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Introduction
Improving the health of a community is essential to enhancing the quality of life for residents in the region and supporting future social and economic well-being. Memorial Hermann Health System (MHHS) engaged in a community health planning process to improve the health of residents served by Memorial Hermann Greater Heights Hospital (MH Greater Heights). This effort includes two phases: (1) a community health needs assessment (CHNA) to identify the health-related needs and strengths of the community and (2) a strategic implementation plan (SIP) to identify major health priorities, develop goals, and select strategies and identify partners to address these priority issues across the community. This report provides an overview of key findings from Memorial Hermann Greater Heights Hospital’s CHNA.

Community Health Needs Assessment Methods
The CHNA was guided by a participatory, collaborative approach, which examined health in its broadest sense. This process included integrating existing secondary data on social, economic, and health issues in the region with qualitative information from 11 focus groups with community residents and service providers and 27 interviews with community stakeholders. Focus groups and interviews were conducted with individuals from the Greater Houston area and from within MH Greater Height’s diverse community. The community defined for this CHNA included the city of Houston within Harris County.

Key Findings
The following provides a brief overview of key findings that emerged from this assessment.

Community Social and Economic Context

- **Population Growth and Size:** The total population in the city of Houston, of which Greater Heights is a neighborhood, was 2,167,988 based on 2010-2014 ACS estimates, 8.3% of Texas’ total population. Between the time periods 2005-2010 and 2010-2014, the population in Harris County increased by 2.1% while Houston’s population decreased by 1.1%. The Houston metropolitan area, which includes Greater Heights, is projected to increase from 5.9 million in 2010 to 9.3 million in 2030.

- **Age Distribution:** In both Harris County and the city of Houston, slightly over one quarter of the population was under the age of 18. Less than 10% of the population of both the county and city was 65 years of age and older.

- **Racial and Ethnic Distribution:** Harris County is predominantly comprised of residents who self-report their racial and ethnic identity as Hispanic (41.1%) or White, non-Hispanic (32.6%). In the city of Houston, 43.6% of residents identified as Hispanic of any race while 25.8% identified themselves as White, non-Hispanic. Black, non-Hispanic residents comprised 18.5% of the population of Harris County and 23.0% of the population of Houston. Asian, non-Hispanics comprised slightly over 6% of the population in both Harris County and the city of Houston.

- **Linguistic Diversity and Immigrant** Almost half of Harris County (42.5%) and Houston (46.3%) residents spoke a language other than English at home. About 80% of non-English speakers in both Harris County and the city of Houston spoke Spanish. Far fewer residents in the county and city spoke an Asian language (about 7% in both the county and city), and fewer spoke other languages. One in four residents in Harris County and the city of Houston was foreign-
From 2000 to 2013, Houston’s immigrant population grew nearly twice the national average: 59% versus 33% in the United States.

- **Income and Poverty**: The median household income in Houston was $45,010, lower than the median household income of Harris County, $53,137. The percent of adults below the poverty line in 2009-2013 was 18.6% in Houston and 15.1% in Harris County.

- **Employment**: Unemployment rates for Texas and Harris County peaked in 2010, but have decreased consistently over the past five years. In 2014, 22.0% of residents were unemployed.

- **Education**: In Harris County, 44.8% of adult residents had a high school diploma or less while in Houston, 47.1% did. Slightly less than 30% of residents of both Harris County and the city of Houston had a Bachelor’s Degree or higher.

- **Housing**: The monthly median housing costs for homeowners was higher in the city of Houston ($1,479) than for Harris County overall ($1,232); for renters, costs were higher in Harris County ($880) and lower in the city ($848) (data not shown). In all counties, a higher percent of renters compared to homeowners paid 35% or more of their household income towards their housing costs. In both Harris County and the city of Houston, about 41% of renters paid more than 35% of their income towards housing costs.

- **Transportation**: As reflected in the focus groups and interviews, a majority of residents in Harris County and Houston commuted to work by driving in a car, truck, or van alone. The proportion of commuters using public transportation was 4.3% in the city of Houston and 2.9% in Harris County.

- **Crime and Violence**: In the city of Houston, the violent crime rate was 954.8 offenses per 100,000 population while in Harris County it was 691.4 offenses per 100,000 population. The property crime rate in Houston was 4,693.7 offenses per 100,000 population while in Harris County it was 3,825.0 per 100,000 population.

### Health Outcomes and Behaviors

#### Physical Health

- **Overall Leading Causes of Death**: Harris County experienced an overall mortality rate of 737.8 per 100,000 population in 2013. The leading cause of death in Harris County was major cardiovascular disease (157.4 deaths per 100,000 population). Harris County residents aged 85 years of age or older had the highest suicide rate among all age groups in 2013, with a rate of 24.2 suicides per 100,000 population.

- **Overweight and Obesity**: In 2013, the percentage of Harris County residents self-reported that they were overweight or obese was 69.4%. Nine out of ten (91.7%) Black, non-Hispanic adult residents in Harris County were considered overweight or obese. Overall, about one third of Houston high school students were considered overweight (16.3%) or obese (17.9%) in 2013.

- **Diabetes**: In Harris County in 2014, 10.4% of adults self-reported to have been diagnosed with diabetes. In 2013, Harris County saw 11.3 hospital admissions per 100,000 population for uncontrolled diabetes.

- **Heart Disease, Stroke, and Cardiovascular Risk Factors**: In 2014, 2.8% of Harris County adults self-reported having been diagnosed with angina or coronary heart disease, and

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“**Houston is booming—services, like transportation, haven’t caught up.**”

Focus group participant
3.6% of adults in Harris County self-reported having a heart attack during the past year. In 2014, 3.8% of Harris County adults self-reported having a stroke during the past year. Over a third of Harris County adults self-reported having high cholesterol (38.3%) and just under a third self-reported having high blood pressure (32.4%).

- **Asthma:** In 2012, adult hospital discharges for asthma in Harris County were 8.4 per 10,000 population. Among children aged 17 years and younger, the rate of asthma-related hospital discharges for Black children was three times the rate for White children (24.2 versus 10.2 per 10,000 children).

- **Cancer:** The cancer incidence rate from 2008-2012 in Harris County was 444.1 per 100,000 population. The cancer mortality rate in the county was 163.4 per 100,000 population. In a 2014 Texas Behavioral Risk Factor Surveillance survey, in Harris County, 81.6% of women 40+ years or older indicated they had had a mammogram in the past two years while 70% of women indicated that they had a pap test to test in the past three years.

- **HIV and Sexually-Transmitted Diseases:** In Harris County in 2014, the HIV rate was 516.1 people per 100,000 population living with HIV in the county, up from 478.4 per 100,000 population in 2011. In Harris County, rates of sexually transmitted diseases—chlamydia, gonorrhea, and syphilis—increased from 2011 to 2014.

- **Tuberculosis:** In 2014, the rate of tuberculosis in Harris County was 7.2 cases per 100,000 population.

- **Influenza:** In 2014, 35.9% of adults self-reported as having a seasonal flu shot or vaccine via nose spray, and residents aged 65 years or older were disproportionately more likely to have received a flu shot (59.0%) than other age groups.

- **Oral Health:** The number of dentists in Harris County in 2014 was 57.4 per 100,000 population. Hispanic adults in Harris County reported the lowest rate of annual dental visitation (50.6%).

- **Maternal and Child Health:** Approximately one in ten babies (11.8%) born in Harris County was born premature. Black babies in the county were more likely to be born low birthweight than babies of other races and ethnicities. In Harris County, 2.8% of births in Harris County were to teen mothers in 2013. Teen birth rates varied by race and ethnicity, with Hispanic teen mothers having the highest birth rate in the county, 4.0%. In 2013, 56.1% in Harris County of live births occurred to mothers who received prenatal care in their first trimester. Rates of receiving no prenatal care were 3.9% for Harris County mothers.

### Health Behaviors

- **Food Access:** In Harris County, more than a quarter of all children were considered to be food insecure. In 2013, there were 19 grocery stores and 55 convenience stores per 100,000 population in Harris County. In Harris County, 13.7% of low-income residents had access to farmer’s markets.

- **Healthy Eating:** Only 12.2% of Harris County adults in 2013 indicated that they ate fruits and vegetables five or more times per day. Lower income Harris County adults ate fewer fruits and vegetables than residents with higher median household incomes. In 2013, 8.9% of high school students in Houston indicated that they did not eat any fruit or drink any fruit juice in the past seven days.

- **Physical Activity:** More than two thirds (68.2%) of adults surveyed in Harris County indicated that they had gotten any type of physical activity in the past month, with Hispanics being less likely to report physical activity than other races and ethnicities. In 2013, two thirds (66.6%) of Houston high school students reported that they had not participated in 60 or more minutes of physical activity for five days in the past seven days.

### Behavioral Health

- **Adult Mental Health:** In 2014, 19.3% of adults in Harris County self-reported as having five or more poor mental health days. Self-report of having had five or more days of poor mental health was highest among residents aged 18 to 29 (26.5%) and Black residents (24.2%) in Harris County.

- **Youth Mental Health:** Among youth in Houston in 2013, one third of Hispanic high school students self-reported feeling sad or
Health Care Access and Utilization

- **Health Insurance**: Uninsurance rates decreased for Harris County following the passage of the Affordable Care Act (ACA) in 2010. In 2014, 22.0% of the total population in Harris County was uninsured. In 2013, the zip codes in the Houston (Harris County) geographic area around the MH Greater Heights facility had the highest rates of uninsurance for the total population. Among the 17 zip codes served by MH Greater Heights, 123,145 residents were enrolled in Medicaid. The zip code in Harris County with the most Medicaid enrollees was 77093 in Houston (13,964 enrollees).

- **Access to Primary Care**: In 2014, there were 82.6 primary care physicians per 100,000 population in Harris County. In Harris County, 38.2% of adult residents reported in the BRFSS survey that they did not have a doctor or healthcare provider. In Harris County in 2014, 37% of physicians accepted all new Medicaid patients, 23% limited their acceptance of new Medicaid patients, and 40% accepted no new Medicaid patients.

- **Emergency Department Care at MH Greater Heights for Primary Care Treatable Conditions**: Of MH Greater Heights 46,746 ED visits in 2013, 55.6% were from patients who were uninsured or on Medicaid, and 35.6% were classified as non-emergent or with primary care treatable conditions. Of all ED visits, 6.7% were for chronic conditions of which 26.9% were cardiovascular-related. All 17 zip codes in the MH Greater Height’s CHNA-defined community were among the top 20 zip codes for the highest number of primary care treatable ED visits at the MH Greater Heights in 2013.

- **Inpatient Care at MH Greater Heights for Ambulatory Care Sensitive Conditions**: Of MH Greater Height’s 11,902 inpatient discharges in 2015, 4,925 inpatient discharges or 41.4% were related to an ambulatory care sensitive condition. The top three ambulatory care sensitive conditions that resulted in inpatient care at MH Greater Heights in 2015 were diabetes (172 discharges), congestive heart failure (165 discharges), and chronic obstructive pulmonary disorder (102 discharges).

Community Assets and Resources

- **Diverse and Cohesive Community**: Residents and stakeholders described diversity and social cohesion as being among the primary assets and strengths of their community. Informants described the positive role of diversity in driving the creation of robust communities to participate in and resources to meet those needs. This social cohesion does not just occur within neighborhoods, but also within groups sharing a common issue.

- **High-Quality, Plentiful Medical Care**: A key asset identified by key informants and focus group participants was the wide availability of health care services and the high quality of those services, both in Harris County and Houston. The health care system is also described as having a strong community health system in addition to world-class acute care.

- **Strong Public Health and Social Service System**: Houston is served by a robust network of public health and social service organizations. Communities are served by a number of non-profit and other charitable organizations.

- **Strong Schools**: Houston has strong schools, according to key informants and focus group respondents. Parental engagement is high in many of their communities, driven largely by the proactive outreach done to
parents by schools and social cohesion among parents.

- **Economic Opportunity:** Many key informants and focus group participants reported improvement in the local economy, creating economic opportunities for residents and businesses in the Greater Houston region.

**Community Vision and Suggestions for Future Programs and Services**

- **Promote Healthy Living:** Promotion of healthy eating, physical activity, and disease self-management by health care delivery systems and supporting social service organizations was a top suggestion of stakeholders.

- **Improve Transportation:** Transportation presents problems in Harris County and Houston, and stakeholders offered perspectives and ideas for future programs and services to alleviate the burden caused by traffic and the lack of transportation in some communities.

- **Provide Support to Navigate the Health Care System:** Residents need assistance in facing the number of barriers to accessing health care services in Harris County and Houston. Stakeholders described existing strategies such as community health workers should be expanded.

- **Expand Access to Behavioral Health Services:** Informants identified behavioral health care access as being a major unmet need in Harris County and Houston. Stakeholders described existing strategies such as community health workers may increase residents’ ability to navigate an increasingly complex health care and public health system.

- **Promote Multi-Sector, Cross-Institutional Collaboration:** Health care and social service stakeholders frequently noted that, while many local services exist, there are opportunities to improve communication and collaborate to improve population health in Harris County and Houston.

**Key Themes and Conclusions**

- **Harris County and Houston are unique in terms of demographics and population health needs but also has a strong set of assets on which to build.** Harris County is home to Houston, a city with a tremendously diverse population in terms of age, affluence, race, ethnicity, language, and health needs. While Harris County and Houston experience more challenges in terms of population health than their more suburban and rural neighbors in the region, it also has more accessible social and health resources and better public transportation for its residents.

- **The increase in population over the past five years has placed a tremendous burden on existing public health, social, and health care infrastructure, a trend that places barriers to pursuing a healthy lifestyle among residents.** Infrastructure that does not keep up with demand leads to unmet need and sustains unhealthy habits in the community. Communities without easy access to healthy foods, safe roads, affordable housing, fewer sidewalks, and more violence are at a disadvantage in the pursuit of healthy living.

- **Although there is economic opportunity for many residents, there are pockets of poverty and some residents face economic challenges which can affect health.** Seniors and members of low-income communities face challenges in accessing care and resources compared to their younger and higher income neighbors. Strategies such as community health workers may increase residents’ ability to navigate an increasingly complex health care and public health system.

- **Obesity and concerns related to maintaining a healthy lifestyle emerged as challenges for the region.** Barriers ranged from individual challenges of lack of time to cultural issues involving cultural norms to structural challenges such as living in a food desert or having limited access to sidewalks, recreational facilities, or affordable fruits and vegetables. While several initiatives in the region are trying to address this issue, there appears ample opportunity for action, partnership, and focusing on specific at-risk populations (e.g., rural communities, youth).

- **Behavioral health was identified as a key concern among residents.** Stakeholders highlighted significant unmet needs for mental health and substance abuse services in the communities served by MH Greater Heights. Key informants particularly drew attention to the burden of mental illness on the incarcerated population. Findings from this current assessment process illustrate
the importance of pursuing innovative strategies to address behavioral health issues, such as those programs that are part of the Texas Section 1115 Medicaid demonstration waiver.

- **Harris County and Houston have many health care assets, but access to those services is a challenge for some residents.** Transportation to health services was identified as a substantial concern, especially for seniors and lower income residents, as access to public transportation may be limited in some areas. There is an opportunity to expand services to fill in gaps in transportation, ensuring residents are able to access primary care and behavioral health services as well as actively participating in their communities.
BACKGROUND

About Memorial Hermann Health System
Memorial Hermann Health System (MHHS) is the largest non-profit health care system in Southeast Texas. Memorial Hermann’s 13 hospitals and numerous specialty programs and services serve the Greater Houston area, the fifth largest metropolitan area in the United States. Memorial Hermann annually contributes more than $451 million in uncompensated care, community health improvement, community benefits, health professions education, subsidized health services, research, and community education and awareness.

About Memorial Hermann Greater Heights Hospital
Located in the heart of Houston adjacent to The Houston Heights, Memorial Hermann Greater Heights Hospital (hereafter MH Greater Heights) has been caring for families since 1966. A 260-bed facility with more than 600 affiliated doctors, MH Greater Heights provides a wide range of medical specialties, including heart and vascular care, orthopedics, cancer treatment, sleep labs, diagnostic imaging, rehabilitation, women’s care and wound care.

Scope of Current Community Health Needs Assessment
There are 13 hospitals participating in MHHS’s community health needs assessment (CHNA) in 2016. The hospitals participating in the CHNA include: Memorial Hermann Greater Heights, Memorial Hermann Texas Medical Center, Memorial Hermann Katy Hospital, Memorial Hermann Rehabilitation Hospital - Katy, Memorial Hermann Memorial City Medical Center, Memorial Hermann Northeast, Memorial Hermann Southwest, Memorial Hermann Southeast, Memorial Hermann Sugar Land Hospital, Memorial Hermann The Woodlands Hospital, TIRR Memorial Hermann, Memorial Hermann Surgical Hospital Kingwood, and Memorial Hermann Surgical Hospital – First Colony. The CHNA process will be integrated with and inform a strategic implementation planning (SIP) process designed to develop aligned strategic implementation plans for each hospital.

Previous Community Health Needs Assessment
MHHS conducted a CHNA for each of its hospitals in 2013 to prioritize health issues, to provide a foundation for the development of a community health improvement plan, and to inform each hospital’s program planning. The CHNA was conducted between August 2012 to February 2013 with the overall goal of identifying the major healthcare needs, barriers to access, and health priorities for those living in the communities of MHHS hospitals. The analysis included a review of current data and input from numerous community representatives.

