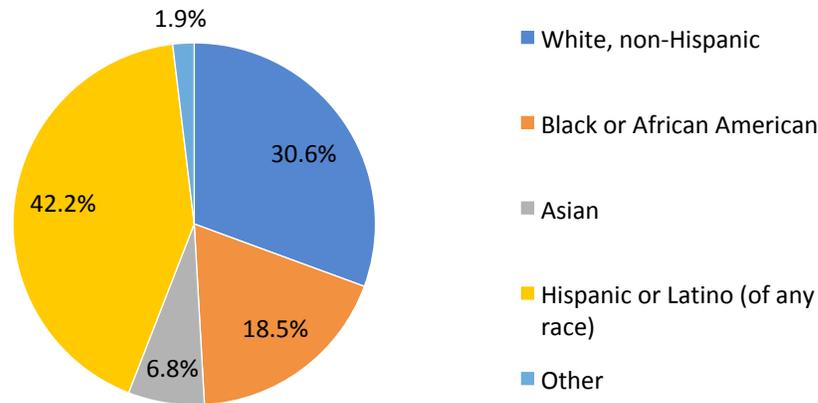


Figure 12 shows the racial composition of residents in Harris County with 42.2% of residents identifying as Hispanic or Latino (of any race); 30.6% as White; 18.5% as Black or African

American; 6.8% as Asian; and 1.9% as American Indian and Alaska Native, Native Hawaiian and Other Pacific Islander, “Some other race”, or “Two or more races”.

Figure 12. Race/Ethnicity in Harris County



Language

Language is an important factor to consider for outreach efforts in order to ensure that community members are aware of available programs and services.

Figure 13. Language Other than English Spoken at Home

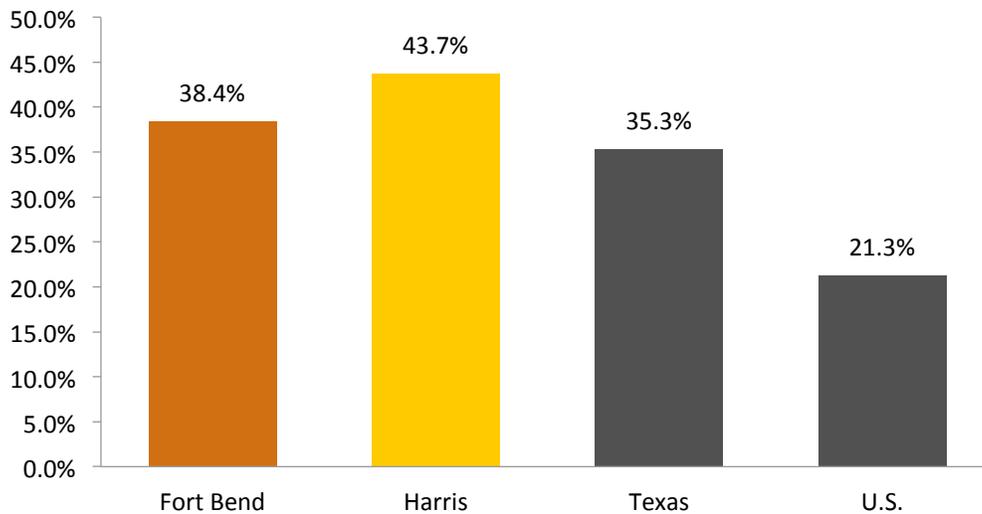


Figure 13 shows the proportion of residents in Fort Bend and Harris counties who speak a language other than English at home. Approximately 38% of residents in Fort Bend County and almost 44% of residents in Harris County speak a language other than English as compared to 35.3% in Texas and 21.3% in the U.S. This is an important consideration for the effectiveness of services and outreach efforts, which may be more effective if conducted in languages other than English alone.

Table 7. Population with Difficulty Speaking English by Zip Code

ZIP Code	County	Difficulty Speaking English
77080	Harris	37.1%
77055	Harris	30.2%
77024	Harris	6.9%
77077	Harris	12.5%
77043	Harris	24.8%
77079	Harris	10.9%
77084	Harris	18.5%
77063	Harris	20.3%
77042	Harris	18.5%
77040	Harris	25.8%
77041	Harris	21.9%
77449	Harris	17.2%
77092	Harris	30.3%
77082	Harris	15.9%
77494	Fort Bend	8.9%
77057	Harris	23.4%
77433	Harris	9.8%
77450	Harris	10.8%
77095	Harris	8.5%
77008	Harris	5.9%
77088	Harris	27.3%
77429	Harris	7.2%
77064	Harris	21.7%
77007	Harris	4.7%
77018	Harris	13.1%
77056	Harris	12.5%
77083	Harris	27.7%
77091	Harris	22.7%
77493	Harris	10.8%
77065	Harris	12.5%
77072	Harris	41.9%
77009	Harris	22.8%
77036	Harris	47.3%
77099	Harris	31.7%
77406	Fort Bend	3.4%
77407	Fort Bend	14.6%
77070	Harris	11.1%
Fort Bend	--	13.0%
Harris	--	20.4%
Texas	--	14.1%

American Community Survey, 2013-2017

As shown in Table 7, Harris County has a larger proportion of residents with difficulty speaking English (20.4%) compared to Fort Bend County (13.0%) and the state of Texas (14.1%). In Harris County, almost half of residents (47.3%) in zip code 77036 and 41.9% of residents in zip code 77072 have difficulty speaking English. Within MHMC’s top zip codes for inpatient discharges (77080 and 77055), over 30% of community members have difficulty speaking English.

Social and Economic Determinants of Health

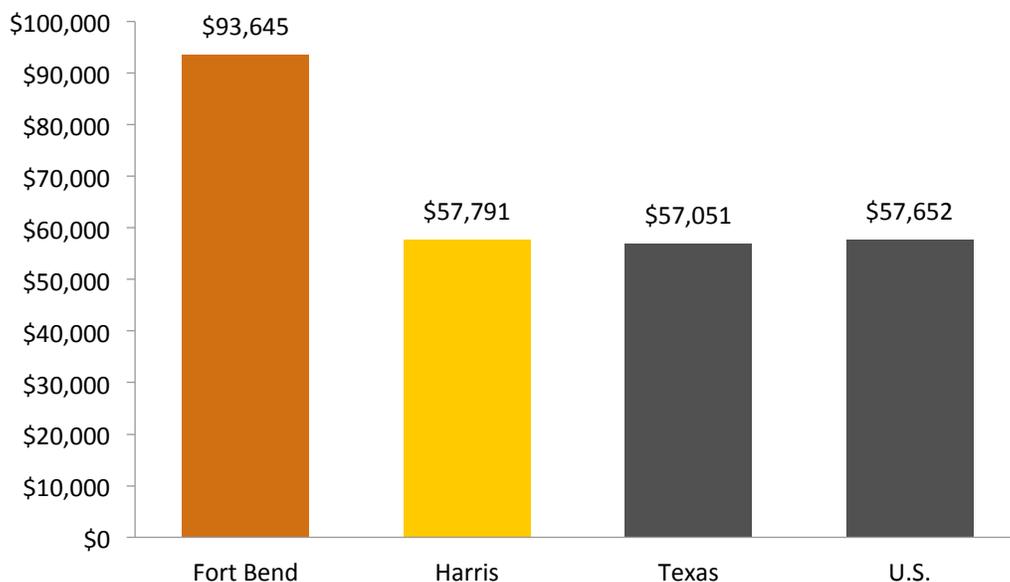
This section explores the economic, environmental, and social determinants of health in MHMC’s service area. Social determinants are the conditions in which people are born, grow, work, live, and age, and the wider set of forces and systems shaping the conditions of daily life.

Income

Median household income reflects the relative affluence and prosperity of an area. Areas with higher median household incomes are likely to have a greater share of educated residents and lower unemployment rates.

Figure 14 compares the median household income values for both counties in MHMC’s service area to the median household income value for Texas and the United States. Fort Bend County’s median household income of \$93,645 is greater than Harris County’s median household income (\$57,791). Harris County’s median household income is similar to the state and national values.

Figure 14. Median Household Income



As shown in Table 8, MHMC’s top zip codes for inpatient discharges reveal a broad range in median household income. At \$44,386 and \$52,269 respectively, zip codes 77080 and 77055 have median household incomes lower than the state of Texas, whereas zip code 77024 has a median household income of \$118,561, which is more than double the state value.

Table 8. Median Household Income by Zip Code

ZIP Code	County	Median Household Income
77080	Harris	\$44,386
77055	Harris	\$52,269
77024	Harris	\$118,561
77077	Harris	\$66,587
77043	Harris	\$60,043
77079	Harris	\$98,774
77084	Harris	\$65,617
77063	Harris	\$44,957
77042	Harris	\$47,297
77040	Harris	\$55,438
77041	Harris	\$79,503
77449	Harris	\$72,397
77092	Harris	\$39,921
77082	Harris	\$53,999
77494	Fort Bend	\$137,600
77057	Harris	\$57,093
77433	Harris	\$103,773
77450	Harris	\$101,240
77095	Harris	\$92,175
77008	Harris	\$97,690
77088	Harris	\$44,472
77429	Harris	\$103,092
77064	Harris	\$67,763
77007	Harris	\$121,458
77018	Harris	\$81,565
77056	Harris	\$107,003
77083	Harris	\$54,786
77091	Harris	\$32,500
77493	Harris	\$85,865
77065	Harris	\$54,688
77072	Harris	\$41,041
77009	Harris	\$49,383
77036	Harris	\$29,744
77099	Harris	\$38,878
77406	Fort Bend	\$114,696
77407	Fort Bend	\$96,947
77070	Harris	\$69,038
Fort Bend	--	\$93,645
Harris	--	\$57,791
Texas	--	\$57,051

American Community Survey, 2013-2017

Poverty

Federal poverty thresholds are set every year by the Census Bureau and vary by size of family and ages of family members. A high poverty rate is both a cause and a consequence of poor economic conditions.

Figure 15 shows the proportion of residents living below the poverty level in Fort Bend and Harris counties compared to the state of Texas and the U.S. The percentage of residents living below the poverty level in Harris County is 16.8%, which is higher than the national value (14.6%) and slightly higher than the state value (16.0%). In Fort Bend County, 8.1% of residents live below the poverty value, which is lower than the national value and nearly half the value of Harris County and Texas.

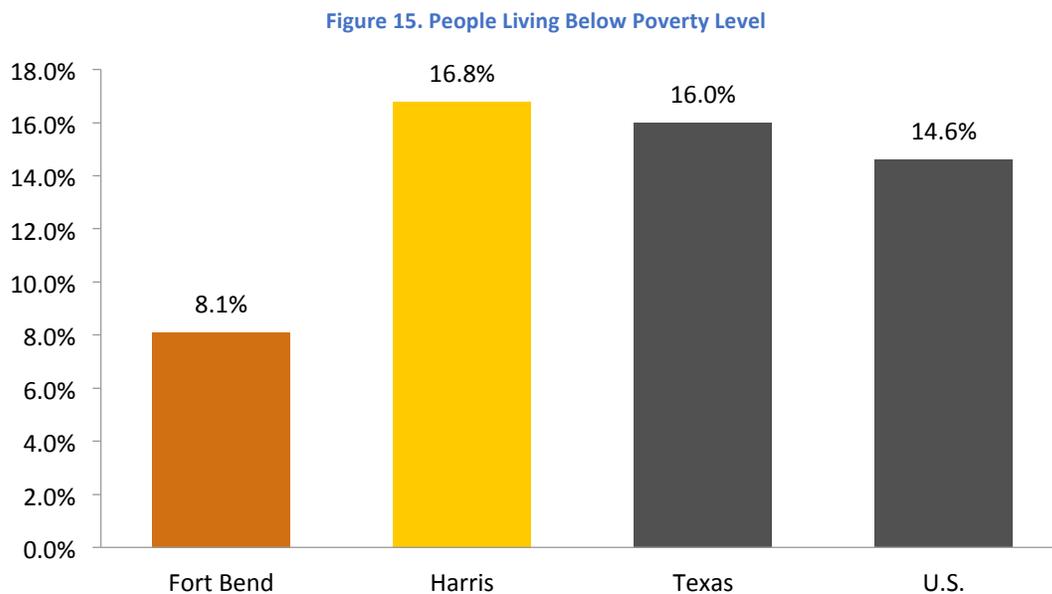


Figure 16 shows the proportion of residents living below the poverty level by race/ethnicity. In Fort Bend County, 14.8% of residents identifying as Hispanic or Latino live below the poverty level, compared to 3.8% White, 5.9% Asian and 9.4% Black or African American residents. For all race/ethnicity groups in Fort Bend County, the percentage of residents living below the poverty level is nevertheless lower than the values for Harris County, Texas and the U.S. In Harris County, 22.6% of Hispanic or Latino residents and 21.8% of Black or African American residents live below the poverty level, compared to 7% White and 11.4% Asian residents. The percentage of Black and Asian residents living below the poverty level in Harris County is higher than the state values for Black and Asian residents.

Figure 16. People Living Below Poverty Level by Race/Ethnicity

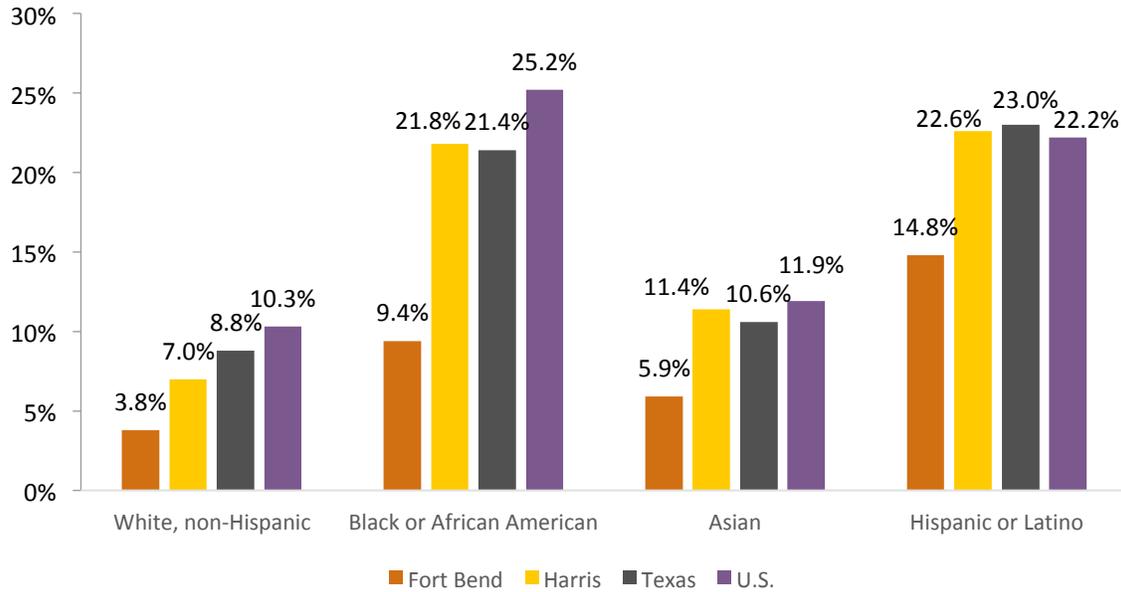
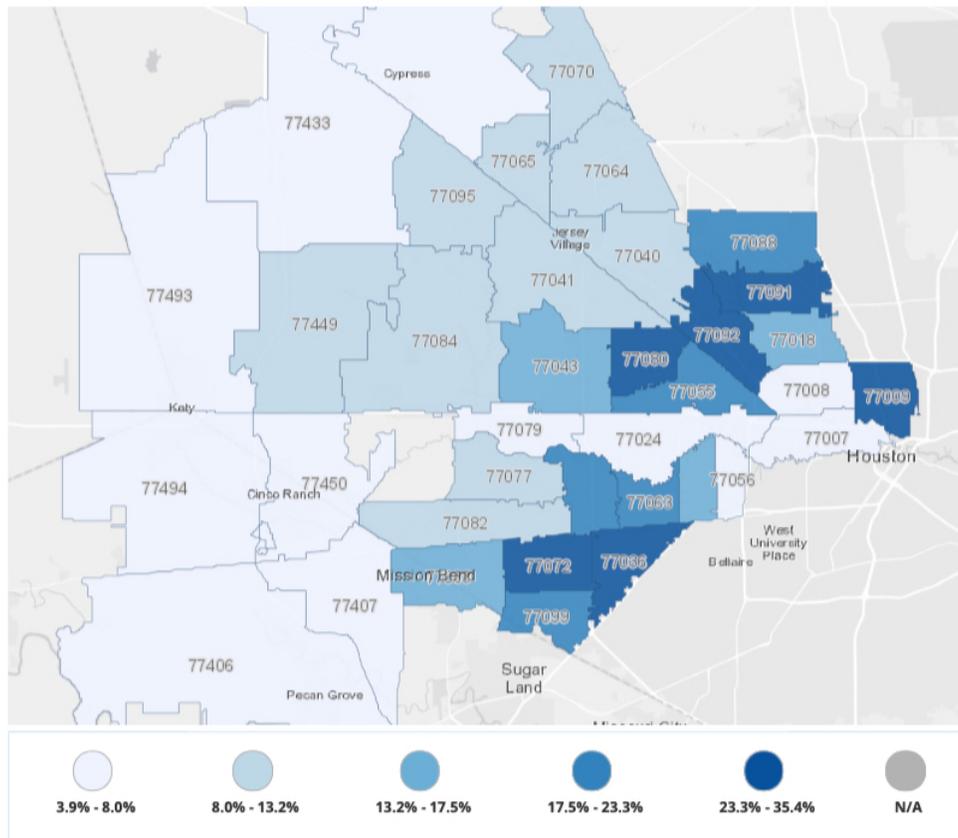


Figure 17. People Living Below Poverty Level by Zip Code



Poverty rates are over twice as high in Harris County (16.8%) compared to Fort Bend County (8.1%) (Table 9.) As show in Figure 17 and Table 9, within MHMC’s service area, over 25% of residents in zip code 77080 and over 22% of residents in zip code 77055 are living below the

poverty level, which is higher than the value for Harris County (16.8%) and Texas (16%), and more than 2.5 times the value for Fort Bend County (8.1%).

Table 9. People Living Below Poverty Level by Zip Code

ZIP Code	County	People Living Below Poverty Level
77080	Harris	25.1%
77055	Harris	22.8%
77024	Harris	5.8%
77077	Harris	10.4%
77043	Harris	14.6%
77079	Harris	8.0%
77084	Harris	11.8%
77063	Harris	22.9%
77042	Harris	19.5%
77040	Harris	13.2%
77041	Harris	10.2%
77449	Harris	9.5%
77092	Harris	26.5%
77082	Harris	12.4%
77494	Fort Bend	3.9%
77057	Harris	16.0%
77433	Harris	4.4%
77450	Harris	4.6%
77095	Harris	9.2%
77008	Harris	6.0%
77088	Harris	21.0%
77429	Harris	4.6%
77064	Harris	12.2%
77007	Harris	6.0%
77018	Harris	17.5%
77056	Harris	5.3%
77083	Harris	14.9%
77091	Harris	28.5%
77493	Harris	5.9%
77065	Harris	11.0%
77072	Harris	24.7%
77009	Harris	24.3%
77036	Harris	35.4%
77099	Harris	23.3%
77406	Fort Bend	3.9%
77407	Fort Bend	6.4%
77070	Harris	11.8%
Fort Bend	--	8.1%
Harris	--	16.8%
Texas	--	16.0%

American Community Survey, 2013-2017

Food Insecurity

The Supplemental Nutrition Assistance Program (SNAP) is a federal assistance program that provides low-income families with electronic benefit transfers (EBTs) that can be used to purchase food. The goal of the program is to increase food security and reduce hunger by increasing access to nutritious food.

Table 10 shows the percent of households with children that participate in SNAP in the zip codes within MHMC’s service area. Both Fort Bend and Harris counties have higher proportions of households with children receiving SNAP compared to the state of Texas. Although the average value for Fort Bend County (73.5%) is higher overall compared to Harris County (67.7%), within MHMC’s top ten zip codes for inpatient discharges, zip codes 77080, 77055, 77024, 77043, 77079, 77084, and 77063 (all within Harris County) have proportions higher than 70%. In particular, zip codes 77080 and 77084 have more than 80% of households with children receiving SNAP.

Table 10. Households with Children Receiving SNAP by Zip Code

ZIP Code	County	Households with Children Receiving SNAP
77080	Harris	81.3%
77055	Harris	72.4%
77024	Harris	71.4%
77077	Harris	62.0%
77043	Harris	77.3%
77079	Harris	79.2%
77084	Harris	85.6%
77063	Harris	71.2%
77042	Harris	63.8%
77040	Harris	65.6%
77041	Harris	60.6%
77449	Harris	77.4%
77092	Harris	71.4%
77082	Harris	66.5%
77494	Fort Bend	57.2%
77057	Harris	76.6%
77433	Harris	69.5%
77450	Harris	73.8%
77095	Harris	58.7%
77008	Harris	34.6%
77088	Harris	67.8%
77429	Harris	85.4%
77064	Harris	67.0%
77007	Harris	15.4%
77018	Harris	49.0%
77056	Harris	22.1%

ZIP Code	County	Households with Children Receiving SNAP
77083	Harris	71.0%
77091	Harris	50.8%
77493	Harris	84.7%
77065	Harris	46.5%
77072	Harris	68.8%
77009	Harris	58.7%
77036	Harris	69.3%
77099	Harris	63.6%
77406	Fort Bend	69.2%
77407	Fort Bend	73.5%
77070	Harris	78.6%
Fort Bend	--	73.5%
Harris	--	67.7%
Texas	--	64.3%

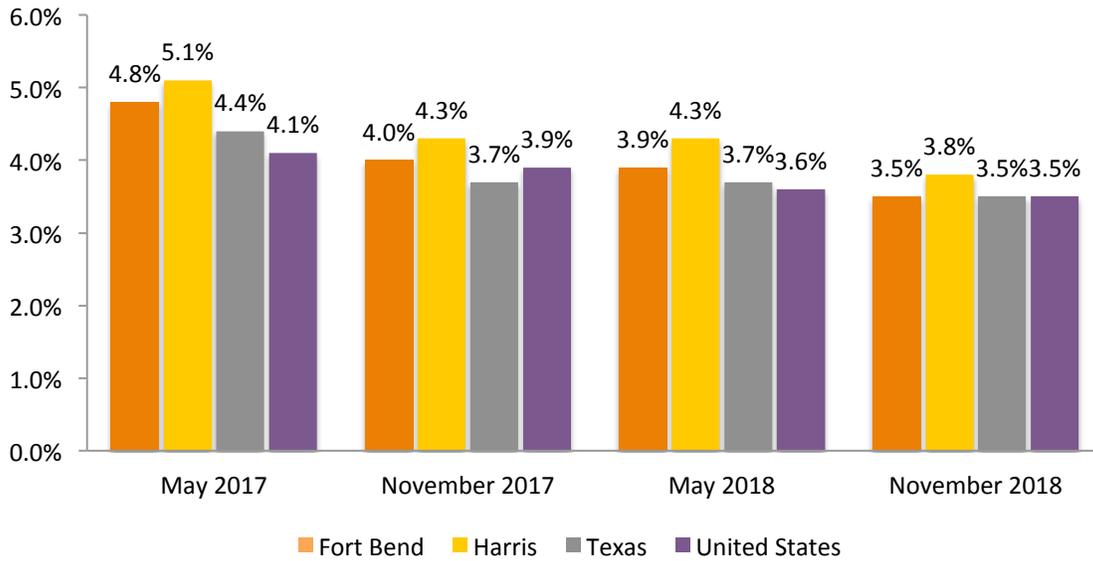
American Community Survey, 2013-2017

Unemployment

The unemployment rate is a key indicator of the local economy. Unemployment occurs when local businesses are not able to supply enough appropriate jobs for local employees and/or when the labor force is not able to supply appropriate skills to employers. A high rate of unemployment has personal and societal effects. During periods of unemployment, individuals are likely to feel severe economic strain and mental stress. Unemployment is also related to access to health care, as many individuals receive health insurance through their employer. A high unemployment rate places strain on financial support systems, as unemployed persons qualify for unemployment benefits and food stamp programs.

Figure 18 displays the rate of unemployment in Fort Bend and Harris counties between May 2017 and November 2018. In both counties, the unemployment rate has exhibited a decrease. In November 2018, the Fort Bend County rate was equivalent to the state and national rate. However, the unemployment rate in Harris County (3.8%) remains higher than Texas and the U.S.

Figure 18. Unemployment Rate per County (U.S. Bureau of Labor Statistics, 2017-2018)



Education

Graduating from high school is an important personal achievement and is essential for an individual’s social and economic advancement. Graduation rates can also be an important indicator of the performance of an educational system. Having a bachelor’s degree opens up career opportunities in a variety of fields and is often a prerequisite for higher-paying jobs.

Figure 19 displays the proportion of residents in Fort Bend and Harris counties who are 25 years and older with at least a high school degree. Nearly 90% of residents 25 years and older in Fort Bend County have at least a high school degree compared to 80.5% in Harris County. Harris County’s value is lower than the U.S. (87.3%) and Texas (82.8%) while Fort Bend County’s value is higher than both the U.S. and Texas.

Figure 19. People 25+ with a High School Degree or Higher

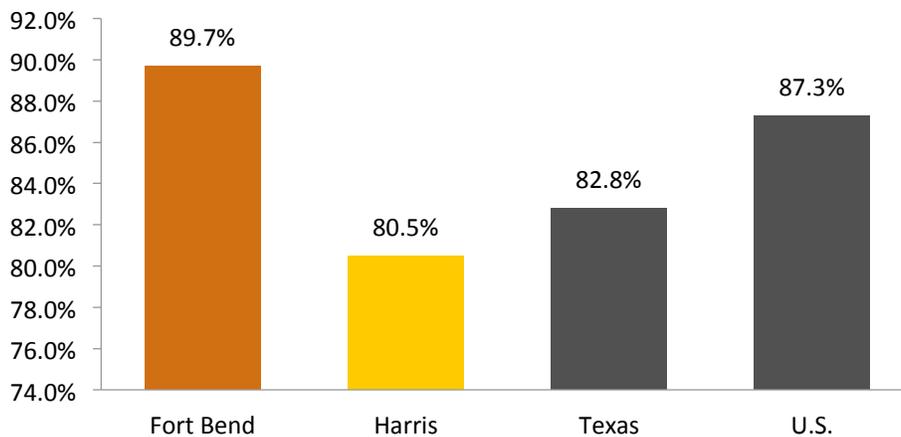


Figure 20 shows the proportion of residents in Fort Bend and Harris counties who are 25 years and older with a bachelor’s degree or higher. With nearly 46% of residents 25 and older having a bachelor’s degree in Fort Bend, this county has an economic advantage compared to Harris County, Texas, and the United States. The proportion of residents 25 and older with a bachelor’s degree in Harris County (30.5%) is somewhat better than the rate in Texas (28.7%), and similar to the rate for the entire United States (30.9%).

