

Memorial Hermann Health System

Memorial Hermann Southwest Hospital
Community Health Needs Assessment 2016

June 8, 2016



Health Resources in Action
Advancing Public Health and Medical Research

TABLE OF CONTENTS

EXECUTIVE SUMMARY i

 Introduction i

 Community Health Needs Assessment Methods i

 Key Findings i

 Community Social and Economic Context i

 Health Outcomes and Behaviors ii

 Health Care Access and Utilization iv

 Community Assets and Resources v

 Community Vision and Suggestions for Future Programs and Services vi

 Key Themes and Conclusions vi

BACKGROUND 1

 About Memorial Hermann Health System..... 1

 About Memorial Hermann Southwest Hospital..... 1

 Scope of Current Community Health Needs Assessment..... 1

 Previous Community Health Needs Assessment 1

 Purpose of Community Health Needs Assessment..... 2

 Definition of Community Served for the CHNA 2

APPROACH & METHODS 4

 Study Approach..... 4

 Social Determinants of Health Framework..... 4

 Health Equity..... 5

 Methods..... 5

 Quantitative Data..... 5

 Qualitative Data 5

 Analysis 6

 Limitations..... 6

COMMUNITY SOCIAL AND ECONOMIC CONTEXT..... 7

 About the MH Southwest Community..... 7

 Population Size and Growth..... 7

 Racial and Ethnic Distribution 9

 Linguistic Diversity and Immigrant Population 10

 Income and Poverty 12

 Employment..... 14

 Education 15

 Housing 16

 Transportation 16

 Crime and Violence 18

HEALTH OUTCOMES AND BEHAVIORS	20
Overall Leading Causes of Death	20
Chronic Diseases and Related Risk Factors	23
Access to Healthy Food and Healthy Eating.....	23
Overweight and Obesity	29
Diabetes	30
Heart Disease, Stroke, and Cardiovascular Risk Factors	31
Asthma	32
Cancer	33
Behavioral Health.....	34
Mental Health	34
Substance Use and Abuse	36
Communicable Diseases	38
HIV	38
Other Sexually-Transmitted Diseases	39
Tuberculosis	40
Influenza.....	40
Reproductive and Maternal Health	40
Prenatal Care.....	41
Birth Outcomes	42
Teen Births	43
Oral Health	44
HEALTH CARE ACCESS AND UTILIZATION	45
Health Insurance	45
Health Care Access and Utilization	49
Access to Primary Care.....	49
Emergency and Inpatient Care for Primary Care Treatable Conditions.....	50
COMMUNITY ASSETS AND RESOURCES	51
Diverse, Cohesive Community	51
High-Quality, Plentiful Medical Care.....	51
Strong Public Health and Social Service System	51
Strong Schools.....	52
Economic Opportunity	52
COMMUNITY VISION AND SUGGESTIONS FOR FUTURE PROGRAMS AND SERVICES.....	53
Promote Healthy Living.....	53
Improve Transportation.....	53
Provide Support to Navigate the Health Care System	53
Expand Availability and Access to Health Care Services	53

Expand Access to Behavioral Health Services	54
Promote Multi-Sector, Cross-Institutional Collaboration	54
KEY THEMES AND CONCLUSION	55
PRIORITIZATION OF COMMUNITY HEALTH NEEDS	57
APPENDIX A. REVIEW OF 2013 INITIATIVES	58
APPENDIX B. FOCUS GROUP AND KEY INFORMANT ORGANIZATIONS	64
APPENDIX C. FOCUS GROUP GUIDE	65
APPENDIX D. KEY INFORMANT INTERVIEW GUIDE	69

EXECUTIVE SUMMARY

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 Southwest Hospital (MH Southwest). 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, select strategies, and identify partners to address these priority issues across the community. This report provides an overview of key findings from MH Southwest'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 Southwest's diverse community. ***The community defined for this CHNA included the cities and towns of Houston, Missouri City, Sugar Land, Stafford, El Campo, and Richmond within the counties of Harris, Fort Bend, and Wharton.***

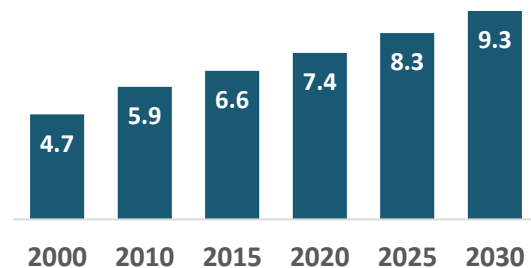
Key Findings

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

Community Social and Economic Context

- **Population Growth and Size:** Fort Bend County is the fastest growing county within the MH Southwest community (3.9% increase in 2010-2014 over the 2005-2009 estimate). The Houston metropolitan area, which is the most populous among the six MH Southwest communities, is projected to increase from 5.9 million in 2010 to 9.3 million in 2030.

PROJECTED TOTAL POPULATION IN MILLIONS, GREATER HOUSTON METROPOLITAN AREA, 2010-2030



- **Age Distribution:** Fort Bend and Harris Counties have the youngest population, whereas Wharton has the largest population of people 65 years of age and older (14.9%) among all three counties served by MH Southwest. Among the communities, Houston and El Campo's population tend to be younger, while Richmond and Sugar Land residents tend to be 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 Fort Bend County, 17.4% of the population self-identify as Asian, which is the largest non-Hispanic population across the three counties served by MH Southwest. Among cities and towns in MH Southwest's community, Richmond reports the largest Hispanic population, representing 62.4% of residents; Sugar Land reports the largest White, non-Hispanic population (44.8%). Missouri City reports the largest Black, non-Hispanic community (42.2%); Stafford reports the largest Asian, Non-Hispanic population (22.3%).

Houston has one of the largest immigrant populations in the United States.

- **Linguistic Diversity and Immigrant Population:** Almost half (42.5%) of Harris County residents speak a language other

than English at home. Across MH Southwest communities, speaking a non-English language at home ranges from a low of 30.7% of the population in Missouri City to a high of 48.0% in Stafford. There is a significant population of people who speak an Asian language in Fort Bend County, with 9.1% of non-English speakers speaking Chinese, 6.3% speaking Vietnamese, and 5.1% speaking another Asian language. One in four residents in Fort Bend and Harris Counties are foreign-born. From 2000 to 2013, Houston's immigrant population grew nearly twice the national average: a rate of 59% in 13 years versus 33% in the United States. Harris County has one of the largest refugee populations in the United States, with 5,285 refugees resettled there in 2014.

- **Income and Poverty:** The median household income in the three counties served by MH Southwest ranges from \$40,411 in Wharton County to \$85,297 in Fort Bend County. The highest median household income—Sugar Land (\$104,702)—is much higher than the community with the lowest median household income—El Campo (\$36,662). The percent of adults below the poverty line in 2009-2013 was highest in Houston (18.6%), Richmond (18.8%), and El Campo (18.9%).
- **Employment:** Unemployment rates for Texas and all three counties served by MH Southwest peaked in 2010 but have decreased consistently over the past five years.
- **Education:** Compared to other municipalities served by MH Southwest, Richmond has the highest percentage of residents with a high school diploma or less (67.7%). Sugar Land has the highest percentage of residents with a Bachelor's degree or higher (54.0%).
- **Housing:** Monthly median housing costs for owners are highest for home-owners in Fort Bend County (\$1,590) and lowest for home-owners in Wharton County (\$595); for renters, costs are highest in Fort Bend County (\$1,167) and lowest in Wharton County (\$657). In all counties, a higher percent of renters compared to owners pay 35% or more of their household income towards their housing costs (e.g., over half

(52.3%) of El Campo renters pay 35% or more of their household income toward housing).

“Transportation is a huge issue. It takes so long to commute.”

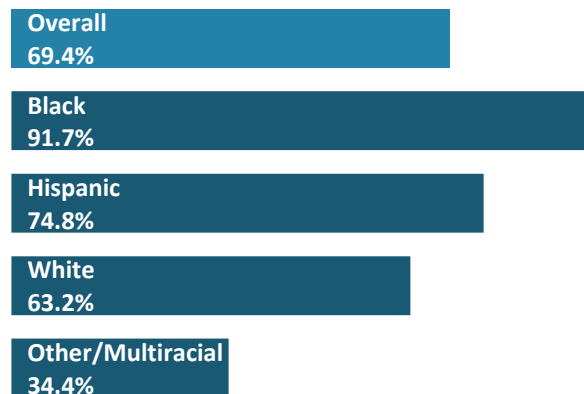
- **Transportation:** A majority of residents in the three counties served by MH Southwest commute to work by driving in a car, truck, or van alone. Among MH Southwest municipalities, Houston has the highest percentage of workers who commute by public transportation (4.3%).
- **Crime and Violence:** Among municipalities, the violent crime rate is highest in Houston (954.8 offenses per 100,000 population) and lowest in Missouri City (109.3 offenses per 100,000 population). The property crime rate is highest in Houston (4,693.7 offenses per 100,000 population) and lowest in Sugar Land (1,646.0 offenses per 100,000 population) and Missouri City (1,646.0 offenses per 100,000 population).

Health Outcomes and Behaviors

Physical Health

- **Overall Leading Causes of Death:** Wharton County experienced the highest overall mortality rate (868.2 deaths per 100,000 population) of the three counties served by MH Southwest, reflecting its older age distribution.
- **Overweight and Obesity:** In 2013, the percentage of Harris County residents reported that they were overweight or obese was 69.4%. (Data unavailable for Fort Bend or Wharton Counties.) 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.

PERCENT ADULTS SELF-REPORTED TO BE OVERWEIGHT OR OBESE, HARRIS COUNTY, 2014



- **Diabetes:** In Harris County in 2014, 10.4% of adults self-reported to have been diagnosed with diabetes. In 2013, Wharton County saw 22.9 hospital admissions per 100,000 population for uncontrolled diabetes, while Harris County had 11.3 admissions per 100,000 population.
- **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 3.6% of adults in Harris County self-reported having a heart attack during the past year. (Data unavailable for Fort Bend or Wharton Counties.) 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 2013, Fort Bend County adult residents had the highest self-reported rates of asthma (5.8%) and Harris County adult residents self-reported the lowest rates of asthma (4.6%). Among children aged 17 years and younger, the rate of asthma-related hospital discharges for Black, non-Hispanic children was three times the rate for White children (24.2 versus 10.2 per 10,000 population).
- **Cancer:** Harris and Wharton Counties see slightly higher incidence rates of cancer (444.1 per 100,000 population and 435.4 per 100,000 population) compared to Fort Bend County (409.4 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.

- **HIV and Sexually-Transmitted Diseases:** Harris County experiences the highest HIV rate in the region, with 516.1 people per 100,000 population reported living with HIV in the county, up from 478.4 people per 100,000 population in 2011. From 2011 to 2014, chlamydia and syphilis case rates have increased in all three counties; gonorrhea case rates increased in Harris and Fort Bend Counties but decreased in Wharton County during the same period.
- **Tuberculosis:** Harris County sees the highest tuberculosis rate in the area, with 7.2 cases per 100,000 population, three times the rate in Fort Bend County (2.8 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:** Across the three counties served by MH Southwest, Fort Bend County had the highest ratio of dentists (56.9 per 100,000 population) and Wharton County had the lowest ratio of dentists (42.7 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 born in Harris, Fort Bend, and Wharton Counties were born premature in 2013. In all three counties, Black, non-Hispanic babies were more likely to be born low birthweight than babies of other races/ethnicities. Hispanic teen mothers have the highest birth rates across the three-county region, with a high of 6.7% in Wharton County. Among live births, 56.1% in Harris County and 62.9% in Fort Bend County occurred to mothers who received prenatal care in their first trimester. Rates of receiving no prenatal care were 3.9% and 1.9% for Harris and Fort Bend County mothers, respectively.

One in four children in Harris and Wharton Counties was food insecure in 2013.

Health Behaviors

- **Food Access:** In Harris and Wharton Counties, more than a quarter of all children are considered to be lacking reliable access to a sufficient quantity of affordable, nutritious food—or food insecure. Residents of the three counties served by MH Southwest have similar access to grocery stores, ranging from 15 grocery stores per 100,000 population in Fort Bend County to 19 grocery stores per 100,000 population in Harris County. Wharton County low-income residents have the highest access to farmer's markets (41.9%).
- **Healthy Eating:** Only 12.2% of Harris County adults in 2013 indicated that they ate fruits and vegetables five or more times per day. (Data unavailable for Fort Bend or Wharton Counties.) 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 7 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. (Data unavailable for Fort Bend or Wharton Counties.) 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 5 days in the past 7 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. (Data unavailable for Fort Bend or Wharton Counties.) 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, non-Hispanic residents (24.2%) in Harris County. Rates of psychiatric discharge varied from 2.3 per 1,000 people in Fort Bend County to 5.3 per 1,000 in Wharton County.