During the 2013 CHNA, the following six health priorities were identified for MHHS hospitals:
- Education and prevention for diseases and chronic conditions
- Address issues with service integration, such as coordination among providers and the fragmented continuum of care
- Address barriers to primary care, such as affordability and shortage of providers
- Address unhealthy lifestyles and behaviors
- Address barriers to mental healthcare, such as access to services and shortage of providers
- Decrease health disparities by targeting specific populations

The process culminated in the development of an Implementation Plan to address the significant needs of residents identified through the CHNA. MH Greater Heights utilized the plan as a guide to improve the health of their community and advance the service mission of the Memorial Hermann organization. The actions taken as a result of the 2013 implementation strategies are identified in Appendix A, Review of 2013 Initiatives. The 2016 CHNA updates MH Greater Heights’s 2013 CHNA and provides additional information about community unmet needs, particularly in the area of healthy living.

Purpose of Community Health Needs Assessment
As a way to ensure that MH Greater Heights is achieving its mission and meeting the needs of the community, and in furtherance of its obligations under the Affordable Care Act, MHHS undertook a community health needs assessment (CHNA) process in the spring of 2016. Health Resources in Action (HRiA), a non-profit public health consultancy organization, was engaged to conduct the CHNA.
A CHNA process aims to provide a broad portrait of the health of a community in order to lay the foundation for future data-driven planning efforts. In addition to fulfilling the requirement by the IRS Section H/Form 990 mandate, the MHHS CHNA process was designed to achieve the following overarching goals:

1. To examine the current health status of MH Greater Heights’s communities and its sub-populations, and compare these rates to city/town, county, and state indicators
2. To explore the current health priorities—as well as new and emerging health concerns—among residents within the social context of their communities
3. To identify community strengths, resources, and gaps in services in order to help MH Greater Heights, MHHS, and its community partners set programming, funding, and policy priorities

Definition of Community Served for the CHNA
The CHNA process delineated each facility’s community using geographic cut-points based on its main service area. MH Greater Heights defines its community geographically as the top 75% of zip codes corresponding to inpatient discharges in fiscal year 2015. These selected zip codes correspond to the city of Houston in Harris County. As shown in TABLE 1, all MH Greater Heights inpatient discharges in fiscal year 2015 occurred among residents of Harris County (100.0%). FIGURE 1 presents a map of MH Greater Heights’s CHNA defined community.

<table>
<thead>
<tr>
<th>Geography</th>
<th># inpatient discharges</th>
<th>% inpatient discharges</th>
</tr>
</thead>
<tbody>
<tr>
<td>Harris County</td>
<td>8,999</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

**DATA SOURCE:** Memorial Hermann Health System, Inpatient Discharges for FY 2015

**NOTE:** Data reported for counties and cities corresponding to the top 75% of zip codes
FIGURE 1. NUMBER OF INPATIENT DISCHARGES REPRESENTING THE TOP 75% OF ZIP CODES SERVED BY MH GREATER HEIGHTS, BY ZIP CODE, FISCAL YEAR 2015

DATA SOURCE: Map created by Health Resources in Action using 2010 data from the U.S. Department of Commerce, Bureau of the Census

Zip codes
77088, 77022, 77091, 77092, 77076, 77009, 77008, 77093, 77016, 77026, 77040, 77028, 77037, 77060, 77055, 77007

Cities and towns
Houston
Counties
Harris
APPROACH & METHODS

The following section describes how the data for the CHNA were compiled and analyzed, as well as the broader lens used to guide this process. Specifically, the CHNA defines health in the broadest sense and recognizes that numerous factors at multiple levels impact a community’s health — from lifestyle behaviors (e.g., diet and exercise), to clinical care (e.g. access to medical services), to social and economic factors (e.g., employment opportunities), to the physical environment (e.g., air quality). The beginning discussion of this section discusses the larger social determinants of health framework which helped guide this overarching process.

Study Approach
Social Determinants of Health Framework

It is important to recognize that multiple factors have an impact on health, and there is a dynamic relationship between real people and their lived environments. Where we are born, grow, live, work, and age—from the environment in the womb to our community environment later in life—and the interconnections among these factors are critical to consider. That is, not only do people’s genes and lifestyle behaviors affect their health, but health is also influenced by more upstream factors such as employment status and quality of housing stock. The social determinants of health framework addresses the distribution of wellness and illness among a population. While the data to which we have access is often a snapshot of a population in time, the people represented by that data have lived their lives in ways that are constrained and enabled by economic circumstances, social context, and government policies. Building on this framework, this assessment approaches data in a manner designed to discuss who is healthiest and least healthy in the community, as well as examines the larger social and economic factors associated with good and ill health.

FIGURE 2 provides a visual representation of this relationship, demonstrating how individual lifestyle factors, which are closest to health outcomes, are influenced by more upstream factors such as employment status and educational opportunities. This report provides information on many of these factors, as well as reviews key health outcomes among the residents of MH Greater Heights’s community.

FIGURE 2. SOCIAL DETERMINANTS OF HEALTH FRAMEWORK

Health Equity

In addition to considering the social determinants of health, it is critical to understand how these characteristics disproportionately affect vulnerable populations. Health equity is defined as all people having “the opportunity to ‘attain their full health potential’ and no one is ‘disadvantaged from achieving this potential because of their social position or other socially determined circumstance.’” When examining the larger social and economic context of the population (e.g., upstream factors such as housing, employment status, racial and ethnic discrimination, the built environment, and neighborhood-level resources), a robust assessment should capture the disparities and inequities that exist for traditionally underserved groups. Thus a health equity lens guided the CHA process to ensure data comprised a range of social and economic indicators and were presented for specific population groups. According to Healthy People 2020, achieving health equity requires focused efforts at the societal level to address avoidable inequalities by equalizing the conditions for health for all groups, especially for those who have experienced socioeconomic disadvantage or historical injustices.

The framework, process, and indicators used in this approach were also guided by national initiatives including Healthy People 2020, National Prevention Strategy, and County Health Rankings.

Methods

Quantitative Data

In order to develop a social, economic, and health portrait of MH Greater Heights’s community through the social determinants of health framework and health equity lenses, existing data were drawn from state, county, and local sources. This work primarily focused on reviewing available social, economic, health, and health care-related data. Sources of data included, but were not limited to, the U.S. Census, U.S. Bureau of Labor Statistics, County Health Rankings, the Texas Department of State Health Services, and MHHS. Types of data included self-report of health behaviors from large, population-based surveys such as the Behavioral Risk Factor Surveillance System (BRFSS), public health disease surveillance data, hospital data, as well as vital statistics based on birth and death records.

Qualitative Data

While social and epidemiological data can provide a helpful portrait of a community, it does not tell the whole story. It is critical to understand people’s health issues of concern, their perceptions of the health of their community, the perceived strengths and assets of the community, and the vision that residents have for the future of their community. Qualitative data collection methods not only capture critical information on the “why” and “how”, but also identify the current level of readiness and political will for future strategies for action.

Secondary data were supplemented by focus groups and interviews. In total, 11 focus groups and 27 key informant discussions were conducted with individuals from MH Greater Heights’s community from October 2015 through February 2016. Focus groups were held with 93 community residents drawn from the region. With the exception of seniors (65 years or older), for which two focus groups were conducted, one focus group was conducted for each of the following population segments:

- Adolescents (15-18 years old)
- Parents of preschool children (0-5 years old)
- Seniors (65+ years old) (two groups)
- Spanish-speaking Hispanic community members (conducted in Spanish)
- English-speaking Hispanic community members
- Asian-American community members
- Low-income community members from urban area
- Low-income community members from suburban area
- Low-income community members from rural area
- Community members of moderate to high socioeconomic status

Twenty-seven key informant discussions were conducted with individuals representing the MH Greater Heights community as well as the Greater Houston community at large. Key informants represented a number of sectors including non-profit/community service, city government, hospital or health care, business, education, housing, transportation, emergency preparedness, faith community, and priority populations (e.g., low-income urban residents representing the MH Greater Heights community).
Focus group and interview discussions explored participants’ perceptions of their communities, priority health concerns, perceptions of public health, prevention, and health care services, and suggestions for future programming and services to address these issues. MH Greater Heights specifically addressed healthy eating, physical activity, and the availability and accessibility of community resources that promote healthy living. A semi-structured moderator’s guide was used across all discussions to ensure consistency in the topics covered. Each focus group and interview was facilitated by a trained moderator, and detailed notes were taken during conversations. On average, focus groups lasted 90 minutes and included 6-12 participants, while interviews lasted approximately 30-60 minutes. Participants for the focus groups were recruited by HRiA, working with clinical and community partners identified by MHHS and MH Greater Heights. Key informants were recruited by HRiA, working from recommendations provided by MHHS and MH Greater Heights.

Analysis
The collected qualitative data were coded using NVivo qualitative data analysis software and analyzed thematically for main categories and sub-themes. Data analysts identified key themes that emerged across all groups and interviews as well as the unique issues that were noted for specific populations relevant to the MH Greater Heights community. Frequency and intensity of discussions on a specific topic were key indicators used for identifying main themes. While geographic differences are noted where appropriate, analyses emphasized findings common across MH Greater Heights’s community. Selected paraphrased quotes — without personal identifying information — are presented in the narrative of this report to further illustrate points within topic areas.

Limitations
As with all data collection efforts, there are several limitations related to the assessment’s research methods that should be acknowledged. Years of the most current data available differ by data source. In some instances, 2013 may be the most current year available for data, while 2009 or 2010 may be the most current year for other sources. Some of the secondary data were not available at the county level. Additionally, several sources did not provide current data stratified by race and ethnicity, gender, or age —thus these data could only be analyzed by total population. Finally, youth-specific data were largely not available, and in cases where such data were available, sample sizes were often small and must be interpreted with caution.

Likewise, secondary survey data based on self-reports, such as the Behavioral Risk Factor Surveillance Survey (BRFSS) and the Texas Behavioral Risk Factor Surveillance System, should be interpreted with particular caution. In some instances, respondents may over- or underreport behaviors and illnesses based on fear of social stigma or misunderstanding the question being asked. In addition, respondents may be prone to recall bias—that is, they may attempt to answer accurately, but they remember incorrectly. In some surveys, reporting and recall bias may differ according to a risk factor or health outcome of interest. Despite these limitations, most of the self-report surveys analyzed in this CHNA benefit from large sample sizes and repeated administrations, enabling comparison over time.

While the focus groups and interviews conducted for this study provide valuable insights, results are not statistically representative of a larger population due to non-random recruiting techniques and a small sample size. Recruitment for focus groups was conducted by HRiA, working with clinical and community partners. Because of this, it is possible that the responses received only provide one perspective of the issues discussed. It is also important to note that data were collected at one point in time, so findings, while directional and descriptive, should not be interpreted as definitive.
COMMUNITY SOCIAL AND ECONOMIC CONTEXT

About the MH Greater Heights Community
The health of a community is associated with numerous factors including what resources and services are available (e.g., safe green space, access to healthy foods) as well as who lives in the community. Focus group participants and key informants described many assets of the MH Greater Heights community. Houston, a vibrant urban area, is the fourth largest city in the U.S. (trailing only New York, Los Angeles and Chicago). Located a short commute from downtown in northwest Houston, Greater Heights area is a historic area of charming older homes that has experienced gentrification in recent years. The area is known for its racial and ethnic diversity as well as its excellent restaurants and night life, aspects that attract many young professionals to the community.

Who lives in a community is significantly related to the rates of health outcomes and behaviors of that area. While age, gender, race, and ethnicity are important characteristics that have an impact on an individual’s health, the distribution of these characteristics in a community may affect the number and type of services and resources available. Harris County has experienced an increase of population over several years, affecting the demand for resources by residents. Interview and focus group participants frequently noted that the city of Houston, of which Greater Heights is a neighborhood, is diverse across a number of indicators including age distribution, racial and ethnic composition, language, income, education, and employment. Factors affecting the population demographically are also reported, including housing, transportation, and crime and violence. The section below provides an overview of the socioeconomic context of Houston.

Population Size and Growth
According to the American Community Survey (ACS), the Texas population has increased by 9.5%—from 23,819,042 in 2005-2009 to 26,092,033 in 2010-2014 (TABLE 2). The total population across Harris County was 4,269,608 based on 2010-2014 ACS estimates, 16.4% of Texas’ total population. The total population in the city of Houston, of which Greater Heights is a neighborhood, was 2,167,988 based on 2010-2014 ACS estimates, 8.3% of Texas’ total population. Between the time periods 2005-2010 and 2010-2014, the population in Harris County increased by 2.1% while Houston’s population decreased by 1.1%.

TABLE 2. POPULATION SIZE AND GROWTH ESTIMATES, BY STATE, COUNTY, AND CITY/TOWN, 2005-2009 AND 2010-2014

<table>
<thead>
<tr>
<th>Geography</th>
<th>2005-2009</th>
<th>2010-2014</th>
<th>% change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Texas</td>
<td>23,819,042</td>
<td>26,092,033</td>
<td>9.5%</td>
</tr>
<tr>
<td>Harris County</td>
<td>4,182,285</td>
<td>4,269,608</td>
<td>2.1%</td>
</tr>
<tr>
<td>Houston</td>
<td>2,191,400</td>
<td>2,167,988</td>
<td>-1.1%</td>
</tr>
</tbody>
</table>


Focus group participants and key informants reported that the greater Houston area is experiencing rapid population growth, a trend that makes the community stand out nationally. Population growth was attributed to growing numbers of immigrants settling in the area as well as higher income people, many from overseas, coming for jobs. Some focus group participants also noted that the Greater Houston area’s industries, particularly its energy industry, influences population growth. As one focus group participant reported, “In the area...some of the big companies are here and people just come and go. A lot of it is because of the oil companies.” Several interviewees noted that rapid population growth has created challenges for the infrastructure in the region. Rapid population growth in the Greater Houston area is a trend likely to continue well beyond this decade. The Houston metropolitan area is projected to increase from 5.9 million in 2010 to 9.3 million in 2030 (FIGURE 3).
Age Distribution

As populations age, the needs of the community shift based on increased overall need for healthcare services. The age distribution of the population shapes the social and health care needs of the community. The city of Houston is diverse in terms of age. Focus group members and interviewees described their communities as a mix of age groups, with seniors, young families, and middle age persons. FIGURE 4 shows the age distribution of MH Greater Heights’ community at the county and city levels. In both Harris County and the city of Houston, slightly over one quarter of the population was under the age of 18. Less than 10% of the population of both the county and city was 65 years of age and older.

“My neighborhood is diverse in terms of age. There are some seniors, but also a lot of working young people.”

Focus group participant

FIGURE 3. PROJECTED TOTAL POPULATION IN MILLIONS, GREATER HOUSTON METROPOLITAN AREA, * 2010-2030

DATA SOURCE: Texas State Data Center, as cited by Greater Houston Partnership Research Department in Social, Economic, and Demographic Characteristics of Metro Houston, 2014

NOTE: Population projections assume the net immigration from 2010 to 2030 to be equal to that from 2000 to 2010

* Houston-The Woodlands-Sugar Land metropolitan statistical area is a nine-county area as defined by the Office of Management and Budget, which includes Harris and Fort Bend Counties but not Wharton County

FIGURE 4. AGE DISTRIBUTION, BY COUNTY AND CITY, 2009-2013

<table>
<thead>
<tr>
<th></th>
<th>Under 18 years old</th>
<th>18-24 years old</th>
<th>25-44 years old</th>
<th>45-64 years old</th>
<th>65 years old and over</th>
</tr>
</thead>
<tbody>
<tr>
<td>Harris County</td>
<td>27.8%</td>
<td>10.0%</td>
<td>30.5%</td>
<td>23.2%</td>
<td>8.5%</td>
</tr>
<tr>
<td>Houston</td>
<td>25.5%</td>
<td>10.7%</td>
<td>31.8%</td>
<td>21.8%</td>
<td>9.3%</td>
</tr>
</tbody>
</table>

DATA SOURCE: U.S. Census Bureau, American Community Survey 5-Year Estimates, 2009-2013
Racial and Ethnic Distribution
Due to a number of complex factors, people of color experience high rates of health disparities across the United States. As such, examining outcomes by race and ethnicity is an important lens through which to view the health of a community.

Qualitative and census data demonstrate the broad diversity of the population of Harris County and Houston in terms of racial and ethnic composition. Focus group participants and key informants frequently described the racial and ethnic distribution of their community as diverse. One focus group participant reported, “It’s a whole melting pot here.” Hispanics comprise the largest minority population group in the region and were described as including both long-standing residents and more recent arrivals. Respondents generally viewed diversity as a substantial strength, such as one key informant who stated, “I think it is our diversification...of cultures. We are a very diverse community, and I think it gives our region great opportunity.” However, focus group members and interviewees also noted that some groups face challenges, including language isolation, and cultural and other barriers to accessing health and social services. As another key informant explained,

“Houston is an extremely diverse community.”
Key informant interviewee

“Lack of options for immigrants is a big issue that is hard to quantify.” Several informants reported a growth in the number of undocumented people in the city, who were described as particularly vulnerable.

At the county level, Harris County was predominantly comprised of residents who self-reported their racial and ethnic identity as Hispanic (41.1%) or White, non-Hispanic (32.6%). In the city of Houston, 43.6% of residents identified as Hispanic of any race while 25.8% identified themselves as White, non-Hispanic. Black, non-Hispanic residents comprised 18.5% of the population of Harris County and 23.0% of the population of Houston. Asian, non-Hispanics comprised slightly over 6% of the population in both Harris County and the city of Houston. FIGURE 5 illustrates the racial and ethnic distribution of Harris County and Houston.