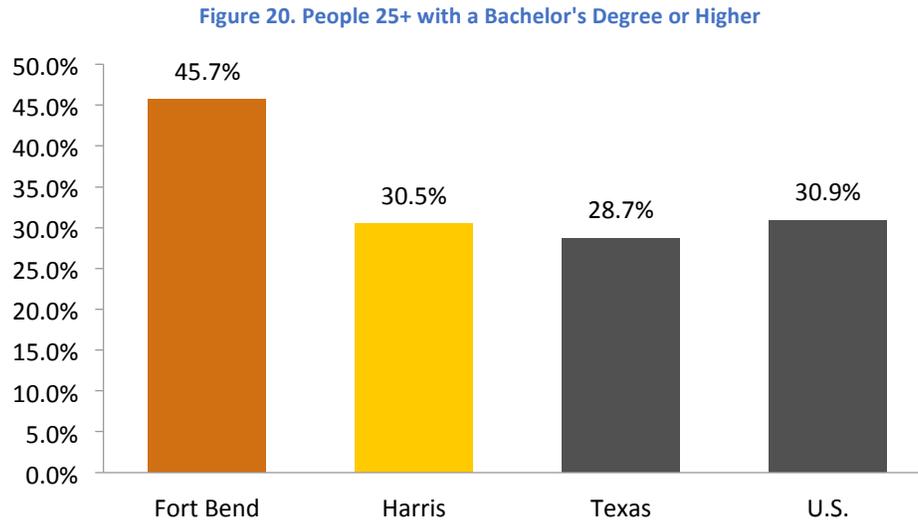


Table 11 displays the educational attainment indicators for residents 25 years and older by zip code in MHMC’s service area. For high school degree attainment, the zip code with the highest rate is 77056 (98.0%) and the zip code with the lowest rate is 77036 (62.7%). For attainment of a bachelor’s degree, the zip code with the highest rate is 77024 (75.8%) and the zip code with the lowest rate is 77072 (13.3%). The zip codes with highest proportions of MHMC inpatient discharges, zip codes 77080 and 77055, have less than 75% of people 25 years and older with a high school degree. In zip code 77080, approximately 17% of residents 25 years and older have a bachelor’s degree or higher.

Table 11. People 25+ with a High School Degree and People 25+ with a Bachelor's Degree by Zip Code

ZIP Code	County	High School Degree or Higher	Bachelor’s Degree or Higher
77080	Harris	67.6%	17.3%
77055	Harris	72.5%	33.9%
77024	Harris	96.9%	75.8%
77077	Harris	95.6%	54.6%
77043	Harris	79.0%	34.7%
77079	Harris	93.4%	64.3%
77084	Harris	84.8%	28.8%
77063	Harris	89.0%	47.0%
77042	Harris	88.6%	43.6%
77040	Harris	78.6%	27.6%
77041	Harris	83.3%	34.1%
77449	Harris	84.3%	25.8%

ZIP Code	County	High School Degree or Higher	Bachelor's Degree or Higher
77092	Harris	73.4%	16.6%
77082	Harris	88.6%	36.6%
77494	Fort Bend	96.4%	61.7%
77057	Harris	85.2%	56.5%
77433	Harris	91.7%	47.3%
77450	Harris	94.3%	52.5%
77095	Harris	92.9%	42.7%
77008	Harris	93.0%	61.9%
77088	Harris	70.9%	13.5%
77429	Harris	95.0%	48.3%
77064	Harris	82.3%	29.7%
77007	Harris	95.5%	74.8%
77018	Harris	85.0%	47.2%
77056	Harris	98.0%	74.8%
77083	Harris	80.1%	25.2%
77091	Harris	74.2%	14.1%
77493	Harris	87.1%	30.1%
77065	Harris	86.5%	29.3%
77072	Harris	63.9%	13.3%
77009	Harris	70.2%	29.6%
77036	Harris	62.7%	15.0%
77099	Harris	71.0%	15.8%
77406	Fort Bend	94.1%	44.1%
77407	Fort Bend	93.7%	48.7%
77070	Harris	93.1%	38.4%
Fort Bend	--	89.7%	45.7%
Harris	--	80.5%	30.5%
Texas	--	82.8%	28.7%

American Community Survey, 2013-2017

Transportation

There are numerous ways in which transportation may influence community health. Public transportation offers mobility, particularly to people without cars. Transit can help bridge the spatial divide between people and jobs, services, and training opportunities. Public transportation also reduces fuel consumption, minimizes air pollution, and relieves traffic congestion. Walking to work helps protect the environment, while also providing the benefit of daily exercise.

Figure 21. Households Without a Vehicle by Zip Code

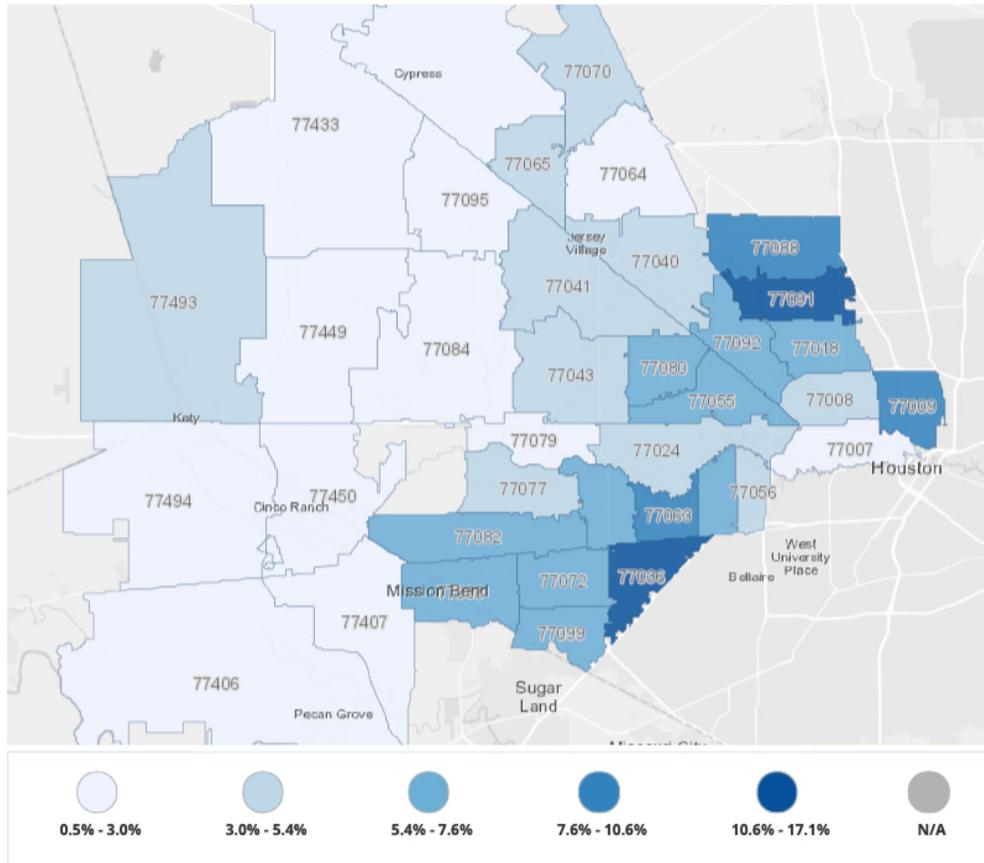


Figure 21 shows the percentage of households without a vehicle within MHMC's service area. As shown, more than 10% of households in zip codes 77091 and 77036 do not have a vehicle.

Table 12. Modes of Commuting by Zip Code

ZIP Code	County	Commute by Walking	Commute by Biking	Commute by Driving Alone	Commute by Public Transportation
77080	Harris	3.1%	0.7%	71.5%	2.7%
77055	Harris	2.9%	0.5%	70.4%	4.0%
77024	Harris	1.8%	0.0%	84.8%	0.7%
77077	Harris	1.4%	0.6%	83.8%	2.1%
77043	Harris	1.5%	0.4%	81.7%	1.8%
77079	Harris	1.2%	0.2%	81.9%	3.5%
77084	Harris	1.5%	0.0%	81.3%	1.6%
77063	Harris	1.4%	0.1%	77.5%	7.5%
77042	Harris	1.4%	0.4%	82.2%	2.8%
77040	Harris	1.4%	0.1%	81.8%	1.6%
77041	Harris	0.7%	0.0%	85.3%	1.1%
77449	Harris	0.2%	0.2%	81.5%	1.3%
77092	Harris	1.7%	0.1%	76.5%	2.5%
77082	Harris	0.9%	0.0%	83.2%	3.3%

77494	Fort Bend	0.3%	0.1%	78.9%	2.4%
77057	Harris	3.4%	0.0%	79.6%	5.3%
77433	Harris	0.2%	0.1%	83.7%	1.5%
77450	Harris	0.4%	0.2%	80.4%	2.2%
77095	Harris	0.7%	0.0%	82.2%	1.9%
77008	Harris	1.5%	0.5%	81.8%	2.3%
77088	Harris	0.5%	0.1%	79.1%	3.9%
77429	Harris	0.4%	0.0%	80.0%	1.9%
77064	Harris	0.6%	0.1%	83.3%	1.3%
77007	Harris	0.9%	0.4%	83.9%	2.4%
77018	Harris	0.5%	0.5%	82.6%	1.6%
77056	Harris	5.0%	0.0%	79.5%	1.4%
77083	Harris	0.4%	0.3%	82.3%	1.7%
77091	Harris	0.9%	0.3%	79.8%	6.2%
77493	Harris	0.8%	0.0%	80.8%	1.1%
77065	Harris	0.6%	0.0%	83.9%	1.5%
77072	Harris	0.8%	0.0%	71.5%	5.1%
77009	Harris	3.7%	0.7%	72.9%	3.9%
77036	Harris	2.5%	0.6%	64.2%	5.8%
77099	Harris	1.5%	0.0%	76.8%	4.0%
77406	Fort Bend	0.3%	0.0%	82.6%	0.9%
77407	Fort Bend	0.3%	0.0%	79.9%	1.5%
77070	Harris	2.0%	0.3%	77.5%	2.1%
Fort Bend	--	0.5%	0.1%	82.0%	1.6%
Harris	--	1.5%	0.3%	79.3%	2.7%
Texas	--	1.6%	0.3%	80.5%	1.5%

American Community Survey, 2013-2017

Table 12 displays the different modes of commuting used by residents of Fort Bend and Harris counties. In Fort Bend County, less than 1% of the population commutes by walking or biking. In Harris County, slightly more residents commute by walking (1.5%) and biking (0.3%). In both counties, the majority of residents commute by driving alone; with 82% in Fort Bend County and 79.3% in Harris County, which is similar to the state value (80.5%).

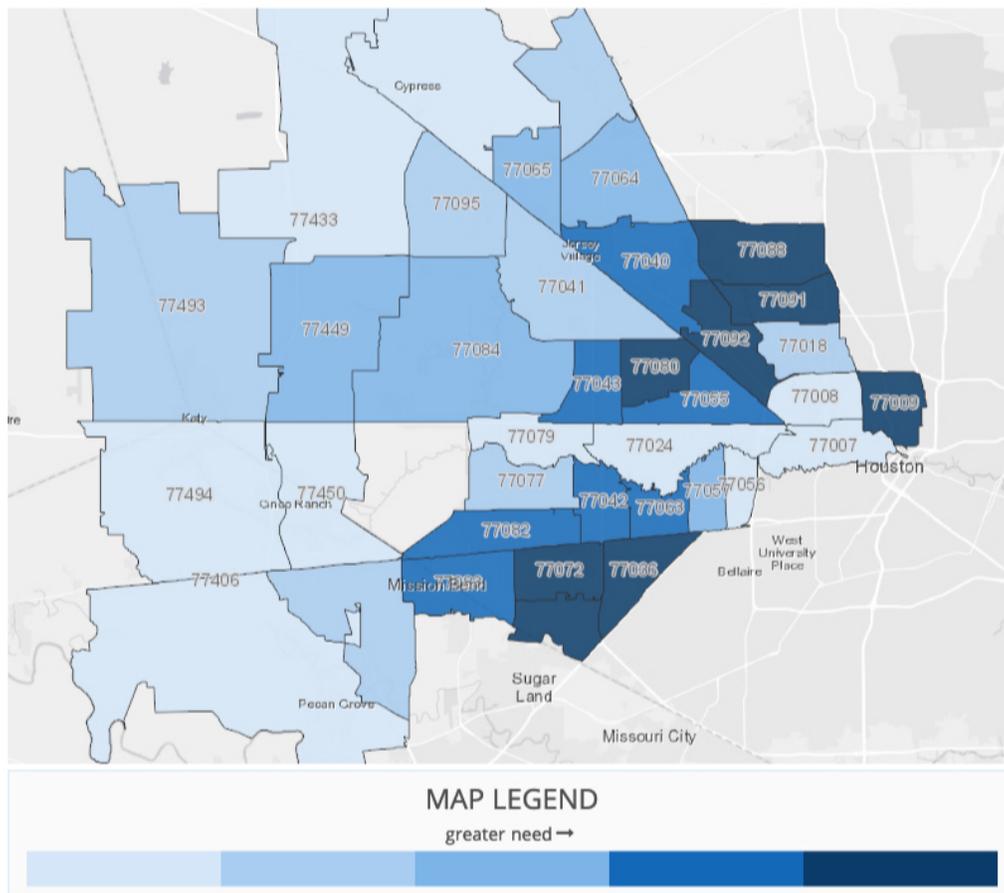
Public transportation is used by Harris County residents (2.7%) more so than Fort Bend residents (1.6%), perhaps indicative of differences in public transportation infrastructure. In Harris County, 7.5% of residents living in zip code 77063 commute by public transportation. Considering the top ten zip codes for inpatient discharges within MHMC's service area, zip codes 77055, 77079 and 77063 have the highest proportions of residents commuting by public transportation.

SocioNeeds Index®

Conduent Healthy Communities Institute developed the SocioNeeds Index® to easily compare multiple socioeconomic factors across geographies. This index incorporates estimates for six different social and economic determinants of health – income, poverty, unemployment, occupation, educational attainment, and linguistic barriers – that are associated with poor health outcomes including preventable hospitalizations and premature death.

Zip codes within each county are assigned an index value from 0 (low need) to 100 (high need), based on how those zip codes compare to others in the U.S. Within each county, the zip codes are then ranked from 1 (low need) to 5 (high need) to identify the relative level of need. Zip codes with populations under 300 persons are excluded.

Figure 22. SocioNeeds Index by Zip Code



As shown in Figure 22 and Table 13, the ten zip codes within MHMC's service area that have the highest SocioNeeds Index values are within Harris County; zip codes 77036, 77072, 77080, 77088, 77091, and 77099 have values greater than 95. The zip codes with largest proportion of inpatient discharges at MHMC, zip codes 77080 and 77055, have SocioNeeds Index values of 95.6 and 82.6, respectively.

Table 13. SocioNeeds Index by Zip Code (In Order of SocioNeeds Index Value)

ZIP Code	County	SocioNeeds Index Value
77036	Harris	99.0
77072	Harris	97.2
77080	Harris	95.6
77088	Harris	95.6
77091	Harris	95.5
77099	Harris	95.3
77092	Harris	93.4
77009	Harris	90.2
77055	Harris	82.6
77083	Harris	80.4
77042	Harris	73.9
77040	Harris	71.8
77043	Harris	70.7
77063	Harris	68.6
77082	Harris	64.5
77449	Harris	53.4
77084	Harris	49.0
77065	Harris	43.6
77064	Harris	39.9
77057	Harris	38.8
77070	Harris	29.6
77041	Harris	29.3
77018	Harris	28.1
77493	Harris	26.8
77407	Fort Bend	22.3
77077	Harris	21.4
77095	Harris	19.6
77450	Harris	9.9
77433	Harris	8.4
77008	Harris	7.8
77429	Harris	7.0
77406	Fort Bend	5.5
77079	Harris	5.0
77007	Harris	4.6
77056	Harris	4.5
77494	Fort Bend	2.7
77024	Harris	1.3

Conduent Healthy Communities Institute SocioNeeds Index, 2019

Data Synthesis

All forms of data have their own strengths and limitations. To gain a comprehensive understanding of the significant health needs for Memorial Hermann Health System, the findings from both the primary data and the secondary data were compared and studied together. The secondary data, key informant interviews and community survey were treated as three separate sources of data.

The secondary data were analyzed using data scoring, which identified health areas of need based on the values of indicators for each topic area (Appendix B). Table 14 and Table 15 display the data scores for Health and Quality of Life Topics for Fort Bend and Harris counties.

Table 14. Fort Bend County Topic Scores

Topic	Score
Transportation	1.83
Immunizations & Infectious Diseases	1.47
Exercise, Nutrition, & Weight	1.45
Other Chronic Diseases	1.44
Public Safety	1.37
Heart Disease & Stroke	1.32
Environment	1.27
Substance Abuse	1.24
Maternal, Fetal & Infant Health	1.23
Older Adults & Aging	1.19
Access to Health Services	1.18
Children's Health	1.15
Social Environment	1.03
Mental Health & Mental Disorders	0.95
Economy	0.91
Education	0.83
Prevention & Safety	0.78
Men's Health	0.75
Women's Health	0.71
Wellness & Lifestyle	0.68
Respiratory Diseases	0.63
Mortality Data	0.61
Cancer	0.53

Table 15. Harris County Topic Scores

Topic	Score
Transportation	1.82
Women's Health	1.81
Immunizations & Infectious Diseases	1.78
Other Chronic Diseases	1.78
Public Safety	1.65
Maternal, Fetal & Infant Health	1.64

Topic	Score
Prevention & Safety	1.58
Social Environment	1.58
Education	1.56
Economy	1.55
Heart Disease & Stroke	1.54
Children's Health	1.52
Older Adults & Aging	1.50
Access to Health Services	1.48
Exercise, Nutrition, & Weight	1.48
Wellness & Lifestyle	1.42
Men's Health	1.38
Diabetes	1.34
Environment	1.34
Substance Abuse	1.33
Cancer	1.31
Mortality Data	1.29
Mental Health & Mental Disorders	1.26
Respiratory Diseases	0.99

This methodology was applied to each of the 12 counties within Memorial Hermann Health System's primary service area and then data scores calculated for the region in order to determine significant health needs across the system. Table 16 lists the resulting data scores for Health & Quality of Life Topics.

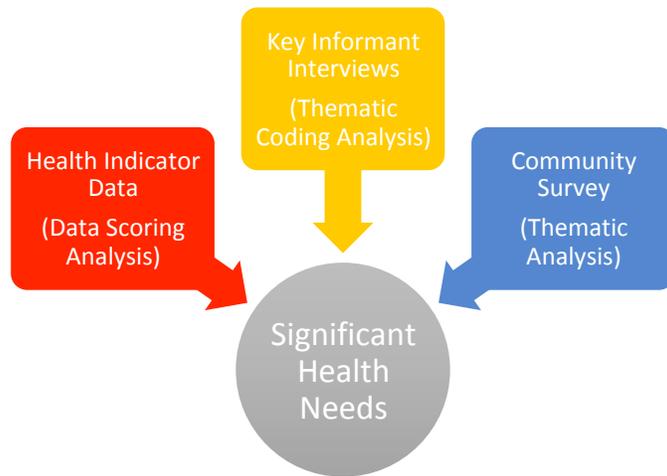
Table 16. Memorial Hermann Region Topic Scores

Topic	Score
Transportation	1.84
Heart Disease & Stroke	1.82
Access to Health Services	1.79
Older Adults & Aging	1.60
Exercise, Nutrition, & Weight	1.56
Other Chronic Diseases	1.52
Mental Health & Mental Disorders	1.50
Children's Health	1.47
Immunizations & Infectious Diseases	1.43
Education	1.43
Women's Health	1.42
Social Environment	1.42
Wellness & Lifestyle	1.41
Maternal, Fetal & Infant Health	1.41
Respiratory Diseases	1.41
Economy	1.41
Environment	1.40
Public Safety	1.36

Topic	Score
Cancer	1.31
Prevention & Safety	1.26
Substance Abuse	1.23
Men's Health	1.21

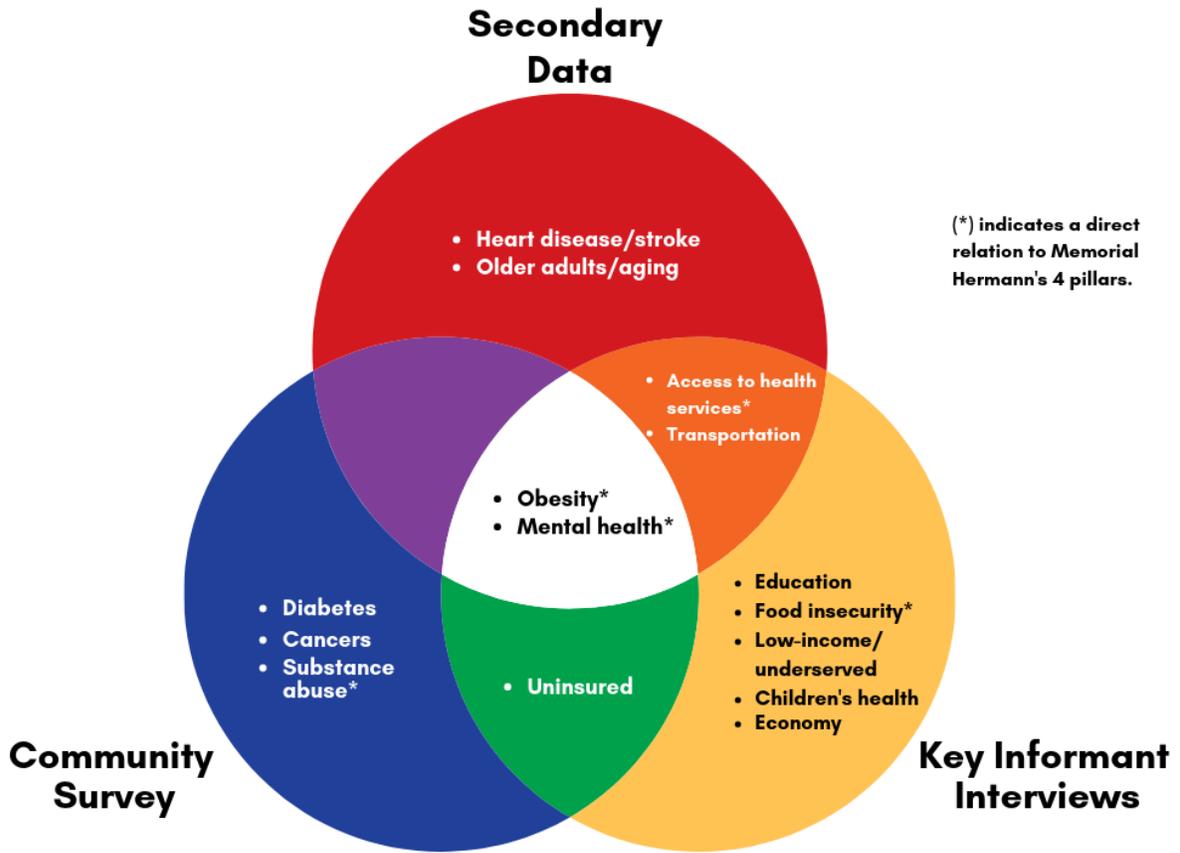
The analysis of key informant interviews occurred using the qualitative software: Dedoose¹. For the community survey, HCI performed a simple review and analysis to identify top health needs. Overall, each method produced individual results that represent the community input in this report. This consolidated input leads to the prioritized health needs in this report. This triangulated approach is shown in Figure 23.

Figure 23. Visual of Data Synthesis Approach



The team used the triangulated approach to identify significant health needs for Memorial Hermann Health System. Figure 24 displays the results of this synthesis. For many of the health topics evidence of need was present across multiple data sources, including Obesity, Mental Health, Access to Health Services, Transportation, and Uninsured. For other health topics the evidence was present in just one source of data, however it should be noted that this may be reflective of the strength and limitations of each type of data that was considered in this process.

Figure 24. Data Synthesis Results



Prioritized Significant Health Needs

Prioritization Results

Upon completion of the online prioritization survey, four health areas were identified for subsequent implementation planning by Memorial Hermann Health System. These four health priorities are: Access to Care, Emotional Well-Being, Food as Health, and Exercise Is Medicine.

The following section will dive deeper into each of these health topics in order to understand how findings from the secondary and primary data led to each health topic becoming a priority health issue for Memorial Hermann Health System. For each prioritized health need, key issues are summarized; secondary data scores are noted for indicators of concern; and community input is described.

Secondary Data Scoring Methodology

For each indicator, each county in MHMC's service area was assigned a score based on its comparison to other communities, whether health targets have been met, and the trend of the indicator value over time. These comparison scores range from 0-3, where 0 indicates the best outcome and 3 the worst. Availability of each type of comparison varied by indicator and was dependent upon the data source, comparability with data collected for other communities, and changes in methodology over time. Please see Appendix B for further information on HCI Data Scoring methodology.

Access to Healthcare

Key Issues:

- Range of barriers, including transportation, access to specialty care, lack of awareness, and fear or stigma
- Lack of health insurance
- Low income and vulnerable groups

Secondary Data

Access to Health Services, Lack of Insurance and Low-Income/Underserved were identified as significant needs for Memorial Hermann Health System. As shown in Table 17, there are several indicators related to Access to Health Services with data scores equal to or greater than 1.75; Harris County having a greater number of indicators of concern overall compared to Fort Bend County.

In Fort Bend County, Mental Health Provider Rate is an indicator of concern with 59.8 providers per 100,000 population, compared to the Texas value of 98.8 and U.S. value of 214.3. In Harris County, indicators of concern include: Adults Unable to Afford to See a Doctor, Adults with Health Insurance, Children with Health Insurance, and Persons with Health Insurance. Over 22% of Harris County adults are unable to afford to see a doctor, which is higher than the proportion in Texas (18.3%) and the U.S. (12.1%). Moreover, approximately 20% of residents in Harris County do not have health insurance.

Table 17. Secondary Data Scoring Results: Access to Health Services

Indicator	County			County Value Compared to:				
	Name	Value	Data Score	TX Counties	TX Value	US Value	HP 2020 Target	Trend Over Time
Adults Unable to Afford to See a Doctor [10] (2015)	Fort Bend	---	---	---	---	---	---	---
	Harris	22.1 percent	2	1.5	3	3	1.5	1.5
[10] Texas Behavioral Risk Factor Surveillance System								
Adults with Health Insurance: 18-64 [9] (2016)	Fort Bend	85.4 percent	0.92	0	0	1.5	3	0
	Harris	74.7 percent	1.75	2	2	1.5	3	0
Children with Health Insurance [9] (2016)	Fort Bend	93.3 percent	0.97	0	1	1.5	2	0
	Harris	89.4 percent	1.81	1	2	1.5	3	1
[9] Small Area Health Insurance Estimates								
Mental Health Provider Rate [4] (2017)	Fort Bend	59.8 providers/ 100,000 population	2.11	1	3	3	1.5	2
	Harris	103.7 providers/ 100,000 population	1.44	0	1	3	1.5	2
[4] County Health Rankings								
Non-Physician Primary Care Provider Rate [4] (2017)	Fort Bend	52.2 providers/ 100,000 population	1.67	1	3	3	1.5	0
	Harris	72.2 providers/ 100,000 population	1	0	1	3	1.5	0
[4] County Health Rankings								
Persons with Health Insurance [9] (2016)	Fort Bend	88 percent	1.08	0	1	1.5	3	0
	Harris	79.3 percent	1.75	2	2	1.5	3	0
[9] Small Area Health Insurance Estimates								
Primary Care Provider Rate [4] (2015)	Fort Bend	80.3 providers/ 100,000 population	0.33	0	0	1	1.5	0

	Harris	57.2 providers/ 100,000 population	1.61	0	2	3	1.5	2
[4] County Health Rankings								

When considering Access to Health Services, it is important to take into account the economy and how financial barriers impact community residents' ability to access care. As shown in Table 18, there are several economic indicators with data scores greater than 2 in Fort Bend and Harris counties.