“At a state level, we are funded 49th in behavioral health care. We have not done a good job in Texas of investing in mental health.”

- **Youth Mental Health:** Among youth in Houston in 2013, one-third of Hispanic high school students self-reported feeling sad or hopeless for two or more weeks in the past year, and 12.1% of Hispanic Houston high school students self-reported they attempted suicide at least once in the past year. Black, non-Hispanic Houston high school students self-reported a suicide attempt rate of 11.3%.
- **Substance Use and Abuse:** 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. (Data unavailable for Fort Bend or Wharton Counties.) Wharton County had the highest rates of non-fatal drinking-under-the-influence (DUI) motor vehicle accidents in the past month (168.6 per 100,000 population), and Fort Bend County had the lowest rate (45.6 per 100,000). Just under two-thirds (63%) of Houston high school students self-reported lifetime substance use of alcohol, followed by marijuana (44%), and tobacco (43%).

Health Care Access and Utilization

- **Health Insurance:** Uninsurance rates decreased for Harris and Fort Bend counties following the passage of the Affordable Care Act in 2010. Harris County had higher rates of uninsurance than Fort Bend County during the 2009-2014 period. In 2014, 22.0% of the total population in Harris County was uninsured compared to 12.1% in Fort Bend County. In 2013, the zip codes in the immediate geographic area around the MH Southwest facility had the highest

rates of uninsurance for the total population. The top zip code for uninsurance was 77081, where 49.2% of the total population is uninsured. Among the zip codes served by MH Southwest, 180,332 residents were enrolled in Medicaid. In Fort Bend County, the zip code with the most Medicaid enrollees was in 77489 in Missouri City (6,456 enrollees). In Harris County, the zip code with the most Medicaid enrollees was 77036 in Houston (20,058 enrollees).

- **Access to Primary Care:** Harris County had a higher proportion of primary care physicians (82.6 per 100,000 population) compared to Fort Bend (59.9 per 100,000 population) and Wharton Counties (47.5 per 100,000 population). In Harris County, 38.2% of adult residents reported in the BRFSS survey that they did not have a doctor or healthcare provider. (Data unavailable for Fort Bend and Wharton Counties.) In the Houston-The Woodlands-Sugar Land MSA, 34% of physicians accept all new Medicaid patients, 24% limit their acceptance of new Medicaid patients, and 42% accept no new Medicaid patients. 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. (Data on Medicaid acceptance is unavailable for Fort Bend and Wharton Counties due to a low survey response rate.)
- **Emergency Department Care at MH Southwest for Primary Care Treatable Conditions:** Of MH Southwest's 59,681 ED visits in 2013, 67.7% were from patients who were uninsured or on Medicaid, and 34.8% were classified as non-emergent or with primary care treatable conditions. Of all ER visits, 25% were for chronic conditions of which 18% were hypertension related. Eighteen zip codes in the MH Southwest's CHNA-defined community were among the top 20 zip codes for the highest number of primary care treatable ED visits at the MH Southwest in 2013.
- **Inpatient Care at MH Southwest for Ambulatory Care Sensitive Conditions:** Of MH Southwest's 17,176 inpatient discharges in 2015, 7,650 inpatient discharges or 38.2% were related to an

ambulatory care sensitive condition. The top four ambulatory care sensitive conditions that resulted in inpatient care at MH Southwest in 2015 were diabetes (189 discharges), congestive heart failure (167 discharges), chronic obstructive pulmonary disorder (81 discharges), and bacterial pneumonia (81 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 Houston and within communities served by MH Southwest. 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:** The communities of MH Southwest are 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:** The communities served by MH Southwest have 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 communities served by MH Southwest.

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 many problems in the communities served by MH Southwest, 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 the communities served by MH Southwest. 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 the communities served by MH Southwest.
- **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 the communities that serve MH Southwest.

Key Themes and Conclusions

- **Harris County is unique in terms of demographics and population health needs compared to Fort Bend and Wharton counties.** While Harris County experiences more challenges in terms of population health than more suburban and rural neighbors in the MH Southwest community, 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**

contributes to residents' barriers to pursuing a healthy lifestyle.

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 Southwest. Key informants particularly drew attention to the burden of mental illness in 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.

- **Communities served by MH Southwest 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 Southwest Hospital

Located in the heart of southwest Houston, Memorial Hermann Southwest Hospital (hereafter MH Southwest) has been caring for families since 1977. A 594-bed facility, Memorial Hermann Southwest employs state-of-the-art technology and a team of highly trained affiliated physicians to offer world-class care close to home. MH Southwest engages the diverse community that it serves through innovative programs designed to meet each demographic group's unique health and cultural needs. Some of these programs include the Memorial Hermann Heart and Vascular Institute, a cancer center, a joint replacement program, a neuroscience center, specialized services for women and the Asian community, a digestive health center, and an imaging program. As a Level III state designated trauma facility and with support provided by Memorial Hermann's Life Flight service, MH Southwest is equipped for Houston's most critical and urgent medical emergencies. MH Southwest is also home to the University Place Retirement Community, an award-winning 180-unit senior living residence.

Scope of Current Community Health Needs Assessment

There are 13 hospitals participating in MHHS's community health needs assessment (CHNA) process 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. Each hospital 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 the 2013 CHNA and provides additional information about community unmet needs.

Purpose of Community Health Needs Assessment

As a way to ensure that MH Southwest 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 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 Southwest's communities and its sub-populations
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 Southwest, 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 Southwest defines its community for the CHNA process as the top 75% of zip codes corresponding to inpatient discharges in fiscal year 2015. These selected zip codes correspond to the communities of Houston, Missouri City, Sugar Land, Stafford, El Campo, and Richmond within the counties of Harris, Fort Bend, and Wharton.

As shown in TABLE 1, a large majority of MH Southwest inpatient discharges in fiscal year 2015 occurred among residents of Harris County (84.8%) or Fort Bend (13.9%); only a small proportion of inpatient discharges occurred among Wharton County residents (1.3%). At a city level, most MH Southwest inpatient discharges occurred among residents of Houston (84.8%) followed by Missouri City (5.3%). FIGURE 1 presents a map of MH Southwest's CHNA defined community by zip code.

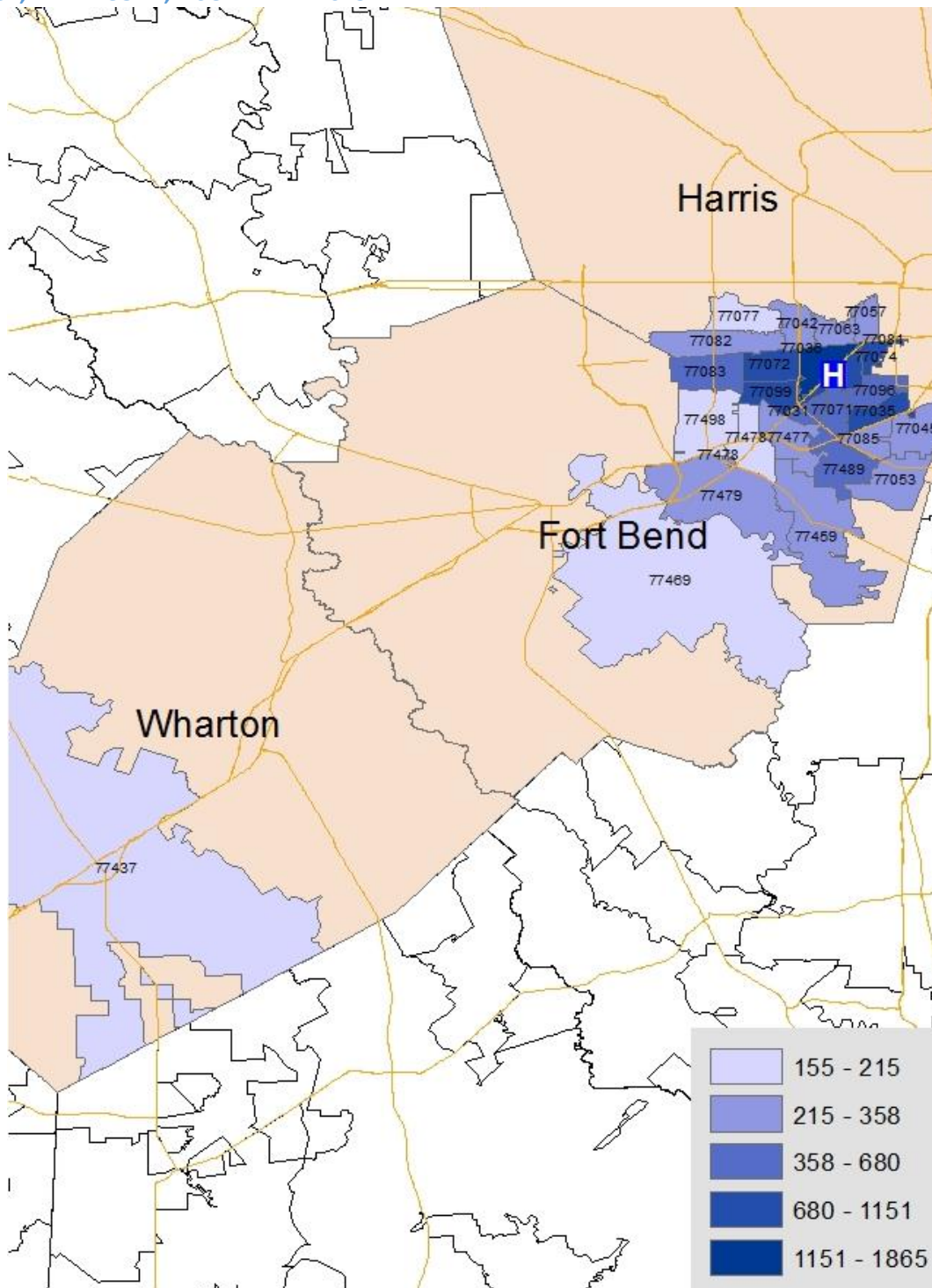
TABLE 1. NUMBER AND PERCENT OF INPATIENT DISCHARGES REPRESENTING THE TOP 75% OF ZIP CODES SERVED BY MH SOUTHWEST, BY COUNTY AND CITY, FISCAL YEAR 2015

Geography	# inpatient discharges	% inpatient discharges
Harris County	11,057	84.8%
Fort Bend County	1,816	13.9%
Wharton County	171	1.3%
Houston	11,057	84.8%
Missouri City	696	5.3%
Sugar Land	658	5.0%
Stafford	306	2.3%
El Campo	171	1.3%
Richmond	156	1.2%

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 served

FIGURE 1. NUMBER OF INPATIENT DISCHARGES REPRESENTING THE TOP 75% OF ZIP CODES SERVED BY MH SOUTHWEST, BY ZIP CODE, FISCAL YEAR 2015



Zip codes

77036, 77074, 77099, 77072, 77035, 77081, 77071, 77096, 77083, 77031, 77489, 77063, 77053, 77477, 77057, 77082, 77045, 77479, 77459, 77042, 77085, 77498, 77437, 77478, 77469, 77077

Cities and towns

Houston, Missouri City, Sugar Land, Stafford, El Campo, and Richmond

Counties

Harris, Fort Bend, and Wharton

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

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

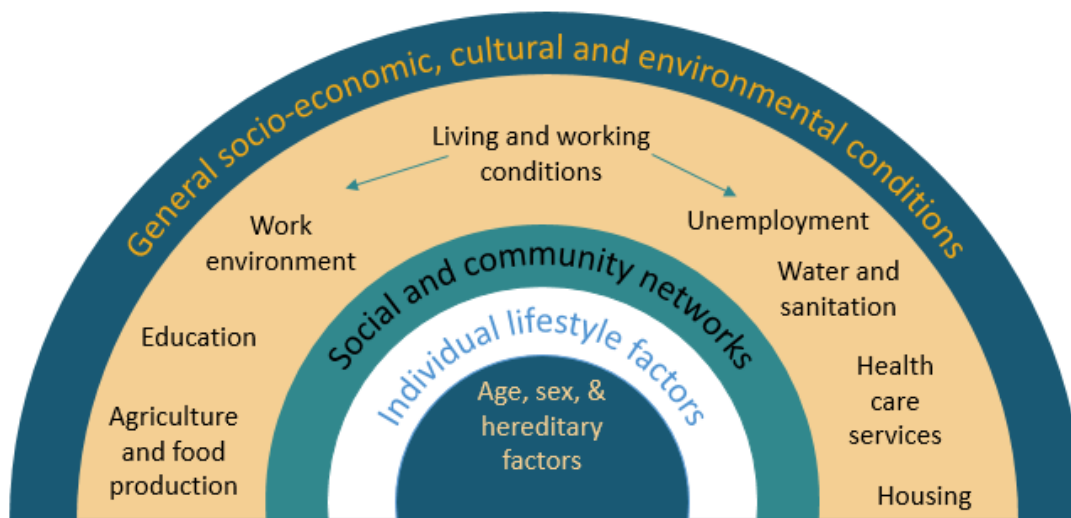
Social Determinants of Health Framework

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 Southwest's community.