FIGURE 5. RACIAL AND ETHNIC DISTRIBUTION, BY COUNTY AND CITY, 2009-2013

<table>
<thead>
<tr>
<th></th>
<th>Harris County</th>
<th>Houston</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hispanic, any race</td>
<td>41.1%</td>
<td>43.6%</td>
</tr>
<tr>
<td>Black, non-Hispanic</td>
<td>18.5%</td>
<td>23.0%</td>
</tr>
<tr>
<td>Asian, non-Hispanic</td>
<td>6.3%</td>
<td>6.2%</td>
</tr>
<tr>
<td>White, non-Hispanic</td>
<td>32.6%</td>
<td>25.8%</td>
</tr>
<tr>
<td>Other</td>
<td>1.6%</td>
<td>1.4%</td>
</tr>
</tbody>
</table>

DATA SOURCE: U.S. Census Bureau, American Community Survey 5-Year Estimates, 2009-2013
NOTE: Other includes American Indian and Alaska Native, non-Hispanic; Native Hawaiian and Other, non-Hispanic; and Two or more races, non-Hispanic
**Linguistic Diversity and Immigrant Population**

The nativity of the population, countries from which immigrant populations originated, and language use patterns are important for understanding social and health patterns of a community. Immigrant populations face a number of challenges to accessing services such as health insurance and navigating the complex health care system in the United States.

MH Greater Heights serves a community that speaks many languages other than English. According to the 2009-2013 American Community Survey, many (42.5%) of Harris County residents spoke a language other than English at home, while in Houston, 46.3% of residents did (data not shown). One key informant described this linguistic diversity as presenting challenges for the health care system: “The diversity [of languages] can be one of our greatest assets, though also there can be challenges. Many languages and dialects can lead to challenges. It creates a need to meet the health needs of a diverse group.”

FIGURE 6 shows the top five non-English languages spoken in Harris County and the city of Houston. About 80% of non-English speakers in both Harris County and the city of Houston spoke Spanish. Far fewer people in the County and city spoke Chinese or Vietnamese (about 7%), and fewer spoke other languages.

**FIGURE 6. TOP FIVE NON-ENGLISH LANGUAGES SPOKEN, HARRIS COUNTY, 2009-2013**

Immigration is a major part of the identity of the city of Houston and the Greater Houston metropolitan area. Between 2000 and 2013, Houston’s immigrant population grew nearly twice the national rate: 59% versus 33% (A Profile of Immigrants in Houston, 2015). The area’s two largest established immigrant groups originate from Mexico and Vietnam, whereas the newest immigrant originate from Guatemala and Honduras. Informants described Houston as comprising as a collection of immigrants from both within and outside of the United States, including more transitional individuals from other countries coming for jobs. As pointed out by one focus group participant: “People are from all over. You see it on the playground... We have one neighbor from Norway and Venezuela. The other is from Scotland.” These qualitative observations are reflected in demographics of the county and city. One in four residents in Harris County and the city of Houston was foreign-born (FIGURE 7). According to the Texas Refugee Health Program Refugee Health Report, 5,285 refugees resettled in Harris County in 2014, with Harris County having one of the largest refugee populations in the United States.
**FIGURE 7. NATIVITY, BY COUNTY AND CITY, 2009-2013**

<table>
<thead>
<tr>
<th></th>
<th>Harris County</th>
<th>Houston</th>
</tr>
</thead>
<tbody>
<tr>
<td>Native-Born</td>
<td>75.0%</td>
<td>71.7%</td>
</tr>
<tr>
<td>Foreign-Born</td>
<td>25.0%</td>
<td>28.3%</td>
</tr>
</tbody>
</table>

**DATA SOURCE:** U.S. Census Bureau, American Community Survey 5-Year Estimates, 2009-2013

### Income and Poverty

Income and poverty status have the potential to impact health in a variety of ways. For example, the stress of living in poverty and struggling to make ends meet can have adverse effects on both mental and physical health, while financial hardship is a barrier to accessing goods and services.

Focus group participants and key informant interviewees alike reported that the region served by MH Greater Heights includes both wealthier and lower income individuals. As one informant described, “[Houston] is very sprawled out and somewhat segregated because of it. There are areas of Houston that are very very poor and then you can throw a rock and in that distance the area becomes extremely affluent and wealthy.” Themes emerging in focus group discussions and interviewees included the challenges low-income residents face paying rent, buying nutritious food, and paying for health insurance and health care. A health care provider key informant highlighted how these choices affect the emergency care system in the community: “A lot of times a patient is not going to take care of themselves if they have no shelter; they may want to put food on table instead of see the doctor, and then they get to the ER. It’s a vicious cycle.” At the same time, several interviewees mentioned that the recent downturn in oil prices has negatively affected some residents who were previously more economically secure. As one interviewee noted, “Many folks are getting laid off and relying on public benefits; this means more families who need help.”

**“But at the end of day, if you are on a fixed income, do you choose to pay for insurance or pay for food for your family?”**

Focus group participant

Data from the 2009-2013 American Community Survey shows that the median household income in Harris County was $53,137 and the median household income in Houston was lower, at $45,010 (data not shown). The percent of adults below the poverty line in 2009-2013 was 18.6% in Houston and 15.1% in Harris County. **FIGURE 8** shows the percent of adults below the poverty line in 2009-2013.
FIGURE 8. PERCENT INDIVIDUALS 18 YEARS AND OVER BELOW POVERTY LEVEL, BY ZIP CODE, 2009-2013

DATA SOURCE: U.S. Census Bureau, American Community Survey 5-Year Estimates, 2010-2014
Employment

Employment status also can have a significant impact on one’s health. Many focus group participants and key informant interviewees reported that the economic outlook of the Greater Houston area region was positive overall. However, several noted that the recent decrease in oil prices has had a negative impact on employment and expressed concern if prices continue to stay low. As one interviewee noted, “Every day in the newspaper, you read about a company going under and employees losing jobs.” Some respondents expressed particular concern about low-wage workers—those who work multiple jobs, are often undocumented, and most often have no health insurance. As one key informant explained, “There a low rate of unemployment but a high rate of uninsured.”

Data from the American Community Survey show that the unemployment rates for Texas and Harris County peaked in 2010, but have decreased consistently over the past five years (FIGURE 9). In 2014, 22.0% of Harris County residents were unemployed.

![FIGURE 9. TRENDS IN UNEMPLOYMENT RATE, BY COUNTY AND STATE, 2005-2014](image)


Education

Educational attainment is often associated with income, and higher educational achievement is linked with greater health literacy. Interview and focus group participants described Houston’s residents as “creative” and working in a wide range of professions. Perceptions of schools in the region were mixed. Focus group members and interviewees reported that the schools in the region are strong, although some reported that educational quality and opportunity varied across the region. In Harris County, 44.8% of adult residents had a high school diploma or less while in Houston, 47.1% did (FIGURE 10). Slightly less than 30% of residents of both Harris County and the city of Houston had a Bachelor’s Degree or higher.

![FIGURE 10. EDUCATIONAL ATTAINMENT OF POPULATION 25 YEARS AND OVER, BY COUNTY AND CITY, 2009-2013](image)

**DATA SOURCE:** U.S. Census Bureau, American Community Survey 5-Year Estimates, 2009-2013

MH Greater Heights 2016 Community Health Needs Assessment
Housing

Housing costs are generally a substantial portion of expenses, which can contribute to an unsustainably high cost of living. Additionally, poor quality housing structures, which may contain hazards such as lead paint, asbestos, and mold, may also trigger certain health issues such as asthma.

“**It’s a changing economy. They keep building and building.**”

*Focus group participant*

Perspectives on the cost of housing in the region varied across informants. Some reported that housing prices were reasonable while others expressed concern about housing being unavailable or unaffordable, especially for some segments of the population. One key informant expressed concern about there being insufficient housing for the disabled: “People with physical disabilities often have trouble finding shelter.” Another segment identified as being at risk for housing insecurity was seniors. One focus group participant described how this issue affected her: **“The rent keeps going up. I’m trying to get into a senior home. I have to wait two years.”** A couple of respondents reported that among minority populations, multi-generational families living together is more common but can contribute to overcrowding. In more urban areas, stakeholders reported there being a lot of apartment complexes where violence may be more likely to occur.

The monthly median housing costs for homeowners was higher in the city of Houston ($1,479) than for Harris County overall ($1,232); for renters, median housing costs were higher in Harris County ($880) and lower in the city ($848) (data not shown). In both Harris County and the city of Houston, a higher percent of renters compared to homeowners paid 35% or more of their household income towards their housing costs. In both Harris County and Houston, about 41% of renters paid more than 35% of their income towards housing costs (FIGURE 11).

**FIGURE 11. PERCENT HOUSING UNITS WHERE OWNERS AND RENTERS HAVE HOUSING COSTS THAT ARE 35% OR MORE OF HOUSEHOLD INCOME, BY COUNTY AND CITY**

<table>
<thead>
<tr>
<th>County</th>
<th>% Owners</th>
<th>% Renters</th>
</tr>
</thead>
<tbody>
<tr>
<td>Harris County</td>
<td>25.5%</td>
<td>40.9%</td>
</tr>
<tr>
<td>Houston</td>
<td>28.0%</td>
<td>41.2%</td>
</tr>
</tbody>
</table>

**DATA SOURCE:** U.S. Census Bureau, American Community Survey 5-Year Estimates, 2009-2013

Transportation

Transportation is important for people to get to work, school, health care services, social services, and many other destinations. Modes of active transportation, such as biking and walking, can encourage physical activity and have a positive impact on health. Almost all focus group participants and key informant interviewees reported transportation as a major concern in their community. Residents reported that private cars are the prominent means of transportation in the region and those who do not have cars, most notably seniors and low-income residents, face substantial transportation challenges. As one interviewee explained, “**Transportation will always be the biggest challenge, particularly for those with low socioeconomic status.**”

There was conflicting feedback about the availability and quality of public transportation in Houston and the surrounding communities. One key informant reported: “Our public transportation is not good enough. It’s a barrier. You don’t see as many people walking around in Houston.” However, another informant shared the perspective that “transportation is pretty good, we have a very strong public transportation system.” Additionally, several respondents reported that there are transportation options for disabled persons and seniors and a limited number of programs that offer transportation vouchers; however, respondents also reported wait times for services, requirements that rides be scheduled far
in advance, and long travel times. When asked about active transportation options such as walking and biking, many respondents stated that concerns about safety, in addition to lack of sidewalks and bike paths, presented barriers. Although one informant reported, “Houston is not a walking city,” others shared that new initiatives are emerging to enhance the city’s livability. Some interviewees, for example, mentioned the Mayor’s initiative, Go Healthy Houston, which focuses on increasing access to healthy foods, physical activity, and tobacco-free places.

As reflected in the focus groups and interviews, a majority of residents in Harris County commuted to work by driving in a car, truck or van alone, and over three quarters of commuters drove alone (FIGURE 12). The proportion of commuters using public transportation was 4.3% in the city of Houston and 2.9% in Harris County.

<table>
<thead>
<tr>
<th>FIGURE 12. MEANS OF TRANSPORTATION TO WORK, BY COUNTY AND CITY, 2009-2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>Harris County</td>
</tr>
<tr>
<td>Houston</td>
</tr>
</tbody>
</table>

**DATA SOURCE:** U.S. Census Bureau, American Community Survey 5-Year Estimates, 2009-2013

**Crime and Violence**

Exposure to crime and violence can have an impact on both mental and physical health. Certain geographic areas may have higher rates of violence, which can serve as stressors for nearby residents. Violence can include physical, social, and emotional violence, such as bullying, which can occur in person or online. Focus group participants and key informants described the priority of violence as a top issue as being dependent on where one lives.

In some areas, crime was not described as a salient issue but in others, crime was top of mind. For example, one focus group participant from urban Houston reported, “We’re very low crime,” but another focus group participant from the same group reported, “There’s gang violence as well, especially in [my neighborhood].” Focus group participants in the described a number of crimes affecting their community including burglary, drug use and dealing, human trafficking, and gang violence. Other focus group participants expressed concern that violence in the community places their children at risk: “Unfortunately, I think [the top issue] is violence. It’s gun violence. Our kids...I think **about their safety. Either because of media or something...we see an uptick in children being exposed to violence.”**

The city of Houston experienced higher crime rates than Harris County. In Houston, the violent crime rate was 954.8 offenses per 100,000 population compared to 691.4 offenses per 100,000 population in Harris County (TABLE 3). The property crime rate in Houston was 4,693.7 offenses per 100,000 population while in Harris County it was 3,825.0 per 100,000 population.

**TABLE 3. VIOLENT AND PROPERTY CRIME RATE PER 100,000 POPULATION, BY COUNTY AND CITY**

<table>
<thead>
<tr>
<th>Geography</th>
<th>Violent Crime Rate</th>
<th>Property Crime Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Harris County</td>
<td>691.4</td>
<td>3,825.0</td>
</tr>
<tr>
<td>Houston</td>
<td>954.8</td>
<td>4,693.7</td>
</tr>
</tbody>
</table>

**DATA SOURCE:** Texas Department of Public Safety, Texas Crime Report, 2014

Focus group participants and key informant interviewees did not specifically name bullying in schools or cyber bullying as major issues in the
According to the Centers for Disease Control and Prevention High School Youth Risk Behavior Survey, in 2013 13.4% of Houston high school students in grades 9 through 12 reporting being bullied on school property (FIGURE 13), and 9.1% reported being electronically bullied (FIGURE 14). Houston high school students self-identifying as White were more likely to report being bullied, either in school or online, than Hispanic or Black, non-Hispanic high school students.

FIGURE 13. PERCENT HOUSTON YOUTH (GRADES 9-12) SELF-REPORTED TO HAVE BEEN BULLIED ON SCHOOL PROPERTY IN PAST 12 MONTHS, BY RACE AND ETHNICITY, 2013

- Houston High School Youth 13.4%
- White 16.9%
- Hispanic 12.7%
- Black 12.2%

DATA SOURCE: Centers for Disease Control and Prevention, High School Youth Risk Behavior Survey, Houston, TX, 2013

NOTE: There was insufficient sample size to report on other races and ethnicities

FIGURE 14. PERCENT HOUSTON YOUTH (GRADES 9-12) SELF-REPORTED TO HAVE BEEN ELECTRONICALLY BULLIED IN PAST 12 MONTHS, BY RACE AND ETHNICITY, 2013

- Houston High School Youth 9.1%
- White 9.2%
- Black 8.7%
- Hispanic 8.3%

DATA SOURCE: Centers for Disease Control and Prevention, High School Youth Risk Behavior Survey, Houston, TX, 2013

NOTE: There was insufficient sample size to report on other races and ethnicities
HEALTH OUTCOMES AND BEHAVIORS

People who reside in the communities served by MH Greater Heights experience a broad range of health outcomes and exhibit health behaviors that reflect their socioeconomic status and the built environment around them. Many of the demographic factors described previously such as population growth, lack of public transportation, and crime all have a role on population health, including mortality chronic disease, behavioral health, communicable disease, and oral health, among other issues. Focus group participants and key informants described a high burden of chronic disease, particularly among the urban poor of Houston. Poor access to food in some communities is an issue, especially for children and their families. From mortality to healthy living, this section provides a snapshot of health in Harris County and the city of Houston.

**Overall Leading Causes of Death**
Mortality statistics provide insights into the most common causes of death in a community. This type of information can be helpful for planning programs and policies targeted at leading causes of death. According to the Texas Department of State Health Services, Harris County experienced an overall mortality rate of 737.8 per 100,000 population in 2013 (data not shown). As shown in FIGURE 15, the leading cause of death in Harris County was heart disease (166.3 deaths per 100,000 population). TABLE 4 presents the leading causes of death by age in Harris County in 2013.