In Fort Bend County, indicators of concern include: Median Household Gross Rent, Median Monthly Owner Costs for Households without a Mortgage, and Mortgaged Owners Median Monthly Household Costs. The Median Household Gross Rent in Fort Bend County is \$1,252 compared to \$911 in Texas and \$949 in the U.S. Moreover, this indicator is exhibiting a negative trend over time. Similarly, the Median Monthly Owner Costs for Households without a Mortgage is higher in Fort Bend County (\$712) than Texas (\$467) and the U.S. (\$462).

Compared to Fort Bend, Harris County has a broader range of economic indicators of concern, including: Homeownership, Severe Housing Problems, Students Eligible for the Free Lunch Program, Median Monthly Owner Costs for Households without a Mortgage, SNAP Certified Stores, Median Household Gross Rent, Families Living Below Poverty Level, and Food Insecurity Rate. Less than 50% of Harris County residents own a home. Over 20% of residents in Harris County have severe housing problems. And more than 58% of students are eligible for the free lunch program compared to the national value of 42.6%. In Harris County, there are over 14% of families living below the poverty level compared to 13% in Texas and 11% in the U.S.

Table 18. Secondary Data Scoring Results: Economy

Indicator	County			County Value Compared to:				
	Name	Value	Data Score	TX Counties	TX Value	US Value	HP 2020 Target	Trend Over Time
Child Food Insecurity Rate [5] (2016)	Fort Bend	19.1 percent	0.67	0	0	2	1.5	0
	Harris	23.5 percent	1.67	1	2	3	1.5	0
[5] Feeding America								
Children Living Below Poverty Level [1] (2012-2016)	Fort Bend	11.2 percent	0.39	0	0	0	1.5	1
	Harris	26.0 percent	1.67	2	2	3	1.5	0
Families Living Below Poverty Level [1] (2012-2016)	Fort Bend	6.4 percent	0.39	0	0	0	1.5	1

	Harris	14.4 percent	2.06	2	3	3	1.5	1
[1] American Community Survey								
Food Insecurity Rate [5] (2016)	Fort Bend	14.8 percent	1.56	1	1	3	1.5	1
	Harris	16.6 percent	2.06	2	2	3	1.5	1
[5] Feeding America								
Homeownership [1] (2012-2016)	Fort Bend	74.4 percent	0.39	0	0	0	1.5	1
	Harris	49.6 percent	2.44	3	2	3	1.5	2
Median Household Gross Rent [1] (2012-2016)	Fort Bend	1252 dollars	2.58	3	3	3	1.5	3
	Harris	937 dollars	2.08	3	2	1	1.5	3
Median Monthly Owner Costs for Households without a Mortgage [1] (2012-2016)	Fort Bend	712 dollars	2.36	3	3	3	1.5	2
	Harris	534 dollars	2.14	3	3	3	1.5	1
Mortgaged Owners Median Monthly Household Costs [1] (2012-2016)	Fort Bend	1884 dollars	2.25	3	3	3	1.5	1.5
	Harris	1504 dollars	1.81	3	2	2	1.5	1
People 65+ Living Below Poverty Level [1] (2012-2016)	Fort Bend	6.9 percent	0.39	0	0	0	1.5	1
	Harris	11.3 percent	1.89	2	2	3	1.5	1
People Living Below Poverty Level [1] (2012-2016)	Fort Bend	8.2 percent	0.39	0	0	0	1.5	1
	Harris	17.4 percent	1.67	2	2	3	1.5	0
[1] American Community Survey								
Severe Housing Problems [4] (2010-2014)	Fort Bend	14.8 percent	1.06	2	0	0	1.5	1
	Harris	20.9 percent	2.39	3	3	3	1.5	1
[4] County Health Rankings								
SNAP Certified Stores [17] (2016)	Fort Bend	0.4 stores/ 1,000 population	1.89	3	1.5	1.5	1.5	1

	Harris	0.6 stores/ 1,000 population	2.11	3	1.5	1.5	1.5	2
[17] U.S. Department of Agriculture - Food Environment Atlas								
Students Eligible for the Free Lunch Program [8] (2015-2016)	Fort Bend	26.7 percent	0.17	0	0	0	1.5	0
	Harris	58.2 percent	2.22	2	3	3	1.5	1
[8] National Center for Education Statistics								
Total Employment Change [16] (2014-2015)	Fort Bend	6.2 percent	0.5	0	0	0	1.5	1.5
	Harris	2.4 percent	1.67	1	3	2	1.5	1.5
[16] U.S. Census - County Business Patterns								
Unemployed Workers in Civilian Labor Force [15] (July 2018)	Fort Bend	4.1 percent	1.78	2	2	1	1.5	2
	Harris	4.4 percent	1.94	2	2	2	1.5	2
[15] U.S. Bureau of Labor Statistics								

Primary Data

During the key informant interview process, Access to Health Services was discussed over 160 times and was raised by participants almost 50 times in relation to barriers or challenges to achieving health in the community. The primary themes related to barriers or challenges were limitations to procuring specialty care services, transportation to services and hours of operation. In addition to the primary themes, two additional barriers or challenges stood out as key factors impacting access to health care services, lack of knowledge and stigma or fear preventing people from seeking care.

The issue that interview participants were most concerned with was patients being able to access follow up care with specialty care providers. Multiple participants raised concerns that even if patients are able to access preventative or primary care services, they may not be able to access the appropriate follow up care with a specialty care provider. Some participants raised this concern in context of patients not living near a specialist and others raised in context of patients not being able to afford the cost of follow up care. A concern brought up by a few participants, that for serious chronic conditions, patients would ultimately end up seeking care from emergency services instead.

Another common concern raised by interview participants was transportation to services and hours of operation of services limiting patients' access to care. Participants described how these factors determine whether patients decide to take off from work and seek services in the first place. A few participants described the many services and resources that are available to the community but that many may not be aware how they can access or benefit from them. One participant described resources being concentrated in certain geographic areas and more

remote locations not being well connected or knowledgeable about how they may also benefit from these resources. Participants described the potential for more collaboration and partnership to connect communities to one another. Several participants described a downturn in people seeking preventative care service and hypothesized that one of the factors may be related to the immigrant community in the region experiencing fear or stigma related to having to show identification or proof of citizenship.

“Even though we at the Health District do not ask for proof of immigration status, people don't understand that, particularly since we're a government agency, and it's been a real challenge to get some of these folks to come in for services.”

There were almost 80 references to the uninsured population in the key informant interviews and lack of health insurance was raised as a barrier or challenge to achieving health in the community 19 times. Lack of health insurance was most often brought up in context of patients having limited financial resources and a factor to not accessing health care services. Participants discussed patients not having the ability to pay fees for multiple appointment co-pays or not seeking care due to competing financial priorities. While health care services may be available in the community, for those who are lacking health insurance, accessing health care services is not necessarily an option. Lack of health insurance creates a particular challenge for those who require specialty care services.

“I think those are the biggest two—access, again, with the majority of our adult population being uninsured, having them try to find a provider that, again, will take sliding fee scale, or reduced rates. Once they're able to access those services, then it becomes a matter of paying for the things that are needed. The patient comes in and we diagnose them with diabetes, then comes the cost of medications, and if that patient is needing specialty care outside of the scope of primary care, access to specialists.”

Participants brought up issues related to low income or groups who may be underserved in the community 115 times during the key informant interview process. Particular groups that participants felt may experience added challenges accessing health care services included the immigrant population, individuals with disabilities, families with young children, and the elderly. Several participants noted fees related to co-pays or out of pocket expenses as a barrier to patients seeking initial preventative services or ongoing treatment for chronic conditions. Participants identified several groups they felt were underserved in the community. Multiple participants discussed the unique and specific challenges with providing culturally appropriate care for a diverse and recent immigrant population in the community. Participants felt that families with young children and the elderly population are particularly vulnerable groups in the community that experience barriers and challenges accessing health care services. Specifically, participants discussed these groups experiencing high levels of poverty placing them at higher risk for poor health outcomes.

“Most of them are extremely low income and they fall in those categories where we have a significant number of elderly disabled, single moms and their children, so vulnerable folks here in Houston.”

Emotional Well-Being

Key Issues:

- Mental health as part of overall health
- Need for more behavioral health services and providers
- Alcohol and substance abuse
- Alzheimer’s and dementia

Secondary Data

Mental Health and Substance Abuse were identified as significant needs for Memorial Hermann Health System. As shown in Table 19, there are several indicators related to Mental Health & Mental Disorders with data scores greater than 1.5. In Harris County, 11.4% of the Medicare Population has Alzheimer’s Disease or Dementia, which is higher than the U.S. value (9.9%). Moreover, 80% of residents in Harris County reported having 5 or more poor mental health days in the past month. In Fort Bend County, an indicator of concern is the Mental Health Provider Rate (with an indicator score above 2). Fort Bend County’s rate of 59.8 providers per 100,000 population is approximately forty percent lower than the state’s value (98.8) and less than one third of the national value (214.3).

Table 19. Secondary Data Scoring Results: Mental Health & Mental Disorders

Indicator	County			County Value Compared to:				
	Name	Value	Data Score	TX Counties	TX Value	US Value	HP 2020 Target	Trend Over Time
Mental Health Provider Rate [4] (2017)	Fort Bend	59.8 providers/ 100,000 population	2.11	1	3	3	1.5	2
	Harris	103.7 providers/ 100,000 population	1.44	0	1	3	1.5	2
[4] County Health Rankings								
Alzheimer's Disease or Dementia: Medicare Population [3] (2015)	Fort Bend	10.2 percent	1.33	1	0	2	1.5	1.5
	Harris	11.4 percent	1.89	2	1	3	1.5	1
[3] Centers for Medicare & Medicaid Services								
Poor Mental Health: 5+ Days [10] (2016)	Fort Bend	---	---	---	---	---	---	---
	Harris	80.0 percent	1.53	1.5	1	1.5	1.5	2
[10] Texas Behavioral Risk Factor Surveillance System								

Substance Abuse is another topic of concern in Fort Bend and Harris counties. For both counties, the proportion of alcohol-impaired driving deaths is higher than the state and the U.S.

There were 36% alcohol-impaired driving deaths in Fort Bend County and 37.8% in Harris County, compared to 28.3% and 29.3% in Texas and the U.S., respectively (Table 20).

Table 20. Secondary Data Scoring Results: Substance Abuse

Indicator	County			County Value Compared to:				
	Name	Value	Data Score	TX Counties	TX Value	US Value	HP 2020 Target	Trend Over Time
Alcohol-Impaired Driving Deaths [4] (2012-2016)	Fort Bend	36.0 percent	2	3	3	3	1.5	0
	Harris	37.8 percent	2.17	3	3	3	1.5	0

[4] County Health Rankings

Primary Data

Approximately 50% of community survey respondents cited Mental Health as one of the top issues most affecting the quality of life in their community and 52% of respondents noted Substance Abuse. In interviews with key informants, Mental Health was discussed 113 times and was raised by participants 33 times as a needs or concern for the health of the community. The primary themes related to Mental Health were treating mental health as part of overall health, address behavioral health in school, need for behavioral health providers and services and older adults with Alzheimer’s and dementia.

Some participants discussed a recent shift in care delivery and the continued need to address mental health as part of a person’s total health similarly to how chronic disease is managed. One particularly vulnerable population that would benefit from a broader approach to treatment, inclusive of mental health, is the homeless population. Several participants brought up issues regarding a need for more behavioral health providers and services in the community.

“(…) I think there needs to be more work around funding for behavioral health but also funding for recruiting and training therapists and behavioral health specialists to address substance abuse, anxiety, depression and suicidality.”

One participant observed recent increases and changes within the local population. From the participant’s perspective, there should be more programs or services to address the growing need for addressing mental health in the community. Another participant suggested solutions for addressing the need for more behavioral health providers in the community such as expanding residency programs for psychiatrists and developing comprehensive telemedicine programs to provide services more efficiently.

Furthermore, participants recommended addressing behavioral health with younger populations in the schools. Schools that provide behavioral health services through telemedicine have been received well in the community and the perception is that they are

effective. Some participants believe that these programs should be expanded and available across the community.

“There [are] the mental health units that have gone out into the schools. They’re not school-based but that’s the venue they will drive to with their mobile units. They have a big impact. They’re seeing thousands of kids. They’ve done some telemedicine with mental health, behavioral health, with some of the high schools. From what I’ve heard, (...) it’s been pretty effective and well received.”

A challenge that health care providers identified for the medical community is adequately addressing dementia and Alzheimer’s within the geriatric population.

“Dementia’s a terminal illness. (...) Much more needs to be done with healthcare systems around routine screening and identification of it as an issue. (...) So, that is the first thing that needs to happen. Then there needs to be an understanding that there are things – there are medications that can be helpful to the systems of the dementia. (...) But you can affect it by addressing some of the symptoms.”

Substance Abuse was discussed 55 times and was raised by participants 15 times as a need or concern for the health of the community. Multiple unique themes emerged from the key informant interviews related to Substance Abuse: funding for treatment programs, invisibility of alcoholism, overcoming stigma of seeking treatment, and emerging shifts in outreach models. Participants identified funding for programs and availability of services for those who may not be able to afford treatment out-of-pocket as issues the community is facing to address substance abuse. One participant raised alcohol abuse specifically as an issue in the community that does not get the amount of attention of other substance abuse topics but may in fact be impacting a larger proportion of the population and connected to many other health issues. Multiple participants identified cultural stigma as a barrier for those who may benefit from seeking treatment. Stigma or fear may be unique and vary from population to population in the community.

“With substance abuse, it’s culture and stigma. Nobody goes to substance abuse treatment on their own. They may not be adjudicated but someone is really, really pushing them, family member, boss. No one goes to treatment if they’re not under duress.”

A few participants described unique approaches to outreach and substance abuse treatment in the community that would support removing barriers for people having to take the first step on their own.

“For instance, it’s pretty new, but there’s an initiative that’s called the Heroes Project that’s looking at overdoses, so when an overdose happens, they’re sending a team to the ER. So, it’s got a peer support specialist, the EMP is involved – but they actually go in to the ER and they do an intervention there to try to help with linkage to treatment so that we can assist the patients.”

Food as Health

Key Issues:

- Food insecurity and limited access to healthy foods
- Diabetes and heart disease linked to socioeconomic factors
- Sedentary lifestyle and driving culture

Secondary Data

The topics of Diabetes and Heart Disease & Stroke emerged as significant health needs. Heart Disease & Stroke rose to the top of the secondary data scoring results for Memorial Hermann Health System. Although Diabetes was not in the top results of the secondary data scoring, an indicator of concern for both Fort Bend and Harris counties is the proportion of diabetes in the Medicare population, with values of 30.8% and 28.1% respectively, compared to 26.5% in the U.S. (Table 21).

Table 21. Secondary Data Scoring Results: Diabetes

Indicator	County			County Value Compared to:				
	Name	Value	Data Score	TX Counties	TX Value	US Value	HP 2020 Target	Trend Over Time
Diabetes: Medicare Population [3] (2015)	Fort Bend	30.8 percent	2.22	3	2	3	1.5	1
	Harris	28.1 percent	1.67	2	1	2	1.5	1.5

[3] Centers for Medicare & Medicaid Services

As shown in Table 22, another indicator of concern is Stroke in the Medicare Population with proportions of 4.7% and 5.2% in Fort Bend and Harris counties, respectively, compared to 4% in the U.S. Furthermore, in Fort Bend County the percentage of Hyperlipidemia (46.6%) in the Medicare Population is higher than the national value.

Table 22. Secondary Data Scoring Results: Heart Disease & Stroke

Indicator	County			County Value Compared to:				
	Name	Value	Data Score	TX Counties	TX Value	US Value	HP 2020 Target	Trend Over Time
Stroke: Medicare Population [3] (2015)	Fort Bend	4.7 percent	2.5	2	2	3	1.5	3
	Harris	5.2 percent	2.61	3	3	3	1.5	2
Heart Failure: Medicare Population [3] (2015)	Fort Bend	13.9 percent	1.06	0	0	2	1.5	1
	Harris	16.0 percent	1.89	1	2	3	1.5	1

Hyperlipidemia: Medicare Population [3] (2015)	Fort Bend	46.6 percent	2.17	2	2	2	1.5	3
	Harris	43.2 percent	1.44	1	1	1	1.5	2
Hypertension: Medicare Population [3] (2015)	Fort Bend	57.1 percent	1.61	1	1	2	1.5	2
	Harris	55.5 percent	1.22	1	1	2	1.5	1
[3] Centers for Medicare & Medicaid Services								

Table 23 reveals food-related indicators of concern, including: SNAP Certified Stores in both Fort Bend and Harris counties; Grocery Store Density and Children with Low Access to a Grocery Store in Fort Bend County; as well as Food Insecurity Rate in Harris County.

Table 23. Secondary Data Scoring Results: Nutrition

Indicator	County			County Value Compared to:				
	Name	Value	Data Score	TX Counties	TX Value	US Value	HP 2020 Target	Trend Over Time
Child Food Insecurity Rate [5] (2016)	Fort Bend	19.1 percent	0.67	0	0	2	1.5	0
	Harris	23.5 percent	1.67	1	2	3	1.5	0
[5] Feeding America								
Children with Low Access to a Grocery Store [17] (2015)	Fort Bend	7.4 percent	1.83	2	1.5	1.5	1.5	1.5
	Harris	5.4 percent	1.5	1	1.5	1.5	1.5	1.5
Fast Food Restaurant Density [17] (2015)	Fort Bend	0.6 restaurants/ 1,000 population	1.33	1	1.5	1.5	1.5	1.5
	Harris	0.7 restaurants/ 1,000 population	1.67	2	1.5	1.5	1.5	1.5
[17] U.S. Department of Agriculture - Food Environment Atlas								
Food Insecurity Rate [5] (2016)	Fort Bend	14.8 percent	1.56	1	1	3	1.5	1
	Harris	16.6 percent	2.06	2	2	3	1.5	1
[5] Feeding America								

Grocery Store Density [17] (2014)	Fort Bend	0.1 stores/ 1,000 population	1.83	2	1.5	1.5	1.5	1.5
	Harris	0.2 stores/ 1,000 population	1.5	1	1.5	1.5	1.5	1.5
SNAP Certified Stores [17] (2016)	Fort Bend	0.4 stores/ 1,000 population	1.89	3	1.5	1.5	1.5	1
	Harris	0.6 stores/ 1,000 population	2.11	3	1.5	1.5	1.5	2
[17] U.S. Department of Agriculture - Food Environment Atlas								

Primary Data

Food-related topics emerged in the community input gathered through the survey and key informant interviews. Food Insecurity, Food Programs and Food Knowledge issues were discussed over 170 times during the key informant interviews and were raised by participants 34 times in relation to barriers or challenges to achieving health in the community. The primary themes related to barriers or challenges that emerged in the interviews were access to healthy foods and affordability, knowledge gaps and limited food familiarity and program limitations.

The most common issue raised by key informant participants related to food insecurity was community members not being able to access healthy foods in their community. Multiple participants believed that in many communities, healthy food options were not available to people within a five-mile radius from their home or work. Participants described ‘food deserts’ as a top issue affecting health in the community and how limited access to healthy foods also was closely associated with people also being not being able to afford healthy foods. Participants also discussed the imbalance of healthy food options for those communities with lower housing prices and in general, lower average incomes. One participant described the link between people having to work multiple jobs and having time to shop for and prepare healthy foods.

“We have a grocery store on every corner but not every corner in the poor neighborhoods. It’s been my personal experience that eating healthy is expensive. It costs more money to buy healthy fruits and vegetables and more healthy food, in general than it does to buy food that’s not so healthy, that’s high fat, high carb, high sugar.... It costs more money. It takes longer to prepare. When you have a mom and a dad or either and they’re trying to handle two jobs, if not three. They’ve got kids of varying ages. The mechanics of shopping and preparing meals is probably an activity that gets let go.”

Some participants had direct experience with educating the community about healthy foods and eating. These participants shared that for some community members, their knowledge of fresh fruits and vegetables is limited and would benefit from early education for parents and children in schools.

In Memorial Hermann’s community survey, 67% of respondents selected Diabetes as one of the top issues most affecting the quality of life in their community. During key informant interviews, Diabetes was discussed 64 times and was raised by participants 32 times as a health need or concern in the community. For those participants who raised Diabetes as a top health issue in the community, unique themes emerged regarding how diabetes is impacting specific groups in the community and the way a sedentary lifestyle impacts diabetes. Multiple participants attributed the surge in obesity and diabetes in general in the U.S. to a shift to a more sedentary lifestyle while others specifically identified the local climate and driving culture as key factors leading to an increase in sedentary lifestyles impacting the region.

Heart Disease & Stroke was discussed 34 times during the key informant interviews and was raised by participants 16 times as a health need or concern in the community. For those participants who raised Heart Disease & Stroke as a top health issue in the community, the unique themes that emerged in the interviews were chronic disease risk related to socioeconomic status and challenges with managing heart-related conditions.

“You have so many communities that are food deserts so, of course, I think we are all at risk for things like diabetes and hypertension, obesity, stroke – but, I think in addition to that, those that are most are already marginalized. People who are low income. Low socioeconomic status. So, education, and all of those indicators are probably even more at risk for chronic diseases than someone, for example, who has access to care and insurance. So, they probably are doubly at risk.”

Exercise Is Medicine

Key Issues:

- Obesity
- Walkability of communities
- Safety of outdoor spaces and places to exercise

Secondary Data

Exercise, Nutrition & Weight was the third highest-ranking topic in the secondary data scoring results for Fort Bend County and fifth for Memorial Hermann Health System. Although Exercise, Nutrition & Weight did not rise to the top of the secondary data scoring results for Harris County, there are indicators of concern for both Fort Bend and Harris counties (Table 24). In Fort Bend and Harris counties, an exercise-related indicator with data score above 2 is: Workers Who Walk to Work.

Table 24. Secondary Data Scoring Results: Exercise, Nutrition & Weight

Indicator	County			County Value Compared to:				
	Name	Value	Data Score	TX Counties	TX Value	US Value	HP 2020 Target	Trend Over Time
Child Food Insecurity Rate [5] (2016)	Fort Bend	19.1 percent	0.67	0	0	2	1.5	0

	Harris	23.5 percent	1.67	1	2	3	1.5	0
[5] Feeding America								
Adults (18+ Years) Who Are Obese [10] (2016)	Fort Bend	---	---	---	---	---	---	---
	Harris	32.0 percent	1.67	1.5	1	2	2	2
[10] Texas Behavioral Risk Factor Surveillance System								
Children with Low Access to a Grocery Store [17] (2015)	Fort Bend	7.4 percent	1.83	2	1.5	1.5	1.5	1.5
	Harris	5.4 percent	1.5	1	1.5	1.5	1.5	1.5
Fast Food Restaurant Density [17] (2015)	Fort Bend	0.6 restaurants/ 1,000 population	1.33	1	1.5	1.5	1.5	1.5
	Harris	0.7 restaurants/ 1,000 population	1.67	2	1.5	1.5	1.5	1.5
[17] U.S. Department of Agriculture - Food Environment Atlas								
Food Insecurity Rate [5] (2016)	Fort Bend	14.8 percent	1.56	1	1	3	1.5	1
	Harris	16.6 percent	2.06	2	2	3	1.5	1
[5] Feeding America								
Grocery Store Density [17] (2014)	Fort Bend	0.1 stores/ 1,000 population	1.83	2	1.5	1.5	1.5	1.5
	Harris	0.2 stores/ 1,000 population	1.5	1	1.5	1.5	1.5	1.5
SNAP Certified Stores [17] (2016)	Fort Bend	0.4 stores/ 1,000 population	1.89	3	1.5	1.5	1.5	1
	Harris	0.6 stores/ 1,000 population	2.11	3	1.5	1.5	1.5	2
[17] U.S. Department of Agriculture - Food Environment Atlas								
Workers who Walk to Work [1] (2012-2016)	Fort Bend	0.6 percent	2.67	3	3	3	3	1.5
	Harris	1.5 percent	2.17	2	2	3	3	1.5
[1] American Community Survey								

Primary Data

Over 60% of Memorial Hermann's community survey respondents noted Obesity as a top issue affecting the quality of life in their community. In key informant interviews, Exercise, Nutrition & Weight was discussed almost 170 times and was raised by participants 42 times as a need or concern for achieving health in the community. The primary barriers related to Exercise, Nutrition & Weight identified by participants were walkability, access to safe outdoor spaces and programming that may not meet the needs of communities facing financial limitations.

Several participants discussed barriers to healthy lifestyle changes and described communities where sidewalks are limited or pedestrian pathways are not available. The ability for community members to make small shifts in their daily lives, such as walking regularly, may be more feasible than undertaking an exercise regimen. The limitations of pedestrian pathways and safer walking spaces prevent those in some sections of the community from making these shifts.

For individuals who may not be able to afford gym memberships nor attend classes due to work schedules, outdoor activities and fitness areas offer a free alternative. Participants felt that in many neighborhoods, these outdoor spaces are not available due to disrepair or unsafe environments.

"I think the built environment is huge, too. If you live out in a planned community, they usually have walking trails, or they have a pretty fountain area for you to walk around it. They have those little exercise things that you stop on part way around the trail and you do your little push-ups and your sit-ups and your pull-ups (...) You go into these poorer areas and there's no sidewalks. There's no lights at night. There's a park—it's all rusted equipment."

Participants also described programs and facilities that are either limited or lacking. These programs included free exercise programs with child care options, youth sports leagues and recess in the schools and free or low-cost options for air-conditioned facilities during times of the year when the weather does not permit outdoor activities.

"In poor areas of Houston, there's just not a lot of parks. There's no little league, and there's no soccer leagues, and so, there's not a lot of recess in the schools. There's just not—the culture among the kids is just not being created around physical activity."

Non-Prioritized Significant Health Needs

The following additional significant health needs emerged from a review of the primary and secondary data. With the need to focus on the prioritized health needs described above, these topics are not specifically prioritized efforts in the 2019-2022 Implementation Strategy. However, due to the interrelationships of social determinant needs many of these areas fall, tangentially, within the prioritized health needs and will be addressed through the upstream efforts of the prioritized health needs. Additionally, many of them are addressed within ongoing programs and services. Examples of these efforts are provided below by topic area.

Older Adults and Aging

Secondary Data

The secondary data scoring results revealed the topic of Older Adults and Aging as a significant health need for both Fort Bend and Harris counties. Older Adults and Aging was in the top 10 topics for Fort Bend County and received a topic score of 1.5 in the secondary data results for Harris County. In Fort Bend County, indicators of concern included Stroke, Diabetes, Chronic Kidney Disease, and Hyperlipidemia (all in the Medicare Population). Indicators of note in Harris County included: Chronic Kidney Disease and Stroke in the Medicare Population as well as Age-Adjusted Death Rate due to Falls.

Primary Data

Key informants and stakeholders discussed Older Adults and Aging. Over 62% of participants in Memorial Hermann Health System's prioritization process cited Older Adults as one of the groups most affected by poor health outcomes. Interviews with key informants noted the growing population of older adults and needs related to specialized care, financial assistance and outreach.

"...[W]e are going to watch the literal doubling of the number of Americans over the age of 65 in the next 25 years. Every day, between now and 2030, day after day, 10,000 Americans will turn 65, so we are watching an extraordinary expansion of challenges of aging. (...) [M]ore and more Americans are going to be getting old, so caring for this massive increase in the aging population is going to be one of the great challenges I think."