FIGURE 2. SOCIAL DETERMINANTS OF HEALTH FRAMEWORK



SOURCE: World Health Organization, Commission on the Social Determinants of Health, Towards a Conceptual Framework for Analysis and Action on the Social Determinants of Health, 2005. Graphic reformatted by Health Resources in Action.

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/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 CHNA 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 Southwest’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 Southwest’s community from October 2015 through February 2016. Focus groups were held with 93 community residents drawn from the region. Focus groups were conducted with ten 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 Southwest community as well as the region 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., the Asian community representing the MH Southwest 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 Southwest discussions 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 Southwest. Key informants were recruited by HRIa, working from recommendations provided by MHHS and MH Southwest.

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 Southwest 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 Southwest'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 town or county level. Additionally, several sources did not provide current data stratified by race/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 System (BRFSS) and the Texas Behavioral Risk Factor Surveillance System, should be interpreted with particular caution. In some instances, respondents may over- or under-report 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 comparisons 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 Southwest 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 Southwest community, particularly the diversity of the population. Over the past two decades, the neighborhoods known as “The Southwest” have experienced a cultural and economic transformation. In addition to a burgeoning population, many immigrant families have moved into the Southwest area. As a result, the areas immediately outside of MH Southwest reflect an exciting cultural diversity, particularly in its growing Asian population. The Southwest area has undergone substantial construction to improve roads and increase access to public transportation such as light rail.

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 and Fort Bend counties have experienced an increase of population growth over the several years, affecting the demand for resources by residents. Interview and focus group participants frequently noted that the communities served by MH Southwest are 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 MH Southwest’s community.

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 the three counties served by MH Southwest was 4,943,773 based on 2010-2014 ACS estimates. Between the time periods 2005-2010 and 2010-

2014, the population in the counties of Harris, Fort Bend, and Wharton increased by 2.3%. Fort Bend County is the fastest growing county within the MH Southwest community defined for this CHNA, with a 3.9% increase in 2010-2014 over the 2005-2009 estimate. Houston (population: 2,167,988) is the most populous city across the three counties served by MH Southwest. El Campo (population: 11,549) is the least populous city across the three counties served by MH Southwest.

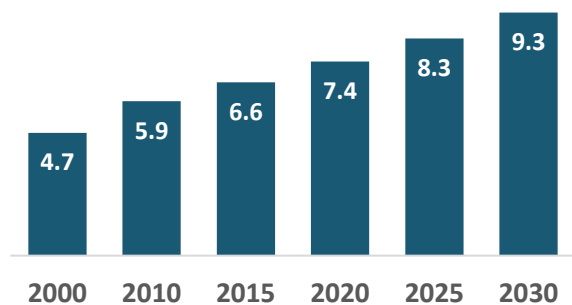
TABLE 2. POPULATION SIZE AND GROWTH ESTIMATES, BY STATE, COUNTY, AND CITY/TOWN, 2005-2009 and 2010-2014

Geography	2005-2009	2010-2014	% change
Texas	23,819,042	26,092,033	9.5%
Harris County	4,182,285	4,269,608	2.1%
Fort Bend County	608,939	632,946	3.9%
Wharton County	41,185	41,219	0.1%
Houston	2,191,400	2,167,988	-1.1%
Missouri City	72,789	69,152	-5.0%
Sugar Land	79,204	82,420	4.1%
Stafford	19,089	17,990	-5.8%
El Campo	10,808	11,549	6.9%
Richmond	13,446	11,769	-12.5%

DATA SOURCE: U.S. Census Bureau, American Community Survey 5-Year Estimates, 2005-2009 and 2010-2014

Focus group participants and key informants reported that the areas served by MH Southwest are experiencing rapid population growth, a trend that makes the community stand out nationally. 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.”* Focus group participants reported that population influx has had an effect on their neighborhoods. *“My neighborhood is transitional. Many have moved away. Before, you would get to know people through your children. As a senior, you see people around, but you don’t get to know them.”* 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).

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

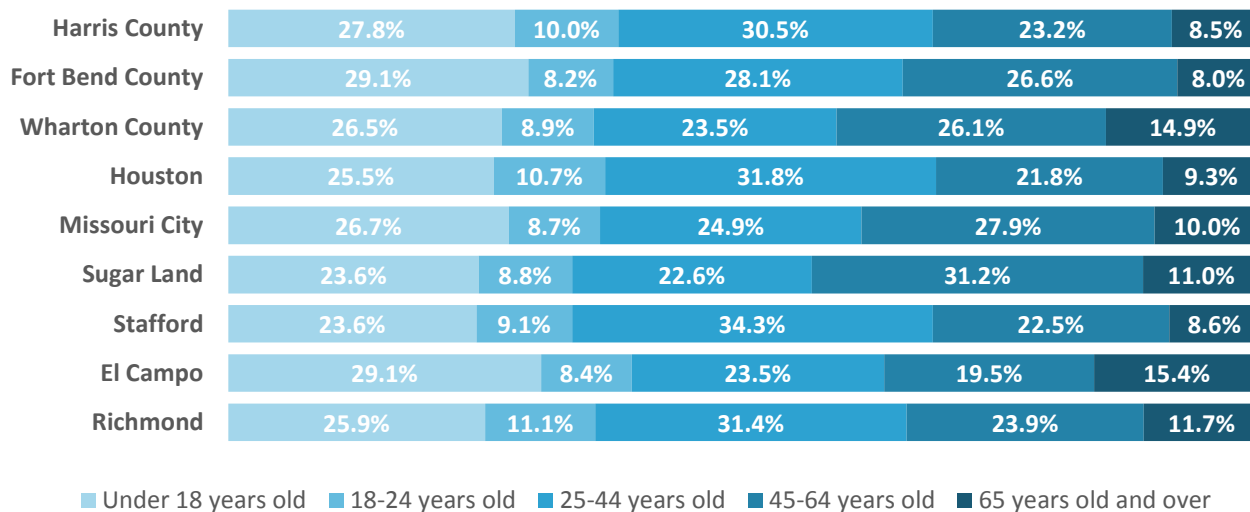
“My neighborhood is diverse in terms of age. There are some seniors, but also a lot of working young people.”

Focus group participant

Age Distribution

As populations age, the needs of the community shift based on increased overall need for health care services. The communities served by MH Southwest are also diverse in terms of age. FIGURE 4 shows the age distribution of MH Southwest’s community at the county and city levels. Fort Bend and Harris Counties have the youngest population, whereas Wharton has the largest population of people 65 years of age and older (14.9%) among all three counties served by MH Southwest. It is important to note that Wharton County serves the smallest proportion of patients at MH Southwest compared to Harris and Fort Bend Counties. Communities with the youngest population include El Campo and Houston. Communities with the highest percentage of older residents (age 65 and older) include Richmond and Sugar Land.

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



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.

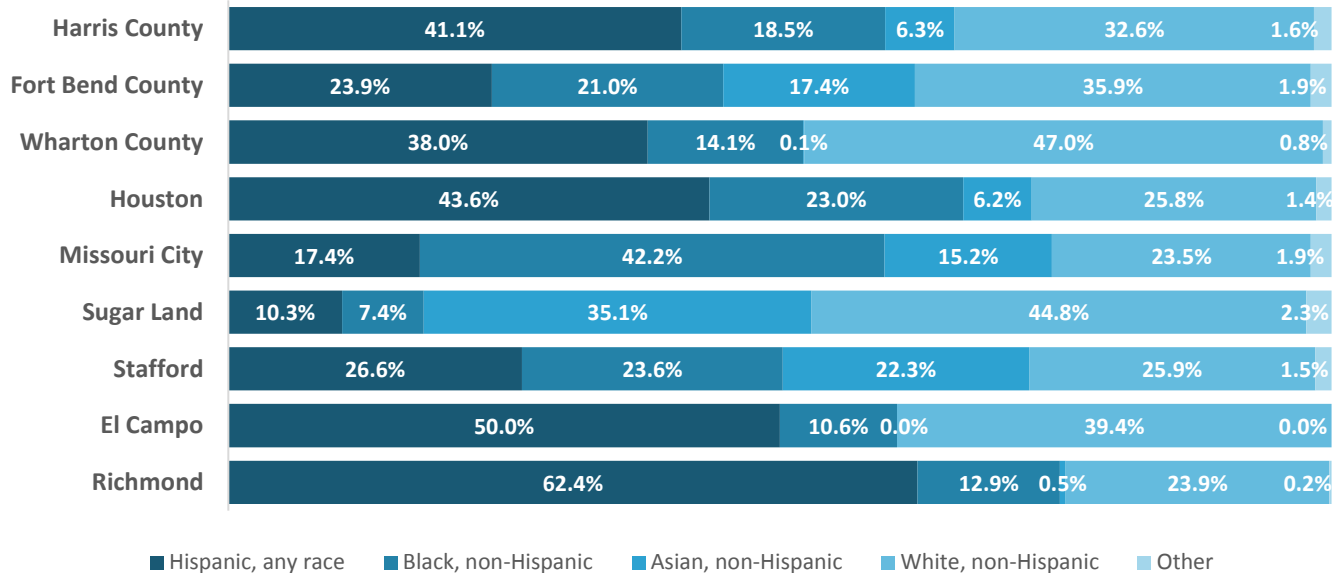
Qualitative and census data demonstrate the broad diversity of the population served by MH Southwest in terms of racial and ethnic composition. Focus group participants and key informants frequently described the racial and ethnic distribution of their

“There are different cultures... different ethnic groups in different areas of town. It’s a mixture.”

Key informant interviewee

community as diverse. One focus group participant reported, *“It’s a whole melting pot here.”* A key informant talked about this diversity as being an asset within the MH Southwest community: *“I think it is our diversification...of cultures. We are a very diverse community, and I think it gives our region great opportunity.”* At the county level, 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 Fort Bend, 17.4% of the population self-identify as Asian, the largest Asian, non-Hispanic population across the three counties served by MH Southwest. Among cities and towns in MH Southwest’s community, Richmond reports the largest Hispanic population, representing 62.4% of residents; Sugar Land reports the largest White, non-Hispanic population (44.8%). Missouri City reports the largest Black, non-Hispanic community (42.2%); Stafford reports the largest Asian, Non-Hispanic population (22.3%). FIGURE 5 illustrates the racial and ethnic distribution of MH Southwest’s communities.

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



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.

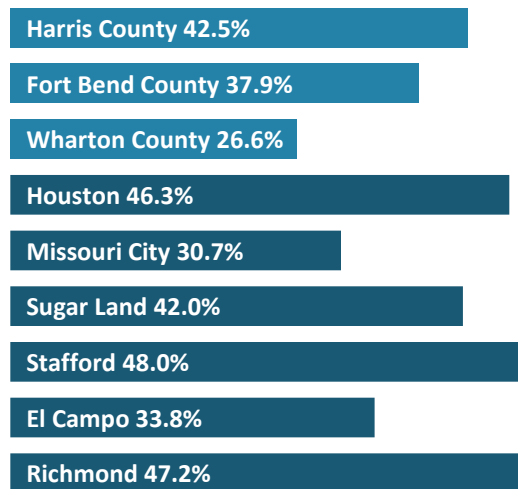
“There are as many languages spoken here in Greater Houston as there are people.”