**FIGURE 15. LEADING CAUSES OF DEATH, AGE-ADJUSTED MORTALITY RATE PER 100,000 POPULATION, HARRIS COUNTY, 2013**

<table>
<thead>
<tr>
<th>Cause</th>
<th>Mortality Rate per 100,000 Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heart Disease</td>
<td>166.3</td>
</tr>
<tr>
<td>Cancer (All)</td>
<td>159.9</td>
</tr>
<tr>
<td>Stroke</td>
<td>40.6</td>
</tr>
<tr>
<td>Accidents</td>
<td>36.8</td>
</tr>
<tr>
<td>Chronic Lower Respiratory Diseases</td>
<td>32.0</td>
</tr>
</tbody>
</table>

**DATA SOURCE:** Texas Department of State Health Services, Health Facts Profiles, 2013

**TABLE 4. LEADING CAUSES OF DEATH, MORTALITY RATE PER 100,000 POPULATION, AGE AND HARRIS COUNTY, 2013**

<table>
<thead>
<tr>
<th>Age</th>
<th>Cause</th>
<th>Mortality Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Under 1 year</td>
<td>Certain Conditions Originating in the Perinatal Period</td>
<td>347.5</td>
</tr>
<tr>
<td></td>
<td>Congenital Malformations, Deformations and Chromosomal Abnormalities</td>
<td>133.9</td>
</tr>
<tr>
<td></td>
<td>Homicide</td>
<td>19.9</td>
</tr>
<tr>
<td></td>
<td>Accidents</td>
<td>12.8</td>
</tr>
<tr>
<td></td>
<td>Septicemia</td>
<td>8.5</td>
</tr>
<tr>
<td>1-4 years</td>
<td>Cancer</td>
<td>4.4</td>
</tr>
<tr>
<td></td>
<td>Accidents</td>
<td>4.1</td>
</tr>
<tr>
<td></td>
<td>Congenital Malformations, Deformations and Chromosomal Abnormalities</td>
<td>2.6</td>
</tr>
<tr>
<td></td>
<td>Heart Disease</td>
<td>1.9</td>
</tr>
<tr>
<td>5-14 years</td>
<td>Cancer</td>
<td>3.7</td>
</tr>
<tr>
<td></td>
<td>Accidents</td>
<td>2.8</td>
</tr>
<tr>
<td></td>
<td>Chronic Lower Respiratory Diseases</td>
<td>0.8</td>
</tr>
<tr>
<td></td>
<td>Heart Disease</td>
<td>0.8</td>
</tr>
<tr>
<td>Age Group</td>
<td>Cause of Death</td>
<td>Harris County</td>
</tr>
<tr>
<td>-----------</td>
<td>-----------------------------------------------------</td>
<td>---------------</td>
</tr>
<tr>
<td>15-24</td>
<td>Accidents</td>
<td>24.1</td>
</tr>
<tr>
<td></td>
<td>Homicide</td>
<td>16.2</td>
</tr>
<tr>
<td></td>
<td>Suicide</td>
<td>8.6</td>
</tr>
<tr>
<td></td>
<td>Cancer</td>
<td>4.8</td>
</tr>
<tr>
<td></td>
<td>Heart Disease</td>
<td>2.3</td>
</tr>
<tr>
<td>25-34</td>
<td>Accidents</td>
<td>24.7</td>
</tr>
<tr>
<td></td>
<td>Homicide</td>
<td>14.9</td>
</tr>
<tr>
<td></td>
<td>Cancer</td>
<td>11.2</td>
</tr>
<tr>
<td></td>
<td>Suicide</td>
<td>10.5</td>
</tr>
<tr>
<td></td>
<td>Heart Disease</td>
<td>5.9</td>
</tr>
<tr>
<td>35-44</td>
<td>Cancer</td>
<td>29.3</td>
</tr>
<tr>
<td></td>
<td>Accidents</td>
<td>28.2</td>
</tr>
<tr>
<td></td>
<td>Heart Disease</td>
<td>19.3</td>
</tr>
<tr>
<td></td>
<td>Suicide</td>
<td>11.1</td>
</tr>
<tr>
<td></td>
<td>Homicide</td>
<td>9.8</td>
</tr>
<tr>
<td></td>
<td>Chronic Liver Disease and Cirrhosis</td>
<td>*</td>
</tr>
<tr>
<td>45-54</td>
<td>Cancer</td>
<td>95.5</td>
</tr>
<tr>
<td></td>
<td>Heart Disease</td>
<td>82.2</td>
</tr>
<tr>
<td></td>
<td>Accidents</td>
<td>42.5</td>
</tr>
<tr>
<td></td>
<td>Chronic Liver Disease and Cirrhosis</td>
<td>22.1</td>
</tr>
<tr>
<td></td>
<td>Suicide</td>
<td>15.7</td>
</tr>
<tr>
<td>55-64</td>
<td>Cancer</td>
<td>273.3</td>
</tr>
<tr>
<td></td>
<td>Heart Disease</td>
<td>194.8</td>
</tr>
<tr>
<td></td>
<td>Accidents</td>
<td>49.7</td>
</tr>
<tr>
<td></td>
<td>Stroke</td>
<td>39.5</td>
</tr>
<tr>
<td></td>
<td>Diabetes Mellitus</td>
<td>38.2</td>
</tr>
<tr>
<td></td>
<td>Chronic Liver Disease and Cirrhosis</td>
<td>*</td>
</tr>
<tr>
<td></td>
<td>Septicemia</td>
<td>*</td>
</tr>
<tr>
<td>65-74</td>
<td>Cancer</td>
<td>618.1</td>
</tr>
<tr>
<td></td>
<td>Heart Disease</td>
<td>419.8</td>
</tr>
<tr>
<td></td>
<td>Chronic Lower Respiratory Diseases</td>
<td>97.9</td>
</tr>
<tr>
<td></td>
<td>Stroke</td>
<td>92.0</td>
</tr>
<tr>
<td></td>
<td>Diabetes Mellitus</td>
<td>71.0</td>
</tr>
<tr>
<td></td>
<td>Septicemia</td>
<td>*</td>
</tr>
<tr>
<td>75-84</td>
<td>Heart Disease</td>
<td>1,166.1</td>
</tr>
<tr>
<td></td>
<td>Cancer</td>
<td>1,115.1</td>
</tr>
<tr>
<td></td>
<td>Stroke</td>
<td>304.3</td>
</tr>
<tr>
<td></td>
<td>Chronic Lower Respiratory Diseases</td>
<td>274.6</td>
</tr>
<tr>
<td></td>
<td>Septicemia</td>
<td>173.5</td>
</tr>
<tr>
<td></td>
<td>Alzheimer’s Disease</td>
<td>*</td>
</tr>
<tr>
<td></td>
<td>Nephritis, Nephrotic Syndrome, and Nephrosis</td>
<td>*</td>
</tr>
<tr>
<td>85+</td>
<td>Heart Disease</td>
<td>3,459.7</td>
</tr>
<tr>
<td></td>
<td>Cancer</td>
<td>1,586.9</td>
</tr>
<tr>
<td></td>
<td>Stroke</td>
<td>957.0</td>
</tr>
<tr>
<td></td>
<td>Chronic Lower Respiratory Diseases</td>
<td>627.5</td>
</tr>
<tr>
<td></td>
<td>Alzheimer’s Disease</td>
<td>574.2</td>
</tr>
</tbody>
</table>

DATA SOURCE: Texas Department of State Health Services, Texas Health Data, Deaths of Texas Residents, 2013

NOTE: Age-adjusted mortality rate per 100,000 population; Asterisk (*) denotes insufficient sample size.
Harris County residents aged 85 years of age or older were the most likely age group to commit the highest suicide in rate among all age groups in 2013 in Harris County, with a rate of 24.2 suicides per 100,000 population. (FIGURE 16).

FIGURE 16. SUICIDE MORTALITY RATE PER 100,000 POPULATION, BY AGE, HARRIS COUNTY, 2013

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>15-24 years</td>
<td>8.6</td>
</tr>
<tr>
<td>25-34 years</td>
<td>10.5</td>
</tr>
<tr>
<td>35-44 years</td>
<td>11.1</td>
</tr>
<tr>
<td>45-54 years</td>
<td>15.7</td>
</tr>
<tr>
<td>55-64 years</td>
<td>14.4</td>
</tr>
<tr>
<td>65-74 years</td>
<td>16.4</td>
</tr>
<tr>
<td>75-84 years</td>
<td>9.3</td>
</tr>
<tr>
<td>85+ years</td>
<td>24.2</td>
</tr>
</tbody>
</table>

DATA SOURCE: Texas Department of State Health Services, Texas Health Data, Deaths of Texas Residents, 2013

Chronic Diseases and Related Risk Factors
Diet, exercise, stress, and other biological conditions are risk factors for chronic diseases like overweight and obesity, heart disease, diabetes, cancer, and asthma. Access to healthy food and opportunities for physical activity depend on not only individual choices but also on the environment in which individuals, families, and communities live, work, and age, the economic resources they have access to, and the larger social context in which they operate. The prevention and management of chronic diseases is important for preventing disability and death, and also for maintaining a high quality of life.

Access to Healthy Food and Healthy Eating
One of the most important risk factors for maintaining a healthy weight and reducing risk of cardiovascular disease is healthy eating habits, secured by access to the appropriate foods and ensuring an environment that helps make the healthy choice the easy choice.

“**It’s amazing how many children are on the margin with respect to food security. Between 70-80% are on meal plans at HISD, at or near poverty level.**”

Key informant interviewee

Food Access
In Harris County, more than a quarter of all children (i.e., those under age 18) (26.3%) were considered to be food insecure (data not shown). Concerns about food insecurity emerged in focus group conversations and interviews as well. For example, a key informant interviewee discussed access to food at school being an area for improvement: “In regards to food insecurity- we’ve made a lot of strides in regards to school breakfasts that are healthy. But there’s much more that needs to be done in regards to after schools snacks, healthy lunches, and summer meals.” Several respondents reported that they live in food deserts, and explained that they face challenges accessing food, especially food that is healthy. For example, a key informant interviewee discussed limited access to healthy food choices, “If you live in a food desert then it’s hard to obtain food, even if healthy options are available elsewhere. You see a lot of corner stores with unhealthy food.” According to the 2009-2013 ACS, among households in Harris County, nearly 13% of families (or more than 1 in 6) received benefits from the Supplemental Nutrition Assistance Program (SNAP), the program providing nutritional assistance for low-income families (data not shown).

“**Unhealthy food is more readily available and cheaper; it is too demanding to plan out healthy meals when working three jobs and stretching a budget.**”

Key informant interviewee
According to the U.S. Department of Agriculture, in 2013 there were 19 grocery stores and 55 convenience stores per 100,000 population in Harris County (FIGURE 17). In Harris County, 13.7% of low-income residents had access to farmer’s markets (data not shown). Among zip codes corresponding to MH Greater Height’s community, Houston zip code 77063 had the highest number of calls (6,137) to the United Way Helpline related to food in in 2014 (FIGURE 18).

FIGURE 17. ACCESS TO GROCERY STORES, FAST FOOD RESTAURANTS, AND CONVENIENCESTORES, PER 100,000 POPULATION, HARRIS COUNTY, 2013

Fast Food Restaurant

Convenience Store*

Grocery Store

DATA SOURCE: U.S. Census Bureau, County Business Patterns, as cited by Community Commons, 2013; and as city by USDA Food Environment Atlas, 2012
NOTE: *Convenience store data reflects 2012

FIGURE 18. NUMBER OF FOOD-RELATED CALLS TO 2-1-1 UNITED WAY HELPLINE IN HARRIS COUNTY, BY ZIP CODE, 2014

DATA SOURCE: United Way of Harris County, 2014
Eating Behaviors
Eating healthy food promotes overall health. Focus group participants and key informant interviewees described healthy eating as a difficult habit to master. Poor access to healthy foods, the low cost of fast food, cultural food norms, and poor education about nutrition were cited across all informants as being top drivers of unhealthy eating habits. Key informants pointed to the lack of grocery stores in poor communities as also contributing to unhealthy eating habits. As one informant shared, “We have food deserts and obesity problems with children and adults-fast food is cheaper and there aren’t many grocery stores in low income communities. That is improving due to effort by grocery store chains to expand in those areas but it is still a problem.” The low cost of and easy access to unhealthy, fast food was frequently cited as a contributor to unhealthy eating habits. Several respondents reported that this is a particular concern for lower income residents. As one interviewee explained, “There are folks who are real concerned about where their next meal comes from versus what the food is.” Other key informants cited cultural factors as affecting whether people make healthy food choices. As one community leader pointed out, “Southern cuisine isn’t healthy. Our food is fried and made with lots of butter.” Another informant echoed this saying, “We have great food with huge portions.” The composition of diets among Hispanic and Asian residents, with high fat and salt content, was also noted. Key informants also reported that education is a driver of healthy eating habits. The lack of knowledge about healthy eating and how to prepare healthy foods emerged as a key theme across several focus groups and interviewees. A critical need, according to respondents is nutrition education.

Surveys in Harris County reveal that only 12.2% of Harris County adults indicated that they ate fruits and vegetables five or more times per day (similar to the government recommendation) (FIGURE 19). Adults who were younger (18-29 years old) had the highest percentage of respondents meeting this recommendation. When examining responses by race and ethnicity, 14.3% of Whites indicated this eating behavior compared to 11.5% of Blacks and 10.9% of Hispanics (FIGURE 20). Lower income Harris County adults ate fewer fruits and vegetables than residents with higher median household incomes (FIGURE 21).

FIGURE 19. PERCENT ADULTS SELF-REPORTED TO HAVE CONSUMED FRUITS AND VEGETABLES AT LEAST FIVE TIMES PER DAY, BY AGE, HARRIS COUNTY, 2013

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall</td>
<td>12.2%</td>
</tr>
<tr>
<td>18-29 years</td>
<td>15.3%</td>
</tr>
<tr>
<td>30-44 years</td>
<td>14.1%</td>
</tr>
<tr>
<td>45-64 years</td>
<td>10.5%</td>
</tr>
<tr>
<td>65+ years</td>
<td>7.6%</td>
</tr>
</tbody>
</table>


FIGURE 20. PERCENT ADULTS TO HAVE CONSUMED FRUITS AND VEGETABLES AT LEAST FIVE TIMES PER DAY, BY RACE AND ETHNICITY, HARRIS COUNTY, 2013

<table>
<thead>
<tr>
<th>Race/Ethnicity</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall</td>
<td>12.2%</td>
</tr>
<tr>
<td>White</td>
<td>14.3%</td>
</tr>
<tr>
<td>Other/Multiracial</td>
<td>13.8%</td>
</tr>
<tr>
<td>Black</td>
<td>11.5%</td>
</tr>
<tr>
<td>Hispanic</td>
<td>10.9%</td>
</tr>
</tbody>
</table>


FIGURE 21. PERCENT ADULTS SELF-REPORTED TO HAVE CONSUMED FRUITS AND VEGETABLES AT LEAST FIVE TIMES PER DAY, BY MEDIAN HOUSEHOLD INCOME, HARRIS COUNTY, 2013

<table>
<thead>
<tr>
<th>Income Level</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall</td>
<td>12.2%</td>
</tr>
<tr>
<td>$50,000 or more</td>
<td>14.9%</td>
</tr>
<tr>
<td>$25,000-$49,999</td>
<td>10.7%</td>
</tr>
<tr>
<td>&lt;$25,000</td>
<td>8.1%</td>
</tr>
</tbody>
</table>

Youth in Houston were surveyed about their eating habits in the Youth Risk Behavior Survey in 2013. In the survey, 8.9% of high school students in Houston indicated that they did not eat any fruit or drink any fruit juice in the past seven days, while 12.5% reported that they had not eaten any vegetables during this time period (FIGURE 22). Black students were most likely to indicate that they had not eaten any fruits (at 10.5%), while Hispanic students were most likely to report not eating any vegetables (at 14.2%). Non-white students were more likely to indicate they had not eaten breakfast in the past seven days. Compared to 60.5% of White students, 72.7% of Black students and 73.9% of Hispanic students reported they had not eaten breakfast in the past seven days (FIGURE 23). Black students were more likely to report drinking soda two or more times per day in the last seven days (19.5%) than Hispanic (14.7%) and White students (9.0%) (FIGURE 24).

**FIGURE 22.** PERCENT HOUSTON YOUTH (GRADES 9-12) SELF-REPORTED TO HAVE NOT EATEN FRUITS OR DRUNK 100% FRUIT JUICES AND VEGETABLES IN PAST SEVEN DAYS, BY RACE AND ETHNICITY, 2013

- Houston High School Youth
- Black
- White
- Hispanic

**DATA SOURCE:** Centers for Disease Control and Prevention, High School Youth Risk Behavior Survey, Houston, TX, 2013

**FIGURE 23.** PERCENT HOUSTON YOUTH (GRADES 9-12) SELF-REPORTED TO HAVE NOT EATEN BREAKFAST AT ALL IN PAST SEVEN DAYS, BY RACE AND ETHNICITY, 2013

- Houston High School Youth 72.0%
- Hispanic 73.9%
- Black 72.7%
- White 60.5%

**DATA SOURCE:** Centers for Disease Control and Prevention, High School Youth Risk Behavior Survey, Houston, TX, 2013

**FIGURE 24.** PERCENT HOUSTON YOUTH (GRADES 9-12) SELF-REPORTED TO HAVE DRUNK SODA TWO OR MORE TIMES A DAY IN PAST SEVEN DAYS, BY RACE AND ETHNICITY, 2013

- Houston High School Youth 15.0%
- Black 19.5%
- Hispanic 14.7%
- White 9.0%

**DATA SOURCE:** Centers for Disease Control and Prevention, High School Youth Risk Behavior Survey, Houston, TX, 2013
Physical Activity

Another important risk factor for maintaining a healthy weight and reducing one’s risk of cardiovascular disease is physical activity.

When asked about opportunities for physical activity in the region, focus group members and interviewees shared several perspectives. Some reported good access to parks and other opportunities for physical activity. However, some stated that these were not equally distributed across the city. As one informant mentioned, “We have a fairly good park and recreation system, but not so much in lower income neighborhoods.” Others commented on the region’s lack of infrastructure such as sidewalks and bike routes. As one informant explained, “Houston has not invested in an infrastructure that creates an environment to provide for healthier living.” One focus group member explained, “The inner city children have nowhere to go, don’t have anything to play on. The lights in the evening are not even lit.” However, a couple of interviewees shared that efforts have been made in recent years to improve sidewalks and connect parks. Figure 27 (next page) shows the location of parks in the Greater Houston area. Another factor affecting outdoor physical activity, according to some residents, is Texas’ hot and humid climate. Given this, some residents mentioned that the region lacks low-cost opportunities for indoor physical activity such as gyms, community centers, and youth centers. Time for exercise was also identified as a substantial constraint for residents.

More than two thirds (68.2%) of adults surveyed in Harris County indicated that they had undertaken physical activity in the past month (Figure 25). When examining results by race and ethnicity, Hispanics were the least likely to report this, with 57.7% saying they had participated in any physical activity in the past month. In surveys with Houston high school students, two-thirds (66.6%) reported that they had not participated in 60 or more minutes of physical activity for five days in the past seven, the recommendation for youth physical activity levels (Figure 26). Hispanic youth were slightly more likely to have indicated this, with 68.6% reporting not reaching this level of activity.