Efforts

Memorial Hermann Health System includes two freestanding Rehabilitation Hospitals (TIRR and Katy) as well as a senior living facility (University Place), featuring independent living, personal assistance services, and a separate, but attached, nursing center.

Additional community outreach includes health education on: Alzheimer's disease, Discounted Diabetes Education, Education/outreach for Seniors, Injury Prevention, Fall Prevention, and support groups for various populations, including: Alzheimer's, Amputees, Cardiac patients, Chronic disease, Diabetics, Grief, Parkinson's disease, Stroke, Survivorship, and more.

Cancers

Secondary Data

Although Cancer was not one of the top ten topics in the secondary data scoring results for Fort Bend and Harris counties, there are certain indicators to note. In Fort Bend County, indicators with indicator scores equal to or above 1.5 are Cancer in the Medicare Population and Prostate Cancer Incidence Rate. In Harris County, several indicators are of concern including: Cervical Cancer Incidence Rate and Age-Adjusted Death Rate due to Breast Cancer (both with indicator scores above 2), Cancer in the Medicare Population, Colon Cancer Screening, and Age-Adjusted Death Rate due to Prostate Cancer.

Primary Data

In Memorial Hermann's community survey, over one third of respondents noted Cancer as a top issue affecting the quality of life in their community. Interviews with key informants revealed the importance of making cancer screening services and specialty care available and accessible (e.g., telehealth, mobile mammography).

Efforts

As leading providers of cancer treatment in Houston, Memorial Hermann Cancer Centers are committed to cancer treatment, prevention, and research. Their broad geographical coverage makes cancer treatment extremely accessible and convenient to where patients live or work. All eight Memorial Hermann Cancer Centers are approved by the American College of Surgeons Commission on Cancer (ACoS CoC); only 25 percent of hospitals across the country have received this special recognition. With guaranteed access to comprehensive care, collaborative team approach for coordinating the best available treatment options, state-of-the-art equipment and services, education and support, and lifelong patient follow-up through the Cancer Registry, patients are able to access a full menu of therapies and treatment options.

Additional outreach includes education and support groups for cancer patients: Art, Self-guided Art Therapy, Lymphedema, Breast Cancer, Oncology Nutrition Therapy, Stress Relief, Look Good Feel Better, Yoga, Meditation, and Healthy Eating Advices.

Education

Secondary Data

Education received a topic score of 1.56 in the secondary data results for Harris County. There are several education-related indicators to consider: Infants Born to Mothers with Less Than 12 Years of Education (with a value of 27.5% in Harris County, compared to 21.3% in Texas and 15.9% in the U.S.), Student-to-Teacher Ratio, High School Drop Out Rate, and People 25+ with a High School Degree or Higher.

Primary Data

During key informant interviews, the topic of Education came up frequently and in relation to different focus areas and target audiences, including children, general community members as well as providers. The link between individuals' level of education and quality of life was

emphasized. Key informants recommended finding opportunities to expand the availability of education (related to health and non-health topics) as well as integrating health education into existing activities in both clinical and non-clinical settings, such as schools and churches. Opportunities were also pointed out to educate healthcare providers (and provide continuing education) on available community linkages and resources and on how to initiate conversations with patients regarding different health topics.

“We want to go into different groups and educate them on what they should be doing or shouldn’t be doing. (...) I think education is a huge component but we’ve got to figure out how to integrate that. The education, without the integration into somebody’s lifestyle, doesn’t do them any good.”

Efforts

Memorial Hermann operates ten Health Centers for Schools, established in 1996, offering access to primary medical, dental and mental health services to underserved children at 82 schools in the Greater Houston Area. Research shows that school-based health centers increase educational success by providing medical and mental health care that allows students to stay in school and learn. The primary goal of the program is to keep children healthy and feeling well so that they stay in school and can perform well academically, creating a foundation for a brighter future. By providing improved access to health care to at-risk children across the region, Memorial Hermann has demonstrated success in creating healthier outcomes for kids, including improvements in their physical health, their mental wellbeing, and even their attendance rate at school.

Transportation

Secondary Data

For both Fort Bend and Harris counties, Transportation rose to the top of the secondary data scoring results, with a topic score of 1.83 in Fort Bend County and 1.82 in Harris County. In both counties, indicators of concern include: Solo Drivers with a Long Commute, Mean Travel Time to Work, and Workers who Walk to Work. Furthermore, there exist high disparities for a few of these indicators. In Fort Bend County, an additional indicator to note includes Workers who Drive Alone to Work (with an indicator score of 1.94).

Primary Data

Participants raised the topic of Transportation 59 times in relation to barriers or challenges to achieving health in the community – more than any other topic. Key informants repeatedly noted that the Houston region has significant transportation issues (including availability, accessibility) that impact community members’ ability to access health programs and services. In addition to limited options for public transportation, travel cost and time were brought up. Moreover, for certain populations, like older adults or people with disabilities, public transportation is not a feasible option.

“This remarkable spread-out city, the size of Massachusetts, is the Greater Houston Metropolitan Area. (...) This is not a city and a suburb anymore, it’s a metropolitan region with eight to ten centers of activity that are larger than downtown San Diego, spread out over this massive area, but getting from one place to another is an increasing challenge. Poverty also means inadequate transportation, we have no really

good transit system because it's almost impossible to develop a good transit system for a city so lacking in density and so spread out as Houston is. We haven't solved that problem, and a lot of the healthcare issues come because people [are] without a car trying to get to a hospital, or to healthcare..."

Efforts

Memorial Hermann provides bus and taxi tokens as required for discharge and continuity of care needs.

One Memorial Hermann strategic effort to not only provide the right care at the right time in the right place, but also provide the opportunity to access help/care via the telephone is the Memorial Hermann Nurse Health Line. Established in 2014, the Nurse Health Line is a free telephone service for Greater Houston residents who are experiencing a health concern and are unsure of what to do or where to go. Experienced, bilingual nurses use their training and expertise to conduct assessments by phone, and are available to answer calls 24 hours a day, seven days a week for any resident living in Harris or surrounding counties. They help callers decide when and where to go for medical care and assist with social service referrals and transportation needs.

Children's Health

Secondary Data

Children's Health received a topic score of 1.52 in Harris County. Particular indicators to note include: Children with Health Insurance, Child Food Insecurity Rate, and Children with Low Access to a Grocery Store. Close to 10% of children in Harris County do not have health insurance. Although Children's Health did not receive a topic score above 1.5 in Fort Bend County, an indicator of concern is: Children with Low Access to a Grocery Store.

Primary Data

When discussing Children's Health, key informants pointed out specific issues such as childhood obesity, access to services and being uninsured. Some participants advised efforts to engage children, families and communities more comprehensively.

"Texas ranks very low in dollars spent on health for children. We rank low in our ranking, generally, in children's health. We're not putting enough money and resources into it. I think we need to shift our attention and (...) give more attention to children's health and how important it is for early childhood development and for brain development and ongoing health in the rest of their lives. I would say put that as a priority. Put children's health as a priority. Not just saying the early years, not just saying zero to five but also throughout early adolescence, pre-adolescence, early adolescence and into the teens."

Efforts

Children's Memorial Hermann Hospital, licensed under Memorial Hermann Texas Medical Center, was founded in 1986 and is the primary teaching hospital for the pediatric and obstetrics/gynecology programs at The University of Texas Medical School at Houston. Children's Memorial Hermann offers care in more than thirty pediatric and women's related specialties including the latest advances in maternal-fetal medicine and neonatal critical care

services, and renowned programs in pediatric trauma, neurosciences, pulmonology and cardiac care. More than 37,000 children come to Children's Memorial Hermann Hospital each year. In addition to Memorial Hermann's school-based health efforts described above, Memorial Hermann is an on-going financial collaborator with Children at Risk, a 501 non-profit organization that drives change for children through research, education, and influencing public policy.

Economy

Secondary Data

With a topic score of 1.55, Economy was one of the top ten topics in the secondary data scoring results for Harris County. In particular, eight economic indicators had scores above 2: Homeownership, Severe Housing Problems, Students Eligible for the Free Lunch Program, Median Monthly Owner Costs for Households without a Mortgage, SNAP Certified Stores, Median Household Gross Rent, Families Living Below Poverty Level, and Food Insecurity Rate. Eight additional indicators received scores between 1.5 and 2. Although Economy was not a main topic for Fort Bend County, there are several economic indicators to note: Median Household Gross Rent, Median Monthly Owner Costs for Households without a Mortgage, Mortgaged Owners Median Monthly Household Costs (all with indicator scores above 2); as well as SNAP Certified Stores, Unemployed Workers in a Civilian Labor Force, Food Insecurity Rate, and Low-Income and Low Access to a Grocery Store (with indicator scores between 1.5 and 2).

Primary Data

Key informants discussed food insecurity and food deserts as factors related to poor health outcomes. They pointed out that, although individuals might understand that eating healthy foods is recommended, they may not have access to grocery stores or be able to afford healthier food options. Key informants noted the importance of addressing socioeconomic barriers to improve health and wellbeing.

" (...) That's a matter of money. You can educate [a] woman all day long, but if she's got a couple of kids to feed and she can feed them all for seven dollars as opposed to 25, she's going to go to McDonald's."

Efforts

It's a daunting task in a region like Greater Houston, which has an estimated 7 million people and one of the highest rates of uninsured and underinsured in the country. But Memorial Hermann believes that we can ONLY impact the health of our community, and the health of individuals, by focusing on the multiple determinants of health that play the greatest role in influencing a person's overall health and wellbeing.

Other Findings

Critical components in assessing the needs of a community are identifying barriers and disparities in health care. The identification of barriers and disparities helps inform and focus strategies for addressing prioritized health needs. The following section outlines barriers across Memorial Hermann Health System and disparities as they pertain to MHMC’s service area.

Barriers to Care

Community input revealed a wide range of barriers to care and wellbeing. As discussed in the previous section, transportation was the most frequently cited barrier in the community, followed by other barriers such as access to health services, healthy food and exercise options, low income, and food insecurity. Overall, the secondary and primary data confirmed that socioeconomic factors impact community members’ ability to achieve good health.

“Many things come back to poverty and lack of disposable income.”

Key informants described the influence of social determinants of health (including income, poverty, language, education, employment) on health outcomes. Participants discussed the importance of addressing social and economic factors to get at the root causes of poor health and wellbeing.

“I think you have to understand that a lot of folks work from paycheck to paycheck, so if they actually end up at one of these medical centers and they require a thirty dollar copay or ten dollars or fifteen dollars, then they’re not going to have it. So, they’re going to walk away until they do have that money and that could be months later. So, if they are sick, they’re just going to become sicker. So, that’s one of the big barriers.”

Disparities

Significant community health disparities are assessed in both the primary and secondary data collection processes. Table 25 identifies the number of secondary data health indicators with a health disparity for MHMC’s service area. See Appendix B for the specific indicators with significant disparities.

Table 25. Number of Health Disparities Identified in Secondary Data Analysis

Fort Bend County	Harris County
Hispanic or Latino (7)	Black or African American (13)
Other Race (7)	White (8)
Black or African American (6)	Hispanic or Latino (8)
White (4)	Other Race (7)
	American Indian or Alaska Native (6)
Male (5)	Male (10)
	Female (3)
65+ years of age (2)	<6 years of age (2)
	25-44 years of age (2)
	45-64 years of age (2)
	65+ years of age (2)

Geographic disparities were identified using the SocioNeeds Index. As shown earlier in Table 13, zip codes 77036, 77072, 77080, 77088, 77091, and 77099 in Harris County were identified as zip codes with the highest socioeconomic need, potentially indicating poorer health outcomes for residents in those areas. The zip codes with largest proportion of inpatient discharges at MHMC, zip codes 77080 and 77055, have SocioNeeds Index values of 95.6 and 82.6, respectively.

Conclusion

The Community Health Needs Assessment for MHMC utilized a comprehensive set of secondary data indicators to measure the health and quality of life needs for MHMC's service area. Furthermore, this assessment was informed by input from knowledgeable and diverse individuals representing the broad interests of the community. Memorial Hermann's system-wide prioritization process resulted in four focus areas or pillars: Access to Healthcare, Emotional Well-Being, Food as Health, and Exercise Is Medicine. MHMC will review these priorities more closely during the Implementation Strategy development process and design a plan for addressing these pillars moving forward.

In addition, MHMC invites your feedback on this CHNA report to help inform the next Community Health Needs Assessment process. If you have any feedback or remarks, please send them to: Deborah.Ganelin@memorialhermann.org.

Appendix

Appendix A: Evaluation Since Prior CHNA

Appendix B. Secondary Data Methodology

Secondary Data Sources

Secondary Data Scoring

Data Scoring Results

Appendix C. Primary Data Methodology

Community Input Participants

Key Informant Interview Questionnaire (Episcopal Health Foundation)

Key Informant Interview Questionnaire (Conduent Healthy Communities Institute)

Community Survey (English)

Community Survey (Spanish)

Appendix D. Prioritization Tool

Prioritization Survey

Appendix E. Community Resources

Appendix A. MHMC Impact Report

Evaluation Since Prior CHNA

Priority 1: Healthy Living

Priority 1: Healthy Living				
Goal 1: Encourage and foster healthy lifestyles through education, awareness and early detection to prevent illness.				
Early Detection and Screening				
Objective 1.1: Decrease morbidity and mortality through early detection and screening to enhance the quality of life for our community				
Outcome Indicators:	Annual Baseline	Year 1	Year 2	FY 2020 Target
<ul style="list-style-type: none"> Number of community and education events hosted by/attended MHMC 	16 health fairs/2,615 attendees 9 seminars/718 attendees 8 blog posts	22 health fairs/seminars-2,075 attendees 23 blog post	13 health fairs/seminars-1,414 attendees 11 blog post	16 health fairs 15 seminars 10 blog posts
<ul style="list-style-type: none"> Number of sports physicals performed 	1,110	1,576	1,085	1,110
Strategies:		Year 1 Notes	Year 2 Notes	Timeline: Year 1,2,3
1.1.1: Provide health fairs, webinars, screenings and blog posts to the community and area employers				1, 2, 3
1.1.2: Provide low cost/free athletic physicals biannually to Spring Branch ISD students (See 1.4.1)				1, 2
1.1.3 Provide financial support to athletic programs at Spring Branch schools		\$98,000	\$98,000	1, 2
	Monitoring/Evaluation Approach: <ul style="list-style-type: none"> Documentation from each event including # of attendees, staff time, giveaways, marketing, etc. Documentation of athletic physicals performed 			

Priority 1: Healthy Living

Goal 1: Encourage and foster healthy lifestyles through education, awareness and early detection to prevent illness.

Potential Partners:

- Major Area Employers
- School District
- Chamber of Commerce
- American Heart Association
- Local city municipality
- American Stroke Association
- American Cancer Society
- Local YMCA
- Local media

Obesity Prevention				
Objective 1.2: Increase awareness for lifestyle changes that decrease obesity rates in our community				
Outcome Indicators:	Annual Baseline	Year 1	Year 2	2020 Target
<ul style="list-style-type: none"> Amount raised and donated to the American Heart Association for Heart Walk 	\$40,830	49,207.81 raised \$250.00 in giveaways	1,575 raised Did not hold a heart walk fundraiser due to Hurricane Harvey	\$42,000
Strategies:		Year 1 Notes	Year 2 Notes	Timeline: Year 1,2,3
1.2.1:	Financially support the Heart Walk			1, 2, 3
1.2.2:	Provide financial support and first aid at Spring Branch Independent School District (SBISD) Running for the Arts	\$3000 (this is included in the \$98,000 in 1.1.3)	\$3000 (this is included in the \$98,000 in 1.1.3)	1, 2, 3
		Monitoring/Evaluation Approach:		
		<ul style="list-style-type: none"> Post-event assessment for walks 		
		Potential Partners:		
		<ul style="list-style-type: none"> American Heart Association Spring Branch ISD 		

Access to Healthy Food				
Objective 1.3: Increase awareness and education about healthy food choices to encourage healthy eating habits				
Outcome Indicators:	Annual Baseline	Year 1	Year 2	2020 Target
• Pounds of food donated to selected charities	2,510	1380 pounds of food and \$650 (these dollars provide 1950 meals)	0	2,600
• Number of oncology nutrition consults	70	60	56	80
• Number of participants in Oncology Nutrition 101 class	11	Class cancelled due to lack of attendance replaced with a weight management class in last quarter	18	20
• Number of ER patients screened for food insecurity via the ER Navigation program	952	1555	1333	952
• Number of CHW referrals to community food pantries via the ER Navigation program	145	122	126	145
• Number of ER Navigation supported community events hosted by local partners	0	1	13	2
Strategies:		Year 1 Notes	Year 2 Notes	Timeline: Year 1,2,3
1.3.1:	Continue to participate in the MH ER Navigation program in which participants are screened for food insecurity and referred to food pantries if necessary (See 2.4.2)			1,2,3
1.3.2:	Collect food to support food pantries or special events hosted by community partners. (Hold annual Summer of Sharing Food Drive benefiting Fairhaven Food Party and the Mission of Yahweh.)		Food Drive discontinued	1,2,3
1.3.3:	Provide free Oncology Nutrition Therapy consults and Nutrition 101 class to cancer patients and their caregivers (See 1.5.2)			1, 2, 3
		Monitoring/Evaluation Approach: <ul style="list-style-type: none"> • Post food drive assessment • Document number of oncology consults • Document number of oncology nutrition 101 classes • Patient activity documented and reported within the ER Navigation electronic record system. 		

Priority 1: Healthy Living

Goal 1: Encourage and foster healthy lifestyles through education, awareness and early detection to prevent illness.

Potential Partners:

- Fairhaven Food Panty
- Mission of Yahweh
- Meals on Wheels
- WIC
- American Cancer Society

Time for/Safety During Physical Activity				
Objective 1.4: Encourage healthy lifestyles through safe exercise practices				
Outcome Indicators:	Annual Baseline	Year 1	Year 2	FY 2020 Target
• Number of education sessions with youth sports organizations	4	5	5	4
• Number of people screened through IMPACT testing	177	84	84	177
• Number of attendees at cancer yoga classes	518	501	347	518
Strategies:		Year 1 Notes	Year 2 Notes	Timeline: Year 1,2,3
1.4.1: Partner with local youth sports organizations to provide safe sports health education to kids, parents and coaches (See 1.1.2)				1, 2, 3
1.4.2 Provide outreach trainer and/or physician coverage at select athletic events		Athletic Trainer not available to provide information		1, 2, 3
1.4.3: Implement baseline IMPACT concussion testing with local youth sports organization				1, 2, 3
1.4.4: Provide free Monday/Wednesday Injury Clinics to treat young athletes		45 athletes were served during the time period of 8/1-12/14 and 1/9-5/29	24 athletes seen in FY18	1, 2, 3
1.4.5: Offer free yoga classes to cancer patients and their caregivers – open to the public (See 1.5.2)				1, 2, 3
		Monitoring/Evaluation Approach: <ul style="list-style-type: none"> • Document number of baseline IMPACT concussion tests performed • Document number of people screened at injury clinics • Document number of attendees at yoga classes 		
		Potential Partners: <ul style="list-style-type: none"> • Spring Branch ISD • Spring Branch Memorial Sports Association • Albion Hurricanes • Memorial Boys LaCrosse • Memorial Knights LaCrosse • Post Oak Little League • American Cancer Society • IMPACT Concussion Testing 		

Chronic Disease Management				
Objective 1.5: Increase awareness to prevent the onset of chronic diseases as well as minimize the impact for patients who suffer from chronic illness				
Outcome Indicators:	Annual Baseline	Year 1	Year 2	FY 2020 Target
<ul style="list-style-type: none"> Readmission rates for chronic disease - medicare patients (Acute Myocardial Infarction, Congestive Heart Failure, Penumonia, Chronic Obstructive Pulmonary Disease) 	AMI: 14.1% CHF: 21% Pneumonia: 13.4% COPD: 15.4%	AMI 6.7% CHF 18.7% Pneumonia 14.4% COPD 12.8%	AMI: 23.8% CHF: 22% Pneumonia: 13.2% COPD: 16.7%	AMI: 12.69% CHF: 18.9% Pneumonia: 12.06% COPD: 13.86%
<ul style="list-style-type: none"> Number of attendees at Mended Hearts 	300	300	300	300
<ul style="list-style-type: none"> Number of attendees at Lymphedema Support Group 	20	71	59	20
<ul style="list-style-type: none"> Number of attendees at Huntington’s Disease Support Group 	360	190	30	360
<ul style="list-style-type: none"> Number of attendees at Stroke Support Group 	120	180	45	130
<ul style="list-style-type: none"> Number of attendees at CMT Support Group 	240	129		240
<ul style="list-style-type: none"> Number of attendees at Breast Cancer Support Group 	58	101 English 58 Spanish	98 English; 126 Spanish	58
<ul style="list-style-type: none"> Number of attendees at Oncology Prehab and Wellness 	38	23	9	40
<ul style="list-style-type: none"> Number of attendees at Techniques for Stress Relief Education 	17	22	2	20
<ul style="list-style-type: none"> Number of attendees at Self Guided Creative Healing Through Art 	36	105	38	40
<ul style="list-style-type: none"> Number of attendees at Self Guided Meditation 	15	56	72	15
<ul style="list-style-type: none"> Number of attendees at Look Good Feel Better 	30	42	38	30
<ul style="list-style-type: none"> Number of attendees at Creative Healing Through Art 	166	190	202	166
<ul style="list-style-type: none"> Number of people who participate in Fresh Start 	27	16	14	27
<ul style="list-style-type: none"> Number of free telephone medication management consultations 	2,270	2,596	2,423	2,270
<ul style="list-style-type: none"> Number of reduced fee medication management clinic visits 	20	32	64	20
Strategies:		Year 1 Notes	Year 2 Notes	Timeline: Year 1,2,3
1.5.1: Continue to offer support group services for chronic diseases (Mended Hearts, Lyphedema) and other conditions (Huntington’s Disease, stroke, Charcot-Marie-Tooth, breast cancer).				1, 2, 3

Priority 1: Healthy Living

Goal 1: Encourage and foster healthy lifestyles through education, awareness and early detection to prevent illness.

1.5.2:	Continue to provide comprehensive cancer survivorship and education services (e.g. Look Good Feel Better, Art Therapy, etc.).		Additional patients served total: 171 Better Breathers-7 Advance Directives- 7 Crochet and Knitting – 154 Zentangle Meditation - 3	1, 2, 3
1.5.3	Provide discounted medication management clinic visits for self-pay for about 20 patients/year			
1.5.4:	Provide free smoking cessation education/classes at MHMC through Fresh Start program created by American Cancer Society			1, 2, 3
		Monitoring/Evaluation Approach: <ul style="list-style-type: none"> • Document number of attendees at each support group, cancer survivorship and cancer education class • Post class evaluation for freshstart smoking cessation 		
		Potential Partners: <ul style="list-style-type: none"> • American Heart/Stroke Association • American Cancer Society • Houston Aphasia Recovery Center • Memorial Drive Methodist Church • Charcot Marie Tooth Association • Cancare • TIRR 		

Priority 2: Access to Health Care

Priority 2: Health Care Access				
Goal 2: Improve community knowledge about health care access points and reduce perceived barriers to care.				
Availability of Primary Care and Specialty Providers				
Objective 2.1: Educate community on how to access primary care and specialty resources for the most cost effective care				
Outcome Indicators:	Annual Baseline	Year 1	Year 2	2020 Target
• Number of hospital's associated counties' calls to Nurse Health Line (MH Memorial City – Fort Bend and Harris)	31,071	28,624	32,616	31,071
• Number of patients enrolled in the ER Navigation Program	1,038	1388	1255	1,038
• Number of ER Navigation patient encounters	2,179	3678	3836	2,179
• Number of ER Navigation referrals to community resources	2,855	4205	3804	2,855
• Number of ER Navigation scheduled appointments	200	255	123	200
• Utilization of the Emergency Center for non-emergent care (patients screened out, not charged and referred to a neighborhood clinic)	2,100	2000	*	2,100
• Number of navigational meetings regarding financials and community resources	222	0	0	222
• Number of Telemedicine Consultations	240 (in 2015)	218	258	240
Strategies:		Year 1 Notes	Year 2 Notes	Timeline: Year 1,2,3
2.1.1: Provide a 24/7 free resource via the Nurse Health Line that community members (uninsured and insured) within the MHHS community can call to discuss their health concerns, receive recommendations on the appropriate setting for care, and get connected to appropriate resources.) (See 2.4.1)				1, 2, 3
2.1.2 Continue to participate in the MH ER Navigation program in which patients are referred to a medical home (See 1.3.1, 2.4.2)				1,2,3
2.1.3: Employ social worker in the ER to direct care for uninsured, including connecting patients to Harris County Gold Card application to access care through County clinics and referring them to neighborhood clinics for follow up care (See 2.4.3)			Social worker no longer provide services in the ER *	1, 2, 3
2.1.4: Utilize Nurse Navigators (cancer services, digestive health) to direct community to appropriate resources based on ability to pay (See 2.4.4)				1, 2, 3

Priority 2: Health Care Access			
Goal 2: Improve community knowledge about health care access points and reduce perceived barriers to care.			
2.1.5:	Provide 24/7 neurological consultations for Memorial City patients through the use of telemedicine technologies such as digital imaging and real-time video conferencing providing patients with continuity in treatment, a fast-tracked process, and the most effective drug therapies	218	258
			1, 2, 3
		Monitoring/Evaluation Approach: <ul style="list-style-type: none"> • Nurse Health Line data • Monthly evaluation of case management referrals • Nurse Navigator resource referrals 	
		Potential Partners: <ul style="list-style-type: none"> • Nurse Health Line • Harris County Hospital District • Neighborhood Health Center • Spring Branch Community Health Center • Houston Area Community Services • Legacy Clinic • El Centro de Corazon • IBN Sina Foundation • Memorial Hermann Community Benefit Corporation 	

Health Insurance Coverage and Costs				
Objective 2.2: Improve awareness among providers and community on available resources for cost effective insurance coverage and other free/low-cost health services				
Outcome Indicators:	Annual Baseline	Year 1	Year 2	FY 2020 Target
Amount of annual prescription expense provided to those in need	\$6,231	\$315	\$35,658	\$6,321
Amount spent on room and board for nursing home and rehab	\$116,351	\$0	\$63,981	\$116,351
Number of wigs/prostheses distributed	12 wigs 28 prostheses	15 wigs 12 prostheses	18 wigs 16 prostheses	12 wigs 28 prostheses
Number of containers donated to Project C.U.R.E.	192 bins	528 (mix of pallets, bins, bags, barrels and cans)	277	192 bins
Strategies:		Year 1 Notes	Year 2 Notes	Timeline: Year 1,2,3
2.2.1:	Continue to contract with Allegis to assist patients in finding health care insurance coverage	Program continued	Program continued	1, 2, 3
2.2.2:	Provide short-term medications/prescriptions upon discharge for uninsured			1, 2, 3
2.2.3:	Provide skilled nursing services upon discharge for those awaiting medicaid approval	\$7,000	\$1,620	1, 2, 3
2.2.4:	Provide short-term home health infusion therapy services (IV antibiotics) for uninsured	\$2,920	\$24,438	1, 2, 3
2.2.5:	Provide post hospitalization follow-up visit for uninsured			
2.2.6:	Offer free breast prostheses and wig closet for cancer patients			1, 2, 3
2.2.7:	Coordinate Project C.U.R.E. for used medical equipment to serve those in need			1, 2, 3
	Monitoring/Evaluation Approach: <ul style="list-style-type: none"> • Document number of referrals to Allegis • Document cost of prescriptions • Document number of wigs and prostheses distributed 			

Priority 2: Health Care Access			
Goal 2: Improve community knowledge about health care access points and reduce perceived barriers to care.			
			<p>Potential Partners:</p> <ul style="list-style-type: none"> • Allegis • Memorial Assistance Ministries • American Cancer Society • Memorial Hermann Home Health • Neighborhood Health Center • Legend Oaks West Houston • Walgreens • Memorial City Health and Rehab Center • Coram Alternative Site Services • Metropolitan Orthopedic • American Medical Direct • Highland Park Care Center

Transportation				
Objective 2.3: Decrease limitations to health care access to due to lack of transportation				
Outcome Indicators:	Annual Baseline	Year 1	Year 2	FY 2020 Target
Number of yellow cab transportation vouchers distributed	300	264	339 Yellow cab 816 bus	300
Number of patients provided with free ambulance transportation	420	744	1,063	420
Strategies:		Year 1 Notes	Year 2 Notes	Timeline: Year 1,2,3
2.3.1: Provide yellow cab transportation for uninsured or those without family/friend assistance				1, 2, 3
2.3.2: Provide ambulance transportation to uninsured or those without family/friend assistance so they may go to the next level of care				1, 2, 3
		Monitoring/Evaluation Approach:		
		<ul style="list-style-type: none"> • Document transportation costs for those who cannot pay • Document number of vouchers distributed 		
		Potential Partners:		
		<ul style="list-style-type: none"> • METRO • Yellow Cab 		

Health Care Navigation				
Objective 2.4: Connect patients to appropriate community health resources to help them navigate their health care journey				
Outcome Indicators:	Annual Baseline	Year 1	Year 2	FY 2020 Target
Number of hospital's associated counties' calls to Nurse Health Line (MH Memorial City – Fort Bend and Harris)	31,071	30,915	32,616	31,071
Number of patients enrolled in the ER Navigation Program	1,038	1388	1255	1,038
Number of ER Navigation patient encounters	2,179	3678	3836	2,179
Number of ER Navigation referrals to community resources	2,855	4205	3804	2,855
Number of ER Navigation scheduled appointments	200	255	123	200
Number of referrals to neighborhood clinics by social workers	120	2000		120
Number of navigational meetings regarding financials and community resources	222	Service provided by ER Navigation (CHW services reflected above)	Service provided by ER Navigation (CHW services reflected above)	222
Number of new mothers referred to WIC and other resources	975	1,103	1,175	975
Strategies:		Year 1 Notes	Year 2 Notes	Timeline: Year 1,2,3
2.4.1:	Provide a 24/7 free resource via the Nurse Health Line that community members (uninsured and insured) within the MHHS community can call to discuss their health concerns, receive recommendations on the appropriate setting for care, and get connected to appropriate resources (See 2.1.1).			1, 2, 3
2.4.2	Continue to participate in the MH ER Navigation program in which patients are referred to a medical home (See 1.3.1)			1,2,3
2.4.3:	Employ social worker in the ER to direct care for uninsured, including connecting patients to Harris County Gold Card application to access care through County clinics and referring them to neighborhood clinics for follow up care (See 2.1.3)			1, 2, 3
2.4.4:	Utilize Nurse Navigators (cancer services, digestive health) to direct community to appropriate resources based on ability to pay (See 2.1.4)			1, 2, 3
2.4.5:	Provide lactation consultant provides navigation services to self-pay new mothers to connect them with WIC and other organizations who can provide free or reduced services			1, 2, 3
		Monitoring/Evaluation Approach:		
		<ul style="list-style-type: none"> • Patient activity documented and reported within the ER Navigation electronic record system • Nurse Health Line call log • Social worker records • Nurse Navigator records • Lactation consultant records 		

Priority 2: Health Care Access

Goal 2: Improve community knowledge about health care access points and reduce perceived barriers to care.