Key informant interviewee

MH Southwest serves a community that speaks many languages other than English. Many (42.5%) Harris County residents speak a language other than English at home (FIGURE 6). 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.”* The proportion of the population that

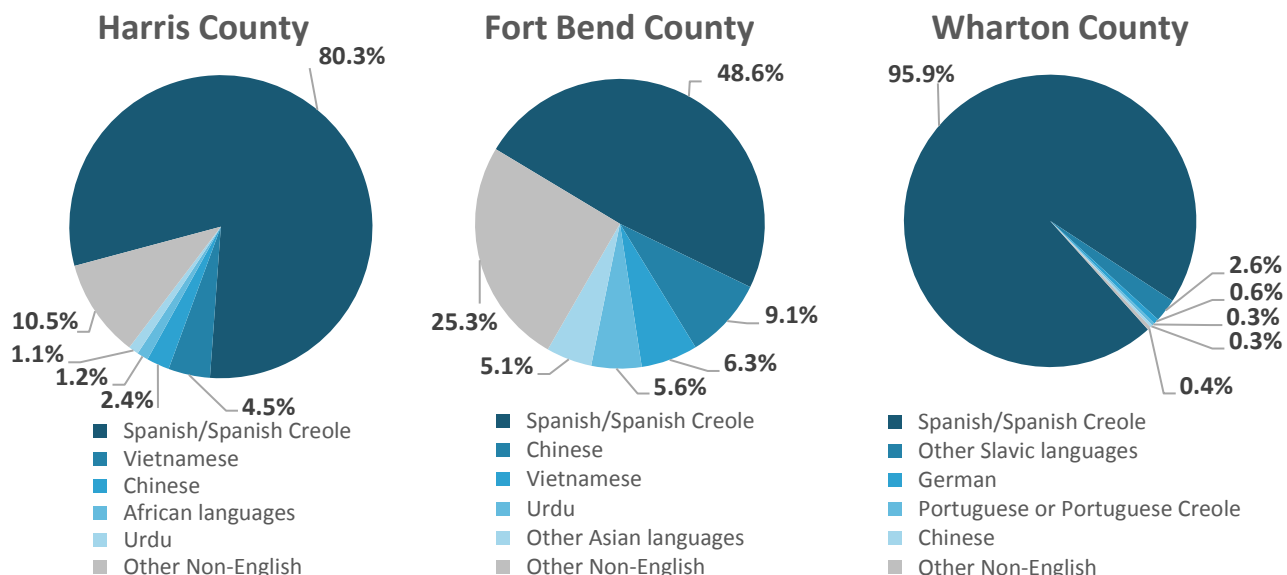
speaks a language other than English at home ranges from a low of 30.7% in Missouri City to a high of 48.0% in Stafford. FIGURE 7 shows the top five non-English languages spoken by County. There is a significant population of people who speak an Asian language in Fort Bend County, with 9.1% of non-English speakers speaking Chinese, 6.3% speaking Vietnamese, and 5.1% speaking another Asian language.

FIGURE 6. PERCENT POPULATION OVER 5 YEARS WHO SPEAK LANGUAGE OTHER THAN ENGLISH AT HOME, BY COUNTY AND CITY, 2009-2013



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

FIGURE 7. TOP FIVE NON-ENGLISH LANGUAGES SPOKEN AMONG THOSE WHO SPEAK A LANGUAGE OTHER THAN ENGLISH AT HOME, BY COUNTY, 2009-2013

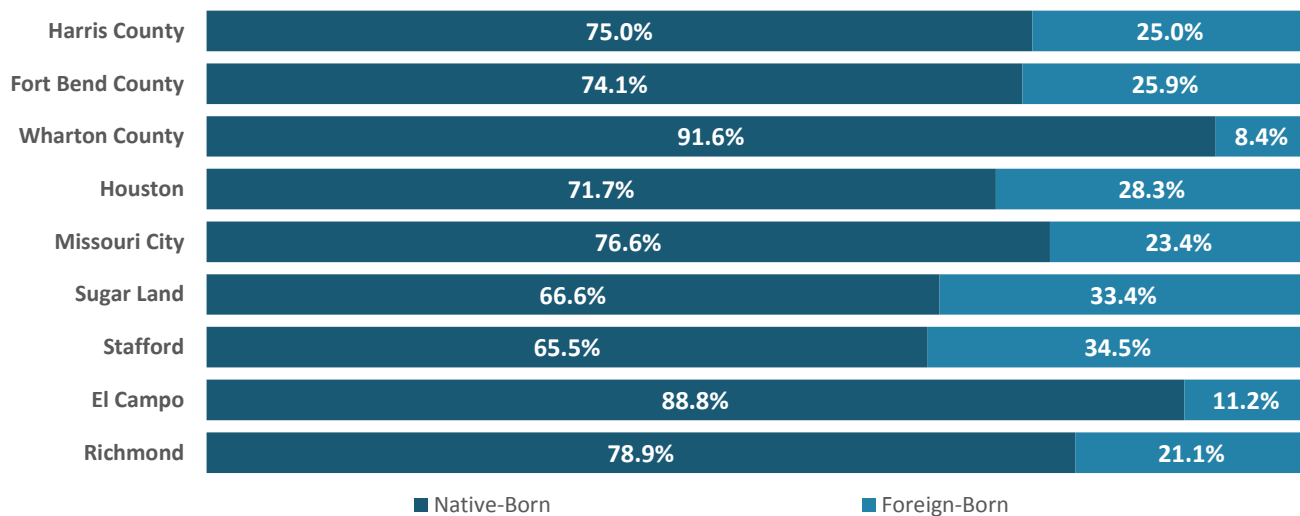


DATA SOURCE: U.S. Census Bureau, American Community Survey 5-Year Estimates, 2009-2013

Immigration is a major part of the identity of 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 immigrants groups originate from Mexico and Vietnam, whereas the newest immigrant originate from Guatemala and Honduras. Informants universally described the MH Southwest community as a collection of immigrants from both within and outside of the United States. 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 MH Southwest community. One in four residents in Fort Bend and Harris Counties are foreign-born, whereas only 8.4% of Wharton County residents are foreign-born (FIGURE 8). 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 8. NATIVITY, BY COUNTY AND CITY, 2009-2013



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 significant barrier to accessing goods and services.

Focus group participants and key informant interviewees alike reported that many residents face a choice between buying essentials such as food and rent and receiving health care. For example, a senior focus group participant shared, *“But at the end of day, if you are on fixed income, do you choose to pay for insurance or pay for food for your family?”* Another senior focus group participant mentioned that obtaining access to the internet, a source of health care resource information, presented challenges due to income: *“Most seniors cannot afford the Internet because of their [low] income.”*

Another population segment at risk for poverty and its effects identified by informants was the disabled population: *“People with disabilities have a hard time when they don’t have family or supports or social networks where they can get financial assistance and a place to live. I get a lot of people who can’t pay their rent and get evicted and we have to connect them with shelters or temporary housing, and it’s always very difficult. Poverty makes them relocate all the time.”* 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, may want to put food on table instead of see the doctor, and then they get to the ER. It’s a vicious cycle.”* Data from the 2009-2013 American Community Survey shows that the median household income in the three counties served by MH Southwest ranges from \$40,411 in Wharton County to \$85,297 in Fort Bend County. However, income varies by town. In 2013, Sugar Land had highest median household income (\$104,702), and El Campo had the lowest median household income (\$40,698) (FIGURE 9). FIGURE 10 shows the percent of adults below the poverty line in 2009-2013. The percent of

“Financially [residents] are not where they need to be.”

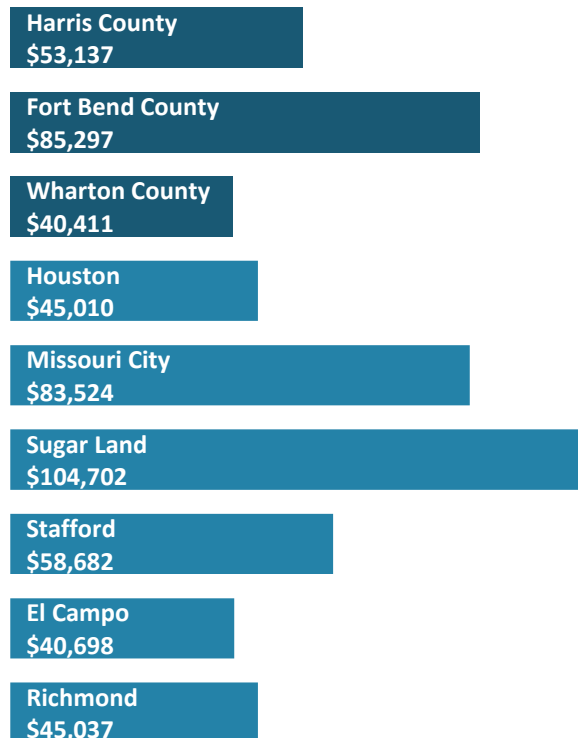
Key informant interviewee

“A lot of people I work with are on Supplemental Security Income and they’re barely able to pay bills and their rent.”

Key informant interviewee

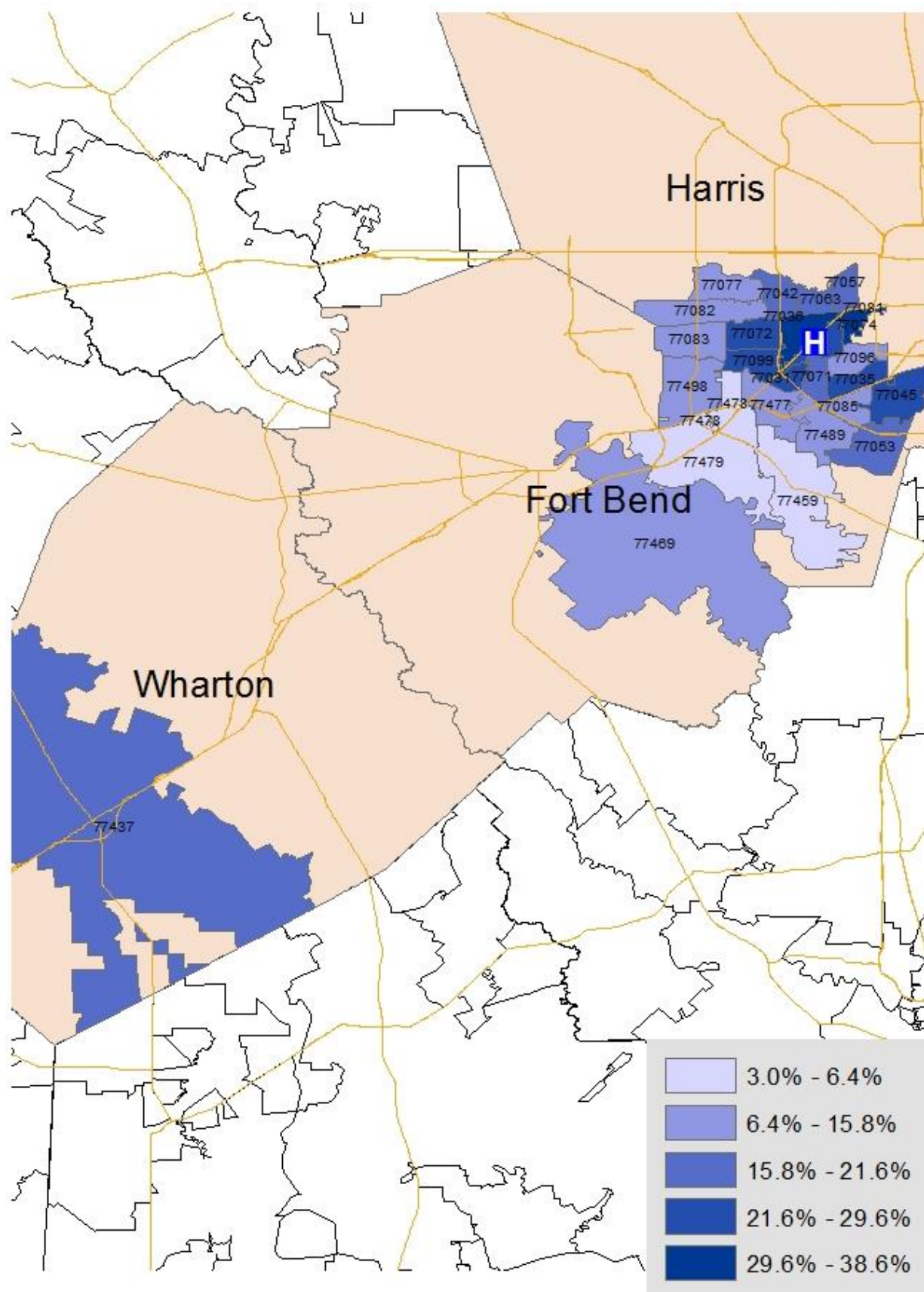
adults below the poverty line in 2009-2013 was highest in Houston (18.6%), Richmond (18.8%), and El Campo (18.9%). It should be noted that federal poverty level in 2013 was \$11,490 for a single individual and \$23,550 for a family of four.