“"There are plenty of parks within the city. They’re everywhere in Houston. People can use those to stay healthy."" 

Key informant interviewee
Overweight and Obesity

Obesity is a major risk factor for poor cardiovascular health and increases the risk of death due to heart disease, diabetes, and stroke. Every community in Houston is affected by obesity. Almost all focus group participants and key informant interviewees acknowledge overweight and obesity is a major issue in the community, alongside diabetes and heart disease. Obesity, as described by focus group participants and key informant interviewees, is driven by unhealthy eating habits and low levels of physical activity. For example, one key informant interviewee reported, “Houston has an obesity problem – we tend to spend a lot of time in cars and inside, not a lot outside in green spaces.”

Several participants shared concerns about children being at high risk for obesity and the long-term impact of childhood obesity on children’s ability to learn, their health as they grow older, and the costs to the healthcare system. As one key informant shared, “Childhood obesity has already been a problem but now we’re seeing an increase in younger kids.” Residents also expressed concern about obesity among children, such as one mother who wondered, “Where are all the kids at the playground? Often we have it to ourselves. The mall is full, but the playground is empty.”

“Obesity is a significant problem because of the eating choices people make and the fact some of the population are not educated... We drive everywhere, and it’s too hot to run here.”

Key informant interviewee

In 2013, the percentage of Harris County residents who reported that they were overweight or obese was 69.4%. Nine out of ten (91.7%) Black, non-Hispanic residents in Harris County were considered...
overweight or obese, according to self-reported height and weight responses (FIGURE 28) in 2013. Overall, about one third of Houston high school students were considered overweight (16.3%) or obese (17.9%) (FIGURE 29). At 22.2%, Hispanic high school students in Houston were most likely to be considered obese, while Black high school students were most likely to be considered overweight (18.0%).

**FIGURE 28. PERCENT ADULTS SELF-REPORTED TO BE OVERWEIGHT OR OBSE, BY RACE AND ETHNICITY, HARRIS COUNTY, 2014**

<table>
<thead>
<tr>
<th>Race/Ethnicity</th>
<th>Overall</th>
<th>Black</th>
<th>Hispanic</th>
<th>White</th>
<th>Other/Multiracial</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>69.4%</td>
<td>91.7%</td>
<td>74.8%</td>
<td>63.2%</td>
<td>34.4%</td>
</tr>
</tbody>
</table>

**DATA SOURCE:** Texas Behavioral Risk Factor Surveillance System, 2014

**FIGURE 29. PERCENT HOUSTON YOUTH (GRADES 9-12) SELF-REPORTED TO BE OVERWEIGHT OR OBSE, BY RACE AND ETHNICITY, 2013**

<table>
<thead>
<tr>
<th>Race/Ethnicity</th>
<th>Overweight</th>
<th>Obese</th>
</tr>
</thead>
<tbody>
<tr>
<td>Houston High School Youth</td>
<td>16.3%</td>
<td>17.9%</td>
</tr>
<tr>
<td>Hispanic</td>
<td>16.1%</td>
<td>22.2%</td>
</tr>
<tr>
<td>Black</td>
<td>18.0%</td>
<td>12.4%</td>
</tr>
</tbody>
</table>

**DATA SOURCE:** Centers for Disease Control and Prevention, High School Youth Risk Behavior Survey, Houston, TX, 2013

**NOTE:** All other races and ethnicities were considered as having insufficient sample sizes for analysis.

**Diabetes**

Diabetes is a life-long chronic illness that can cause premature death. According to the American Diabetes Association, care for diagnosed diabetes accounts for one in five health care dollars in the United States, a figure which has been rising over the last several years. Diabetes is an issue for many residents in Harris County and Houston. The majority of focus group participants and key informants named diabetes (along with cancer and hypertension) as a top health issue in the region. Others noted that like obesity, diabetes is becoming increasingly prevalent in children. Informants talked about the unmet needs of diabetics, particularly due to lack of self-management and delaying care that can come with lack of health insurance or money for health care. One key informant reported, “You see a lot of cases with Type 2 diabetes. These people have more doctors than ever. Take multiple medications at a time. All of those things cost money.” Many informants discussed diabetes “running in families” as though diabetes is an expectation of life. As one informant explained, “We see people who expect to have diabetes because everyone in their family does.” Providers shared that this perspective makes it difficult to talk to patients about the preventable nature of the disease.

In Harris County in 2014, 10.4% of adults self-reported to have been diagnosed with diabetes (FIGURE 30). Self-reported diabetes diagnosis was more likely to be reported in older age groups of Harris County residents, with 22.8% of persons aged 65 years or older self-reporting they had diabetes compared to 1.4% of persons aged 18 to 29 years. Black adults in Harris County self-reported higher rate of diabetes diagnosis (15.2%) than persons self-identifying as Hispanic, White or other races and ethnicities (FIGURE 31). According to the Texas Department of State Health Services, in 2013, Harris County had 11.3 admissions per 100,000 population for uncontrolled diabetes (data not shown).

“Diabetes…it seems to be rampant.”

Low-income focus group participant
Hypertension (e.g., high blood pressure) is one of the major causes of stroke, and high cholesterol is a major risk factor for heart disease. Both hypertension and cholesterol are preventable conditions, but unhealthy lifestyle choices can play a major role in the development of these top two cardiovascular risk factors. Heart disease and stroke are among the top five leading causes of death both nationally and within this region. One focus group participant said many diseases affected her community, “Especially heart disease...everybody has high blood pressure.” Focus group participants named hypertension and heart disease as among the top issues affecting their community, especially among seniors and immigrants. As with diabetes, poor self-management and delayed care can have substantial negative consequences for patients and lack of education was seen as a factor contributing to heart disease risk. Other informants mentioned acculturation as being related to developing conditions like hypertension as newcomers experience the variety and quantity of food in the U.S. Some key informants expressed concern that heart disease and stroke occurs more in populations experiencing health care inequities and those with less access to healthy food and options for physical activity.

In Harris County in 2014, according to the Texas Behavioral Risk Factor Surveillance System, 2.8% of adults self-reported having been diagnosed with angina or coronary heart disease (data not shown). Similarly, 3.6% of adults in Harris County self-reported having a heart attack in 2014, and 3.8% of Harris County adults self-reported having a stroke (data not shown). Over a third of Harris County adults self-reported having high cholesterol (38.3%) and just under a third self-reported having high blood pressure (32.4%) (FIGURE 32). Harris County residents over the age of 65 were disproportionally likely to report having high blood pressure (71.7%) than their younger counterparts. White Harris County residents had the highest self-reported rate of high cholesterol (46.6%) while Black Harris County residents had the highest self-reported rate of high blood pressure (45.7%) (FIGURE 33).
A few key informant interviewees described air quality as an area of concern for the community, particularly for people living in Houston. Several focus group members and interviewees reported that asthma rates were high in the region, which was attributed to environmental quality and housing quality.

In 2013, 12.6% Texas adults self-reported having asthma at one point in their lifetime according to the Texas Behavioral Risk Factor Surveillance System. In Harris County, 4.6% of adult residents self-reported that they had asthma (data not shown). In 2012, adult hospital discharges for asthma were 8.4 per 10,000 population in Harris County (data not shown). Among children aged 17 years and younger, the rate of asthma-related hospital discharges for Black children was higher than the rate for White children (24.2 versus 10.2 per 10,000 children) (FIGURE 34).
Cancer
Cancer is among the top two leading causes of death in the region. (In some cases, cancer is the leading cause of death, while heart disease is number one in others.) This trend is similar to what is seen nationally. Focus group participants and key informant interviewees described cancer as one of the top health conditions seen in their communities. A few informants expressed concern that people do not have access to or are aware of early screening and detection resources. A focus group participant said, “You may get cancer because you don’t have access to resources.”

According to the Texas Cancer Registry, the cancer incidence rate from 2008-2012 in Harris County was 444.1 per 100,000 population (data not shown). The cancer mortality rate in the county was 163.4 per 100,000 population. In a 2014 Behavioral Risk Factor Surveillance survey, 81.6% of women 40+ years or older indicated they had had a mammogram in the past two years while 70% of women indicated that they had had a pap test to test in the past three years (FIGURE 35). Over two thirds (64.8%) of adults 50 years of age and older in Harris County self-reported having a colonoscopy or sigmoidoscopy.

FIGURE 35. PERCENT ADULTS SELF-REPORTED CANCER SCREENING, HARRIS COUNTY, 2014

- Mammogram within past 2 years* 81.6%
- Pap test within past 3 years** 70.0%
- Sigmoidoscopy or Colonoscopy*** 64.8%

* women 40 years old and over; ** women 18 years and over; *** adults 50 years and over

Mental Health
Focus group participants and key informants identified mental health and lack of access to mental health services as a major unmet need in the community served by MH Greater Heights. Behavioral health providers reported a growth in demand for their services. Overall, stress, anxiety, and depression were identified as the most common mental health concerns in the community.

“Mental health issues are multi-cultural. They do not discriminate...it will touch every family regardless of their level of education and professional standing. It goes back to access to care and treatment. The lower income cohort is most vulnerable because they lack access to specialists.”

Key informant interviewee

Respondents reported that the region lacks enough mental health providers of all kinds to address the need, including psychiatrists, social workers, school counselors, and others skilled at addressing the needs of children and teens. As a result, those who need services must wait long periods to access them or go untreated. Other informants noted the link between mental health and incarceration. One key informant shared that, “We have a huge problem with mental health...the largest mental health center is the county jail.” Several respondents specifically mentioned a long-standing lack of attention to and investment in mental health services at the state level, although others mentioned that new innovations that are being supported through Texas’ Section 1115 Medicaid demonstration waiver.

While more affluent residents were seen as having greater access to mental health services, low-income residents face substantial challenges including transportation and lack of insurance and resources to pay for services out of pocket. Stigma about mental illness was mentioned as a substantial barrier to identifying mental health concerns and seeking treatment among all population groups. As one informant explained, “People may not seek services because of the stigma or what they
perceive is normal in their own families and may not realize that it’s correctable and there are services available.”

According to the Texas Behavioral Risk Factor Surveillance System, in 2014 19.3% of adults in Harris County self-reported as having five or more poor mental health days (FIGURE 36). Self-report of having had five or more days of poor mental health was highest among residents aged 18 to 29 (26.5%) (FIGURE 36) and Black, non-Hispanic residents (24.2%) in Harris County (FIGURE 37).

Focus group participants and key informants reported that children and youth are at high risk for mental health problems, and that the response to their needs is inadequate. Among older youth, stress associated with academic pressures was identified as a concern. As one youth focus group member shared, “Stress is the biggest thing…I would definitely say stress is huge.” While mental health services in general were seen as lacking in the region, services for children and youth were reported to be particularly scarce. The consequence is that as one informant shared, “Too many cases are undiagnosed for too long.” Houston Hispanic youth experienced higher mental health needs than youth of other races and ethnicities in 2013. Among youth in Houston, one third of Hispanic high school students self-reported feeling sad or hopeless for two or more weeks in the past year (FIGURE 38). Some (12.1%) Hispanic Houston high school students self-reported that they attempted suicide at least once in the past year; 11.3% of Black, non-Hispanic high school students self-reported a suicide attempt (FIGURE 39).
FIGURE 38. PERCENT YOUTH (GRADES 9-12) SELF-REPORTED FELT SAD OR HOPELESS FOR TWO OR MORE WEEKS IN PAST 12 MONTHS IN HOUSTON, RACE AND ETHNICITY, 2013

- Houston High School Youth 29.9%
- Hispanic 34.1%
- White 25.6%
- Black 23.9%

DATA SOURCE: Centers for Disease Control and Prevention, High School Youth Risk Behavior Survey, Houston, TX, 2013
NOTE: There was insufficient data for other races and ethnicities.

FIGURE 39. PERCENT YOUTH (GRADES 9-12) SELF-REPORTED ATTEMPTED SUICIDE ONE OR MORE TIMES IN PAST YEAR IN HOUSTON, RACE AND ETHNICITY, 2013

- Houston High School Youth 11.6%
- Hispanic 12.1%
- Black 11.3%

DATA SOURCE: Centers for Disease Control and Prevention, High School Youth Risk Behavior Survey, Houston, TX, 2013
NOTE: There was insufficient data for other races and ethnicities.

Substance Use and Abuse
Substance use and abuse affects the physical and mental health of its recipients, their families, and the wider community. Stakeholders raised substance abuse as being an important health issue in the community by many interview and focus group participants. Neither focus group participants nor key informant interviewees identified opioid addiction as a major health issue affecting the Houston area.

Alcohol abuse—among both adults and teens—was reported to be a concern for the region. Reasons cited for alcohol abuse were stress and social norms. The availability of alcohol was also noted. Perspectives on the prevalence of smoking varied across respondents. Some respondents reported that it was not a key health issue for the region. Others, however, identified it as a concern, such as one respondent who stated, “I have not seen much of a decline in smoking. There’s a hard cultural stigma to drive home.” As with mental health services, residents reported that the need for substance use services—both prevention and treatment—exceeds the available supply. Barriers to addressing substance use issues are similar to those for mental health concerns and include stigma, lack of services, and lack of awareness about the dangers of substance use. As one informant explained, “No one wants to talk about behavioral health or substance abuse because of the stigma.”

According to the Texas Behavioral Risk Factor Surveillance System, in 2014 13.7% of Harris County adults self-reported binge drinking in the past month, and 13.6% of adults self-reported being current smokers. Only 1.9% of Harris County adults self-reported to have drank alcohol and drove in the past month (data not shown). In Harris County, the rate of non-fatal drinking-under-the-influence (DUI) motor vehicle accidents in the past month was 66.9 per 100,000 population in 2010-2014, according to the Texas Department of Transportation (data not shown).

According to the Texas Youth Risk Behavior Survey, in 2013 Houston high school students self-reported using alcohol (31%), marijuana (23%), or tobacco (11%) in the past month (FIGURE 40). Just under two thirds (63%) of Houston high school students self-reported lifetime substance use of alcohol, followed by marijuana (44%), and tobacco (43%) (FIGURE 41). White Houston high school students had disproportionately higher rates of ever using tobacco and prescription drugs than students of other races and ethnicities (FIGURE 42).
FIGURE 40. PERCENT HOUSTON YOUTH (GRADES 9-12) SELF-REPORTED SUBSTANCE USE IN PAST 30 DAYS, 2013

- Alcohol: 31%
- Marijuana: 23%
- Tobacco: 11%


FIGURE 41. PERCENT HOUSTON YOUTH (GRADES 9-12) SELF-REPORTED SUBSTANCE USE, 2013

- Ecstasy: 6%
- Inhalants: 11%
- Cocaine: 11%
- Prescription Drugs: 17%
- Tobacco: 43%
- Marijuana: 44%
- Alcohol: 63%


FIGURE 42. PERCENT HOUSTON YOUTH (GRADES 9-12) SELF-REPORTED SUBSTANCE USE, BY RACE AND ETHNICITY, 2013

- Tobacco: 43.1%, 35.0%, 46.9%
- Alcohol: 63.3%, 62.6%, 64.4%, 66.8%
- Marijuana: 43.6%, 44.1%, 45.0%, 44.7%
- Prescription Drugs: 17.4%, 16.4%, 16.4%, 21.5%

DATA SOURCE: Centers for Disease Control and Prevention, High School Youth Risk Behavior Survey, Houston, TX, 2013
NOTE: Percentages were not calculated for American Indian/Alaska Native, Asian, Native Hawaiian/Pacific Islander, or Multiple Races due to insufficient sample size
Communicable Diseases
Communicable diseases are diseases that can be transferred from person to person. These conditions are not as prevalent as chronic diseases in the region, but they do disproportionately affect vulnerable population groups.

Focus group participants and key informants had few varied concerns or comments about communicable disease. Some informants reported concern about parents not getting their children vaccinated against diseases such as measles, which they attributed to continuing misinformation about vaccines. Some focus group participants and key informants reported that education and awareness about HIV/AIDS is lacking in some communities and perceive a lack of resources in low-income areas, contributing to disparate levels of education. A low-income focus group participant reported that “Where I live, there is money in this area, but when you get in to the poor areas…they are hurting. There is a very high statistic of HIV and its going to spread…[There’s] no education and no resources in the community.”

HIV
In Harris County in 2014, the rate of persons living with HIV was 516.1 per 100,000 population in the county, up from 478.4 per 100,000 population in 2011 (FIGURE 43).

“*We have an international airport...This makes us vulnerable to communicable infectious diseases.*”

Key informant interviewee

FIGURE 43. RESIDENTS LIVING WITH HIV RATE PER 100,000 POPULATION, HARRIS COUNTY, 2011-2014

**Other Sexually-Transmitted Diseases**

In Harris County, rates of sexually transmitted diseases—chlamydia, gonorrhea, and syphilis—increased from 2011 to 2014 (FIGURE 44). For example, rate of chlamydia cases increased from 520.4 per 100,000 population in 2011 to 545.6 per 100,000 population in 2014.