Potential Partners:

- Harris County Hospital District
- WIC
- American Cancer Society
- American Heart/Stroke Association
- Nurse Health Line
- Spring Branch ISD
- Spring Branch Community Health Center
- Legacy Health Community Center
- Houston Area Community Services
- Thomas Street Clinic – Harris Health
- El Centro de Corazon
- IBN Sina Foundation

Priority 3: Behavioral Health

The following tables provide strategies and outcome indicators that reflect an MHHS system-wide approach to Behavioral Health. Data is not specific to MH Memorial City Hospital but to the community at large with the exception of reduction in ER encounters that result in a psychiatric inpatient stay through linkage with a network of behavioral partners.

Priority 3: Behavioral Health				
Goal 3: Ensure that all community members who are experiencing a mental health crisis have access to appropriate psychiatric specialists at the time of their crisis, are redirected away from the ER, are linked to a permanent, community based mental health provider, and have the necessary knowledge to navigate the system, regardless of their ability to pay.				
Objective 3.1: Create nontraditional access points around the community (crisis/ambulatory, acute care, and community-based chronic care management), and link those who need services to permanent providers and resources in the community				
Outcome Indicators:	Annual Baseline	Year 1	Year 2	FY 2020 Target
• Decrease in number of ER encounters that result in psychiatric inpatient stay	1,146	1,213	1,135	1,089 % reduction of baseline
• Decrease in number of ER encounters that result in psychiatric inpatient stay – Memorial City	143	126	141	136
• Number of MHCC Memorial Hermann Crisis Clinic total visits	5,400	5,590	5,154	5% over baseline
• Number of Psychiatric Response Care Management total visits	1,200	1,103	1,259	5% over baseline
Strategies:		Year 1 Notes	Year 2 Notes	Timeline: Year 1,2,3
3.1.1: Provide mental health assessment, care, and linkage to services in an acute care setting, 24x7 at Memorial City.		An uptick in acute care volume over the past fiscal year has contributed to a higher number of psychiatric transfers overall.	An increase in acute care volume and number of acute care sites over the past fiscal year have contributed to a higher number of psychiatric transfers overall.	1,2,3

Priority 3: Behavioral Health			
Goal 3: Ensure that all community members who are experiencing a mental health crisis have access to appropriate psychiatric specialists at the time of their crisis, are redirected away from the ER, are linked to a permanent, community based mental health provider, and have the necessary knowledge to navigate the system, regardless of their ability to pay.			
3.1.2:	Create nontraditional community access to psychiatric providers for individuals experiencing a mental health crisis. Clinical Social Workers connect the target population to on-going behavioral health care		Recruiting mental health providers willing to commit to a non-traditional schedule remains a challenge. Continuing this urgent care model of treatment remains a priority, due to limited mental health treatment access in the community.
3.1.3:	Engage individuals with a chronic mental illness and work to maintain engagement with treatment and stability in the community via enrollment in community-based mental health case management program	Staffing issues impeded year one target. Identifying appropriately licensed clinicians willing to consider a career that is community based with the requirement of making home visits and working non – traditional hours is an ongoing challenge.	Case Managers partner with their clients to identify specific recovery goals and utilize evidence-based practices to facilitate client achievement. We continue to partner with community providers to address the mental health needs of the Greater Houston Community.
		Monitoring/Evaluation Approach:	
		• EMR/registration system (track and trend daily, weekly, monthly)	

Priority 3: Behavioral Health		
Goal 3: Ensure that all community members who are experiencing a mental health crisis have access to appropriate psychiatric specialists at the time of their crisis, are redirected away from the ER, are linked to a permanent, community based mental health provider, and have the necessary knowledge to navigate the system, regardless of their ability to pay.		
		Potential Partners: <ul style="list-style-type: none"> • System acute care campuses • Memorial Hermann Medical Group • Network of public and private providers

Objective 3.2: Reduce stigma in order to promote mental wellness and improve community awareness that mental health is part of physical health and overall well-being

Outcome Indicators:	Annual Baseline	Year 1	Year 2	FY 2020 Target
• Number of presentations/educational sessions for healthcare professionals within MHHS	50 sessions per year	63	71	5% increase over baseline
• Number of presentations/educational sessions for corporations	5	7	8	5% over baseline
• MH Memorial City EEG Department Training (total time includes training material development and implementation)	1 training (4 hours)	0	0	1 training (4 hours)
• Training on Acute Care Concepts - system nurse resident program	15 trainings (45 hours total/3 hours each)*	18	9	15 trainings (45 hours total/3 hours each)*
• Training on CMO Roundtable - system-wide	1 training (2 hours)*	0	4	1 training (2 hours)*
*Total time includes training material development and implementation			531.6	
Strategies:		Year 1 Notes	Year 2 Notes	Timeline: Year 1,2,3
3.2.1: Provide mental health education sessions within the MH health system for nurses and physicians				1,2,3
3.2.2: Work with employer solutions group to provide education and training with corporations on MH topics (stress, PTSD)				1,2,3
	Monitoring/Evaluation Approach:			
	<ul style="list-style-type: none"> • Requests for presentations and sessions tracked via calendar/excel 			
	Potential Partners:			
	<ul style="list-style-type: none"> • System acute care campuses • System Marketing and Communications • Employer solutions group 			

Objective 3.3: Quality of mental health and substance abuse services: access, link, and practice utilizing evidence-based practice to promote overall wellness				
Outcome Indicators:	Annual Baseline	Year 1	Year 2	FY 2020 Target
<ul style="list-style-type: none"> Number of Memorial Hermann Crisis Clinic follow-ups post discharge with clinic patients 	7,716	6,431	5,154	5% over baseline
<ul style="list-style-type: none"> Psychiatric Response Case Management reduction in system ER utilization 	54.4%	53.0%	50%	5% increase over baseline
Strategies:		Year 1 Notes	Year 2 Notes	Timeline: Year 1,2,3
3.3.1: Social workers follow-up with discharged patients and their families to assess well-being and connect them to community resources		The goal is to continue to educate the community, including other health systems, about the crisis clinic level of care so that when someone is experiencing a mental health crisis or needs immediate access to a behavioral health provider, the clinic will be the identified referral source.	The System has seen an overall increase in patient acuity with complex physical and behavioral health needs requiring higher levels of care. The Crisis Clinic and Psych Response Case Management Programs continue to meet the needs of patients with behavioral health conditions by providing immediate access to a mental health provider.	1,2,3

Priority 3: Behavioral Health			
Goal 3: Ensure that all community members who are experiencing a mental health crisis have access to appropriate psychiatric specialists at the time of their crisis, are redirected away from the ER, are linked to a permanent, community based mental health provider, and have the necessary knowledge to navigate the system, regardless of their ability to pay.			
3.3.2:	Psychiatric Response Case Management Program utilizes evidence-based practice interventions (motivational interviewing, MH First Aid, CAMS, etc.) to reduce ER utilization for program enrollees		Case Managers continue to partner with community agencies in an effort to connect program enrollees to resources for ongoing wellness. Program clinicians continue to use evidence-based practice interventions to reduce ER utilization and improve quality of life.
			1,2,3
		Monitoring/Evaluation Approach:	
		<ul style="list-style-type: none"> • Social work logs (Excel spreadsheet) 	
		Potential Partners:	
		<ul style="list-style-type: none"> • System acute care campuses • Community-based clinical providers • Network of public and private providers 	

Appendix B. Secondary Data Methodology

Secondary Data Sources

The main source for the secondary data, or data that have been previously collected, is the community indicator database maintained by Conduent Healthy Communities Institute. The following is a list of both local and national sources used in Memorial Hermann Memorial City's Community Health Needs Assessment.

Fort Bend County

1. American Community Survey
2. Centers for Medicare & Medicaid Services
3. County Health Rankings
4. Feeding America
5. Institute for Health Metrics and Evaluation
6. National Cancer Institute
7. National Center for Education Statistics
8. Small Area Health Insurance Estimates
9. Texas Department of Family and Protective Services
10. Texas Department of State Health Services
11. Texas Education Agency
12. Texas Secretary of State
13. U.S. Bureau of Labor Statistics
14. U.S. Census - County Business Patterns
15. U.S. Department of Agriculture - Food Environment Atlas
16. U.S. Environmental Protection Agency

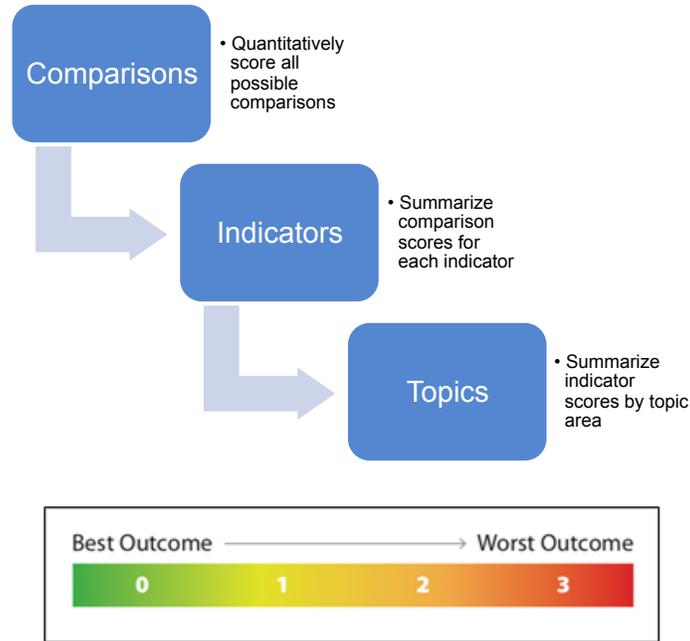
Harris County

1. American Community Survey
2. American Lung Association
3. Centers for Medicare & Medicaid Services
4. County Health Rankings
5. Feeding America
6. Institute for Health Metrics and Evaluation
7. National Cancer Institute
8. National Center for Education Statistics
9. Small Area Health Insurance Estimates
10. Texas Behavioral Risk Factor Surveillance System
11. Texas Department of Family and Protective Services
12. Texas Department of State Health Services
13. Texas Education Agency
14. Texas Secretary of State
15. U.S. Bureau of Labor Statistics
16. U.S. Census - County Business Patterns

17. U.S. Department of Agriculture - Food Environment Atlas
18. U.S. Environmental Protection Agency

Secondary Data Scoring

Data scoring is done in three stages:



For each indicator, each county in Memorial Hermann Memorial City’s service area is assigned a score based on its comparison to other communities, whether health targets have been met, and the trend of the indicator value over time. These comparison scores range from 0-3, where 0 indicates the best outcome and 3 the worst. Availability of each type of comparison varies by indicator and is dependent upon the data source, comparability with data collected for other communities, and changes in methodology over time.

Indicators are categorized into topic areas and each topic area receives a score. Indicators may be categorized in more than one topic area. Topic scores are determined by the comparisons of all indicators within the topic.

Comparison to a Distribution of County Values: Within State and Nation

For ease of interpretation and analysis, indicator data on the Community Dashboard is visually represented as a green-yellow-red gauge showing how the community is faring against a distribution of counties in the state or the United States. A distribution is created by taking all county values within the state or nation, ordering them from low to high, and dividing them into three groups (green, yellow, red) based on their order. Indicators with the poorest comparisons (“in the red”) scored high, whereas indicators with good comparisons (“in the green”) scored low.

Comparison to Values: State, National, and Targets

Each county is compared to the state value, the national value, and target values. Target values include the nation-wide Healthy People 2020 (HP2020) goals. Healthy People 2020 goals are national objectives for improving the health of the nation set by the Department of Health and Human Services' (DHHS) Healthy People Initiative. For all value comparisons, the scoring depends on whether the county value is better or worse than the comparison value, as well as how close the county value is to the target value.

Trend Over Time

The Mann-Kendall statistical test for trend was used to assess whether the county value is increasing over time or decreasing over time, and whether the trend is statistically significant. The trend comparison uses the four most recent comparable values for the county, and statistical significance is determined at the 90% confidence level. For each indicator with values available for four time periods, scoring was determined by direction of the trend and statistical significance.

Missing Values

Indicator scores are calculated using the comparison scores, availability of which depends on the data source. If the comparison type is possible for an adequate proportion of indicators on the community dashboard, it will be included in the indicator score. After exclusion of comparison types with inadequate availability, all missing comparisons are substituted with a neutral score for the purposes of calculating the indicator's weighted average. When information is unknown due to lack of comparable data, the neutral value assumes that the missing comparison score is neither good nor bad.

Indicator Scoring

Indicator scores are calculated as a weighted average of all included comparison scores. If none of the included comparison types are possible for an indicator, no score is calculated and the indicator is excluded from the data scoring results.

Topic Scoring

Indicator scores are averaged by topic area to calculate topic scores. Each indicator may be included in up to three topic areas if appropriate. Resulting scores range from 0-3, where a higher score indicates a greater level of need as evidenced by the data. A topic score is only calculated if it includes at least three indicators.

Data Scoring Results

The following tables list each indicator by topic area for each of the counties in Memorial Hermann Memorial City's service area. Secondary data for this report are up to date as of November 2, 2018.

Fort Bend County

SCORE	ACCESS TO HEALTH SERVICES	UNITS	FORT BEND COUNTY	HP2020	TEXAS	U.S.	MEASUREMENT PERIOD	HIGH DISPARITY*	Source
2.11	Mental Health Provider Rate	<i>providers/ 100,000 population</i>	59.8		98.8	214.3	2017		3
1.67	Non-Physician Primary Care Provider Rate	<i>providers/ 100,000 population</i>	52.2		66.8	81.2	2017		3
1.17	Dentist Rate	<i>dentists/ 100,000 population</i>	51.8		55.9	67.4	2016		3
1.08	Persons with Health Insurance	<i>percent</i>	88	100	81.4		2016		8
0.97	Children with Health Insurance	<i>percent</i>	93.3	100	90.3		2016		8
0.92	Adults with Health Insurance: 18-64	<i>percent</i>	85.4	100	77.4		2016		8
0.33	Primary Care Provider Rate	<i>providers/ 100,000 population</i>	80.3		59.9	75.5	2015		3
SCORE	CANCER	UNITS	FORT BEND COUNTY	HP2020	TEXAS	U.S.	MEASUREMENT PERIOD	HIGH DISPARITY*	Source
1.56	Cancer: Medicare Population	<i>percent</i>	7.3		7.1	7.8	2015		2
1.50	Prostate Cancer Incidence Rate	<i>cases/ 100,000 males</i>	103.8		95.4	109	2011-2015		6
1.17	Breast Cancer Incidence Rate	<i>cases/ 100,000 females</i>	114.7		111.7	124.7	2011-2015		6
0.56	Oral Cavity and Pharynx Cancer Incidence Rate	<i>cases/ 100,000 population</i>	10		10.9	11.6	2011-2015		6
0.50	All Cancer Incidence Rate	<i>cases/ 100,000 population</i>	367.6		401.3	441.2	2011-2015		6
0.47	Age-Adjusted Death Rate due to Breast Cancer	<i>deaths/ 100,000 females</i>	18.1	20.7	20.2	20.9	2011-2015		6
0.47	Cervical Cancer Incidence Rate	<i>cases/ 100,000 females</i>	6.4	7.3	9.2	7.5	2011-2015		6

0.25	Age-Adjusted Death Rate due to Prostate Cancer	<i>deaths/ 100,000 males</i>	14.6	21.8	18.1	19.5	2011-2015		6
0.22	Age-Adjusted Death Rate due to Colorectal Cancer	<i>deaths/ 100,000 population</i>	11.9	14.5	14.4	14.5	2011-2015		6
0.17	Lung and Bronchus Cancer Incidence Rate	<i>cases/ 100,000 population</i>	39.5		53.1	60.2	2011-2015		6
0.00	Age-Adjusted Death Rate due to Cancer	<i>deaths/ 100,000 population</i>	126.2	161.4	156.4	163.5	2011-2015	Male	6
0.00	Age-Adjusted Death Rate due to Lung Cancer	<i>deaths/ 100,000 population</i>	28.1	45.5	39	43.4	2011-2015		6
0.00	Colorectal Cancer Incidence Rate	<i>cases/ 100,000 population</i>	34	39.9	38.1	39.2	2011-2015		6
SCORE	CHILDREN'S HEALTH	UNITS	FORT BEND COUNTY	HP2020	TEXAS	U.S.	MEASUREMENT PERIOD	HIGH DISPARITY*	Source
1.83	Children with Low Access to a Grocery Store	<i>percent</i>	7.4				2015		15
1.11	Substantiated Child Abuse Rate	<i>cases/ 1,000 children</i>	3.5		8.5		2017		9
0.97	Children with Health Insurance	<i>percent</i>	93.3	100	90.3		2016		8
0.67	Child Food Insecurity Rate	<i>percent</i>	19.1		23	17.9	2016		4
SCORE	ECONOMY	UNITS	FORT BEND COUNTY	HP2020	TEXAS	U.S.	MEASUREMENT PERIOD	HIGH DISPARITY*	Source
2.58	Median Household Gross Rent	<i>dollars</i>	1252		911	949	2012-2016		1
2.36	Median Monthly Owner Costs for Households without a Mortgage	<i>dollars</i>	712		467	462	2012-2016		1
2.25	Mortgaged Owners Median Monthly Household Costs	<i>dollars</i>	1884		1444	1491	2012-2016		1
1.89	SNAP Certified Stores	<i>stores/ 1,000 population</i>	0.4				2016		15

1.78	Unemployed Workers in Civilian Labor Force	percent	4.1		4	4.1	July 2018		13
1.56	Food Insecurity Rate	percent	14.8		15.4	12.9	2016		4
1.50	Low-Income and Low Access to a Grocery Store	percent	7.1				2015		15
1.17	Female Population 16+ in Civilian Labor Force	percent	59.3		57.7	58.3	2012-2016		1
1.17	Population 16+ in Civilian Labor Force	percent	66.9		64.2	63.1	2012-2016		1
1.06	Renters Spending 30% or More of Household Income on Rent	percent	40.1		48	47.3	2012-2016		1
1.06	Severe Housing Problems	percent	14.8		18.3	18.8	2010-2014		3
0.75	Persons with Disability Living in Poverty (5-year)	percent	15.6		25.1	27.6	2012-2016		1
0.67	Child Food Insecurity Rate	percent	19.1		23	17.9	2016		4
0.64	Persons with Disability Living in Poverty	percent	16.2		24.2	26.6	2016		1
0.56	Households with Cash Public Assistance Income	percent	1.1		1.6	2.7	2012-2016		1
0.50	Total Employment Change	percent	6.2		3.2	2.5	2014-2015		14
0.42	Median Housing Unit Value	dollars	217600		142700	184700	2012-2016		1
0.39	Children Living Below Poverty Level	percent	11.2		23.9	21.2	2012-2016	Hispanic or Latino, Other	1
0.39	Families Living Below Poverty Level	percent	6.4		13	11	2012-2016	Hispanic or Latino, Other	1
0.39	Homeownership	percent	74.4		55	55.9	2012-2016		1
0.39	People 65+ Living Below Poverty Level	percent	6.9		10.8	9.3	2012-2016	Hispanic or Latino, Other	1
0.39	People Living Below Poverty Level	percent	8.2		16.7	15.1	2012-2016	Hispanic or Latino, Other, <6, 6-11, 12-17, 18-24	1
0.17	Homeowner Vacancy Rate	percent	1.1		1.6	1.8	2012-2016		1

0.17	Median Household Income	<i>dollars</i>	91152		54727	55322	2012-2016	Black or African American, Hispanic or Latino, Other	1
0.17	People Living 200% Above Poverty Level	<i>percent</i>	79.4		62.8	66.4	2012-2016		1
0.17	Per Capita Income	<i>dollars</i>	37134		27828	29829	2012-2016	Black or African American, Hispanic or Latino, Other, Two or More Races	1
0.17	Students Eligible for the Free Lunch Program	<i>percent</i>	26.7		52.9	42.6	2015-2016		7
SCORE	EDUCATION	UNITS	FORT BEND COUNTY	HP2020	TEXAS	U.S.	MEASUREMENT PERIOD	HIGH DISPARITY*	Source
1.67	Student-to-Teacher Ratio	<i>students/ teacher</i>	16.5		15.4	17.7	2015-2016		7
1.00	High School Drop Out Rate	<i>percent</i>	1.1		2		2016		11
0.89	People 25+ with a High School Degree or Higher	<i>percent</i>	89.2		82.3	87	2012-2016	65+	1
0.42	Infants Born to Mothers with <12 Years Education	<i>percent</i>	9.2		21.6	15.9	2013		10
0.17	People 25+ with a Bachelor's Degree or Higher	<i>percent</i>	44.6		28.1	30.3	2012-2016	Black or African American, Other, Two or More Races, Female, 65+	1
SCORE	ENVIRONMENT	UNITS	FORT BEND COUNTY	HP2020	TEXAS	U.S.	MEASUREMENT PERIOD	HIGH DISPARITY*	Source
1.89	SNAP Certified Stores	<i>stores/ 1,000 population</i>	0.4				2016		15
1.83	Children with Low Access to a Grocery Store	<i>percent</i>	7.4				2015		15
1.83	Grocery Store Density	<i>stores/ 1,000 population</i>	0.1				2014		15

1.61	Recognized Carcinogens Released into Air	<i>pounds</i>	18132				2017		16
1.50	Farmers Market Density	<i>markets/ 1,000 population</i>	0				2016		15
1.50	Low-Income and Low Access to a Grocery Store	<i>percent</i>	7.1				2015		15
1.39	PBT Released	<i>pounds</i>	18164				2017		16
1.33	Fast Food Restaurant Density	<i>restaurants/ 1,000 population</i>	0.6				2014		15
1.33	Recreation and Fitness Facilities	<i>facilities/ 1,000 population</i>	0.1				2014		15
1.22	Food Environment Index		7.4		6	7.7	2018		3
1.17	People 65+ with Low Access to a Grocery Store	<i>percent</i>	1.9				2015		15
1.08	Drinking Water Violations	<i>percent</i>	0.9		6.6		FY 2013-14		3
1.06	Severe Housing Problems	<i>percent</i>	14.8		18.3	18.8	2010-2014		3
1.00	Households with No Car and Low Access to a Grocery Store	<i>percent</i>	1.1				2015		15
0.83	Access to Exercise Opportunities	<i>percent</i>	83.8		80.6	83.1	2018		3
0.61	Liquor Store Density	<i>stores/ 100,000 population</i>	5.2		6.8	10.5	2015		14
0.39	Houses Built Prior to 1950	<i>percent</i>	1.2		7.4	18.2	2012-2016		1
SCORE	EXERCISE, NUTRITION, & WEIGHT	UNITS	FORT BEND COUNTY	HP2020	TEXAS	U.S.	MEASUREMENT PERIOD	HIGH DISPARITY*	Source
2.67	Workers who Walk to Work	<i>percent</i>	0.6	3.1	1.6	2.8	2012-2016	25-44	1
1.89	SNAP Certified Stores	<i>stores/ 1,000 population</i>	0.4				2016		15
1.83	Children with Low Access to a Grocery Store	<i>percent</i>	7.4				2015		15
1.83	Grocery Store Density	<i>stores/ 1,000 population</i>	0.1				2014		15