FIGURE 9. MEDIAN HOUSEHOLD INCOME, BY COUNTY AND CITY, 2009-2013



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

FIGURE 10. PERCENT OF 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

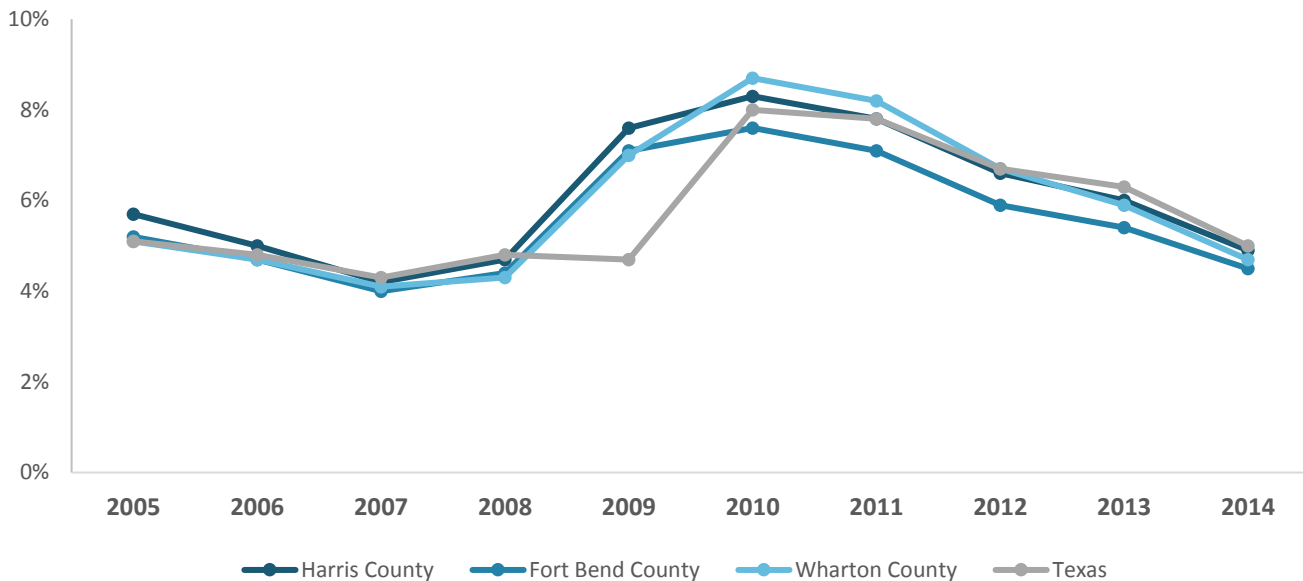
Employment status also can have a significant impact on one's health. Many focus group participants and key informant interviewees reported the economic outlook of the Greater Houston area was positive. *"The economy is robust, a little slowed with the price of oil being low. It will continue to be low. Nothing indicating that it will rise anytime soon. I don't think we will see a lot of home foreclosures but you will see some unemployment due to the low oil costs."* Data from the American Community Survey show that the

unemployment rates for Texas and all three counties served by MH Southwest peaked in 2010 but have decreased consistently over the past five years. (FIGURE 11).

"In terms of industry here, we are pretty stable. We don't have a high unemployment rate here."

Key informant interviewee

FIGURE 11. TRENDS IN UNEMPLOYMENT RATE, BY COUNTY AND STATE, 2005-2014



DATA SOURCE: Bureau of Labor Statistics, Local Area Unemployment Statistics, Labor force data by county; and Bureau of Labor Statistics, Current Population Survey, Annual Averages, 2005-2014

Education

Educational attainment is often associated with income, and higher educational levels can translate to greater health literacy. Interview and focus group participants described MH Southwest's community residents as "creative" and working in a wide range of professions. Compared to other municipalities served by MH Southwest, Richmond has the highest percentage of residents with a high school diploma or less (67.7%) (FIGURE 12). Sugar Land has the highest percentage of residents with a Bachelor's degree or higher (54.0%).

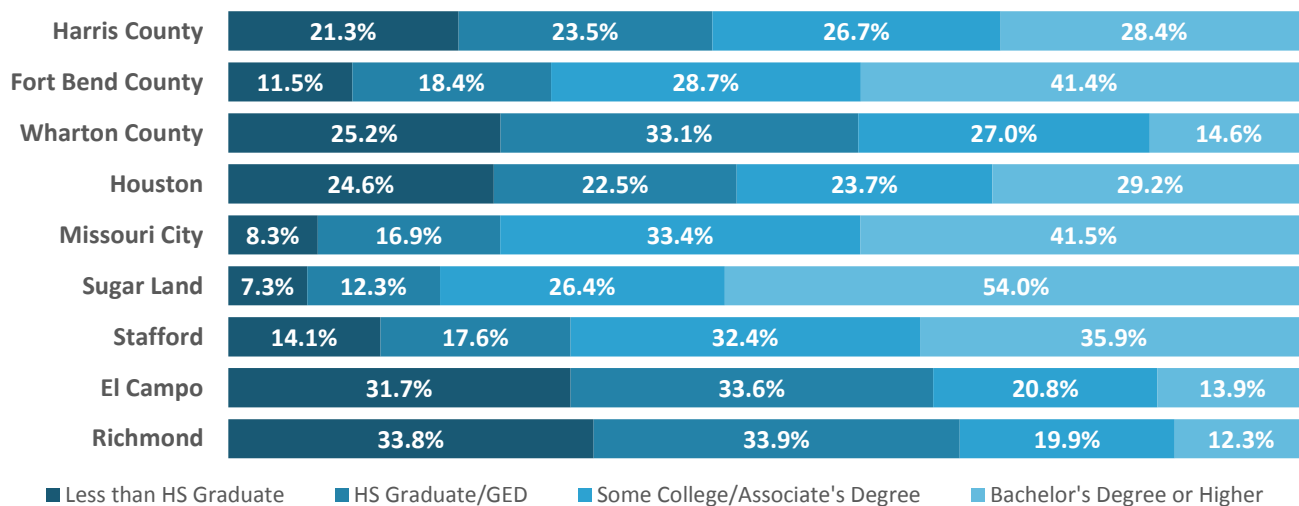
Experiences in school among youth predict a range of health issues in addition to economic productivity as adults. High school student focus group participants expressed concern about the level of stress they experience as they pursue their academics and aspire to higher education. For example, one high school student focus group

"I do think Houston does a good job with caring for kids. Education is important here."

Key informant interviewee

participant said "College wasn't as hard to get into back then as it is now," when referring to the pressure her parents and teachers placed on her to get into college. Students also talked about stress as a problem not well understood by educators and parents. A high school student focus group participant illustrated this concept: "My dad didn't think stress was a thing for kids. My brothers talked sense into my parents. Still my dad says, 'you're a kid, you don't know what stress is.'"

FIGURE 12. EDUCATIONAL ATTAINMENT OF POPULATION 25 YEARS AND OVER, BY COUNTY AND CITY, 2009-2013



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

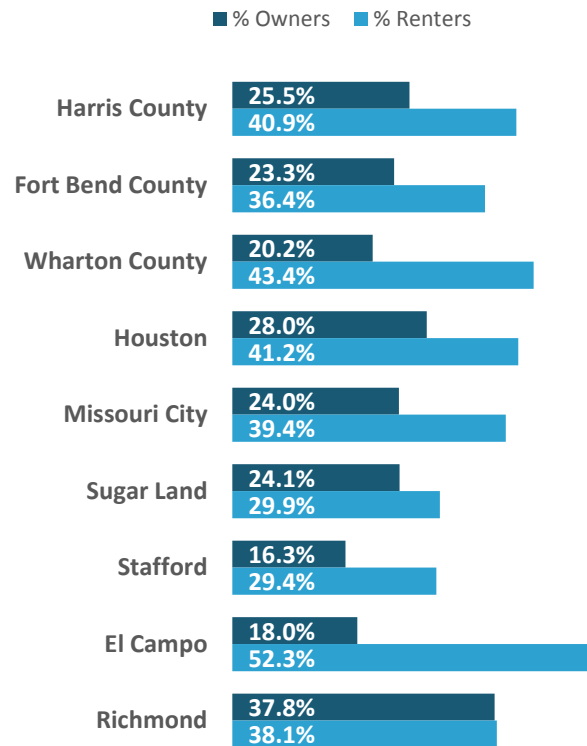
Housing

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. Focus group participants and key informants expressed some concern about housing being unavailable or unaffordable for some segments of the population. One key informant expressed concern about there being insufficient housing for the disabled in Houston. *“People with physical disabilities often have trouble finding shelter.”* In contrast, other informants reported the wide availability of affordable housing within Houston city limits. *“There are relatively low housing prices still [in Houston]. You don’t have to be a multi-millionaire to live inside the Loop. It used to be that everybody lived out in the suburbs, but now there’s a lot more demand for living within [Houston].”*

Some participants were concerned about the strain of population growth on the need for housing and subsequent need for more roads. Many focus group participants talked about observing communities being uprooted by road construction. One low-income focus group participant reported: *“We’re going to have a bridge or overpass be built here. It’s good but they’re taking away homes from people, like in Rosenberg and Richmond, who have owned their homes for a long time.”* In more urban areas, stakeholders reported there being a lot of apartment complexes where violence may be more likely to occur. Focus group participants also expressed concern about flooding affecting their housing and the strain on public works.

Across the three counties served by MH Southwest, the monthly median housing costs for owners are highest for owners in Fort Bend County (\$1,590) and lowest in Wharton County (\$595); for renters, costs are highest in Fort Bend County (\$1,167) and lowest in Wharton County (\$657) (data not shown). In all counties, a higher percent of renters compared to owners pay 35% or more of their household income towards their housing costs (FIGURE 13). In El Campo, for example, more than half of renters pay more than 35% of their income towards housing costs.

FIGURE 13. PERCENT HOUSING UNITS WHERE OWNERS AND RENTERS HAVE HOUSING COSTS THAT ARE 35% OR MORE OF HOUSEHOLD INCOME, BY COUNTY AND CITY, 2009-2013



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. As shared by a key informant: *“Transportation is a huge issue. It takes so long to commute.”* Many focus group participants mentioned the challenge of children walking safely

“[Residents] in rural areas have to take a commuter train to Houston, but it runs infrequently.”

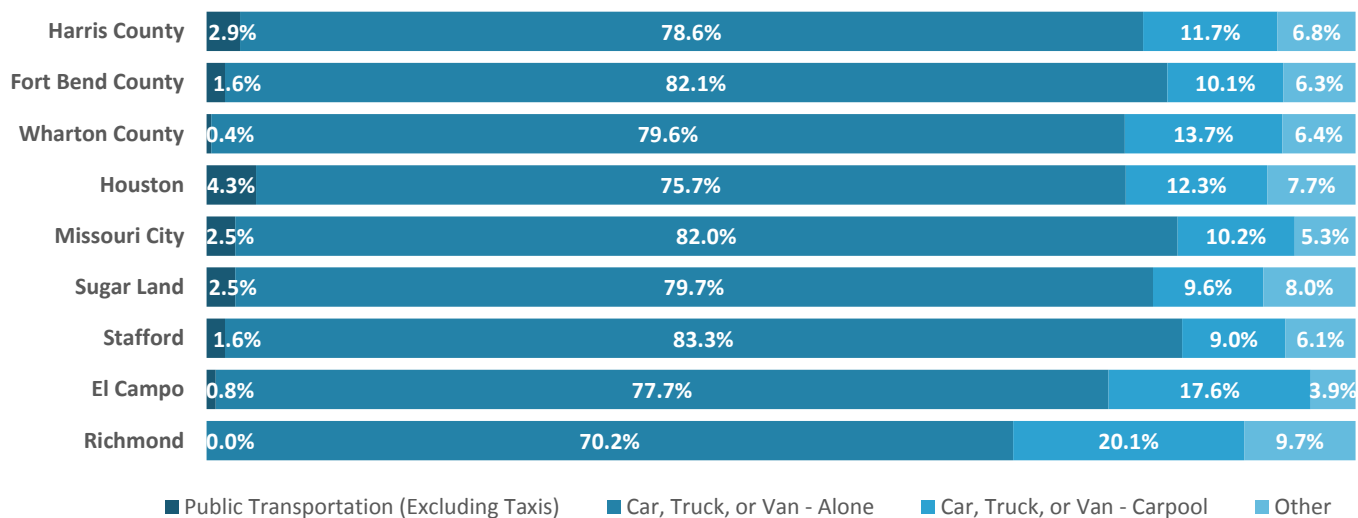
Low-income rural area focus group participant

to school due to traffic. *“Traffic during school hours is a problem,”* remarked one focus group participant.

There was conflicting feedback about the availability and quality of public transportation. 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.”* Focus group respondents, particularly seniors living in areas where public transportation is largely unavailable,

reported resources in the community that provide transportation to residents. As reported by a senior focus group participant, *“I’ve heard of those transportation services that are provided by certain institutions. Houston Transit Authority has buses that are made available for seniors and the disabled. I’ve seen those buses.”* As reflected in the focus groups and interviews, a majority of residents in the three counties served by MH Southwest commute to work by driving in a car, truck, or van alone (FIGURE 14). Among all municipalities, Houston has the highest percentage of workers who commute by public transportation (4.3%).

FIGURE 14. MEANS OF TRANSPORTATION TO WORK, BY COUNTY AND CITY, 2009-2013



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 you live. 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].” Types of crime vary across the communities served by MH Southwest according to informants. Participants in the CHNA 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.” Among municipalities, the violent crime rate is highest in Houston (954.8 offenses per 100,000 population) and lowest in Missouri City (109.3 offenses per 100,000

“Illicit drugs and human trafficking are part of the greater Houston area but they aren’t the only things we are dealing with.”