**FIGURE 44. SEXUALLY TRANSMITTED DISEASE CASE RATES PER 100,000 POPULATION, HARRIS COUNTY, 2011-2014**

![Graph showing sexually transmitted disease case rates per 100,000 population, Harris County, 2011-2014.](image)

**DATA SOURCE:** Texas Department of State Health Services, TB/HIV/STD Epidemiology and Surveillance Branch, Texas STD Surveillance Report, 2014
**Tuberculosis**
In 2014, the rate of tuberculosis in Harris County was 7.2 cases per 100,000 population (data not shown).

**Influenza**
In 2014, 35.9% of adults in Harris County self-reported as having a seasonal flu shot or vaccine via nose spray, according to the Texas Behavioral Risk Factor Surveillance System. As shown in FIGURE 45, residents aged 65 years or older were disproportionately more likely to have received a flu shot (59.0%) than other age groups.

**FIGURE 45. PERCENT ADULTS SELF-REPORTED TO HAVE HAD SEASONAL FLU SHOT OR SEASONAL FLU VACCINE VIA NOSE SPRAY, BY AGE, HARRIS COUNTY, 2014**

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Percent Receipt of Vaccine</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall</td>
<td>35.9%</td>
</tr>
<tr>
<td>65+ years</td>
<td>59.0%</td>
</tr>
<tr>
<td>45-64 years</td>
<td>35.5%</td>
</tr>
<tr>
<td>30-44 years</td>
<td>34.6%</td>
</tr>
<tr>
<td>18-29 years</td>
<td>18.6%</td>
</tr>
</tbody>
</table>

**DATA SOURCE:** Texas Behavioral Risk Factor Surveillance System, 2014

**Reproductive and Maternal Health**
Good reproductive and maternal health provides a stronger foundation for newborns and children to have a more positive health trajectory across their lifespans. This section presents information about birth outcomes and teen pregnancy in Harris County.

**Birth Outcomes**
Approximately one in ten babies (11.8%) born in Harris County were premature, meaning born before 37 weeks gestation, in 2013 (data not shown). Similarly, approximately one in ten babies in the county were born low birthweight, although this varies by race. Black babies in the county were more likely to be born low birthweight than babies of other races and ethnicities (FIGURE 46).

**FIGURE 46. PERCENT LOW BIRTH WEIGHT INFANTS, OVERALL AND BY RACE AND ETHNICITY, HARRIS COUNTY, 2013**

<table>
<thead>
<tr>
<th>Race</th>
<th>Percentage Low Birth Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Black</td>
<td>13.0%</td>
</tr>
<tr>
<td>White</td>
<td>7.9%</td>
</tr>
<tr>
<td>Hispanic</td>
<td>7.4%</td>
</tr>
</tbody>
</table>

**DATA SOURCE:** Texas Department of State Health Services, Texas Vital Statistics Annual Report, 2013

**NOTE:** White includes Other and Unknown races and ethnicity; Low birth weight is defined as under 2,500 grams

**Prenatal Care**
According to the Texas Department of State Health Services, 56.1% in Harris County of live births occurred to mothers who received prenatal care in their first trimester. Rates of first trimester prenatal care in all counties were highest for White, non-Hispanic mothers and lowest for Black, non-Hispanic mothers (FIGURE 47). Rates of receiving no prenatal care was 3.9% overall for Harris County mothers. Rates of receiving no prenatal care in both counties were highest for Black, non-Hispanic mothers (5.4%) and lowest for mothers of Other race and ethnicity (2.7%).
FIGURE 47. PERCENT OF HARRIS COUNTY BIRTHS WITH PRENATAL CARE IN THE FIRST TRIMESTER OR NO PRENATAL CARE IN ANY TRIMESTER, BY RACE AND ETHNICITY OF MOTHER, 2013

DATA SOURCE: Texas Certificate of Live Birth, as cited by Texas Department of State Health Services, Center for Health Statistics, Texas Health Data, Birth Outcomes, 2013

Teen Births
In 2013, 12,245 births occurred to Texas mothers aged 17 years or younger, representing 3.1% of all births in Texas according to the Texas Department of State Health Services (data not shown). In Harris County, 2.8% of births in Harris County were to teen mothers in 2013 (FIGURE 48). Teen birth rates varied by race and ethnicity. Hispanic teen mothers had the highest birth rate in the County, 4.0%.

FIGURE 48. PERCENT BIRTHS TO TEENAGED MOTHERS AGE 17 YEARS OLD AND UNDER, BY RACE AND ETHNICITY, HARRIS COUNTY, 2013

DATA SOURCE: Texas Department of State Health Services, Texas Vital Statistics Annual Report, 2013

NOTE: White includes Other and Unknown race and ethnicity

Oral Health
Oral health is a strong indicator of overall well-being and health. In addition to tooth decay and gum disease, poor oral hygiene has been linked in some studies to premature birth, cardiovascular disease, and endocarditis. Oral bacteria and inflammation can also lead to infection in people with diabetes and HIV/AIDS. Several focus group respondents and interviewees reported that oral health was a concern, especially for seniors on fixed incomes and low-income individuals. Dental services were described as being expensive and thus out of reach for many. Focus group members shared personal experiences in trying to get dental care, which was often too expensive for them to afford. While some health clinics have dental services, these are often difficult to access due to long waitlists. Dental care for children was seen as a need as well as resources to pay for things like toothbrushes. Parent education was also seen as key.

According to the Texas Medical Board, the number of dentists per population in Harris County in 2014 was 57.4 per 100,000 population (data not shown). According to the Texas Behavioral Risk Factor Surveillance System, 58.2% of adults in Harris County in 2014 self-reported having visited a dentist or dental clinic within the past year for any reason (FIGURE 49). Hispanic adults in Harris County reported the lower rates of annual dental visitation
(50.6%) than adults of other races or ethnicities. Adults with higher education levels (i.e., more than a high school education) were more likely to have received dental care in the past year in Harris County (FIGURE 50). Similarly, adults with higher incomes were more likely to have received dental care (FIGURE 51).

FIGURE 49. PERCENT ADULTS SELF-REPORTED TO HAVE VISITED DENTIST OR DENTAL CLINIC WITHIN PAST YEAR FOR ANY REASON, BY RACE AND ETHNICITY, HARRIS COUNTY, 2014

- Overall 58.2%
- Other/Multiracial 70.2%
- White 65.2%
- Black 57.2%
- Hispanic 50.6%


FIGURE 50. PERCENT ADULTS SELF-REPORTED TO HAVE VISITED DENTIST OR DENTAL CLINIC WITHIN PAST YEAR FOR ANY REASON, BY EDUCATION, HARRIS COUNTY, 2014

- Overall 58.2%
- College Graduate 76.5%
- High School Graduate 61.9%
- < High School 48.1%
- Some College 47.1%


FIGURE 51. PERCENT ADULTS SELF-REPORTED TO HAVE VISITED DENTIST OR DENTAL CLINIC WITHIN PAST YEAR FOR ANY REASON, BY INCOME, HARRIS COUNTY, 2014

- Overall 58.2%
- $50,000 or more 75.1%
- $25,000-$49,999 56.4%
- <$25,000 44.7%

HEALTH CARE ACCESS AND UTILIZATION

Health Insurance

Health insurance is a predictor of access to health care services and overall population health. While some interview and focus group participants stated that community members have access to health insurance, others noted substantial gaps. For example, focus group participants from low-income areas reported frustration regarding this lack of health insurance. As one member of a focus group shared, “You work 30+ years and retire, now you have no insurance; they know you don’t have insurance and a whistle goes off... After taking care of people all your life, you struggle.” Others reported that despite the Affordable Care Act (ACA), the number of uninsured in the region was high. One reason for this, according to respondents, is that Texas has not adopted Medicaid expansion, which leaves a large number of working poor uninsured. Additionally, respondents reported that the cost of insurance is too high for some to afford. Lack of insurance and underinsurance has a substantial negative impact on health, according to informants, because people will not seek preventative care. As one interviewee shared, “When people are uninsured, people are less likely to be proactive about health.”

Some people can’t afford insurance. Even though it’s cheap, it’s still not affordable.”

Hispanic focus group participant

“My copayments scheduled changed on me. I don’t understand it.”

Focus group participant

Another challenge cited by informants has been patients’ lack of understanding about what is covered by different insurance products and navigating their health insurance. Residents in focus groups expressed frustration when trying to understand co-pays and deductibles, in and out of network providers, services covered, and billing statements. This is especially challenging, respondents reported, for those who do not speak English or who have lower literacy levels. As one focus group member summed up, “[Insurance is very hard to understand] There are so many places and points of the process where it can go wrong.”

Uninsurance rates decreased for Harris County following the passage of the Affordable Care Act in 2010 (FIGURE 52).

Rates of uninsurance varied by zip code across the communities served by MH Greater Heights. In 2013, the zip codes in the Houston (Harris County) total population geographic area around the MH Greater Heights facility had the highest rates of uninsurance for the (FIGURE 53). The following zip codes reported rates of uninsurance over 40% in 2013: 77093 (42.5%) and 77037 (41.2%).

Among individuals aged 18 and younger, uninsurance rates reported in 2013 were lower than the overall population. The following zip codes reported rates of uninsurance over 20% in 2013: 77037 (27.7%), 77022 (25.4%), 77093 (21%), 77060 (20.8%), and 77026 (20.8%) (FIGURE 54). Among the 17 zip codes served by MH Greater Heights, 123,145 residents were enrolled in Medicaid. The zip code in Harris County with the most Medicaid enrollees was 77093 in Houston (13,964 enrollees) (FIGURE 55).
Healthcare Access and Utilization

Focus group participants and key informants stated that shortages of specialty providers presented a barrier to access to care for area residents. As one mental health provider explained, “I’m a social worker by training, and licensed, and I don’t think we can keep up with the demand on our systems and structures.” Several respondents mentioned that the growing number of free-standing emergency rooms (ERs and drugstore-based clinics have added to the landscape of health care services available to residents. However, as one informant pointed out, these are not medical homes. According to focus group respondents and interviewees, the barriers to health care access have led to increased use of emergency departments (ED) for health issues that are not emergent.

The cost of healthcare was also reported to be a challenge to accessing healthcare. Focus group members and interviewees reported that high deductibles and co-pays prevent some from accessing needed care. Several respondents expressed a concern about high-deductible plans that can discourage patient use of healthcare. As one provider explained, “A pressing concern for many is the high-deductible plans. Some don’t recognize what that impact is, but many will defer care because of that cost.” A related challenge is the cost of medication, some of which are not covered by insurance. One focus group participant from a mid-to-high socioeconomic status reported that some people do not have “access to medication... They can’t afford it. They can buy food, but can’t get insulin because of the co-pay.” While residents reported that there are medication assistance programs, these are seen as insufficient to meet the need. A couple of respondents also mentioned that cost of other health services—like dental and vision care—is expensive and often not covered by insurance.

Among those residents needing assistance to obtain health and social services, focus group participants reported challenges in meeting administrative requirements of existing programs as well as the lack of availability of assistance programs in some geographic areas. One focus group participant residing in a low-income area reported, “There are a lot of places that say they help people, but it’s a lot of paperwork. We need more assistance. Or you go there, and they say they have no funding.” Another challenge according to informants is that people are not accessing existing health and social services because they don’t know about them. As one interviewee from Harris County explained, “Harris County has a lot of programs and services. Information needs to be made available to [patients].”
FIGURE 53. PERCENT TOTAL POPULATION UNINSURED, BY ZIP CODE, 2013

DATA SOURCE: U.S. Census Bureau, American Community Survey 5-Year Estimates, 2009-2013
FIGURE 54. PERCENT UNDER 18 YEARS OLD POPULATION UNINSURED BY COUNTY, 2013

DATA SOURCE: U.S. Census Bureau, American Community Survey 5-Year Estimates, 2009-2013
FIGURE 55. NUMBER ENROLLED IN MEDICAID, BY ZIP CODE, FISCAL YEAR 2015

DATA SOURCE: Texas Health and Human Services Commission System Forecasting, March 2016
NOTE: Enrollment by zip code does not equal total enrollment due to lack of zip code data for some clients
**Access to Primary Care**

The number of primary care physicians (including general practice, family practice, OB-GYN, pediatrics, and internal medicine) per 100,000 population varied by county. According to the Texas Medical Board, the number of primary care physicians serving Harris County in 2014 was 82.6 per 100,000 population (data not shown). In 2014, Harris County had 82.6 physicians per 100,000 population and 38.2% of adult residents self-reported that they did not have a doctor or health care provider (data not shown). According to the Texas Medical Association’s 2014 physician survey, the percent of Texas physicians who accept all new Medicaid patients decreased from 42% in 2010 to 37% in 2014. In Harris County in 2014, 37% of physicians accepted all new Medicaid patients, 23% limited their acceptance of new Medicaid patients, and 40% accepted no new Medicaid patients.

**Emergency and Inpatient Care for Primary Care Treatable Conditions**

People who are poor, uninsured or covered by Medicaid, certain racial/ethnic minorities and immigrants, and individuals with limited education, literacy or English language skills are all less likely to have a usual source of care (USOC) provider other than a hospital emergency department (ED). In 2013, about 4 in 10 ED visits were classified as primary care-related.

Of MH Greater Heights 46,746 ED visits in 2013, 55.6% were from patients who were uninsured or on Medicaid, and 35.6% were classified as non-emergent or with primary care treatable conditions. Of all ED visits, 6.7% were for chronic conditions of which 26.9% were cardiovascular-related. All 17 zip codes in the MH Greater Height’s CHNA-defined community were among the top 20 zip codes for the highest number of primary care treatable ED visits at the MH Greater Heights in 2013 (FiGURE 56).

Of MH Greater Height’s 11,902 inpatient discharges in 2015, 4,925 inpatient discharges or 41.4% were related to an ambulatory care sensitive condition. The top three ambulatory care sensitive conditions that resulted in inpatient care at MH Greater Heights in 2015 were diabetes (172 discharges), congestive heart failure (165 discharges), and chronic obstructive pulmonary disorder (102 discharges).
FIGURE 56. PRIMARY CARE TREATABLE EMERGENCY DEPARTMENT VISITS AT MH GREATER HEIGHTS, BY TOP 20 ZIP CODES, 2013

DATA SOURCE: Memorial Hermann Health System, Emergency Department Data, 2012-2013
Diverse, Cohesive Community
Residents and stakeholders described diversity and social cohesion as being among the primary assets and strengths of their community. Houston was described as “an extremely diverse community” with “positive growth” and a “sense of community.” Informants described the positive role of diversity in driving the creation of robust communities to participate in and resources to meet those needs: “Houston is an extremely rich place, culturally. We have something for everyone. Community needs can be met pretty well here in Houston because there’s a lot of understanding of different types of needs. The feeling is that you can always find community.” Many key informants and focus group participants described a sense of social cohesion across communities. This cohesion does not just occur within neighborhoods, but also within groups sharing a common issue. For example, one key informant reported: “From what I see in the disability community is a strong sense of friendship. People know each other and care about each other because they see that they have similar difficulties. That brings people together and supports and connects them.”

High-Quality, Plentiful Medical Care
A key theme among key informants and focus group participants was the wide availability of health care services in Houston and the high quality of those services. As one informant explained, “[We have] one of the strongest complex of medical services in the United States and the world.” The health care system is also described as having a strong community health system in addition to world-class acute care: “We have a strong community healthcare system...there is a significant amount of hospitals available to people.” Additionally, many respondents pointed to excellent services provided by health departments in many counties in the region and a strong infrastructure of school-based health centers. The challenge, noted by many respondents, is ensuring these excellent services are accessible to all residents. Key informants and focus group participants also communicated the theme of innovation regarding the health care system. As one key informant interviewee reported, “[There is a] spirit of innovation...I see that with our health department and health institutions...We are known for key research.”

Strong Public Health and Social Service System
Houston is served by a robust network of public health and social service organizations. Many focus group participants and key informant interviewees reported that their communities are served by a number of non-profit and other charitable organizations. As one informant stated, “There are organizations doing good work with the resources they have. We have a very strong presence in our local health department, and they have a strong commitment at looking at and working with school districts to fill gaps, understanding needs of the community and creating the mission that...
intertwines with other organizations.” Along with the theme of social cohesion and a sense of community closeness reported earlier, key informants also described the community as being charitable. As one interviewee shared, “We are a generous community. A lot of our services are supported by donations from foundations, individuals, or fundraisers. There is a lot of volunteer effort.”

**Strong Schools**

Overall, Houston was reported to have strong schools. According to one key informant, “We have great school districts. Education outreach is good.” Key informants and focus group participants reported that parental engagement is high in many of their communities, driven largely by the proactive outreach done to parents by schools and social cohesion among parents. As one informant explained, “We do proactive outreach as a district, embrace families and bring them in, provide additional training for parents especially around English as a Second Language, trying to connect them with social services and resources.”

**Economic Opportunity**

Many key informants and focus group participants reported improvement in the local economy, creating economic opportunities for residents and businesses in Houston. As one interviewee shared, “There are jobs here. They may not be high paying jobs, but they provide some income for people to survive.” The cost of living was also reported as a positive by focus group participants. As one focus group member shared, “There’s a lower cost of living. I came from California. Everything is cheaper here.”
COMMUNITY VISION AND SUGGESTIONS FOR FUTURE PROGRAMS AND SERVICES

Assessment participants were asked about their vision for the future of their community, and ideas for programs, services, and initiatives. Prominent themes that emerged related to the future program and service environment included the promotion of healthy eating and physical activity, improvement of transportation and roads, supporting people in their navigation of the health care system, expansion of available and access to health care services, and multi-sector collaboration across institutions.