1.56	Food Insecurity Rate	percent	14.8		15.4	12.9	2016		4
1.50	Farmers Market Density	markets/ 1,000 population	0				2016		15
1.50	Low-Income and Low Access to a Grocery Store	percent	7.1				2015		15
1.33	Fast Food Restaurant Density	restaurants/ 1,000 population	0.6				2014		15
1.33	Recreation and Fitness Facilities	facilities/ 1,000 population	0.1				2014		15
1.22	Food Environment Index		7.4		6	7.7	2018		3
1.17	People 65+ with Low Access to a Grocery Store	percent	1.9				2015		15
1.00	Households with No Car and Low Access to a Grocery Store	percent	1.1				2015		15
0.83	Access to Exercise Opportunities	percent	83.8		80.6	83.1	2018		3
0.67	Child Food Insecurity Rate	percent	19.1		23	17.9	2016		4
SCORE	HEART DISEASE & STROKE	UNITS	FORT BEND COUNTY	HP2020	TEXAS	U.S.	MEASUREMENT PERIOD	HIGH DISPARITY*	Source
2.50	Stroke: Medicare Population	percent	4.7		4.5	4	2015		2
2.17	Hyperlipidemia: Medicare Population	percent	46.6		46.1	44.6	2015		2
1.61	Hypertension: Medicare Population	percent	57.1		57.5	55	2015		2
1.22	Ischemic Heart Disease: Medicare Population	percent	28		28.8	26.5	2015		2
1.06	Heart Failure: Medicare Population	percent	13.9		15.5	13.5	2015		2
0.94	Atrial Fibrillation: Medicare Population	percent	6.9		7.4	8.1	2015		2
0.64	Age-Adjusted Death Rate due to Cerebrovascular Disease (Stroke)	deaths/ 100,000 population	35.4	34.8	42	37.3	2010-2014		10

0.42	Age-Adjusted Death Rate due to Heart Disease	<i>deaths/ 100,000 population</i>	135		173	171.9	2010-2014	Black, White, Male	10
SCORE	IMMUNIZATIONS & INFECTIOUS DISEASES	UNITS	FORT BEND COUNTY	HP2020	TEXAS	U.S.	MEASUREMENT PERIOD	HIGH DISPARITY*	Source
1.67	Chlamydia Incidence Rate	<i>cases/ 100,000 population</i>	373.5		511.6		2017		10
1.67	Gonorrhea Incidence Rate	<i>cases/ 100,000 population</i>	93		160.2		2017		10
1.67	Syphilis Incidence Rate	<i>cases/ 100,000 population</i>	19		40.6		2017		10
1.56	Tuberculosis Incidence Rate	<i>cases/ 100,000 population</i>	3.7	1	4.5		2013-2017		10
1.22	HIV Diagnosis Rate	<i>cases/ 100,000 population</i>	9.2		16.1		2016		10
1.06	Age-Adjusted Death Rate due to Influenza and Pneumonia	<i>deaths/ 100,000 population</i>	13.6		14.2	15.2	2010-2014		10
SCORE	MATERNAL, FETAL & INFANT HEALTH	UNITS	FORT BEND COUNTY	HP2020	TEXAS	U.S.	MEASUREMENT PERIOD	HIGH DISPARITY*	Source
2.36	Babies with Low Birth Weight	<i>percent</i>	9.3	7.8	8.3	8	2013		10
1.86	Mothers who Received Early Prenatal Care	<i>percent</i>	62.8	77.9	59.2	74.2	2013		10
1.47	Preterm Births	<i>percent</i>	11.5	9.4	12	11.4	2013		10
1.39	Babies with Very Low Birth Weight	<i>percent</i>	1.4	1.4	1.4	1.4	2013		10
0.69	Infant Mortality Rate	<i>deaths/ 1,000 live births</i>	4.3	6	5.8	6	2013		10
0.42	Infants Born to Mothers with <12 Years Education	<i>percent</i>	9.2		21.6	15.9	2013		10
0.42	Teen Births	<i>percent</i>	1		2.8	4.3	2014		10

SCORE	MEN'S HEALTH	UNITS	FORT BEND COUNTY	HP2020	TEXAS	U.S.	MEASUREMENT PERIOD	HIGH DISPARITY*	Source
1.50	Prostate Cancer Incidence Rate	<i>cases/ 100,000 males</i>	103.8		95.4	109	2011-2015		6
0.50	Life Expectancy for Males	<i>years</i>	80.1		76.2	76.7	2014		5
0.25	Age-Adjusted Death Rate due to Prostate Cancer	<i>deaths/ 100,000 males</i>	14.6	21.8	18.1	19.5	2011-2015		6
SCORE	MENTAL HEALTH & MENTAL DISORDERS	UNITS	FORT BEND COUNTY	HP2020	TEXAS	U.S.	MEASUREMENT PERIOD	HIGH DISPARITY*	Source
2.11	Mental Health Provider Rate	<i>providers/ 100,000 population</i>	59.8		98.8	214.3	2017		3
1.33	Alzheimer's Disease or Dementia: Medicare Population	<i>percent</i>	10.2		11.7	9.9	2015		2
0.94	Age-Adjusted Death Rate due to Suicide	<i>deaths/ 100,000 population</i>	7.3	10.2	11.7	12.5	2010-2014	White, Male	10
0.64	Age-Adjusted Death Rate due to Alzheimer's Disease	<i>deaths/ 100,000 population</i>	20.6		26.6	24.5	2010-2014	White	10
0.61	Depression: Medicare Population	<i>percent</i>	12.2		17	16.7	2015		2
0.50	Frequent Mental Distress	<i>percent</i>	9		10.6	15	2016		3
0.50	Poor Mental Health: Average Number of Days	<i>days</i>	3		3.4	3.8	2016		3
SCORE	OLDER ADULTS & AGING	UNITS	FORT BEND COUNTY	HP2020	TEXAS	U.S.	MEASUREMENT PERIOD	HIGH DISPARITY*	Source
2.50	Stroke: Medicare Population	<i>percent</i>	4.7		4.5	4	2015		2
2.22	Diabetes: Medicare Population	<i>percent</i>	30.8		28.2	26.5	2015		2
2.17	Chronic Kidney Disease: Medicare Population	<i>percent</i>	19.2		19.9	18.1	2015		2
2.17	Hyperlipidemia: Medicare Population	<i>percent</i>	46.6		46.1	44.6	2015		2

1.61	Hypertension: Medicare Population	percent	57.1		57.5	55	2015		2
1.56	Cancer: Medicare Population	percent	7.3		7.1	7.8	2015		2
1.56	Osteoporosis: Medicare Population	percent	6		6.5	6	2015		2
1.33	Alzheimer's Disease or Dementia: Medicare Population	percent	10.2		11.7	9.9	2015		2
1.22	Ischemic Heart Disease: Medicare Population	percent	28		28.8	26.5	2015		2
1.17	People 65+ with Low Access to a Grocery Store	percent	1.9				2015		15
1.06	Heart Failure: Medicare Population	percent	13.9		15.5	13.5	2015		2
0.94	Atrial Fibrillation: Medicare Population	percent	6.9		7.4	8.1	2015		2
0.72	Age-Adjusted Death Rate due to Falls	deaths/100,000 population	6	7.2	7.4	8.3	2010-2014		10
0.64	Age-Adjusted Death Rate due to Alzheimer's Disease	deaths/100,000 population	20.6		26.6	24.5	2010-2014	White	10
0.61	Asthma: Medicare Population	percent	6.5		8.2	8.2	2015		2
0.61	Depression: Medicare Population	percent	12.2		17	16.7	2015		2
0.61	Rheumatoid Arthritis or Osteoarthritis: Medicare Population	percent	26.1		31.6	30	2015		2
0.39	COPD: Medicare Population	percent	7.7		11.1	11.2	2015		2
0.39	People 65+ Living Alone	percent	15.2		23.9	26.4	2012-2016		1
0.39	People 65+ Living Below Poverty Level	percent	6.9		10.8	9.3	2012-2016	Hispanic or Latino, Other	1
SCORE	OTHER CHRONIC DISEASES	UNITS	FORT BEND COUNTY	HP2020	TEXAS	U.S.	MEASUREMENT PERIOD	HIGH DISPARITY*	Source
2.17	Chronic Kidney Disease: Medicare Population	percent	19.2		19.9	18.1	2015		2

1.56	Osteoporosis: Medicare Population	percent	6		6.5	6	2015		2
0.61	Rheumatoid Arthritis or Osteoarthritis: Medicare Population	percent	26.1		31.6	30	2015		2
SCORE	PREVENTION & SAFETY	UNITS	FORT BEND COUNTY	HP2020	TEXAS	U.S.	MEASUREMENT PERIOD	HIGH DISPARITY*	Source
1.06	Severe Housing Problems	percent	14.8		18.3	18.8	2010-2014		3
0.86	Death Rate due to Drug Poisoning	deaths/ 100,000 population	5.6		9.8	16.9	2014-2016		3
0.72	Age-Adjusted Death Rate due to Falls	deaths/ 100,000 population	6	7.2	7.4	8.3	2010-2014		10
0.47	Age-Adjusted Death Rate due to Unintentional Injuries	deaths/ 100,000 population	24.9	36.4	37.6	39.2	2010-2014	White, Male	10
SCORE	PUBLIC SAFETY	UNITS	FORT BEND COUNTY	HP2020	TEXAS	U.S.	MEASUREMENT PERIOD	HIGH DISPARITY*	Source
2.00	Alcohol-Impaired Driving Deaths	percent	36		28.3	29.3	2012-2016		3
1.11	Substantiated Child Abuse Rate	cases/ 1,000 children	3.5		8.5		2017		9
1.00	Violent Crime Rate	crimes/ 100,000 population	261.5		407.6		2012-2014		3
SCORE	RESPIRATORY DISEASES	UNITS	FORT BEND COUNTY	HP2020	TEXAS	U.S.	MEASUREMENT PERIOD	HIGH DISPARITY*	Source
1.56	Tuberculosis Incidence Rate	cases/ 100,000 population	3.7	1	4.5		2013-2017		10
1.06	Age-Adjusted Death Rate due to Influenza and Pneumonia	deaths/ 100,000 population	13.6		14.2	15.2	2010-2014		10
0.61	Asthma: Medicare Population	percent	6.5		8.2	8.2	2015		2
0.39	COPD: Medicare Population	percent	7.7		11.1	11.2	2015		2

0.17	Lung and Bronchus Cancer Incidence Rate	<i>cases/ 100,000 population</i>	39.5		53.1	60.2	2011-2015		6
0.00	Age-Adjusted Death Rate due to Lung Cancer	<i>deaths/ 100,000 population</i>	28.1	45.5	39	43.4	2011-2015		6
SCORE	SOCIAL ENVIRONMENT	UNITS	FORT BEND COUNTY	HP2020	TEXAS	U.S.	MEASUREMENT PERIOD	HIGH DISPARITY*	Source
2.83	Mean Travel Time to Work	<i>minutes</i>	32.6		25.9	26.1	2012-2016	Male	1
2.58	Median Household Gross Rent	<i>dollars</i>	1252		911	949	2012-2016		1
2.36	Median Monthly Owner Costs for Households without a Mortgage	<i>dollars</i>	712		467	462	2012-2016		1
2.25	Mortgaged Owners Median Monthly Household Costs	<i>dollars</i>	1884		1444	1491	2012-2016		1
1.72	Linguistic Isolation	<i>percent</i>	6.2		7.9	4.5	2012-2016		1
1.17	Female Population 16+ in Civilian Labor Force	<i>percent</i>	59.3		57.7	58.3	2012-2016		1
1.17	Population 16+ in Civilian Labor Force	<i>percent</i>	66.9		64.2	63.1	2012-2016		1
1.11	Substantiated Child Abuse Rate	<i>cases/ 1,000 children</i>	3.5		8.5		2017		9
1.08	Persons with Health Insurance	<i>percent</i>	88	100	81.4		2016		8
0.89	People 25+ with a High School Degree or Higher	<i>percent</i>	89.2		82.3	87	2012-2016	65+	1
0.89	Voter Turnout: Presidential Election	<i>percent</i>	64.8		58.8		2016		12
0.61	Single-Parent Households	<i>percent</i>	22.4		33.3	33.6	2012-2016		1
0.50	Total Employment Change	<i>percent</i>	6.2		3.2	2.5	2014-2015		14
0.42	Median Housing Unit Value	<i>dollars</i>	217600		142700	184700	2012-2016		1
0.39	Children Living Below Poverty Level	<i>percent</i>	11.2		23.9	21.2	2012-2016	Hispanic or Latino, Other	1
0.39	Homeownership	<i>percent</i>	74.4		55	55.9	2012-2016		1

0.39	People 65+ Living Alone	percent	15.2		23.9	26.4	2012-2016		1
0.39	People Living Below Poverty Level	percent	8.2		16.7	15.1	2012-2016	Hispanic or Latino, Other, <6, 6-11, 12-17, 18-24	1
0.17	Median Household Income	dollars	91152		54727	55322	2012-2016	Black or African American, Hispanic or Latino, Other	1
0.17	People 25+ with a Bachelor's Degree or Higher	percent	44.6		28.1	30.3	2012-2016	Black or African American, Other, Two or More Races, Female, 65+	1
0.17	Per Capita Income	dollars	37134		27828	29829	2012-2016	Black or African American, Hispanic or Latino, Other, Two or More Races	1
SCORE	SUBSTANCE ABUSE	UNITS	FORT BEND COUNTY	HP2020	TEXAS	U.S.	MEASUREMENT PERIOD	HIGH DISPARITY*	Source
2.00	Alcohol-Impaired Driving Deaths	percent	36		28.3	29.3	2012-2016		3
1.50	Adults who Drink Excessively	percent	18.3	25.4	19.4	18	2016		3
0.86	Death Rate due to Drug Poisoning	deaths/ 100,000 population	5.6		9.8	16.9	2014-2016		3
0.61	Liquor Store Density	stores/ 100,000 population	5.2		6.8	10.5	2015		14
SCORE	TRANSPORTATION	UNITS	FORT BEND COUNTY	HP2020	TEXAS	U.S.	MEASUREMENT PERIOD	HIGH DISPARITY*	Source
2.83	Mean Travel Time to Work	minutes	32.6		25.9	26.1	2012-2016	Male	1
2.83	Solo Drivers with a Long Commute	percent	57.5		36.9	34.7	2012-2016		3
2.67	Workers who Walk to Work	percent	0.6	3.1	1.6	2.8	2012-2016	25-44	1
1.94	Workers who Drive Alone to Work	percent	82.3		80.3	76.4	2012-2016	Black or African American, 20-44	1
1.06	Workers Commuting by Public	percent	1.7	5.5	1.5	5.1	2012-2016	Hispanic or Latino	1

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	Transportation								
1.00	Households with No Car and Low Access to a Grocery Store	<i>percent</i>	1.1				2015		15
0.50	Households without a Vehicle	<i>percent</i>	2.7		5.6	9	2012-2016		1
SCORE	WELLNESS & LIFESTYLE	UNITS	FORT BEND COUNTY	HP2020	TEXAS	U.S.	MEASUREMENT PERIOD	HIGH DISPARITY*	Source
1.17	Insufficient Sleep	<i>percent</i>	32.5		32.7	38	2016		3
0.72	Life Expectancy for Females	<i>years</i>	83.5		80.8	81.5	2014		5
0.67	Self-Reported General Health Assessment: Poor or Fair	<i>percent</i>	14.1		18.2	16	2016		3
0.50	Frequent Physical Distress	<i>percent</i>	8.7		10.8	15	2016		3
0.50	Life Expectancy for Males	<i>years</i>	80.1		76.2	76.7	2014		5
0.50	Poor Physical Health: Average Number of Days	<i>days</i>	2.9		3.5	3.7	2016		3
SCORE	WOMEN'S HEALTH	UNITS	FORT BEND COUNTY	HP2020	TEXAS	U.S.	MEASUREMENT PERIOD	HIGH DISPARITY*	Source
1.17	Breast Cancer Incidence Rate	<i>cases/ 100,000 females</i>	114.7		111.7	124.7	2011-2015		6
0.72	Life Expectancy for Females	<i>years</i>	83.5		80.8	81.5	2014		5
0.47	Age-Adjusted Death Rate due to Breast Cancer	<i>deaths/ 100,000 females</i>	18.1	20.7	20.2	20.9	2011-2015		6
0.47	Cervical Cancer Incidence Rate	<i>cases/ 100,000 females</i>	6.4	7.3	9.2	7.5	2011-2015		6

Harris County

SCORE	ACCESS TO HEALTH SERVICES	UNITS	HARRIS COUNTY	HP2020	TEXAS	U.S.	MEASUREMENT PERIOD	HIGH DISPARITY*	Source
2.00	Adults Unable to Afford to See a Doctor	percent	22.1		18.3	12.1	2015		10
1.81	Children with Health Insurance	percent	89.4	100	90.3		2016		9
1.75	Adults with Health Insurance: 18-64	percent	74.7	100	77.4		2016		9
1.75	Persons with Health Insurance	percent	79.3	100	81.4		2016		9
1.61	Primary Care Provider Rate	providers/ 100,000 population	57.2		59.9	75.5	2015		4
1.44	Mental Health Provider Rate	providers/ 100,000 population	103.7		98.8	214.3	2017		4
1.00	Non-Physician Primary Care Provider Rate	providers/ 100,000 population	72.2		66.8	81.2	2017		4
0.50	Dentist Rate	dentists/ 100,000 population	66.3		55.9	67.4	2016		4
SCORE	CANCER	UNITS	HARRIS COUNTY	HP2020	TEXAS	U.S.	MEASUREMENT PERIOD	HIGH DISPARITY*	Source
2.53	Cervical Cancer Incidence Rate	cases/ 100,000 females	11	7.3	9.2	7.5	2011-2015		7
2.25	Age-Adjusted Death Rate due to Breast Cancer	deaths/ 100,000 females	23.2	20.7	20.2	20.9	2011-2015	Black	7
1.94	Cancer: Medicare Population	percent	7.6		7.1	7.8	2015		3
1.58	Colon Cancer Screening: Sigmoidoscopy or Colonoscopy	percent	57.6		62.3		2016		10
1.53	Age-Adjusted Death Rate due to Prostate Cancer	deaths/ 100,000 males	19.8	21.8	18.1	19.5	2011-2015		7
1.39	Breast Cancer Incidence Rate	cases/ 100,000	113.2		111.7	124.7	2011-2015		7

		<i>females</i>							
1.33	Prostate Cancer Incidence Rate	<i>cases/ 100,000 males</i>	102.5		95.4	109	2011-2015		7
1.22	Age-Adjusted Death Rate due to Colorectal Cancer	<i>deaths/ 100,000 population</i>	14.6	14.5	14.4	14.5	2011-2015		7
1.00	All Cancer Incidence Rate	<i>cases/ 100,000 population</i>	402.6		401.3	441.2	2011-2015		7
0.94	Age-Adjusted Death Rate due to Cancer	<i>deaths/ 100,000 population</i>	157.8	161.4	156.4	163.5	2011-2015	Black, Male	7
0.94	Colorectal Cancer Incidence Rate	<i>cases/ 100,000 population</i>	38.8	39.9	38.1	39.2	2011-2015		7
0.89	Oral Cavity and Pharynx Cancer Incidence Rate	<i>cases/ 100,000 population</i>	10.9		10.9	11.6	2011-2015		7
0.50	Lung and Bronchus Cancer Incidence Rate	<i>cases/ 100,000 population</i>	50.9		53.1	60.2	2011-2015		7
0.33	Age-Adjusted Death Rate due to Lung Cancer	<i>deaths/ 100,000 population</i>	37.5	45.5	39	43.4	2011-2015		7
SCORE	CHILDREN'S HEALTH	UNITS	HARRIS COUNTY	HP2020	TEXAS	U.S.	MEASUREMENT PERIOD	HIGH DISPARITY*	Source
1.81	Children with Health Insurance	<i>percent</i>	89.4	100	90.3		2016		9
1.67	Child Food Insecurity Rate	<i>percent</i>	23.5		23	17.9	2016		5
1.50	Children with Low Access to a Grocery Store	<i>percent</i>	5.4				2015		17
1.11	Substantiated Child Abuse Rate	<i>cases/ 1,000 children</i>	5.4		8.5		2017		11
SCORE	DIABETES	UNITS	HARRIS COUNTY	HP2020	TEXAS	U.S.	MEASUREMENT PERIOD	HIGH DISPARITY*	Source
1.67	Diabetes: Medicare Population	<i>percent</i>	28.1		28.2	26.5	2015		3
1.44	Adults with Diabetes	<i>percent</i>	10.2		11.2	10.5	2016		10
0.92	Age-Adjusted Death Rate due to	<i>deaths/ 100,000</i>	20.2		21.7	21.2	2010-2014	Black, Hispanic,	12

	Diabetes	<i>population</i>						Male	
SCORE	ECONOMY	UNITS	HARRIS COUNTY	HP2020	TEXAS	U.S.	MEASUREMENT PERIOD	HIGH DISPARITY*	Source
2.44	Homeownership	<i>percent</i>	49.6		55	55.9	2012-2016		1
2.39	Severe Housing Problems	<i>percent</i>	20.9		18.3	18.8	2010-2014		4
2.22	Students Eligible for the Free Lunch Program	<i>percent</i>	58.2		52.9	42.6	2015-2016		8
2.14	Median Monthly Owner Costs for Households without a Mortgage	<i>dollars</i>	534		467	462	2012-2016		1
2.11	SNAP Certified Stores	<i>stores/ 1,000 population</i>	0.6				2016		17
2.08	Median Household Gross Rent	<i>dollars</i>	937		911	949	2012-2016		1
2.06	Families Living Below Poverty Level	<i>percent</i>	14.4		13	11	2012-2016	American Indian or Alaska Native, Black or African American, Hispanic or Latino, Other	1
2.06	Food Insecurity Rate	<i>percent</i>	16.6		15.4	12.9	2016		5
1.94	Unemployed Workers in Civilian Labor Force	<i>percent</i>	4.4		4	4.1	July 2018		15
1.89	People 65+ Living Below Poverty Level	<i>percent</i>	11.3		10.8	9.3	2012-2016	Asian, Black or African American, Hispanic or Latino, Other, Female, 75+	1
1.81	Mortgaged Owners Median Monthly Household Costs	<i>dollars</i>	1504		1444	1491	2012-2016		1
1.67	Child Food Insecurity Rate	<i>percent</i>	23.5		23	17.9	2016		5
1.67	Children Living Below Poverty Level	<i>percent</i>	26		23.9	21.2	2012-2016	American Indian or Alaska Native, Black or African American, Hispanic or Latino, Other, <6	1

1.67	People Living Below Poverty Level	percent	17.4		16.7	15.1	2012-2016	American Indian or Alaska Native, Black or African American, Hispanic or Latino, Other, Female, <6, 6-11, 12-17, 18-24	1
1.67	Total Employment Change	percent	2.4		3.2	2.5	2014-2015		16
1.50	Renters Spending 30% or More of Household Income on Rent	percent	46.8		48	47.3	2012-2016		1
1.42	Persons with Disability Living in Poverty (5-year)	percent	25.4		25.1	27.6	2012-2016		1
1.33	Low-Income and Low Access to a Grocery Store	percent	6.3				2015		17
1.33	People Living 200% Above Poverty Level	percent	61.6		62.8	66.4	2012-2016		1
1.08	Median Housing Unit Value	dollars	145600		142700	184700	2012-2016		1
0.97	Persons with Disability Living in Poverty	percent	22.9		24.2	26.6	2016		1
0.94	Female Population 16+ in Civilian Labor Force	percent	59.8		57.7	58.3	2012-2016		1
0.94	Population 16+ in Civilian Labor Force	percent	68.3		64.2	63.1	2012-2016		1
0.89	Households with Cash Public Assistance Income	percent	1.5		1.6	2.7	2012-2016		1
0.67	Homeowner Vacancy Rate	percent	1.5		1.6	1.8	2012-2016		1
0.50	Median Household Income	dollars	55584		54727	55322	2012-2016	American Indian or Alaska Native, Black or African American, Hispanic or Latino, Other	1
0.50	Per Capita Income	dollars	29850		27828	29829	2012-2016	American Indian or Alaska Native, Black or African American, Hispanic or Latino,	1

								Native Hawaiian or Other Pacific Islander, Other, Two or More Races	
SCORE	EDUCATION	UNITS	HARRIS COUNTY	HP2020	TEXAS	U.S.	MEASUREMENT PERIOD	HIGH DISPARITY*	Source
1.92	Infants Born to Mothers with <12 Years Education	<i>percent</i>	27.5		21.6	15.9	2013		12
1.89	Student-to-Teacher Ratio	<i>students/ teacher</i>	16.4		15.4	17.7	2015-2016		8
1.67	High School Drop Out Rate	<i>percent</i>	2.6		2		2016		13
1.67	People 25+ with a High School Degree or Higher	<i>percent</i>	80.2		82.3	87	2012-2016	Male, 35-44, 45-64, 65+	1
0.67	People 25+ with a Bachelor's Degree or Higher	<i>percent</i>	30.1		28.1	30.3	2012-2016	American Indian or Alaska Native, Black or African American, Native Hawaiian or Other Pacific Islander, Other, 45-64, 65+	1
SCORE	ENVIRONMENT	UNITS	HARRIS COUNTY	HP2020	TEXAS	U.S.	MEASUREMENT PERIOD	HIGH DISPARITY*	Source
2.39	Severe Housing Problems	<i>percent</i>	20.9		18.3	18.8	2010-2014		4
2.11	SNAP Certified Stores	<i>stores/ 1,000 population</i>	0.6				2016		17
1.75	Annual Ozone Air Quality	<i>grade</i>	F				2014-2016		2
1.69	Annual Particle Pollution	<i>grade</i>	C				2014-2016		2
1.67	Fast Food Restaurant Density	<i>restaurants/ 1,000 population</i>	0.7				2014		17
1.61	Recognized Carcinogens Released into Air	<i>pounds</i>	1962916				2017		18

1.50	Children with Low Access to a Grocery Store	percent	5.4				2015		17
1.50	Farmers Market Density	markets/ 1,000 population	0				2016		17
1.50	Grocery Store Density	stores/ 1,000 population	0.2				2014		17
1.33	Low-Income and Low Access to a Grocery Store	percent	6.3				2015		17
1.33	Recreation and Fitness Facilities	facilities/ 1,000 population	0.1				2014		17
1.25	Drinking Water Violations	percent	1.7		6.6		FY 2013-14		4
1.17	PBT Released	pounds	210516				2017		18
1.00	Food Environment Index		7.2		6	7.7	2018		4
1.00	Households with No Car and Low Access to a Grocery Store	percent	0.9				2015		17
1.00	People 65+ with Low Access to a Grocery Store	percent	1.4				2015		17
0.89	Liquor Store Density	stores/ 100,000 population	6.3		6.8	10.5	2015		16
0.67	Access to Exercise Opportunities	percent	90.4		80.6	83.1	2018		4
0.17	Houses Built Prior to 1950	percent	6.2		7.4	18.2	2012-2016		1
SCORE	EXERCISE, NUTRITION, & WEIGHT	UNITS	HARRIS COUNTY	HP2020	TEXAS	U.S.	MEASUREMENT PERIOD	HIGH DISPARITY*	Source
2.17	Workers who Walk to Work	percent	1.5	3.1	1.6	2.8	2012-2016	White, non-Hispanic	1
2.11	SNAP Certified Stores	stores/ 1,000 population	0.6				2016		17
2.06	Food Insecurity Rate	percent	16.6		15.4	12.9	2016		5
1.67	Adults (18+ Years) Who Are Obese	percent	32	30.5	33.6	29.9	2016		10
1.67	Child Food Insecurity Rate	percent	23.5		23	17.9	2016		5
1.67	Fast Food Restaurant Density	restaurants/ 1,000	0.7				2014		17