Key informant interviewee

population) (TABLE 3). The property crime rate is highest in Houston (4,693.7 offenses per 100,000 population) and lowest in Sugar Land (1,646.0 offenses per 100,000 population) and Missouri City (1,646.0 offenses per 100,000 population). Rates of property and violent crime are higher in Harris County than in Texas overall.

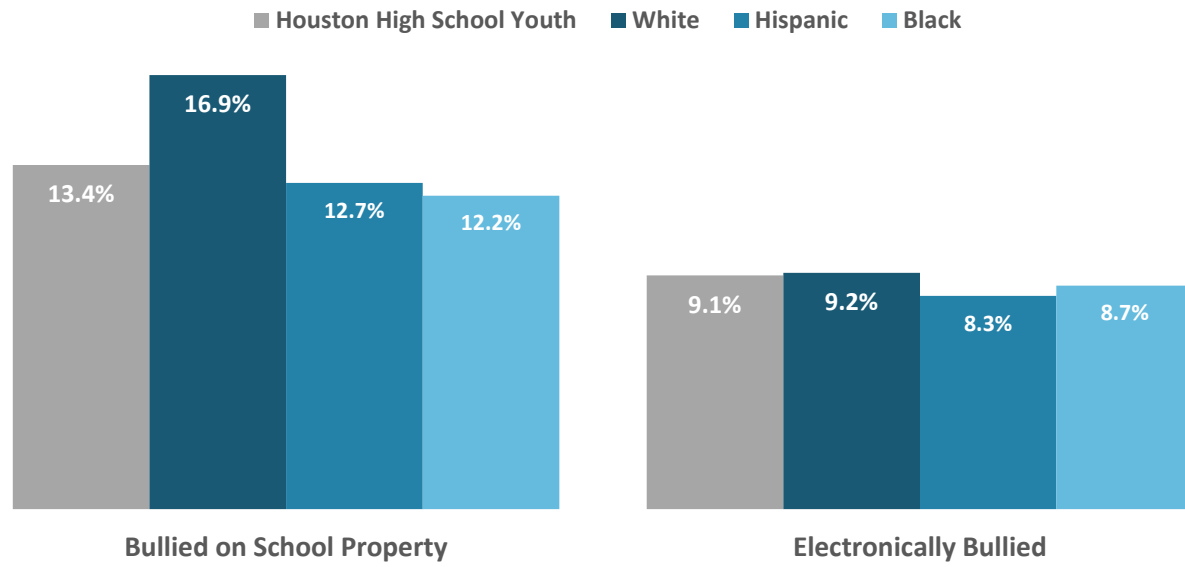
TABLE 3. VIOLENT AND PROPERTY CRIME RATE PER 100,000 POPULATION, BY STATE, COUNTY, AND CITY/TOWN, 2014

Geography	Property Crime Rate	Violent Crime Rate
Texas	2,988.0	361.6
Harris County	3,825.0	691.4
Fort Bend County	1,391.3	197.1
Wharton County	1,976.4	400.0
Houston	4,693.7	954.8
Missouri City	1,640.0	109.3
Sugar Land	1,646.0	153.8
Stafford	3,989.2	384.1
El Campo	2,584.0	360.7
Richmond	2,785.0	378.6

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 cyberbullying as major issues in their communities. 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 reported being bullied on school property, and 9.1% reported being electronically bullied (from 15.6% to 15.0%) (FIGURE 15). Houston high school students self-identifying as White were more likely to self-report being bullied, either in school or online, than Hispanic or Black, non-Hispanic high school students.

FIGURE 15. PERCENT HOUSTON YOUTH (GRADES 9-12) SELF-REPORTED TO HAVE BEEN BULLIED ON SCHOOL PROPERTY AND ELECTRONICALLY BULLIED IN PAST 12 MONTHS, BY RACE AND ETHNICITY, 2013



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/ethnicities

HEALTH OUTCOMES AND BEHAVIORS

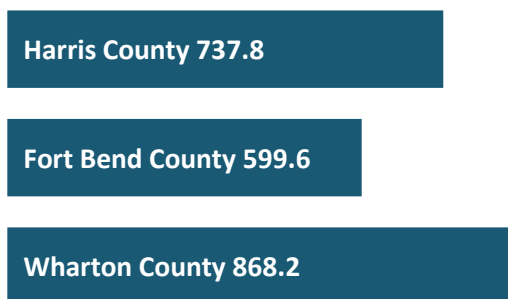
People who reside in the communities served by MH Southwest experience a broad range of health outcomes and exhibit health behaviors that reflect their socioeconomic status and the built environment around them. Many of the demographic factors described previously such as population growth, lack of public 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 representing the MH Southwest community 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. MH Southwest serves a very small number of patients from Wharton County each year, but those patients are disproportionately elderly compared to other Counties in this CHNA and reflects in their health outcomes. From mortality to healthy living, this section provides a snapshot of health within the communities served by MH Southwest.

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

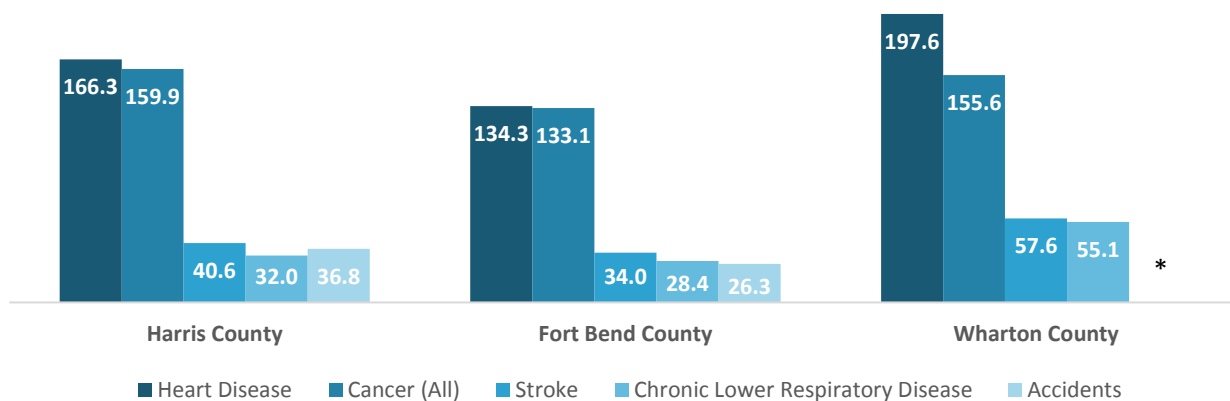
Services, Wharton County experienced the highest overall mortality rate (868.2 per 100,000 population) of the three counties served by MH Southwest (FIGURE 16). This finding is not surprising since Wharton County has the highest proportion of seniors across the three counties served by MH Southwest. Similarly in 2013, Wharton County had the highest mortality rates in all top leading causes of mortality—which includes heart disease, cancer, stroke, and chronic lower respiratory disease—compared to Harris and Fort Bend Counties (FIGURE 17). TABLE 4 presents the leading causes of death by age and county in 2013.

FIGURE 16. MORTALITY FROM ALL CAUSES AGE-ADJUSTED RATE PER 100,000 POPULATION, BY COUNTY, 2013



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

FIGURE 17. LEADING CAUSES OF DEATH PER 100,000 POPULATION, BY COUNTY, 2013



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

NOTE: Age-adjusted mortality rate per 100,000 population; rate not available for mortality due to accidents by Wharton County due to insufficient sample size; Asterisk (*) denotes insufficient sample size

TABLE 4. LEADING CAUSES OF DEATH, MORTALITY RATE PER 100,000 POPULATION, 2013

		Harris County	Fort Bend County	Wharton County
Under 1 year	Certain Conditions Originating in the Perinatal Period	347.5	208.2	-
	Congenital Malformations, Deformations and Chromosomal Abnormalities	133.9	122.5	-
	Homicide	19.9	-	-
	Accidents	12.8	-	-
	Septicemia	8.5	-	-
1-4 years	Cancer	4.4	-	-
	Accidents	4.1	-	-
	Congenital Malformations, Deformations and Chromosomal Abnormalities	2.6	-	-
	Heart Disease	1.9	-	-
5-14 years	Cancer	3.7	-	-
	Accidents	2.8	-	-
	Chronic Lower Respiratory Diseases	0.8	-	-
	Heart Disease	0.8	-	-
15-24 years	Accidents	24.1	19.3	-
	Homicide	16.2	-	-
	Suicide	8.6	8.6	-
	Cancer	4.8	-	-
	Heart Disease	2.3	-	-
25-34 years	Accidents	24.7	26.2	-
	Homicide	14.9	11.0	-
	Cancer	11.2	11.0	-
	Suicide	10.5	9.6	-
	Heart Disease	5.9	-	-
35-44 years	Cancer	29.3	22.7	-
	Accidents	28.2	15.8	-
	Heart Disease	19.3	9.9	-
	Suicide	11.1	11.1	-
	Homicide	9.8	9.8	-
	Chronic Liver Disease and Cirrhosis	*	4.9	-
45-54 years	Cancer	95.5	62.5	202.0
	Heart Disease	82.2	46.4	-
	Accidents	42.5	16.1	-
	Chronic Liver Disease and Cirrhosis	22.1	19.2	-
	Suicide	15.7	11.1	-
55-64 years	Cancer	273.3	199.1	198.8
	Heart Disease	194.8	123.3	198.8
	Accidents	49.7	32.1	-
	Stroke	39.5	*	-
	Diabetes Mellitus	38.2	*	-
	Chronic Liver Disease and Cirrhosis	*	19.3	-
	Septicemia	*	16.7	-
65-74 years	Cancer	618.1	473.2	533.0
	Heart Disease	419.8	240.6	444.2
	Chronic Lower Respiratory Diseases	97.9	59.5	-
	Stroke	92.0	73.0	-
	Diabetes Mellitus	71.0	*	-
	Septicemia	*	43.3	-
75-84 years	Heart Disease	1,166.1	952.4	1,223.7
	Cancer	1,115.1	1,037.1	881.1
75-84 years	Stroke	304.3	239.9	489.5
	Chronic Lower Respiratory Diseases	274.6	204.6	538.4

		Harris County	Fort Bend County	Wharton County
	Septicemia	173.5	173.5	-
	Alzheimer's Disease	*	148.2	-
	Nephritis, Nephrotic Syndrome, and Nephrosis	*	*	391.6
85+ years	Heart Disease	3,459.7	3,615.9	4,988.9
	Cancer	1,586.9	1,477.4	1,552.1
	Stroke	957.0	1,030.3	1,330.4
	Chronic Lower Respiratory Diseases	627.5	894.2	776.1
	Alzheimer's Disease	574.2	602.6	776.1

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

NOTE: Dash (-) denotes unreliable rate

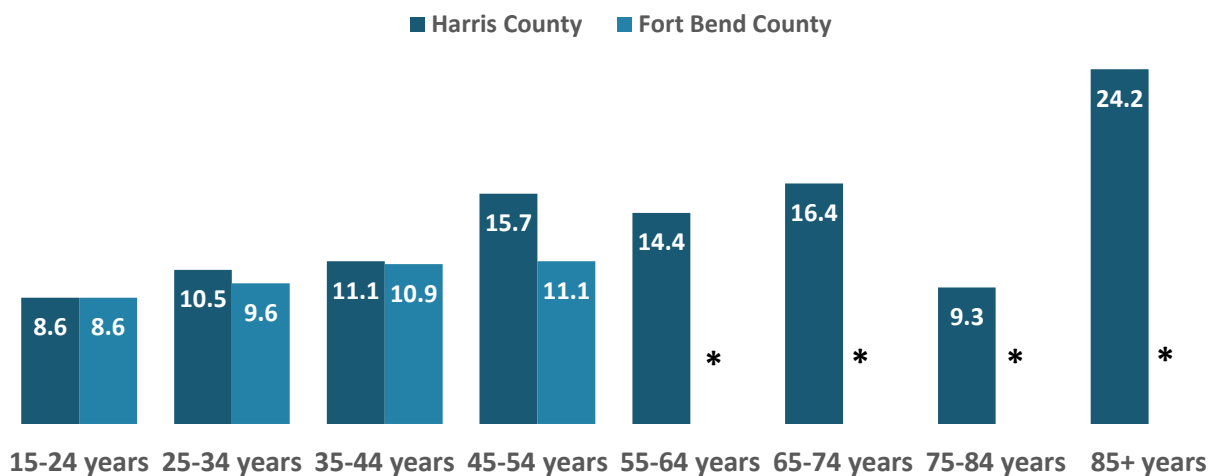
NOTE: Asterisk (*) indicates cause of death not one of the top five leading causes

NOTE: "All Other Diseases" not reported in leading causes

Suicide is more common among people over the age of 45. Persons aged 85 years of age or older were the most likely age group to commit suicide in

2013 in Harris County, with a rate of 24.2 suicides per 100,000 population (FIGURE 18).