Promote Healthy Living
Promotion of healthy eating, physical activity, and disease self-management by health care delivery systems and supporting social service organizations was a top suggestion of stakeholders. Interviewees and focus group members identified a need to address the rising rates of obesity and chronic disease in the region and promote community health for the long term. Suggestions about how to do this varied. For example, one informant suggested insurance incentives: “An insurance product can encourage healthy lifestyles. If you can put a reasonable one in peoples’ hands...that incentivizes people and it could have the biggest effect.” Another key informant noted that promotion of healthy living must be aligned with better access to health care services: “The long term solution is healthy living. Needs to be pushed concurrently with health care access. They need to come hand in hand.”

Other stakeholders suggested investment in education in communities with the highest rates of obesity to promote healthier habits: “I suggest major educational efforts. Not one size fits all but they would be tapping into multiple parts of the community where you can access individuals who need it.” To address this, they recommended more education programs around topics like nutrition and cooking healthy foods, and more community-based events around physical activity. Parent engagement was seen as critical. As one person stated, “We need to do more educating and engaging family. It needs to be reinforced at the family level.” Respondents saw many potential partners in this work including hospitals, schools and school nurses, social service organizations, public programs like WIC, faith institutions, and workplaces. Some respondents suggested PSAs with positive messaging around healthy lifestyles. One key informant noted that promotion of healthy living must be aligned with better access to health care services: “The long term solution is healthy living. Needs to be pushed concurrently with health care access. They need to come hand in hand.”

Improve Transportation
Transportation presents many problems in the communities served by MH Greater Heights, and stakeholders offered perspectives and ideas for future programs and services to alleviate the burden caused by traffic and the lack of transportation in some communities. As one key informant shared, “We really do need a robust transportation system. Increasing access to that will make a big difference in community health.” Focus group participants and key informant interviewees made suggestions about the direction of future efforts to address transportation. For example, stakeholders suggested non-profits could offer more transportation services. Stakeholders also suggested public transportation be expanded and promoted, especially in areas where the population is expanding.

Provide Support to Navigate the Health Care System
Residents need assistance in facing the number of barriers to accessing health care services in the communities served by MH Greater Heights. Stakeholders described existing strategies such as community health workers should be expanded. Numerous respondents pointed to the critical role that Community Health Workers (CHWs) play in educating patients and community members about prevention and in helping them to navigate the health system. For example, a stakeholder suggested, “Navigator programs for people to access healthcare.” Senior focus group respondents were particularly insistent that advocates be available for them to navigate the complexities of the health care system. As one senior focus group member stated, “We need personal advocates for us seniors. We don’t have anyone to fight for us, no one to talk for us.” As one person stated, “We need to teach health literacy. Sure, the ACA has been
positive but if people don’t know how to use their insurance, it’s useless.” Respondents also pointed to the need for larger systems reform that incentivizes a more holistic approach to health care, including a social support component. For example, one informant said, “if there was a mechanism to reimburse providers to provide social support within the healthcare setting...that would make patients’ lives easier. They wouldn’t have to worry as much about how to navigate the system. Maybe like a one-stop shop. More comprehensive care. Looking more like holistic care.”

Expand Availability and Access to Health Care Services
While the communities served by MH Greater Heights offer a multitude of health care services that are recognized as being among the best in the United States, access remains a top issue that community stakeholders wished to see addressed. As one informant stated, “We’ve got some of the greatest physicians in town. The cardiologists, the OBs, the neonatologists...and that’s great but we need more.” One strategy suggested by multiple stakeholders was investment in training local workforce to become health care professionals, particularly in specialties such as child psychiatry, vision, and behavioral health: “We need educational institutions to staff the innovative programs we need. That’s coming full circle. This is not what it was years ago...until we get enough providers...that’s when we will achieve the structure and service delivery to meet all the needs. We have to look beyond our own walls to do this.” This stakeholder also suggested partnerships with academic institutions to train the future workforce needed to meet the needs of the growing population.

Expand Access to Behavioral Health Services
Informants identified behavioral health care access as being a major unmet need in the communities served by MH Greater Heights. Residents reported that more behavioral health services were needed across the region and across age groups. “There is a major need for detox and behavioral health. There needs to be a closer link between population health and primary care,” said one key informant interviewee. Many stakeholders reported that the Texas Section 1115 Medicaid demonstration waiver had opened the door in Texas to improvement in access to and quality of behavioral health services. Stakeholders suggested Texas should pursue strategies that sustain these efforts and continue to promote innovation within the behavioral health services space.

Promote Multi-Sector, Cross-Institutional Collaboration
Health care and social service stakeholders frequently noted that, while many local services exist, there are opportunities to improve communication and collaborate to improve population health in Houston. Lack of collaboration among big players in the health care space—from medical institutions to public health organizations, government, payers, and social services—was a consistent theme across the key informant interviews. As one person shared, “Houston is a very large place and resources are available, they just aren’t allocated in a way that’s equitable.” Informants suggested that developing a common agenda across sectors with multiple institutions is a needed next step to improving population health: “If we could get everybody working on a common agenda...driving our resources into one area...If we could rally on one thing...that would be incredibly helpful. A concentrated effort.” As noted earlier, respondents reported that because the Texas Section 1115 Medicaid demonstration waiver is intended to promote systems transformation, it provides an opportunity for regional partnerships to address service gaps.
KEY THEMES AND CONCLUSION

Through a review of the secondary data and discussions with community residents and key informants, this assessment report provides an overview of the social and economic environment of the community served by MH Greater Heights, health conditions and behaviors that most affect the population, and perceptions of strengths and gaps in the current environment. Overarching themes that emerge from this synthesis include:

- Harris County and Houston are unique in terms of demographics and population health needs but also has a strong set of assets on which to build. Harris County is home to Houston, a city with a tremendously diverse population in terms of age, affluence, race, ethnicity, language, and health needs. While Harris County and Houston experience more challenges in terms of population health than their more suburban and rural neighbors in the region, they also have more accessible social and health resources and better public transportation for their residents.

- The increase in population over the past five years has placed a tremendous burden on existing public health, social, and health care infrastructure, a trend that places barriers to pursuing a healthy lifestyle among residents. Houston is experiencing challenges associated with rapid population growth, including strain on housing availability, time spent commuting to work, and the availability of resources to stay healthy. Infrastructure that does not keep up with demand leads to unmet need and sustains unhealthy habits in the community. Communities without easy access to healthy foods, safe roads, affordable housing, fewer sidewalks, and more violence are at a disadvantage in the pursuit of healthy living.

- Although there is economic opportunity for many residents, there are pockets of poverty and some residents face economic challenges, which can affect health. Seniors and members of low-income communities face challenges in accessing care and resources compared to their younger and higher income neighbors. While uninsured rates have decreased slightly over the past five years, many adults and children face barriers to obtaining care including cost, availability of providers, language and cultural barriers, and transportation. There are many support organizations in the community that help the uninsured obtain health insurance and charitable care such as federally qualified health centers, but stakeholders report more support is needed for this vulnerable population. Strategies such as community health workers may increase residents’ ability to navigate an increasingly complex health care and public health system.

- Obesity and concerns related to maintaining a healthy lifestyle emerged as challenges for the region. In Harris County, nearly 7 in 10 adults were considered overweight or obese. This emerged as a key issue in every focus group and interview discussion. Barriers ranged from individual challenges of lack of time to cultural issues involving cultural norms to structural challenges such as living in a food desert or having limited access to sidewalks, recreational facilities, or affordable fruits and vegetables. While several initiatives in the region are trying to address this issue, there appears ample opportunity for action, partnership, and focusing on specific at-risk populations (e.g., rural communities, youth).

- Behavioral health was identified as a key concern among residents. Stakeholders highlighted significant unmet needs for mental health and substance abuse services in the communities served by MH Greater Heights, particularly the burden of mental illness on young people and the incarcerated population. Findings from this current assessment process illustrate the importance of pursuing innovative strategies to address behavioral health issues, such as those programs that are part of the Texas Section 1115 Medicaid demonstration waiver. This area is ripe with opportunity to address needs that are currently not being met.

- Harris County and Houston have many health care assets, but access to those services is a challenge for some residents. Transportation to health services was identified as a substantial concern, especially for seniors and lower
income residents, as there are few public transportation options in the region. While existing public transportation is being expanded in a limited way in Harris County, some communities served by MH Greater Heights have limited access to public transportation. There is an opportunity to expand services to fill in gaps in transportation, ensuring residents are able to access primary care and behavioral health services as well as actively participate in their communities.
The CHNA data collection process was conducted over a six-month period. During that time, HRiA analyzed secondary data, and conducted numerous focus groups with community members and key informant interviews with leaders and providers. The severity and magnitude of epidemiological data were triangulated with level of concern among leaders and community members to identify key community needs. The following key health issues emerged most frequently from a review of the available data across all MHHS hospitals and were considered in the selection of the system-wide Strategic Implementation Plan (SIP) health priorities:

- Health Care Access
- Issues Related to Aging
- Behavioral Health, Including Substance Abuse and Mental Health
- Transportation
- Healthy Eating, Active Living, and Overweight/Obesity
- Chronic Disease Management

HRiA and MHHS conducted an initial narrowing of the priorities based on key criteria, outlined in FIGURE 46, which could be applied across all CHNAs in the system. MHHS applied these criteria to select system-level priorities for approval by representatives from MH Greater Heights. The final three key priorities identified by this process were:

1. Healthy Living
2. Behavioral Health
3. Health Care Access

In May 2016, HRiA led a two-hour, facilitated conversation with Memorial Hermann Health Systems (MHHS), MH Greater Heights, and the other 12 MHHS hospitals participating in its 2016 CHNA-SIP process. This conversation included a presentation of the priorities identified by the community health needs assessment (CHNA) across all MHHS hospitals, including a discussion of the key criteria for prioritization and the impact of these health issues on the most vulnerable populations. After discussion among all hospital facilities, representatives came to consensus on these three final key priorities for each hospital facility and agreed to set hospital-specific goals, objectives, and strategies within them that addressed the facility’s specific service area and populations served.

**FIGURE 57. PRIORITY CRITERIA**

<table>
<thead>
<tr>
<th>RELEVANCE</th>
<th>APPROPRIATENESS</th>
<th>IMPACT</th>
<th>FEASIBILITY</th>
</tr>
</thead>
<tbody>
<tr>
<td>How Important Is It?</td>
<td>Should We Do It?</td>
<td>What Will We Get Out of It?</td>
<td>Can We Do It?</td>
</tr>
<tr>
<td>Burden (magnitude and severity, economic cost; urgency of the problem)</td>
<td>Ethical and moral issues</td>
<td>Effectiveness</td>
<td>Community capacity</td>
</tr>
<tr>
<td>Community concern</td>
<td>Human rights issues</td>
<td>Coverage</td>
<td>Technical capacity</td>
</tr>
<tr>
<td>Focus on equity and accessibility</td>
<td>Legal aspects</td>
<td>Builds on or enhances current work</td>
<td>Economic capacity</td>
</tr>
<tr>
<td></td>
<td>Political and social acceptability</td>
<td>Can move the needle and demonstrate measureable outcomes</td>
<td>Political capacity/will</td>
</tr>
<tr>
<td></td>
<td>Public attitudes and values</td>
<td>Proven strategies to address multiple wins</td>
<td>Socio-cultural aspects</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Ethical aspects</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Can identify easy short-term wins</td>
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## APPENDIX A. REVIEW OF 2013 INITIATIVES

<table>
<thead>
<tr>
<th>CHNA PRIORITIES</th>
<th>OBJECTIVES</th>
<th>RESULTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Education and prevention for diseases and chronic conditions</td>
<td>To address education and prevention for diseases and chronic conditions (diabetes, heart disease, cancer, and Alzheimer’s) through community programs such as education sessions, screenings, support groups and health education publications.</td>
<td>In the past three years, MH-Greater Heights served 23,247 individuals through 23 programs focused on education and prevention for diseases and chronic conditions.</td>
</tr>
<tr>
<td>Address issues with service integration, such as coordination among providers and the fragmented continuum of care</td>
<td>To address information sharing, patients’ needs for medical homes, and inappropriate ED use through several programs.</td>
<td>All 11 participating hospitals are responding to the community’s concern about the lack of record sharing among providers through the Memorial Hermann Information Exchange (MHIE) which uses a secure, encrypted electronic network to integrate and house patients' digital medical records so they are easily accessible to authorized MHIE caregivers. The service is free to patients and only requires their consent. To date, 50.6% or 4,117,874 of Memorial Hermann patients have registered to participate. Another initiative is for all inpatient, outpatient, and emergency room progress notes to be electronic providing for up-to-date provider access anytime, anywhere. The ER navigation services at MH-Greater Heights consist of navigating self-pay/uninsured and Medicaid patients without a primary care provider and who present to the Emergency Department (ED) for primary care reasons. Greater Heights utilizes two Certified Community Health Workers (CHWs) to provide the following navigation services: referrals to PCPs/Medical Homes; assistance with scheduling follow-up doctors’ appointments, follow-up calls to assist patients with additional resources, and education on the importance of establishing a medical home. The Program has reduced ER visit utilization by 67% in the 12-months post discharge. MH-Greater Heights issued 282 vouchers to the Memorial Hermann Neighborhood Health Clinic—NW, which provides primary care services in a cost effective setting. The voucher</td>
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<tr>
<td>CHNA PRIORITIES</td>
<td>OBJECTIVES</td>
<td>RESULTS</td>
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<tr>
<td>CHNA PRIORITIES</td>
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<td>OBJECTIVES</td>
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<tr>
<td>RESULTS</td>
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<tr>
<td>program introduces the working poor to an affordable medical home.</td>
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<tr>
<td>MH-Greater Heights provides pharmaceutical support to a Memorial Hermann’s school-based clinics located nearby, in the Heights. The clinics are located in schools and school districts that have students with documented barriers to health care. Through transportation from feeder schools provided by the collaborating school districts, the Health Centers offer access to primary medical, mental health, nutritional and dental care services to underserved children. The clinic incurs 2,400 visits annually.</td>
<td></td>
<td></td>
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<tr>
<td><strong>Address barriers to primary care, such as affordability and shortage of providers</strong></td>
<td>To develop recruiting strategies for PCPs within the service area; To assess implementation of a Hospitalist Service to the medical staff to introduce, educate, and encourage service buy-in by physicians; and To continue to capitalize on community resources for primary care.</td>
<td>Memorial Hermann Medical Group (MHMG) employs primary care providers in our community and continues to promote and educate on the importance of having a family medicine physician in the community. Uninsured Emergency Center patients receive a visit voucher for Memorial Hermann’s Neighborhood Health Center, a primary care center whose mission is to serve the working poor. In addition to connecting un- and underinsured patients with Memorial Hermann’s Neighborhood Health Center, MH-Greater Heights works with 12 FQHCs in greater Houston area to find the right care in the right place at the right time.</td>
</tr>
<tr>
<td><strong>Address unhealthy lifestyles and behaviors</strong></td>
<td>To continue to reinforce healthy lifestyles and influence and encourage behavior change.</td>
<td>-MH-Greater Heights provides education regarding healthy lifestyle in the community newsletter, Breakthroughs in Health. -The Diabetes Support Group meets monthly. -At community events, MH-Greater Heights provides information about Heart, Stroke, Diabetes, Health and Wellness. -Red Wine and Dark Chocolate (Heart event) provides cooking demonstration on how to eat heart healthy. -Heart to Heart Employer Event, Women’s Health Symposium, free physicals for band students and Fall Family Fun Day were all opportunities for MH-Greater Heights to provide information on living a healthy lifestyle.</td>
</tr>
<tr>
<td>CHNA PRIORITIES</td>
<td>OBJECTIVES</td>
<td>RESULTS</td>
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<tr>
<td>Address barriers to mental healthcare, such as access to services and shortage of providers</td>
<td>To partner with the Psych Response Team to provide case management of post-discharge behavioral health patients in order to encourage compliance in prescribed health maintenance activities. To partner with the Psych Response Team to provide a crisis stabilization clinic that will provide rapid access to initial psychiatric treatment and outpatient services.</td>
<td>To address the barriers to obtaining mental health care, Memorial Hermann has a Psych Response Team used by all of its hospitals to identify, consult with and refer patients who would benefit from appropriate community mental health care. In FY 2016, consults totaled 8,335. Through appropriate referral and placement among 200+ mental health providers within the greater Houston area, the Psych Response Team has reduced emergency room average length of stay for psychiatric patients needing an inpatient psychiatric bed from 72 hours in 2000 to 5.5 hours today. The Psych Response Case Management Program provides intensive community-based case management services for individuals with chronic mental illness who struggle to maintain stability in the community. Since its inception in October 2013, this program has serviced 301 patients from enrollment to discharge. 1800 face-to-face encounters, where case manager and patient collaborate to maintain mental health stability, have resulted in a reduced client facility utilization of 68% in the 6-months post discharge. The Memorial Hermann Mental Health Crisis Clinic is an “Urgent Care” outpatient mental health clinic intended to serve individuals in crisis situations or individuals unable to follow...</td>
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</table>