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		<i>population</i>							
1.50	Adults who are Overweight or Obese	<i>percent</i>	66.7		68.4	65.2	2016		10
1.50	Children with Low Access to a Grocery Store	<i>percent</i>	5.4				2015		17
1.50	Farmers Market Density	<i>markets/ 1,000 population</i>	0				2016		17
1.50	Grocery Store Density	<i>stores/ 1,000 population</i>	0.2				2014		17
1.42	Adult Fruit and Vegetable Consumption	<i>percent</i>	18.7		17.2		2015		10
1.33	Low-Income and Low Access to a Grocery Store	<i>percent</i>	6.3				2015		17
1.33	Recreation and Fitness Facilities	<i>facilities/ 1,000 population</i>	0.1				2014		17
1.00	Food Environment Index		7.2		6	7.7	2018		4
1.00	Households with No Car and Low Access to a Grocery Store	<i>percent</i>	0.9				2015		17
1.00	People 65+ with Low Access to a Grocery Store	<i>percent</i>	1.4				2015		17
0.67	Access to Exercise Opportunities	<i>percent</i>	90.4		80.6	83.1	2018		4
SCORE	HEART DISEASE & STROKE	UNITS	HARRIS COUNTY	HP2020	TEXAS	U.S.	MEASUREMENT PERIOD	HIGH DISPARITY*	Source
2.61	Stroke: Medicare Population	<i>percent</i>	5.2		4.5	4	2015		3
1.89	Heart Failure: Medicare Population	<i>percent</i>	16		15.5	13.5	2015		3
1.50	Atrial Fibrillation: Medicare Population	<i>percent</i>	7.3		7.4	8.1	2015		3
1.44	Hyperlipidemia: Medicare Population	<i>percent</i>	43.2		46.1	44.6	2015		3

1.42	Age-Adjusted Death Rate due to Cerebrovascular Disease (Stroke)	deaths/ 100,000 population	41.5	34.8	42	37.3	2010-2014	Black	12
1.33	Ischemic Heart Disease: Medicare Population	percent	28.8		28.8	26.5	2015		3
1.22	Hypertension: Medicare Population	percent	55.5		57.5	55	2015		3
0.92	Age-Adjusted Death Rate due to Heart Disease	deaths/ 100,000 population	167.6		173	171.9	2010-2014	Black, White, Male	12
SCORE	IMMUNIZATIONS & INFECTIOUS DISEASES	UNITS	HARRIS COUNTY	HP2020	TEXAS	U.S.	MEASUREMENT PERIOD	HIGH DISPARITY*	Source
2.33	Gonorrhea Incidence Rate	cases/ 100,000 population	182.1		160.2		2017		12
2.33	Syphilis Incidence Rate	cases/ 100,000 population	59.3		40.6		2017		12
2.11	Chlamydia Incidence Rate	cases/ 100,000 population	571.4		511.6		2017		12
1.83	Tuberculosis Incidence Rate	cases/ 100,000 population	6.6	1	4.5		2013-2017		12
1.78	Adults 65+ with Influenza Vaccination	percent	57.2		57.3	58.6	2016		10
1.67	HIV Diagnosis Rate	cases/ 100,000 population	26.3		16.1		2016		12
1.17	Adults 65+ with Pneumonia Vaccination	percent	73.5	90	71.3	73.4	2016		10
1.00	Age-Adjusted Death Rate due to Influenza and Pneumonia	deaths/ 100,000 population	14		14.2	15.2	2010-2014	Black, Male	12
SCORE	MATERNAL, FETAL & INFANT HEALTH	UNITS	HARRIS COUNTY	HP2020	TEXAS	U.S.	MEASUREMENT PERIOD	HIGH DISPARITY*	Source
2.36	Infant Mortality Rate	deaths/ 1,000 live births	6.8	6	5.8	6	2013		12
1.97	Mothers who Received Early Prenatal Care	percent	56.1	77.9	59.2	74.2	2013		12

1.92	Infants Born to Mothers with <12 Years Education	percent	27.5		21.6	15.9	2013		12
1.81	Babies with Low Birth Weight	percent	8.6	7.8	8.3	8	2013		12
1.61	Babies with Very Low Birth Weight	percent	1.5	1.4	1.4	1.4	2013		12
1.25	Preterm Births	percent	11.8	9.4	12	11.4	2013		12
0.58	Teen Births	percent	2.5		2.8	4.3	2014		12
SCORE	MEN'S HEALTH	UNITS	HARRIS COUNTY	HP2020	TEXAS	U.S.	MEASUREMENT PERIOD	HIGH DISPARITY*	Source
1.53	Age-Adjusted Death Rate due to Prostate Cancer	deaths/ 100,000 males	19.8	21.8	18.1	19.5	2011-2015		7
1.33	Prostate Cancer Incidence Rate	cases/ 100,000 males	102.5		95.4	109	2011-2015		7
1.28	Life Expectancy for Males	years	76.4		76.2	76.7	2014		6
SCORE	MENTAL HEALTH & MENTAL DISORDERS	UNITS	HARRIS COUNTY	HP2020	TEXAS	U.S.	MEASUREMENT PERIOD	HIGH DISPARITY*	Source
1.89	Alzheimer's Disease or Dementia: Medicare Population	percent	11.4		11.7	9.9	2015		3
1.53	Poor Mental Health: 5+ Days	percent	80		81.5		2016		10
1.50	Poor Mental Health: Average Number of Days	days	3.7		3.4	3.8	2016		4
1.44	Mental Health Provider Rate	providers/ 100,000 population	103.7		98.8	214.3	2017		4
1.17	Frequent Mental Distress	percent	11.2		10.6	15	2016		4
0.94	Age-Adjusted Death Rate due to Suicide	deaths/ 100,000 population	10.3	10.2	11.7	12.5	2010-2014	White, Male	12
0.94	Depression: Medicare Population	percent	14.8		17	16.7	2015		3
0.64	Age-Adjusted Death Rate due to Alzheimer's Disease	deaths/ 100,000 population	17.9		26.6	24.5	2010-2014	White, Female	12

SCORE	OLDER ADULTS & AGING	UNITS	HARRIS COUNTY	HP2020	TEXAS	U.S.	MEASUREMENT PERIOD	HIGH DISPARITY*	Source
2.67	Chronic Kidney Disease: Medicare Population	percent	20.9		19.9	18.1	2015		3
2.61	Stroke: Medicare Population	percent	5.2		4.5	4	2015		3
2.06	Age-Adjusted Death Rate due to Falls	deaths/ 100,000 population	10.4	7.2	7.4	8.3	2010-2014	White, Male	12
1.94	Cancer: Medicare Population	percent	7.6		7.1	7.8	2015		3
1.89	Alzheimer's Disease or Dementia: Medicare Population	percent	11.4		11.7	9.9	2015		3
1.89	Heart Failure: Medicare Population	percent	16		15.5	13.5	2015		3
1.89	People 65+ Living Below Poverty Level	percent	11.3		10.8	9.3	2012-2016	Asian, Black or African American, Hispanic or Latino, Other, Female, 75+	1
1.78	Adults 65+ with Influenza Vaccination	percent	57.2		57.3	58.6	2016		10
1.72	Osteoporosis: Medicare Population	percent	6.3		6.5	6	2015		3
1.67	Diabetes: Medicare Population	percent	28.1		28.2	26.5	2015		3
1.50	Atrial Fibrillation: Medicare Population	percent	7.3		7.4	8.1	2015		3
1.44	Hyperlipidemia: Medicare Population	percent	43.2		46.1	44.6	2015		3
1.44	People 65+ Living Alone	percent	24.4		23.9	26.4	2012-2016		1
1.33	Ischemic Heart Disease: Medicare Population	percent	28.8		28.8	26.5	2015		3
1.22	Hypertension: Medicare Population	percent	55.5		57.5	55	2015		3
1.17	Adults 65+ with Pneumonia Vaccination	percent	73.5	90	71.3	73.4	2016		10

1.00	People 65+ with Low Access to a Grocery Store	<i>percent</i>	1.4				2015		17
0.94	Asthma: Medicare Population	<i>percent</i>	7.3		8.2	8.2	2015		3
0.94	Depression: Medicare Population	<i>percent</i>	14.8		17	16.7	2015		3
0.94	Rheumatoid Arthritis or Osteoarthritis: Medicare Population	<i>percent</i>	27.8		31.6	30	2015		3
0.64	Age-Adjusted Death Rate due to Alzheimer's Disease	<i>deaths/ 100,000 population</i>	17.9		26.6	24.5	2010-2014	White, Female	12
0.39	COPD: Medicare Population	<i>percent</i>	9.6		11.1	11.2	2015		3
SCORE	OTHER CHRONIC DISEASES	UNITS	HARRIS COUNTY	HP2020	TEXAS	U.S.	MEASUREMENT PERIOD	HIGH DISPARITY*	Source
2.67	Chronic Kidney Disease: Medicare Population	<i>percent</i>	20.9		19.9	18.1	2015		3
1.72	Osteoporosis: Medicare Population	<i>percent</i>	6.3		6.5	6	2015		3
0.94	Rheumatoid Arthritis or Osteoarthritis: Medicare Population	<i>percent</i>	27.8		31.6	30	2015		3
SCORE	PREVENTION & SAFETY	UNITS	HARRIS COUNTY	HP2020	TEXAS	U.S.	MEASUREMENT PERIOD	HIGH DISPARITY*	Source
2.39	Severe Housing Problems	<i>percent</i>	20.9		18.3	18.8	2010-2014		4
2.06	Age-Adjusted Death Rate due to Falls	<i>deaths/ 100,000 population</i>	10.4	7.2	7.4	8.3	2010-2014	White, Male	12
1.19	Death Rate due to Drug Poisoning	<i>deaths/ 100,000 population</i>	10.2		9.8	16.9	2014-2016		4
0.69	Age-Adjusted Death Rate due to Unintentional Injuries	<i>deaths/ 100,000 population</i>	36.1	36.4	37.6	39.2	2010-2014	White, Male	12

SCORE	PUBLIC SAFETY	UNITS	HARRIS COUNTY	HP2020	TEXAS	U.S.	MEASUREMENT PERIOD	HIGH DISPARITY*	Source
2.17	Alcohol-Impaired Driving Deaths	<i>percent</i>	37.8		28.3	29.3	2012-2016		4
1.67	Violent Crime Rate	<i>crimes/ 100,000 population</i>	713.7		407.6		2012-2014		4
1.11	Substantiated Child Abuse Rate	<i>cases/ 1,000 children</i>	5.4		8.5		2017		11
SCORE	RESPIRATORY DISEASES	UNITS	HARRIS COUNTY	HP2020	TEXAS	U.S.	MEASUREMENT PERIOD	HIGH DISPARITY*	Source
1.83	Tuberculosis Incidence Rate	<i>cases/ 100,000 population</i>	6.6	1	4.5		2013-2017		12
1.78	Adults 65+ with Influenza Vaccination	<i>percent</i>	57.2		57.3	58.6	2016		10
1.17	Adults 65+ with Pneumonia Vaccination	<i>percent</i>	73.5	90	71.3	73.4	2016		10
1.00	Age-Adjusted Death Rate due to Influenza and Pneumonia	<i>deaths/ 100,000 population</i>	14		14.2	15.2	2010-2014	Black, Male	12
0.94	Asthma: Medicare Population	<i>percent</i>	7.3		8.2	8.2	2015		3
0.50	Lung and Bronchus Cancer Incidence Rate	<i>cases/ 100,000 population</i>	50.9		53.1	60.2	2011-2015		7
0.39	COPD: Medicare Population	<i>percent</i>	9.6		11.1	11.2	2015		3
0.33	Age-Adjusted Death Rate due to Lung Cancer	<i>deaths/ 100,000 population</i>	37.5	45.5	39	43.4	2011-2015		7
SCORE	SOCIAL ENVIRONMENT	UNITS	HARRIS COUNTY	HP2020	TEXAS	U.S.	MEASUREMENT PERIOD	HIGH DISPARITY*	Source
2.67	Mean Travel Time to Work	<i>minutes</i>	28.6		25.9	26.1	2012-2016	Male	1
2.50	Linguistic Isolation	<i>percent</i>	11.8		7.9	4.5	2012-2016		1
2.44	Homeownership	<i>percent</i>	49.6		55	55.9	2012-2016		1
2.17	Single-Parent Households	<i>percent</i>	36.2		33.3	33.6	2012-2016		1

2.14	Median Monthly Owner Costs for Households without a Mortgage	<i>dollars</i>	534		467	462	2012-2016		1
2.08	Median Household Gross Rent	<i>dollars</i>	937		911	949	2012-2016		1
1.81	Mortgaged Owners Median Monthly Household Costs	<i>dollars</i>	1504		1444	1491	2012-2016		1
1.75	Persons with Health Insurance	<i>percent</i>	79.3	100	81.4		2016		9
1.67	Children Living Below Poverty Level	<i>percent</i>	26		23.9	21.2	2012-2016	American Indian or Alaska Native, Black or African American, Hispanic or Latino, Other, <6	1
1.67	People 25+ with a High School Degree or Higher	<i>percent</i>	80.2		82.3	87	2012-2016	Male, 35-44, 45-64, 65+	1
1.67	People Living Below Poverty Level	<i>percent</i>	17.4		16.7	15.1	2012-2016	American Indian or Alaska Native, Black or African American, Hispanic or Latino, Other, Female, <6, 6-11, 12-17, 18-24	1
1.67	Total Employment Change	<i>percent</i>	2.4		3.2	2.5	2014-2015		16
1.67	Voter Turnout: Presidential Election	<i>percent</i>	58.4		58.8		2016		14
1.44	People 65+ Living Alone	<i>percent</i>	24.4		23.9	26.4	2012-2016		1
1.11	Substantiated Child Abuse Rate	<i>cases/ 1,000 children</i>	5.4		8.5		2017		11
1.08	Median Housing Unit Value	<i>dollars</i>	145600		142700	184700	2012-2016		1
0.94	Female Population 16+ in Civilian Labor Force	<i>percent</i>	59.8		57.7	58.3	2012-2016		1
0.94	Population 16+ in Civilian Labor Force	<i>percent</i>	68.3		64.2	63.1	2012-2016		1
0.67	People 25+ with a Bachelor's Degree or Higher	<i>percent</i>	30.1		28.1	30.3	2012-2016	American Indian or Alaska Native, Black or African American, Native Hawaiian or	1

								Other Pacific Islander, Other, 45-64, 65+	
0.50	Median Household Income	<i>dollars</i>	55584		54727	55322	2012-2016	American Indian or Alaska Native, Black or African American, Hispanic or Latino, Other	1
0.50	Per Capita Income	<i>dollars</i>	29850		27828	29829	2012-2016	American Indian or Alaska Native, Black or African American, Hispanic or Latino, Native Hawaiian or Other Pacific Islander, Other, Two or More Races	1
SCORE	SUBSTANCE ABUSE	UNITS	HARRIS COUNTY	HP2020	TEXAS	U.S.	MEASUREMENT PERIOD	HIGH DISPARITY*	Source
2.17	Alcohol-Impaired Driving Deaths	<i>percent</i>	37.8		28.3	29.3	2012-2016		4
1.50	Adults who Drink Excessively	<i>percent</i>	18.1	25.4	19.4	18	2016		4
1.28	Adults (18+ Years) Reporting Binge Drinking Within the Last 12 months	<i>percent</i>	16.6	24.2	17.9	16.9	2016		10
1.19	Death Rate due to Drug Poisoning	<i>deaths/ 100,000 population</i>	10.2		9.8	16.9	2014-2016		4
0.94	Adults who Smoke	<i>percent</i>	12.1	12	14.3	17.1	2016		10
0.89	Liquor Store Density	<i>stores/ 100,000 population</i>	6.3		6.8	10.5	2015		16
SCORE	TRANSPORTATION	UNITS	HARRIS COUNTY	HP2020	TEXAS	U.S.	MEASUREMENT PERIOD	HIGH DISPARITY*	Source
2.83	Solo Drivers with a Long Commute	<i>percent</i>	45.8		36.9	34.7	2012-2016		4
2.67	Mean Travel Time to Work	<i>minutes</i>	28.6		25.9	26.1	2012-2016	Male	1

2.17	Workers who Walk to Work	percent	1.5	3.1	1.6	2.8	2012-2016	White, non-Hispanic	1
1.44	Workers who Drive Alone to Work	percent	79.1		80.3	76.4	2012-2016	White, non-Hispanic, 25-44, 55-59	1
1.33	Households without a Vehicle	percent	6.4		5.6	9	2012-2016		1
1.28	Workers Commuting by Public Transportation	percent	2.8	5.5	1.5	5.1	2012-2016	Hispanic or Latino, Native Hawaiian or Other Pacific Islander, Two or More Races, White, non-Hispanic, Male, 25-44	1
1.00	Households with No Car and Low Access to a Grocery Store	percent	0.9				2015		17
SCORE	WELLNESS & LIFESTYLE	UNITS	HARRIS COUNTY	HP2020	TEXAS	U.S.	MEASUREMENT PERIOD	HIGH DISPARITY*	Source
1.83	Self-Reported General Health Assessment: Poor or Fair	percent	18.2		18.2	16	2016		4
1.75	Poor Physical Health: 5+ Days	percent	80.6		81.5		2016		10
1.67	Insufficient Sleep	percent	33.9		32.7	38	2016		4
1.28	Life Expectancy for Males	years	76.4		76.2	76.7	2014		6
1.17	Frequent Physical Distress	percent	11.5		10.8	15	2016		4
1.17	Poor Physical Health: Average Number of Days	days	3.6		3.5	3.7	2016		4
1.06	Life Expectancy for Females	years	81		80.8	81.5	2014		6
SCORE	WOMEN'S HEALTH	UNITS	HARRIS COUNTY	HP2020	TEXAS	U.S.	MEASUREMENT PERIOD	HIGH DISPARITY*	Source
2.53	Cervical Cancer Incidence Rate	cases/ 100,000 females	11	7.3	9.2	7.5	2011-2015		7

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2.25	Age-Adjusted Death Rate due to Breast Cancer	<i>deaths/ 100,000 females</i>	23.2	20.7	20.2	20.9	2011-2015	Black	7
1.39	Breast Cancer Incidence Rate	<i>cases/ 100,000 females</i>	113.2		111.7	124.7	2011-2015		7
1.06	Life Expectancy for Females	<i>years</i>	81		80.8	81.5	2014		6

Appendix C. Primary Data Methodology

Community Input Participants

AccessHealth (FQHC) (Fort Bend Family Health Center)
AIDS Foundation of Houston
Association for the Advancement of Mexican Americans
Avenue CDC
Catholic Charities - Archdiocese of Galveston
Catholic Charities - Fort Bend
Child Advocates of Fort Bend
Children at Risk
Christ Clinic
City of Houston, Department of Parks and Recreation
Coastal Area Health Education Centers (AHEC)
Community Health Choice
El Centro de Corazon
Episcopal Health Foundation
Fort Bend County Health and Human Services
Fort Bend County Sheriff's Office
Fort Bend Regional Council On Substance Abuse
Fort Bend Seniors Meals on Wheels
Fort Bend Women's Center
Galveston County Health District
Galveston County Mental Health Deputies
Greater Houston Partnership
Greater Houston Women's Chamber of Commerce
Gulf Coast Medical Foundation
Harris County Public Health
Healthcare for the Homeless - Houston
HOPE Clinic (FQHC)
Houston Food Bank
Houston Health Department
Houston Housing Authority
Houston Independent School District
Interfaith Community Clinic
Kinder Institute
Legacy Community Health
Liberty County Sheriff's Office
Lone Star Family Health Center
Midtown Arts and Theater Center Houston
Montgomery County Women's Center
Baker-Ripley Early Head Start
Patient Care Intervention Center (PCIC)
Prairie View A&M University
Santa Maria Hostel, Inc.
The Arc of Fort Bend County
The Harris Center for Mental Health and IDD (formerly MHMRA)
The Rose
The Women's Home
Tri-County Services Behavioral Healthcare
United Way of Brazoria County
United Way of Greater Houston
United Way of Harris and Montgomery County
West Chambers Medical Center (FQHC)
YMCA of Greater Houston

Key Informant Interview Questionnaire (Episcopal Health Foundation)

- Good morning/afternoon [NAME OF INFORMANT]. My name is [NAME OF INTERVIEWER], and I am with Health Resources in Action, a non-profit public health organization based in Boston. Thank you for speaking with me today.
- As we mentioned in our interview invitation, the Episcopal Health Foundation is coordinating an interview initiative to support four Greater Houston area hospital systems in preparing their community health needs assessments. The collaborating hospitals include CHI St. Luke's, Houston Methodist Hospital, Memorial Hermann Health System, and Texas Children's Hospital.
- The purpose of this interview is to gain a greater understanding of the health status and wellbeing of residents in the Greater Houston area and determine how these health needs are currently being addressed. Interviews like this one are being conducted with about 70 stakeholders from a range of sectors such as government, healthcare, business, and community service organizations. We are also interviewing community leaders with specific experience working with priority populations such as women, children, people of color, and the disabled to name a few.
- We are interested in hearing people's feedback on the needs of the broader Greater Houston community and the populations you work with as a leader in your community. The Foundation and the four hospitals welcome your critical feedback and suggestions for health improvement activities in the future. Your honesty during today's interview is encouraged and appreciated.
- As we mentioned in our interview invitation, the interview will last between 45 minutes to an hour and it will be recorded. After all the interviews are completed, Health Resources in Action will provide a transcript of your interview to the four hospitals for use in preparing their community health needs assessment reports. Each hospital will keep your interview transcript confidential and accessible only to the team that is preparing the community health needs assessment report. Health Resources in Action will also be preparing a report of the general themes that emerge across all the interviews to help the hospitals prepare their reports.
- The Foundation has asked Health Resources in Action to ask all interviewees how they wish any quotes from today's interview to be presented in reports. There are three options. Quotes may be presented anonymously without your name or organization, presented with your name and organization, or presented with only the sector you represent. Which option would you like to choose?
 - RECORD RESPONSE FROM INTERVIEWEE:
 Anonymous Name and organization Sector
- Thank you. We will note your choice in the transcript that we provide to the hospitals.

- IF THE RESPONDENT IS UNSURE AT THE TIME OF THE INTERVIEW: Ok, please feel free to think it over and we will follow up with you for your decision before we send the transcript to the hospitals.
- Do you have any questions before we begin? BEGIN RECORDING THE INTERVIEW

INTERVIEW QUESTIONNAIRE (55 MINUTES)

NOTES TO INTERVIEWER:

- INTERVIEW QUESTIONS MAY BE ADDED OR TAILORED TO MEET THE SPECIFIC POSITION/ROLE OF THE INTERVIEWEE
- THE QUESTIONS IN THE INTERVIEW QUESTIONNAIRE ARE INTENDED TO SERVE AS A GUIDE, NOT A SCRIPT

BACKGROUND (5 MINUTES)

- Can you tell me a little bit about your role at your organization/agency?
 - Has your organization/agency ever partnered with any of the four hospitals involved in this shared community health needs assessment before? IF SO, PROBE IN WHAT CAPACITY/PROGRAM
- How would you describe the community you represent/the community your organization serves/the Greater Houston population at large? What are some of its defining characteristics in terms of demographics? INTERVIEWER: ESTABLISH WHAT THE INFORMANT CONSIDERS THE COMMUNITY TO BE FROM THEIR PERSPECTIVE

COMMUNITY ISSUES (20 minutes)

INTERVIEWER: VARY THE LABEL OF 'COMMUNITY' BASED ON THE INFORMANT'S BACKGROUND AND HOW HE OR SHE DESCRIBES THE COMMUNITY; BE SURE TO PROBE ON WOMEN'S AND CHILDREN'S ISSUES TO ENSURE WE ADDRESS THE NEEDS OF THE CHILDREN'S HOSPITALS IN ALL QUESTIONS AS RELEVANT

- Thinking about the status of the community today, how would you rate the overall health status of residents on a scale of 1 to 5 with 1 being poor and 5 being very healthy?
- If you had to pick your top 3 health concerns in the community, what would they be? PROBE IN-DEPTH BASED ON INFORMANT AREA OF EXPERTISE
 - Who do you consider to be the populations in the community most vulnerable or at risk for these conditions/issues?
 - IF NOT YET MENTIONED, PROBE SPECIFICALLY ON PRIORITY POPULATION RELEVANT TO THE INFORMANT'S EXPERTISE: What do you think are the most pressing health concerns in the community for [PRIORITY POPULATION]?

- FOR INFORMANTS EXPERTISE WITH WOMEN AND CHILDREN: What do you think are the most pressing health concerns in the community for children and their families? How about for women?
 - IF NOT YET DISCUSSED: Of the top three issues you mentioned, which would you rank as your top issue? How do you see this issue affecting community members' daily lives and their health? PROBE IN-DEPTH IN SPECIFIC FOCUS AREAS; MAY ASK ABOUT ONE ISSUE AT TIME AND FOCUS ON PERSON'S AREA OF EXPERTISE.
- From your experience, what are residents' biggest barriers to addressing the top 3 health issues you identified?
 - PROBE: Social determinants of health?
 - PROBE: Barriers to accessing medical care?
 - PROBE: Barriers to accessing preventive services or programs?

FOCUS AREA: HEALTHY LIVING (5 MINUTES)

- I'd like to ask you about barriers affecting healthy living and the prevention of obesity.
 - What are some of the barriers to healthy eating and physical activity among the communities you serve?
 - What populations are most affected by barriers to healthy living and physical activity? PROBE ABOUT FOOD INSECURITY AND ACCESS TO SAFE SPACES FOR PHYSICAL ACTIVITY
 - What efforts or programs are you aware of that promote healthy living? PROBE ABOUT HEALTHY LIVING MATTERS COLLABORATIVE

ACCESS TO HEALTH CARE AND PUBLIC HEALTH/PREVENTION SERVICES (15 MINUTES)

- I'd like to ask you about access to health care and social services in your community.
 - What do you see as the strengths of the health care and social services in your community?
 - What do you see as its limitations?
- What challenges/barriers do residents in your community face in accessing health care and social services? [PROBE IN DEPTH FOR BARRIERS TO CARE: INSURANCE ISSUES, LANGUAGE BARRIERS, ACCESS TO HEALTH INFORMATION/HEALTH LITERACY, LACK OF TRANSPORTION, CHILD CARE, ETC.]
 - What do you think needs to happen in the community you serve to help residents overcome or address these challenges?
- What programs, services, or policies are you aware of in the community that address access to health care and social services?
 - In your opinion, how effective have these programs, services, or policies been at addressing the health needs of residents?

- What program, services, or policies are currently not available that you think should be?

IMPROVING THE HEALTH OF THE COMMUNITY/RESIDENTS (10 MINUTES)

- What do you think needs to happen in the community you serve to help residents overcome or address the challenges they face in being able to be healthy?
- Earlier in this interview, you mentioned [TOP ISSUE] as being your top health priority for area residents. What do you think needs to be done to address [TOP ISSUE HERE]?
 - What do you think hospitals can do to address this issue that they aren't doing right now? Do you have any suggestions about how hospitals can be creative or work outside their traditional role to address this issue and improve community health?
 - What kinds of opportunities are currently out there that can be seized upon to address these issues? For example, are there some "low hanging fruit" – current collaborations or initiatives that can be strengthened or expanded?

VISION FOR THE COMMUNITY (5 MINUTES)

- The hospitals involved in this initiative will be planning their strategy to improve the health of the communities they serve. What advice do you have for the group developing the plan to address the top health needs you've mentioned?