FIGURE 18. SUICIDE MORTALITY RATE PER 100,000 POPULATION, BY AGE AND COUNTY, 2013



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

NOTE: Data for Wharton County not reported due to unreliable rates (indicated with a * in the figure above)

Chronic Diseases and Related Risk Factors

Diet and exercise are risk factors for many chronic diseases. Access to healthy food and opportunities for physical activity depend on not only individual choices but also on the built environment in which we live, the economic resources we have access to, and the larger social context in which we operate. Risk factors for chronic diseases like overweight and obesity, heart disease, diabetes, cancer, and asthma include diet and exercise as well as genetics and stress. 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.

Food Access

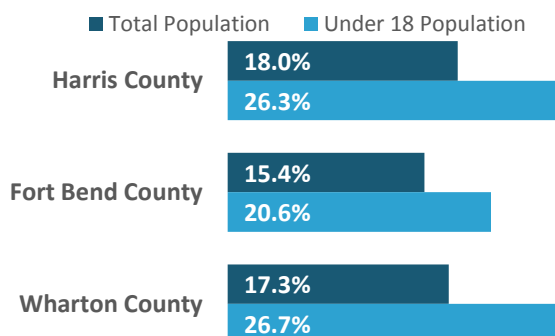
Rates of food insecurity are similar for adults across all three counties served by MH Southwest, and children are more likely to be food insecure than adults. Focus group participants and key informants consistently identified food insecurity in children to be a major issue affecting the community. 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.”* In Harris and Wharton Counties, more than a quarter of all children (i.e., those under age 18) are considered to be food insecure (FIGURE 19). In Fort Bend County, one in five children is food insecure (20.6%).

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

Key informant interviewee

Among households in Wharton County, nearly 16% of families (or more than 1 in 6) receive benefits from the Supplemental Nutrition Assistance Program (SNAP), the program providing nutritional assistance for low-income families (FIGURE 20). In Harris County, 12.6% of families receive SNAP benefits, while the percentage is half that in Fort Bend (6.8%).

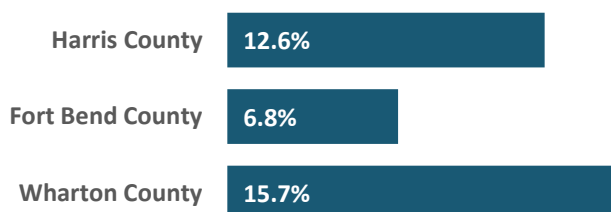
FIGURE 19. PERCENT FOOD INSECURE BY TOTAL POPULATION AND UNDER 18 YEARS OLD POPULATION, BY COUNTY, 2013



DATA SOURCE: Map the Meal Gap, 2015

NOTE: Food insecurity among children defined as self-report of two or more food-insecure conditions per household in response to eight questions on the Community Population Survey.

FIGURE 20. PERCENT HOUSEHOLDS RECEIVING SNAP BENEFITS, BY COUNTY, 2009-2013



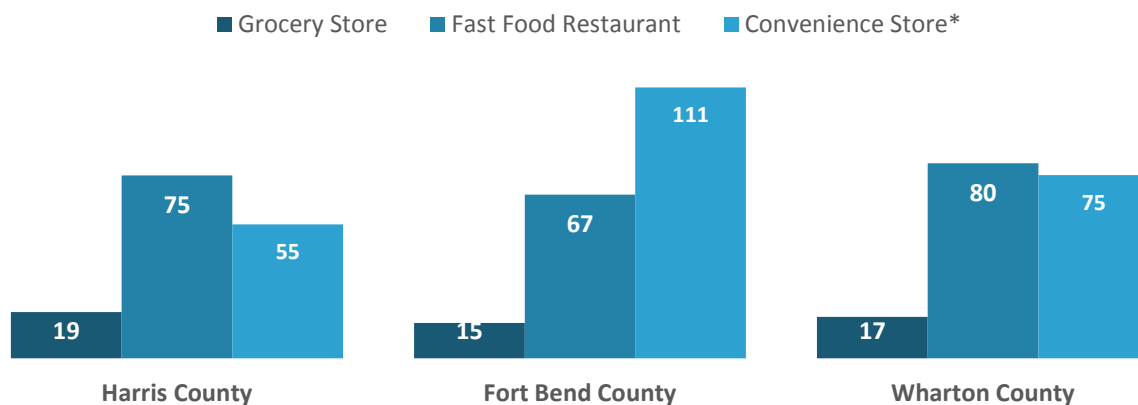
DATA SOURCE: U.S. Census Bureau, American Community Survey 5-Year Estimates, 2009-2013, as cited by Prevention Resource Center Regional Needs Assessment, 2015

According to the US Department of Agriculture, in 2013 residents of the three counties served by MH Southwest have similar access to grocery stores, ranging from 15 grocery stores per 100,000 population in Fort Bend County to 19 grocery stores per 100,000 in Harris County (FIGURE 21). Fort Bend County residents in 2012 had the highest access to convenience stores (111 convenience stores per 100,000 population) compared to 75 convenience stores in both Harris and Wharton Counties. Wharton County low-income residents

have the highest access to farmer's markets (41.9%) and Fort Bend County low-income residents had the lowest access to farmer's markets (10.4%) (FIGURE 22). Among zip codes corresponding to MH

Southwest's community in Harris County, Houston zip code 77063 had the highest number of calls (6,137) to the United Way Helpline related to food in 2014 (FIGURE 23).

FIGURE 21. ACCESS TO GROCERY STORES, FAST FOOD RESTAURANTS, AND CONVENIENCE STORES, PER 100,000 POPULATION, BY COUNTY, 2013



DATA SOURCE: US Census Bureau, County Business Patterns, as cited by Community Commons, 2013; and as city by USDA Food Environment Atlas, 2012

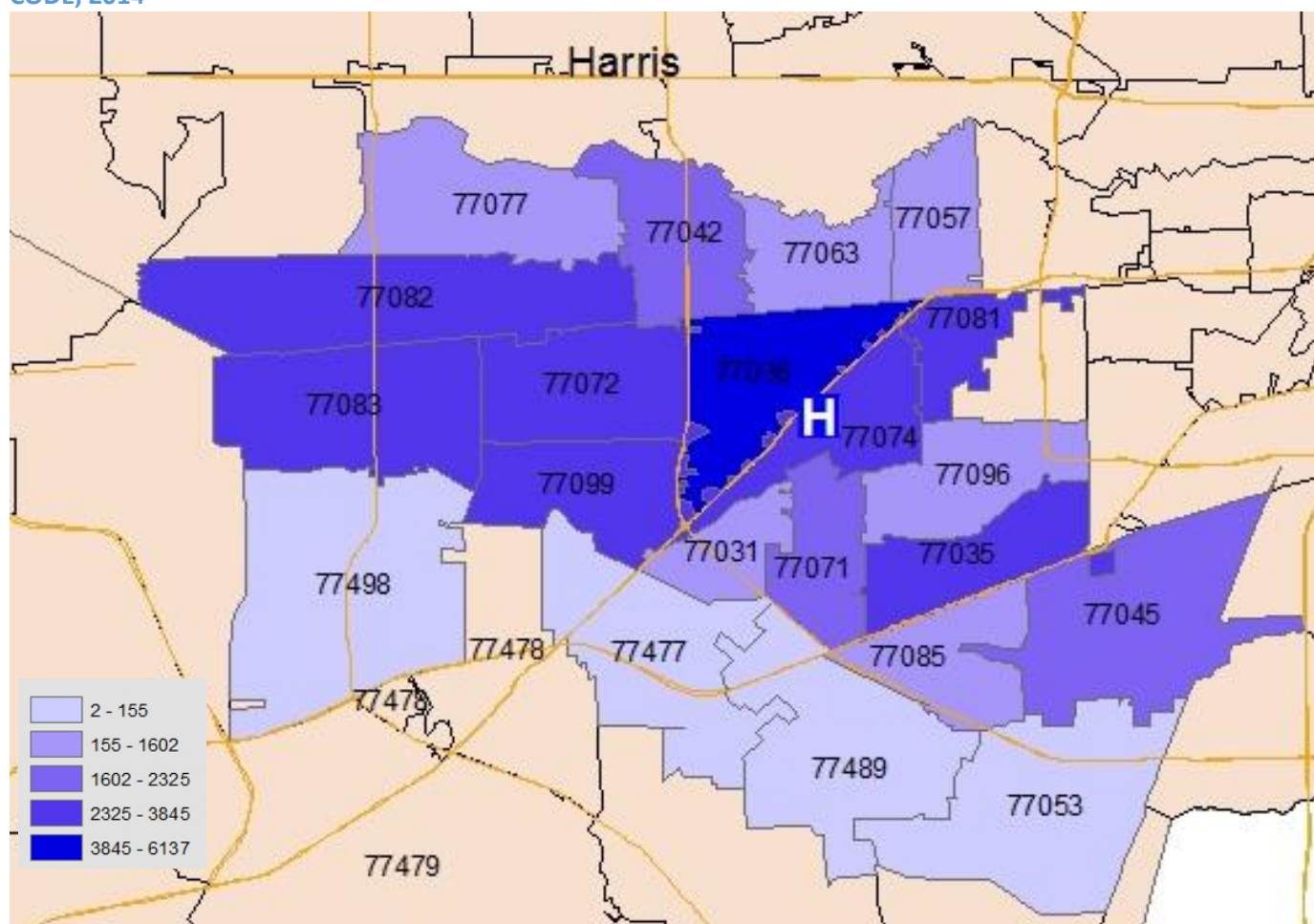
*Convenience store data reflects 2012

FIGURE 22. PERCENT LOW INCOME POPULATION LIVING NEAR A FARMER'S MARKET, BY COUNTY, 2015



DATA SOURCE: US Department of Agriculture, Agriculture Marketing Service, 2015, as cited by Community Commons

FIGURE 23. 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 contributing to unhealthy eating habits. *“We have food deserts and obesity problems with children and adults—fast*

“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

“There’s not enough nutritional value in our daily lives. We’re so used to eating cookies and cakes that aren’t good for you. We have a group of people here [at the senior center] who are trying to be friendly with other people by bringing each other cakes and such. We need more nutritional things. We have to stop eating junk food. We need something like a healthy snack bar [at the senior center].”

Houston senior focus group participant

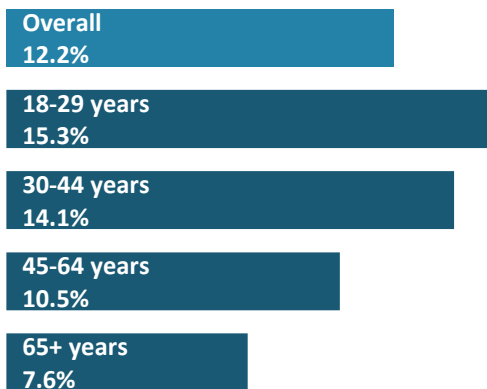
“The kids are eating too many happy meals and not the broccoli.”

High school student focus group participant

food is cheaper and there aren’t many grocery stores in low-income communities. That is improving due to efforts by grocery stores but it is still a problem.” The low cost of and easy access to unhealthy, fast food was also cited as a contributor to unhealthy eating habits: *“Frankly it is faster and cheaper to eat food that isn’t good for you than it is to prepare healthy meals,”* said one key informant. Other key informants cited cultural factors as affecting whether people make healthy food choices. *“Texas is the barbeque capital of the world. Barbeque and pizza are popular and very unhealthy. For 30 years, we have known that smoked meats cause cancer. Other than the recent announcement, you will never hear any kind of person in Texas saying it is unhealthy to eat barbeque.”* Key informants also reported that education is a driver of healthy eating habits. One key informant described this barrier as the power of assumption: *“We may take for granted that we know what a healthy lifestyle is. Exercise, healthy eating, alcohol consumption. Short of smoking, which everyone knows is a bad habit...we don’t think of food the same way.”*

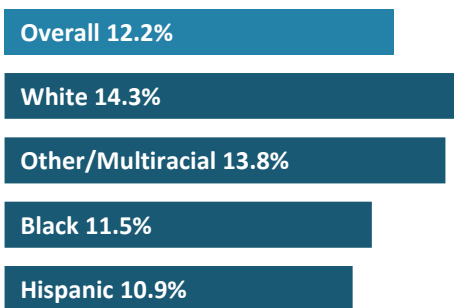
Surveys in Harris County reveal that only 12.2% of Harris County adults indicated that they ate fruits and vegetables five or more times per day (similar to the government recommendation) (FIGURE 24). Adults who were younger (18-29 years old) had the highest percentage of respondents meeting this recommendation. When examining responses by race/ethnicity, 14.3% of Whites indicated this eating behavior compared to 11.5% of Black, non-Hispanics and 10.9% of Hispanics (FIGURE 25). Lower-income Harris County adults ate fewer fruits and vegetables than residents with higher median household incomes (FIGURE 26).