- “Swap this for that” (Mindful) signage and information is presented in the cafeteria as well as through the digital screens updated daily, providing suggestions to healthier options that are being served on the particular day. Current signage in these areas displays the caloric difference between two choices on the menu.
- The menus have been updated with “Expressly for You” which visually guides patients to choose and recognize healthy options by providing carbohydrate serving size and icons for patients to identify.
- Vending machines, aside from those located in cafeteria, have been removed to encourage healthier eating options.
- Employee wellness programs continue to include incentive/disincentive for wellness/non wellness selections.
<table>
<thead>
<tr>
<th>CHNA PRIORITIES</th>
<th>OBJECTIVES</th>
<th>RESULTS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Decrease health disparities by targeting specific populations</strong></td>
<td>To address the populations most at risk including the safety net population, the unemployed, children, elderly and “almost elderly,” non-English speaking minorities, Asian immigrant populations and the homeless.</td>
<td>At-risk individuals, including the homeless, needing post-acute care are transferred to the Transitional Care Unit (TCU) at the MH-Southwest Campus. MH-Greater Heights also provides annually over a dozen personal care homes to homeless patients to ensure successful transition post discharge. MH-Greater Heights arranges for free or discounted medications and in special circumstances when a patient cannot afford an IV or antibiotics, the hospital provides the medication at discharge. Clothing, cab vouchers and Metro bus passes are provided as needed, as are helpful contact numbers provided by the Homeless Coalition. Case Management creates and distributes throughout the hospital lists of local food pantries, local shelters, low cost prescription programs and low cost and free clinics. MH-Greater Heights has a language line for patients and visitors. The monthly average is 328 calls. The most requested translated...</td>
</tr>
<tr>
<td>CHNA PRIORITIES</td>
<td>OBJECTIVES</td>
<td>RESULTS</td>
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<tr>
<td></td>
<td>language are Spanish, Vietnamese, Mandarin, and Arabic. Two laptops are available for American Sign Language interpretation.</td>
<td></td>
</tr>
<tr>
<td>Increased access to affordable dental care</td>
<td>Not Applicable</td>
<td>The need for “increased access to affordable dental care” is not addressed due to the fact that dental is not a core business function of Memorial Hermann and the limited capacity of each hospital to address those needs. Memorial Hermann fully supports local governments in their efforts to impact these issues.</td>
</tr>
<tr>
<td>Increased access to transportation</td>
<td>Not Applicable</td>
<td>The need for “increased access to transportation,” is not addressed due to the fact that transportation is not a core business function of Memorial Hermann and the limited capacity of each hospital to address those needs. Furthermore, the hospitals do not have the expertise to address access to transportation and the system views this issue as a larger city and county infrastructure related concern. Memorial Hermann fully supports local governments in their efforts to impact these issues.</td>
</tr>
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## APPENDIX B. FOCUS GROUP AND KEY INFORMANT ORGANIZATIONS

### Organizations Involved in Focus Group Recruitment by Population Segment

<table>
<thead>
<tr>
<th>Low-income community members from suburban area</th>
<th>ACCESS Health, Fort Bend County</th>
</tr>
</thead>
<tbody>
<tr>
<td>Seniors (65+ years old)</td>
<td>The Pinnacle Senior Center</td>
</tr>
<tr>
<td>Community members from more mid to higher SES area</td>
<td>Fort Bend County Women’s Club (Sugar Land)</td>
</tr>
<tr>
<td>Spanish-speaking Hispanic community members and English-speaking Hispanic community members</td>
<td>Association for the Advancement of Mexican Americans</td>
</tr>
<tr>
<td>Parents of preschool children (0-5 years old)</td>
<td>The Yellow School</td>
</tr>
<tr>
<td>Seniors (65+ years old)</td>
<td>Senior Center, City of South Houston</td>
</tr>
<tr>
<td>Low-income community members from rural area</td>
<td>Mamie George Community Center (Catholic Charities)</td>
</tr>
<tr>
<td>Adolescents (15-18 years old)</td>
<td>Katy Family YMCA</td>
</tr>
<tr>
<td>Low-income community members from urban area</td>
<td>Houston Food Bank</td>
</tr>
<tr>
<td>Asian community members</td>
<td>HOPE Clinic</td>
</tr>
</tbody>
</table>

### Organizations Contributing Key Informant Interviews

ACCESS Health (FQHC)  
Asian American Health Coalition  
Association for the Advancement of Mexican Americans  
Blue Cross Blue Shield  
Children at Risk  
Childrens Defense Fund  
Christ Clinic  
City of Houston, Department of Neighborhoods  
City of Houston, Department of Parks and Recreation  
Community Health Choice  
Fort Bend Health and Human Services  
Harris County Public Health and Environmental Services  
Harris Health  
Houston Independent School District  
Institute for Spirituality and Health  
Interfaith Community Clinic  
Interfaith Ministries of Greater Houston  
LoneStar Family Health Center  
Mayor’s Office for People with Disabilities  
Memorial Hermann Texas Medical Center  
Memorial Hermann Health System  
Office of Harris County Judge Ed Emmett  
One Voice Texas  
Pasadena Independent School District  
SETRAC (Southeast Texas Regional Advisory Council)  
Sheltering Arms Senior Services, Neighborhood Centers Inc.  
Southwest Management District  
Texas Legislature  
The Harris Center for Mental Health and IDD (MHMRA)  
Tri County Services  
United Way of Montgomery County  
University of Texas School of Public Health
Goals of the Focus Groups:
- To identify the perceived health needs and assets in the community
- To understand to what extent healthy living, including healthy eating and physical activity, is achievable in the community and perceived barriers to living a healthy lifestyle
- To gain an understanding of people’s barriers to health and how these barriers can be addressed
- To identify areas of opportunity for Memorial Hermann to address needs

[NOTE: THE QUESTIONS IN THE FOCUS GROUP GUIDE ARE INTENDED TO SERVE AS A GUIDE, BUT NOT A SCRIPT.]

BACKGROUND (5 MINUTES)

- Welcome everyone. My name is __________, and I work for Health Resources in Action, a non-profit public health organization in Boston.

- We’re going to be having a focus group today. Has anyone here been part of a focus group before? You are here because we want to hear your opinions. I want everyone to know there are no right or wrong answers during our discussion. We want to know your opinions, and those opinions might differ. This is fine. Please feel free to share your opinions, both positive and negative.

- Memorial Hermann Health System is conducting a community health assessment to gain a greater understanding of the health issues facing residents in the Greater Houston area and its specific communities, how those needs are currently being addressed, and where there are opportunities to address these needs in the future. The information you provide is a valuable part of this assessment and improving health services in the community.

- As you can see, I have a colleague with me today, [NAME], who is taking notes during our discussion. She works with me on this project. I want to give you my full attention, so she is helping me out by taking notes during the group and she doesn’t want to distract from our discussion.

- [NOTE AUDIOTAPING IF APPLICABLE] Just in case we miss something in our note-taking, we are also audio-taping the groups tonight. We are conducting several of these discussion groups around the Greater Houston area, and we want to make sure we capture everyone’s opinions. After all of the groups are done, we will be writing a summary report of the general opinions that have come up. In that report, I might provide some general information on what we discussed tonight, but I will not include any names or identifying information. Your responses will be strictly confidential. In our report, nothing you say here will be connected to your name.

- You might also notice that I have a stack of papers here. I have a lot of questions that I’d like to ask you tonight. I want to let you know that so if it seems like I cut a conversation a little short to move on to the next question, please don’t be offended. I just want to make sure we cover a number of different topics during our discussion tonight.

- Lastly, please turn off your cell phones or at least put them on vibrate mode. The group will last only about 80-90 minutes. If you need to go to the restroom during the discussion, please feel free to leave, but we’d appreciate it if you would go one at a time.

- Any questions before we begin our introductions and discussion?
INTRODUCTION AND WARM-UP (5-10 MINUTES)

- Now, first let’s spend a little time getting to know one another. Let’s go around the table and introduce ourselves. Please tell me: 1) Your first name; 2) what town or neighborhood you live in; and 3) something about yourself – such as how many children you have or what activities you like to do in your spare time. [AFTER ALL PARTICIPANTS INTRODUCE THEMSELVES, MODERATOR TO ANSWER INTRO QUESTIONS]

COMMUNITY AND HEALTH PERCEPTIONS (15-20 MINUTES)

- Tonight, we’re going to be talking a lot about the community or neighborhood that you live in. How would you describe your community?
  - If someone was thinking about moving into your community, what would you say are some of its biggest strengths or the most positive things about it? [PROBE ON COMMUNITY AND ORGANIZATIONAL ASSETS/STRENGTHS]

- What are some of the biggest problems or concerns in your community? [PROBE ON ISSUES IF NEEDED – HEALTH, ECONOMIC, SOCIAL, SAFETY, ETC.]
  - Just thinking about day-to-day life –working, getting your kids to school, things like that – what are some of the challenges or struggles you deal with on a day-to-day basis?

- What do you think are the most pressing health concerns in your community? [PROBE ON THE FOLLOWING SPECIFIC ISSUES IF NOT MENTIONED: CHRONIC DISEASES/CONDITIONS, MENTAL HEALTH, SUBSTANCE ABUSE, VIOLENCE, ACCESS TO HEALTHY FOOD; ENSURE ADEQUATE DISCUSSION TIME; PROBE ON HEALTH CARE ACCESS IF MENTIONED]
  - How have these health issues affected your community? [PROBE FOR SPECIFICS]

- Thinking about health and wellness in general, what helps keep you healthy?
  - What makes it easier to be healthy in your community?
  - What supports your health and wellness?
  - What makes it harder to be healthy in your community?
PERCEPTIONS OF PUBLIC HEALTH/PREVENTION SERVICES AND HEALTH CARE (15-20 minutes)

- Let’s talk about a few of the health issues you mentioned. [SELECT TOP HEALTH CONCERNS] What programs, services, and policies are you aware of in the community that currently focus on these health issues?

- What’s missing? What programs, services, or policies are currently not available that you think should be?

- What do you think the community should do to address these issues? [PROBE SPECIFICALLY ON WHAT THAT WOULD LOOK LIKE AND WHO WOULD BE INVOLVED TO MAKE THAT HAPPEN]
  - What do you think are some things a community could do to make it easier for people to be healthy?
  - If these things were available in the community, what would make you more likely to access these opportunities? [PROBE ON SPECIFICS IF NEEDED: What would these programs/services include? Where should they be offered? During what hours? How often? Would you prefer an individual or group setting?]

- [IF NOT ALREADY MENTIONED] I’d like to ask specifically about health care in your community. Have you or someone close to you ever experienced any challenges in trying to get health care? What specifically? [PROBE FOR BARRIERS: INSURANCE ISSUES, LANGUAGE BARRIERS, LACK OF TRANSPORTION, CHILD CARE, ETC.]
  - [NAME BARRIER] was mentioned as something that made it difficult to get health care. What do you think would help so that people don’t experience the same type of problem that you did in getting health care? What would be needed so that this doesn’t happen again? [REPEAT FOR OTHER BARRIERS]

PERCEPTIONS OF HEALTHY LIVING AND RELATED PROGRAMS (20-25 MINUTES)

- I’d now like to talk specifically about being able to live a healthy lifestyle such as being able to maintain a healthy weight and being able to exercise. In your opinion, is being able to maintain a healthy habits a concern in your community?
  - [PROBE IF NEEDED: How much of a concern is being able to live a healthy lifestyle relative to other health or economic issues?]

- What are some things that you think people can do to achieve or maintain a healthy weight in your community? [PROBE FOR RISK FACTORS AND BEHAVIORS: ACCESS TO HEALTHY FOODS, SAFE ENVIRONMENTS FOR BEING PHYSICALLY ACTIVE, EATING HEALTHY AT HOME OR WORK, TIME TO BE PHYSICALLY ACTIVE, ETC.]

- Let’s talk about healthy eating.
  - Do you know of any programs in your community that currently try to address healthy eating? What are they?
  - What kinds of programs or services would you want to see in your community to help people with healthy eating? What would the program look like?
• If these programs or services were available in the community, what would make you more likely to access these opportunities? (PROBE ON SPECIFICS IF NEEDED: Where should they be offered? During what hours? How often? Would you prefer an individual or group setting?)

• Let’s talk about exercise.

• Do you know of any programs in your community that currently try to help people exercise more? What are they?

• What kinds of programs or services would you want to see in your community to help people with physical activity? What would the program look like?

• If these programs or services were available in the community, what would make you more likely to access these opportunities? (PROBE ON SPECIFICS IF NEEDED: Where should they be offered? During what hours? How often? Would you prefer an individual or group setting?)

CLOSING (2 MINUTES)

• Thank you so much for your time and sharing your opinions. Before we end the discussion, is there anything that you wanted to add that you didn’t get a chance to bring up earlier?

• I want to thank you again for your time. And we’d like to express our thanks to you. [DISTRIBUTE STIPENDS AND HAVE RECEIPT FORMS SIGNED].

• As I mentioned before, we are conducting these groups around the Greater Houston area, and we’re also talking to people who work at organizations. After all this is over, we’re going to be writing up a report. Memorial Hermann wants to share these report findings with people who are interested in the results. We have a sign-up sheet here if you are interested in finding out more about the results of this effort and to receive a summary of the report findings. Feel free to provide your name and contact information, if you are interested. If you are not interested, you do not have to sign up. [PROVIDE CONTACT SHEET FOR INTERESTED PEOPLE]

• Thank you again. Your feedback is greatly valuable, and we greatly appreciate your time and for sharing your opinion.
APPENDIX D. KEY INFORMANT INTERVIEW GUIDE

Goals of the Key Informant Interview

- To determine perceptions of the health-related strengths and needs of individuals served in the primary service area of each MHHS facility
- To explore how these issues can be addressed in the future
- To identify the gaps, challenges, and opportunities for addressing community needs via the SIP planning process

[NOTE: QUESTIONS FOR THE INTERVIEW GUIDE ARE INTENDED TO SERVE AS A GUIDE, NOT A SCRIPT.]

BACKGROUND (5 minutes)

- Hi, my name is __________ and I am with Health Resources in Action, a non-profit public health organization. Thank you for taking the time to speak with me today.

- As I mentioned previously, we are working with Memorial Hermann Health System on their community health needs assessment. This effort aims to gain a greater understanding of the health needs of area residents served by [NAME OF FACILITY], how these health needs are currently being addressed, and opportunities to facilitate successful implementation of community activities for the future.

- We are conducting interviews with leaders in the community to understand different people’s perspectives on these issues. We greatly appreciate your feedback, insight, and honesty.

- Our interview will last about ____ minutes [EXPECTED RANGE FROM 30-60 MINUTES, DEPENDING ON INTERVIEWEE]. We recognize your time is valuable, so please let us know if you have any time constraints for our conversation. After all of the discussions are completed, we will be writing a summary report of the general themes that have emerged during the discussions. We will not connect any names or identifying information to any specific response. Nothing sensitive that you say here will be connected to directly to you in our report.

- Any questions before we begin our introductions and discussion?

THEIR AGENCY/ORGANIZATION

- What is role is at [NAME OF ORGANIZATION]? (probe: in relation to health care)

COMMUNITY ISSUES

- How would you describe the community which your organization serves?
  - What do you consider to be the community’s strongest assets/strengths?
    - What are some of its biggest concerns/issues in general? What challenges do residents face day-to-day?
  - What do you think are the most pressing health concerns in the community? Why? [PROBE ON SPECIFICS]

- Memorial Hermann Health System has identified promotion of healthy living as one of their priority areas for its assessment.
• Does [NAME OF COUNTY] have any programs that promote healthy lifestyles? (Prompt for nutrition, exercise.) If yes:
  • Do you think these programs are adequate? What is needed to improve these programs?
  • Which populations are most vulnerable or at risk for unhealthy lifestyles?
  • How do residents obtain information about these programs?
  • What do you think are community residents’ biggest challenges in adopting a healthy lifestyle?

• FOR ADDITIONAL PRIORITY HEALTH AREAS, ASK THE FOLLOWING QUESTIONS FOR EACH AREA:
  • Memorial Hermann has also identified [HEALTH ISSUE] as a priority area for its assessment of community needs.
    • How has [HEALTH ISSUE] affected your community?
    • Who do you consider to be the populations in the community most vulnerable or at risk for [THIS CONDITION / ISSUE]?
    • From your experience, what are community residents’ biggest challenges to addressing [THIS ISSUE]?
    • From your experience, what are organizations’ biggest challenges to addressing [THIS ISSUE]?
    • What programs, services, or policies are you aware of in the community that address [THIS HEALTH ISSUE]? [PROBE FOR SPECIFICS]
    • Where are the gaps? What program, services, or policies are currently not available that you think should be?

[REPEAT SET OF QUESTIONS FOR NEXT HEALTH ISSUE IDENTIFIED]

3. In general, what is occurring or has recently occurred that affects the health of the community you serve? [PROBE ON EXTERNAL FACTORS: Built environment, physical environment, economy, political environment, resources, organizational structures, etc.]

4. What are some factors that make it easier to be healthy in your community?

5. What are some factors that make it harder to be healthy in your community?

ACCESS TO CARE

• 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? What specifically? [PROBE IN DEPTH FOR BARRIERS TO CARE: INSURANCE ISSUES, LANGUAGE BARRIERS, LACK OF TRANSPORTATION, CHILD CARE, ETC.]

• What programs, services, or policies are you aware of in the community that address access to care?

• Where are the gaps? What program, services, or policies are currently not available that you think should be?

ADDRESSING COMMUNITY NEEDS IN THE FUTURE

• What would be the **1** thing that you think needs to be done in the next year that would help make the biggest difference in improving community health?

• Thinking about the future, what would you like to see MHHS/[NAME OF FACILITY] work on to address community needs?
  
  • What resources or supports are needed to facilitate this success? What needs to be in place as planning and implementation move forward?

CLOSING (2 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? Thank you again. Have a good day.
Please address written comments on the CHNA and Strategic Implementation Plan and requests for a copy of the CHNA to:

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