CLOSING (5 MINUTES)

Thank you so much for your time. That's it for my questions. Is there anything else that you would like to mention that we didn't discuss today?

As I mentioned, after all of the interviews are completed, we will be sending your interview transcripts to the four hospitals. Each hospital will make their community health needs assessment reports publicly available when they are complete. If you have any questions, please feel free to reach out to Jennifer Mineo at the Episcopal Health Foundation who is coordinating this effort on behalf of the four hospitals. Thank you again. Have a good morning/afternoon.

Key Informant Interview Questionnaire (Conduent Healthy Communities Institute)

Good morning/afternoon [NAME OF INFORMANT]. My name is [NAME OF INTERVIEWER], and I am with Conduent Healthy Communities Institute. My colleague [name] is also on the line. We are working with Memorial Hermann Health System to conduct a Community Health Needs Assessment.

- **The purpose of this interview is to gain a greater understanding of the health status and wellbeing of residents in the Greater Houston area and determine how these health needs are currently being addressed.** Interviews like this one are being conducted with about 12 stakeholders from a range of sectors such as government, healthcare, business, and community service organizations. We are also interviewing community leaders with specific experience working with priority populations such as women, children, people of color, and the disabled to name a few.
- We are interested in hearing people's feedback on the needs of the community and the populations you work with as a leader in your community. Memorial Hermann welcome your critical feedback and suggestions for health improvement activities in the future. Your honesty during today's interview is encouraged and appreciated.
- As we mentioned in our interview invitation, the interview will last between 45 minutes to an hour and it will be recorded. After all the interviews are completed, we will analyze and summarize all the interviews to incorporate into the community health needs assessment reports. Each MH hospital will keep your interview transcript confidential and accessible only to the team that is preparing the community health needs assessment report.
- Memorial Hermann has asked HCI to ask all interviewees how they wish any quotes from today's interview to be presented in reports. There are three options. Quotes may be presented anonymously without your name or organization, presented with your name and organization, or presented with only the sector you represent.
 - Which option would you like to choose?
 - RECORD RESPONSE FROM INTERVIEWEE:
 Anonymous Name and organization Sector
- Thank you. We will note your choice in the transcript that we provide to the hospitals.
 - IF THE RESPONDENT IS UNSURE AT THE TIME OF THE INTERVIEW: Ok, please feel free to think it over and we will follow up with you for your decision before we send the transcript to the hospitals.
 - Do you have any questions before we begin? BEGIN RECORDING THE INTERVIEW

INTERVIEW QUESTIONNAIRE (55 MINUTES)

NOTES TO INTERVIEWER:

- INTERVIEW QUESTIONS MAY BE ADDED OR TAILORED TO MEET THE SPECIFIC POSITION/ROLE OF THE INTERVIEWEE
- THE QUESTIONS IN THE INTERVIEW QUESTIONNAIRE ARE INTENDED TO SERVE AS A GUIDE, NOT A SCRIPT

BACKGROUND (5 MINUTES)

- **Can you tell me a little bit about your role at your organization?**
 - Has your organization/agency ever partnered with MH's community health needs assessment before? IF SO, PROBE IN WHAT CAPACITY/PROGRAM
- **How would you describe the community you represent/the community your organization serves?** What are some of its defining characteristics in terms of demographics?
INTERVIEWER: ESTABLISH WHAT THE INFORMANT CONSIDERS THE COMMUNITY TO BE FROM THEIR PERSPECTIVE

COMMUNITY ISSUES (20 minutes)

INTERVIEWER: VARY THE LABEL OF 'COMMUNITY' BASED ON THE INFORMANT'S BACKGROUND AND HOW HE OR SHE DESCRIBES THE COMMUNITY; BE SURE TO PROBE ON WOMEN'S AND CHILDREN'S ISSUES TO ENSURE WE ADDRESS THE NEEDS OF THE CHILDREN'S HOSPITALS IN ALL QUESTIONS AS RELEVANT

- **Thinking about the status of the community today, how would you rate the overall health status of residents on a scale of 1 to 5 with 1 being poor and 5 being very healthy?**
- **If you had to pick your top 3 health concerns in the community, what would they be?**
PROBE IN-DEPTH BASED ON INFORMANT AREA OF EXPERTISE
 - Who do you consider to be the populations in the community most vulnerable or at risk for these conditions/issues?
 - IF NOT YET MENTIONED, PROBE SPECIFICALLY ON PRIORITY POPULATION RELEVANT TO THE INFORMANT'S EXPERTISE: **What do you think are the most pressing health concerns in the community for [PRIORITY POPULATION]?**
 - FOR INFORMANTS EXPERTISE WITH WOMEN AND CHILDREN: **What do you think are the most pressing health concerns in the community for children and their families? How about for women?**
 - IF NOT YET DISCUSSED: **Of the top three issues you mentioned, which would you rank as your top issue? How do you see this issue affecting**

community members' daily lives and their health? PROBE IN-DEPTH IN SPECIFIC FOCUS AREAS; MAY ASK ABOUT ONE ISSUE AT TIME AND FOCUS ON PERSON'S AREA OF EXPERTISE.

- **From your experience, what are residents' biggest barriers to addressing the top 3 health issues you identified?**
 - PROBE: Social determinants of health?
 - PROBE: Barriers to accessing medical care?
 - PROBE: Barriers to accessing preventive services or programs?

FOCUS AREA: HEALTHY LIVING (5 MINUTES)

- **I'd like to ask you about barriers affecting healthy living and the prevention of obesity.**
 - **What are some of the barriers to healthy eating and physical activity among the communities you serve?**
 - **What populations are most affected by these barriers to healthy living and physical activity?** PROBE ABOUT FOOD INSECURITY AND ACCESS TO SAFE SPACES FOR PHYSICAL ACTIVITY
 - **What efforts or programs are you aware of that promote healthy living?** PROBE ABOUT HEALTHY LIVING MATTERS COLLABORATIVE

ACCESS TO HEALTH CARE AND PUBLIC HEALTH/PREVENTION SERVICES (15 MINUTES)

- **I'd like to ask you about access to health care and social services in your community.**
 - **What ARE the strengths of the health care and social services in your community?**
 - **What are some of their limitations?**
- **What challenges/barriers do residents in your community face when accessing health care and social services?** [PROBE IN DEPTH FOR BARRIERS TO CARE: INSURANCE ISSUES, LANGUAGE BARRIERS, ACCESS TO HEALTH INFORMATION/HEALTH LITERACY, LACK OF TRANSPORTATION, CHILD CARE, ETC.]
 - **What do you think needs to happen in the community to help residents overcome or address these challenges?**
- **What programs, services, or policies are you aware of that address access to health care and social services?**
 - **In your opinion, how effective have these programs, services, or policies been at addressing the health needs of residents?**
 - **What program, services, or policies not available that you think should be?**

IMPROVING THE HEALTH OF THE COMMUNITY/RESIDENTS (10 MINUTES)

- **What do you think needs to happen in the community to help residents overcome or address the challenges they face in being able to be healthy?**
- Earlier in this interview, you mentioned [TOP ISSUE] as being your top health priority for area residents. What do you think needs to be done to address [TOP ISSUE HERE]?
 - **What do you think hospitals can do to address this issue that they are not doing right now?**
 - Do you have any suggestions about how hospitals can be creative or work outside their traditional role to address this issue and improve community health?
 - What kinds of opportunities are currently out there that can be seized upon to address these issues? For example, are there some “low hanging fruit” – current collaborations or initiatives that can be strengthened or expanded?

VISION FOR THE COMMUNITY (5 MINUTES)

- The hospitals involved in this initiative will be planning their strategy to improve the health of the communities they serve.

What advice do you have for the group developing the plan to address the top health needs you've mentioned?

CLOSING (5 MINUTES)

Thank you so much for your time. That's it for my questions. Is there anything else that you would like to mention that we didn't discuss today?

As I mentioned, after all of the interviews are completed, we will be sending your interview transcripts to Memorial Hermann. The community health needs assessment reports will be **publicly** available when they are complete. If you have any questions, please feel free to reach out to Deborah Ganelin at Memorial Hermann who is coordinating this effort. Thank you again. Have a good morning/afternoon.

Community Survey (English)

Memorial Hermann Health System is conducting a Community Health Needs Assessment for the Greater Houston area. This assessment allows Memorial Hermann to better understand the health status and needs of the community and use the knowledge gained to implement programs that will benefit the community.

We can better understand community needs by gathering voices from the community. This survey allows community members like you to tell us about what you feel are important issues for your community.

We estimate that it will take about 5 minutes to complete this survey.

Thank you very much for your input and your time!

1. Please look at this list of community issues. In your opinion, what are the **top 5 issues** most affecting the quality of life in your community?
 - Diabetes
 - Obesity/Overweight
 - Respiratory/Lung Disease (asthma, COPD, etc.)
 - Cancers
 - Mental Health and Mental Disorders
 - Injuries, Violence and Safety
 - Substance Abuse (alcohol, tobacco, drugs, etc.)
 - Oral Health
 - Heart Disease and Stroke
 - Sexual Health (HIV/AIDS, STDs, etc.)
 - Teenage Pregnancy
 - Elder Care
 - Reproductive Health (family planning)
 - Other (please specify): _____

2. How would you rate your own personal health?
 - Very healthy
 - Somewhat healthy
 - Unhealthy
 - Very unhealthy

3. About how many times a week do you exercise or perform a physical activity like walking, running, bicycling, etc.?
 - Less than 1 time a week
 - 2-3 times a week
 - 5 or more times a week
 - Never
 - Other (please specify): _____

4. What are some of the barriers or challenges to exercising on a regular basis for you?

- No places to exercise
- No time to exercise
- I don't like exercising
- Feel unsafe exercising in the community
- None of my friends or family exercise
- No childcare
- Lack of funds to pay for gym or classes
- No transportation
- Other (please specify): _____

5. How much do you agree or disagree with each of the statements below.

	Agree strongly	Agree	Disagree	Disagree strongly
There are good parks for children, adults and people of all abilities to enjoy in my community				
In the past 12 months, I had a problem getting the health care I needed for me or a family member from any type of health care provider, dentist, pharmacy, or other facility				
I don't know where to get services for myself when I am sad, depressed or need someone to talk to				
I am confident I can get an appointment when I need to see my doctor fairly quickly				
I have a place to receive medical care other than the emergency room				
Within the past 12 months, I worried whether my food would run out before I got money to buy more				
Within the past 12 months, the food I bought just didn't last and I didn't have money to get more				
There are many options for healthy and affordable food in my community				

6. Has your doctor ever told you that you have any of the following? (Mark all that apply)

- High blood pressure
- High cholesterol
- Cancer
- Diabetes
- Obesity
- Asthma
- Heart disease
- Other (please specify): _____

Now, a few questions so that we can see how different types of people feel about the questions asked.

7. Zip code where you live: _____

8. What is your age? _____

9. What is your race/ethnicity?

- White
- Black/African American
- Hispanic/Latino
- Asian/Pacific Islander
- Native American
- Other (please specify): _____

10. What are the ages of children living in your household?

- 11 and younger
- 12-18 years old
- 18 and older
- None

11. What kind of medical insurance or coverage do you have?

- Private
- Employer-sponsored
- Medicaid
- Medicare
- None
- Other (please specify): _____

Thank you for completing this survey!

Community Survey (Spanish)

Memorial Hermann Health System está realizando una Evaluación de las Necesidades de Salud de la Comunidad en el área metropolitana de Houston. Esta evaluación permite a Memorial Hermann comprender mejor el estado de salud y las necesidades de la comunidad, así como usar la información obtenida para poner en práctica programas que beneficien a la comunidad.

Calculamos que le tomará unos 5 minutos completar esta encuesta.

1. Lea la lista de problemas de la comunidad. En su opinión ¿cuáles son los 5 problemas que más afectan la calidad de vida en su comunidad?

- | | |
|---|--|
| <input type="checkbox"/> Diabetes | <input type="checkbox"/> Salud bucal |
| <input type="checkbox"/> Obesidad/sobrepeso | <input type="checkbox"/> Enfermedades cardíacas y accidentes cerebrovasculares |
| <input type="checkbox"/> Enfermedades respiratorias/pulmonares (asma, enfermedad pulmonar obstructiva crónica [EPOC], etc.) | <input type="checkbox"/> Salud sexual (VIH/sida, enfermedades de transmisión sexual [ETS], etc.) |
| <input type="checkbox"/> Cáncer | <input type="checkbox"/> Embarazos de adolescentes |
| <input type="checkbox"/> Salud mental y trastornos mentales | <input type="checkbox"/> Cuidado de ancianos |
| <input type="checkbox"/> Lesiones, violencia y seguridad | <input type="checkbox"/> Salud reproductiva (planificación familiar) |
| <input type="checkbox"/> Drogodependencia (alcohol, tabaco, drogas, etc.) | |
| <input type="checkbox"/> Otros, (especifique): _____ | |

2. ¿Cómo calificaría su propia salud personal?

- | | |
|---|-----------------------------------|
| <input type="checkbox"/> Muy buena | <input type="checkbox"/> Mala |
| <input type="checkbox"/> Bastante buena | <input type="checkbox"/> Muy mala |

3. ¿Aproximadamente, cuántas veces por semana hace ejercicio o alguna actividad física, como caminar, correr, andar en bicicleta, etc.?

- | | |
|--|---|
| <input type="checkbox"/> Menos de 1 vez por semana | <input type="checkbox"/> 5 o más veces por semana |
| <input type="checkbox"/> De 2 a 3 veces por semana | <input type="checkbox"/> Nunca |
| <input type="checkbox"/> Otros, (especifique): _____ | |

4. ¿Cuáles son algunas de las barreras o dificultades que le impiden hacer ejercicio regularmente?

- | | |
|--|--|
| <input type="checkbox"/> No tengo un lugar donde hacer ejercicio. | <input type="checkbox"/> No tengo con quién dejar a mis hijos mientras hago ejercicio. |
| <input type="checkbox"/> No tengo tiempo para hacer ejercicio. | <input type="checkbox"/> No tengo dinero para pagar un gimnasio o clases. |
| <input type="checkbox"/> No me gusta hacer ejercicio. | <input type="checkbox"/> No tengo acceso a transporte. |
| <input type="checkbox"/> No me siento seguro/a haciendo ejercicio en mi comunidad. | |
| <input type="checkbox"/> Ninguno de mis amigos o familiares hacen ejercicio. | |
| <input type="checkbox"/> Otros, (especifique): _____ | |

5. ¿Le ha dicho su médico alguna de las siguientes afecciones? (Marque todas las opciones que correspondan).

- Presión arterial alta
- Colesterol alto
- Cáncer
- Diabetes
- Otros, (especifique): _____
- Obesidad
- Asma
- Enfermedad cardíaca

6. ¿En qué medida está de acuerdo o en desacuerdo con cada una de las siguientes afirmaciones?

	Muy de acuerdo	De acuerdo	En desacuerdo	Muy en desacuerdo
En mi comunidad, hay buenos parques para niños, adultos y personas con todo tipo de capacidades para nuestro disfrute.				
En los últimos 12 meses, tuve un problema para obtener el cuidado médico que necesitaba para mí o para un familiar por parte de cualquier tipo de proveedor de cuidado de la salud, dentista, farmacia u otro centro sanitario.				
No sé dónde obtener servicios para mí cuando estoy triste, deprimido/a, o necesito hablar con alguien.				
Sé con seguridad que puedo obtener una cita con mi médico con cierta rapidez.				
Tengo a mi disposición un lugar para recibir cuidados médicos que no sea una sala de emergencias.				
En los últimos 12 meses, me preocupé de si la comida se agotaría antes de obtener dinero para comprar más alimentos.				
En los últimos 12 meses, los alimentos que compré simplemente no duraron lo suficiente y no tuve dinero para comprar más.				
En mi comunidad hay muchas opciones para comprar alimentos saludables y asequibles.				

Ahora le haremos algunas preguntas para poder ver cómo se sienten los distintos grupos de personas acerca de las preguntas que le hemos hecho.

7. Código postal de su casa: _____

8. ¿Cuántos años tiene? _____

9. ¿Cuál es su raza/origen étnico?

- Blanco/a
- Negro/a o afroamericano/a
- Hispano/a o latino/a
- Asiático/a o isleño/a del Pacífico
- Indígena americano/a
- Otro/a, (especifique): _____

10. ¿Cuántos años tienen los niños/as que viven en su casa?

- 11 y menos
- Entre 12 y 18 años
- Más de 18 años
- Ninguno

11. ¿Qué tipo de seguro médico o cobertura tiene?

Privado

Patrocinado por un empleador

Medicaid

Medicare

Ninguno

Otro, (especifique): _____

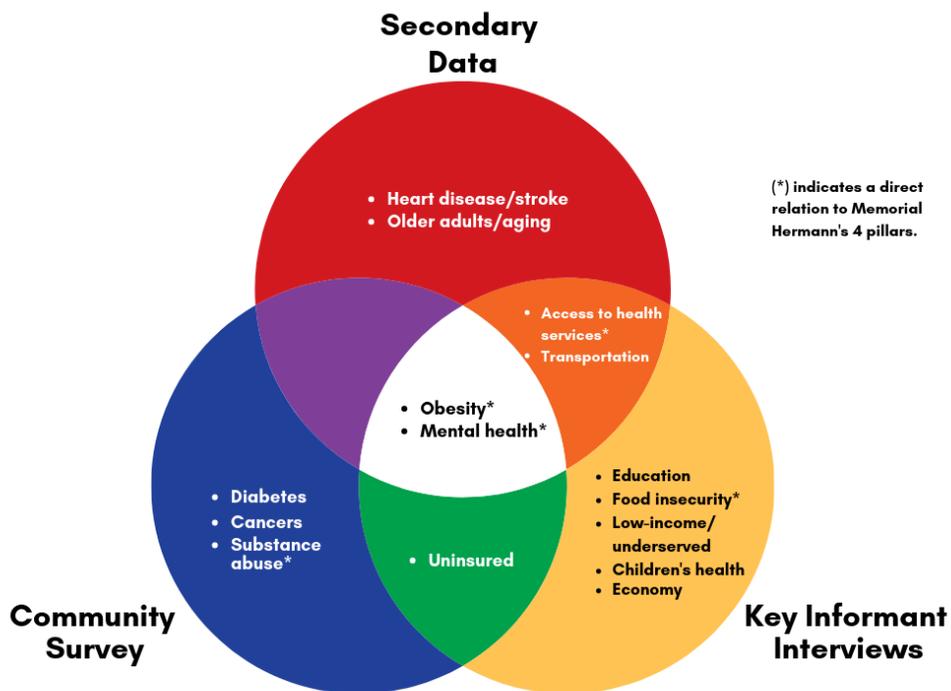
Appendix D. Prioritization Tool

Prioritization Survey

Thank you for your participation in this prioritization process.

The Community Health Needs Assessment (CHNA) process has multiple steps. After thorough research has been completed to identify the significant health needs in the community, these significant health needs must be prioritized for further strategic planning and implementation. Prioritization is the process of determining the most important or urgent health needs to address in communities.

Below is a diagram that shows the methods that were used to identify key issues across Memorial Hermann’s service areas. These three methods included: a secondary data review, a community survey and key informant interviews. As you see, some issues revealed themselves across multiple methods. Reviewing this diagram may help you complete this survey.



- The following health needs are not listed by order of importance. For each health need, click on the arrow on the drop down box and select your agreement with each statement. If you are on a tablet or phone, please scroll all the way to the right for each row.

The issue impacts many people in my community	This issue significantly impacts subgroups	There are not enough existing and adequate resources to	This issue has high risk for disease or death
--	---	--	--

		(subgroups by age, gender, race/ethnicity, LGBTQ, etc.)	address this issue in my community	
Access to Health Services				
Heart Disease and Stroke				
Older Adults and Aging				
Obesity (Exercise, Nutrition and Weight)				
Transportation				
Mental Health				
Diabetes				
Substance Abuse				
Cancers				
Lack of Health Insurance				
Education				
Food Insecurity				
Low-Income/Underserved				
Children's Health				
Economy				

2. Indicate the level of importance that should be given towards each of Memorial Hermann's 4 Pillars. Key definitions are listed below.

	Not Important	Somewhat Important	Important	Very Important	Not Sure
Access to care (including healthcare access, healthcare resource awareness, healthcare navigation / literacy)					
Food as health (including food insecurity, food programs, food knowledge)					
Exercise as medicine (including obesity, access to parks, safe places to exercise)					
Emotional well-being (including emotional health, mental health, substance abuse)					

Key definitions:

Healthcare navigation/literacy: need for education in navigating health systems

Food insecurity: lacking reliable access to healthy food options

Food programs: programs, efforts or services designed to address food issues
Food knowledge: one's understanding of healthy foods

3. Who in your community is most affected by poor health outcomes? (Select up to 5)
- Lesbian, Gay, Bisexual, Transgender, Queer or Questioning (LGBTQ)
 - Older Adults
 - Persons with Disabilities (cognitive, sensory or physical disability)
 - Racial/Ethnic Minority Populations
 - Veterans
 - Immigrants or other undocumented persons
 - Persons experiencing homelessness or precariously housed
 - Other Populations (please specify): _____
4. Please provide your name: _____
5. Please provide your email address: _____
6. Please select the name(s) of the healthcare facility or facilities you represent. You may choose more than one.
- Memorial Hermann Katy
 - Memorial Hermann Memorial City
 - Memorial Hermann Greater Heights
 - Memorial Hermann Northeast
 - Memorial Hermann Southeast
 - Memorial Hermann Sugar Land
 - Memorial Hermann Southwest
 - Memorial Hermann The Woodlands
 - Katy Rehab
 - Texas Medical Center
 - TIRR Memorial Hermann
 - Memorial Hermann Surgical Hospital Kingwood
 - Memorial Hermann Surgical Hospital First Colony
 - Memorial Hermann First Colony Hospital (ER)
 - Memorial Hermann Tomball Hospital (ER)
 - Other (please specify): _____

Thank you for your input and participation in the Community Health Needs Assessment process.

Appendix E. Community Resources

The following is a list of community resources mentioned by community input participants.

2-1-1 Texas	City of Pasadena
A.C. Taylor Health Center	Coastal Area Health Education Centers (AHEC)
AccessHealth	Community Health Choice
Acres Home Health Center	County Indigent Health Care Program
AIDS Foundation Houston	Covenant with Christ Community Service Center
Aldine Health Center	Cypress Health Center
American Heart Association	Danny Jackson Health Center
American Red Cross	Dental Hygiene Clinic
Amistad Community Health Center	E. A. "Squatty" Lyons Health Center
Area Agency on Aging	El Centro De Corazon
Association for the Advancement of Mexican Americans	El Franco Lee Health Center
Avenue 360 Health & Wellness	Episcopal Health Foundation
Avenue CDC	Family Services (Galveston County)
Baker-Ripley	Fort Bend Connect
Bastrop Community Health Center	Fort Bend County Collaborative Information System
Baylor Teen Health Clinic	Fort Bend County Health and Human Services
Bayside Clinic	Fort Bend County Sheriff's Office
Baytown Health Center	Fort Bend Regional Council On Substance Abuse
Bee Busy Wellness Center	Fort Bend Seniors Meals on Wheels
Boat People SOS	Fort Bend Women's Center
Bo's Place	Galveston County Health District
Brighter Bites	Galveston County Mental Health Deputies
Brownsville Community Health Center	Go Healthy Houston Task Force
Buffalo Bayou Partnership	GoodRx
Burleson Family Medical Center	Greater Houston Partnership
BVCAA - HealthPoint	Greater Houston Women's Chamber of Commerce
Can Do Houston	Gulf Coast Community Services Association
Casa de Amigos Health Center	Gulf Coast Medical Foundation
Casa El Buen Samaritano	Gulfgate Health Center
Catholic Charities of the Archdiocese of Galveston-Houston-Fort Bend	Harmony House Respite Center
Central Care Community Health	Harris Center Crisis Line
Chambers Community Health Center	Harris County Public Health and Environmental Services (HCPHES)
CHI St. Luke's Health	Harris County Rides
Child Advocates of Fort Bend	Harris County Social Services
Children at Risk	Harris Health System
Christ Clinic	Harvest Green (Development)
Christian Community Services Center (CCSC)	HEAL Initiative
CHRISTUS Health System	
Cities Changing Diabetes	
City of Houston	
City of Houston, Department of Parks and Recreation	

Health Center of Southeast Texas
 Healthcare for the Homeless - Houston
 Healthy Living Matters (Harris County)
 Helping Hands Food Pantry
 HOPE Clinic (FQHC)
 Houston Food Bank
 Houston Health Department
 Houston Housing Authority
 Houston Independent School District
 Houston Ryan White Planning Council
 Houston Shifa Synott Clinic
 Huntsville Memorial Hospital Clinic
 IbnSina Foundation
 India House Charity Clinic
 Interfaith Community Clinic
 Interfaith Ministries Meals on Wheels
 Interfaith of The Woodlands
 Kinder Institute
 La Nueva Casa Health Center
 Legacy Health (FQHC)
 Leon County Community Health Center
 Liberty County Sheriff's Office
 Lone Star Family Health Center (FQHC)
 Long Branch Health Center
 Long Term Recovery Group
 Los Barrios Unidos Community Clinic
 Magnolia Health Center
 Mamie George Community Center
 Martin Luther King Jr. Health Center
 Medical Plus Supplies
 MEHOP - Matagorda Episcopal Health
 Outreach Program
 MET Head Start
 Methodist Hospital
 Metrolift
 Midtown Arts and Theater Center Houston
 Montgomery County Food Bank
 Montgomery County Women's Center
 Neighborhood Health Center
 Northwest Assistance Ministry's Children's
 Clinic
 Northwest Health Center
 Nuestra Clinica del Valle
 Pat McWaters Health Clinic- Second Mile
 Mission
 Patient Care Intervention Center (PCIC)
 Pearland Community Health Center
 Pediatric & Adolescent Health Center
 Physicians at Sugar Creek
 Planned Parenthood
 Prairie View A&M University
 Quentin Mease Hospital
 Regional Association of Grant Makers
 Regional Medical Center
 Robert Carrasco Health Clinic
 RSVP Med Spa
 San Jose Clinic
 Santa Maria Hostel, Inc.
 Settegast Health Center
 Seva Clinic Charity Medical Facility
 Sheltering Arm Senior Services Division of
 Baker Ripley
 Shifa Clinic
 Smith Clinic
 Social Security Administration
 Spring Branch Community Health Center
 St. Hope Foundation
 St. Vincent's House
 Stephen F. Austin Community Health
 Network
 Strawberry Health Center
 Texana Behavioral Health
 Texas A&M AgriLife Extension Service
 Texas Children's Hospital
 Texas Medicaid and CHIP Medical
 Transportation Program
 The Arc of Fort Bend County
 The Beacon
 The Harris Center for Mental Health and
 IDD (formerly MHMRA)
 The Rose
 The Women's Home
 Thomas Street Health Center
 TOMAGWA Clinic
 Tri-County Services Behavioral Healthcare
 Uber Health
 United Way of Brazoria County
 United Way of Greater Houston
 United Way Project Blueprint
 University of Houston - College of
 Optometry
 University of Texas Health - Dental
 University of Texas Health Services
 University of Texas Physicians
 Urban Harvest
 UTMB

Valbona Health Center
VCare Clinic
Vecino Health Center
West Chambers Medical Center (FQHC)
West Houston Assistance Ministries
(WHAM)
Whole Life Service Center
Women's Care Center
Workforce Solutions
YMCA of Greater Houston