FIGURE 24. PERCENT ADULTS SELF-REPORTED TO HAVE CONSUMED FRUITS AND VEGETABLES AT LEAST FIVE TIMES PER DAY, BY AGE, HARRIS COUNTY, 2013



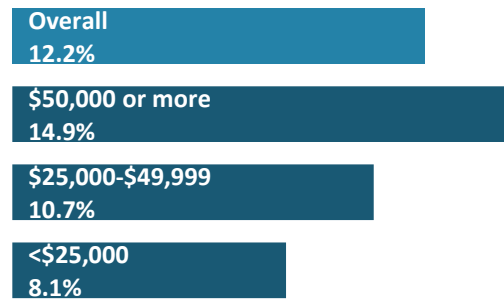
DATA SOURCE: Texas Behavioral Risk Factor Surveillance System, 2013

FIGURE 25. PERCENT ADULTS REPORTED EATING FRUITS AND VEGETABLES 5+ TIMES A DAY IN HARRIS COUNTY BY RACE/ETHNICITY, 2013



DATA SOURCE: Texas Behavioral Risk Factor Surveillance System, 2013

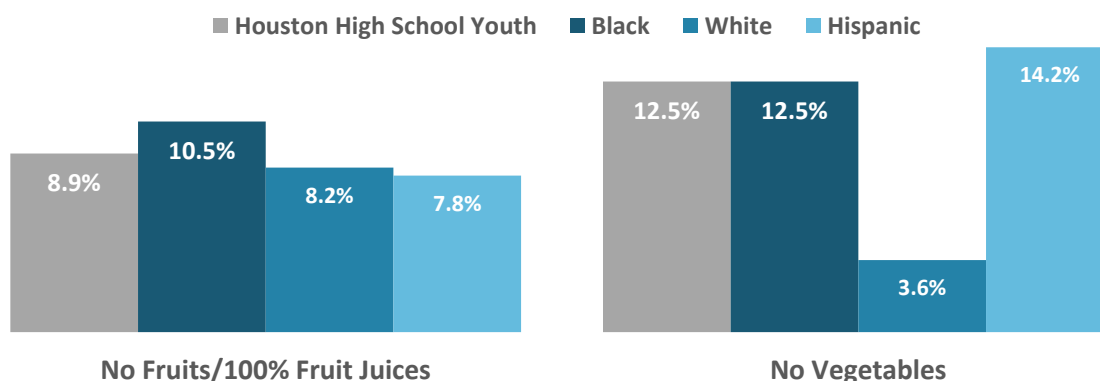
FIGURE 26. PERCENT ADULTS SELF-REPORTED TO HAVE CONSUMED FRUITS AND VEGETABLES AT LEAST FIVE TIMES PER DAY, BY MEDIAN HOUSEHOLD INCOME, HARRIS COUNTY, 2013



DATA SOURCE: Texas Behavioral Risk Factor Surveillance System, 2013

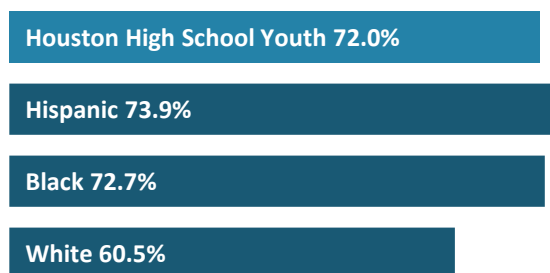
Youth in Houston were surveyed about their eating habits in 2013. In the survey, 8.9% of high school students in Houston indicated that they did not eat any fruit or drink any fruit juice in the past 7 days, while 12.5% reported that they had not eaten any vegetables during this time period (FIGURE 27). Black, non-Hispanic 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, non-Hispanic students and 73.9% of Hispanic students reported they had not eaten breakfast in the past seven days (FIGURE 28). Black, non-Hispanic 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 29).

FIGURE 27. 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



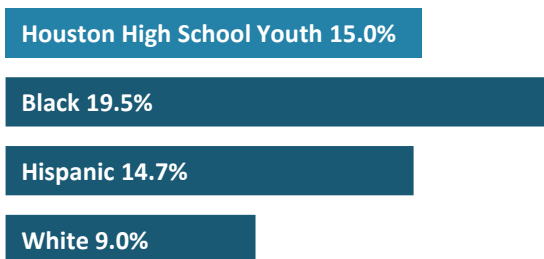
DATA SOURCE: Centers for Disease Control and Prevention, High School Youth Risk Behavior Survey, Houston, TX, 2013

FIGURE 28. PERCENT HOUSTON YOUTH (GRADES 9-12) SELF-REPORTED TO HAVE NOT EATEN BREAKFAST AT ALL IN PAST SEVEN DAYS, BY RACE AND ETHNICITY, 2013



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

FIGURE 29. 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



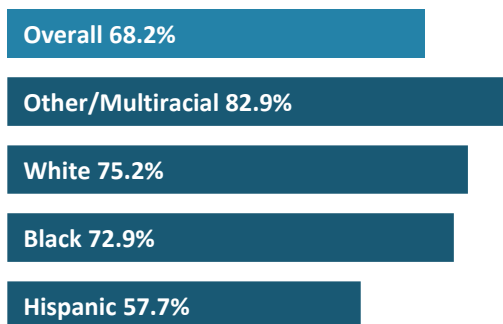
DATA SOURCE: Centers for Disease Control and Prevention, High School Youth Risk Behavior Survey, Houston, TX, 2013

Physical Activity

Another important risk factor for maintaining a healthy weight and reducing one's risk of cardiovascular disease is physical activity. More than two-thirds (68.2%) of adults surveyed in Harris County indicated that they had undertaken physical

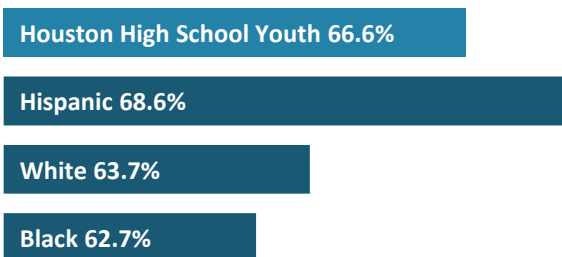
activity in the past month (FIGURE 30). When examining results by race/ethnicity, Hispanics were the least likely to report this, with 57.7% saying they had participated in any physical activity in the past month. In surveys with Houston high school students, two-thirds (66.6%) reported that they had not participated in 60 or more minutes of physical activity for 5 days in the past 7, the recommendation for youth physical activity levels (FIGURE 31). Hispanic youth were slightly more likely to indicate this, with 68.6% reporting not reaching this level of activity. FIGURE 32 shows the location of parks in the Greater Houston area.

FIGURE 30. PERCENT ADULTS SELF-REPORTED TO HAVE PARTICIPATED IN ANY PHYSICAL ACTIVITIES IN PAST MONTH, BY RACE/ETHNICITY, HARRIS COUNTY, 2013



DATA SOURCE: Texas Behavioral Risk Factor Surveillance System, 2013

FIGURE 31. PERCENT HOUSTON YOUTH (GRADES 9-12) SELF-REPORTED TO NOT HAVE BEEN PHYSICALLY ACTIVE FOR AT LEAST 60 MINUTES PER DAY ON FIVE OR MORE DAYS IN PAST SEVEN DAYS, BY RACE AND ETHNICITY, 2013

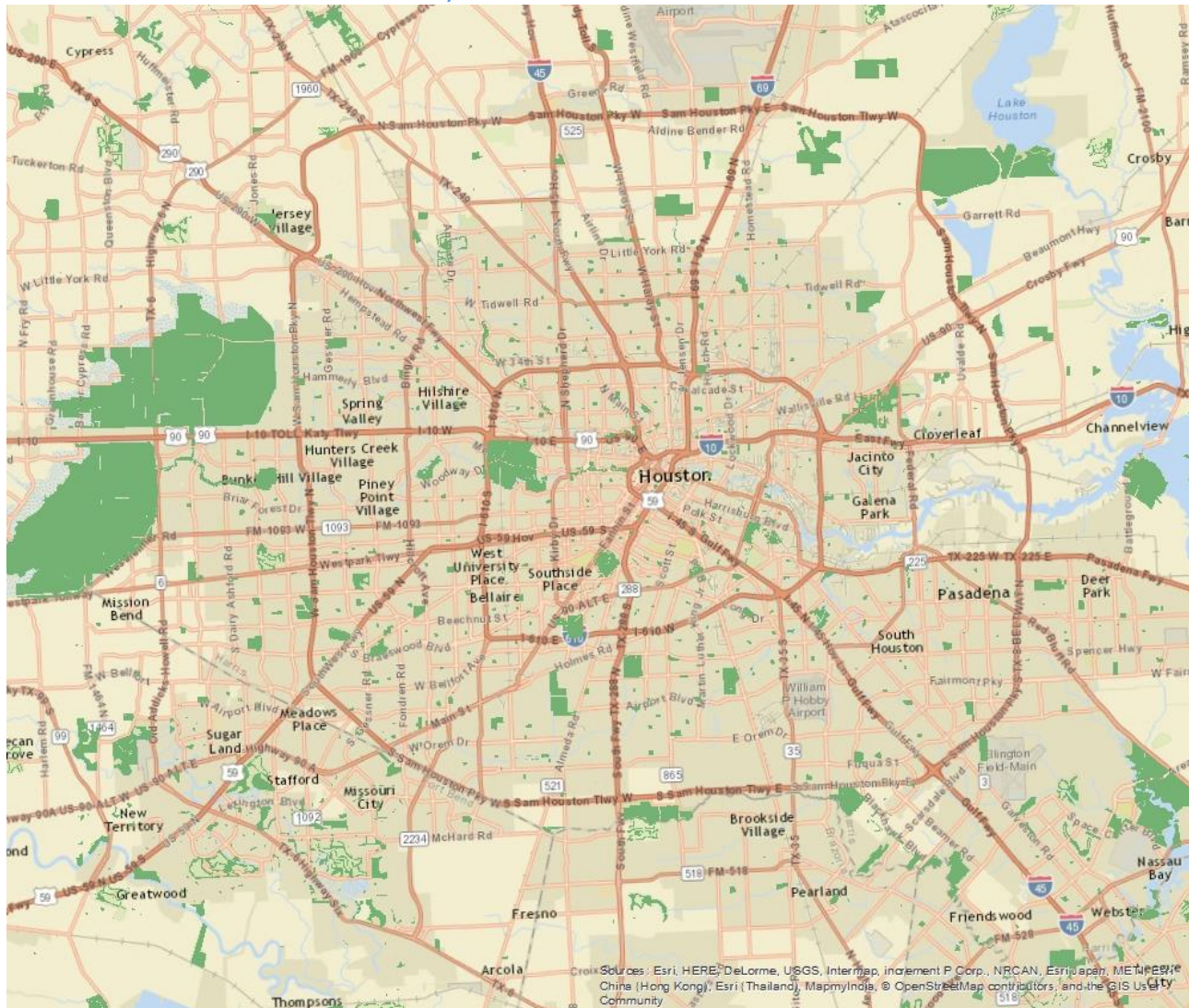


DATA SOURCE: Centers for Disease Control and Prevention, High School Youth Risk Behavior Survey, Houston, TX, 2013

“Houston is geared around cars and most people can’t walk to their jobs. Exercise is a luxury item in Houston. Making more hours in the day to exercise is not something that is likely.”

Key informant interviewee

FIGURE 32. PARKS IN GREATER HOUSTON, 2013



DATA SOURCE: Houston Parks and Recreation Department, 2013

Overweight and Obesity

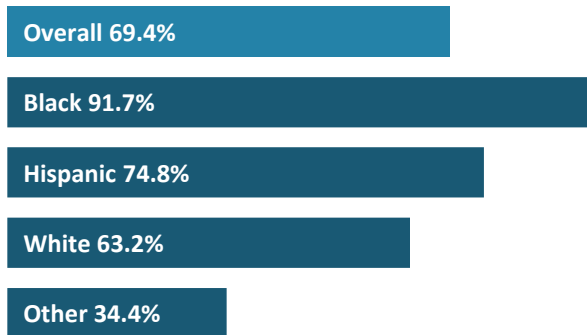
Obesity is a major risk factor for poor cardiovascular health and increases the risk of death due to heart disease, diabetes, and stroke. Every community served by MH Southwest is affected by obesity. Almost all focus group participants and key informant interviewees acknowledge overweight and obesity 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.” Other participants shared many concerns about children being at high risk for obesity and the long-term impact of childhood obesity. As one key informant discussed, “I still

think...the fact that school-aged children are not getting proper nutrition will affect their lifestyle as they grow older. That impacts the kind of workforce we will have in the future. Kids who are not familiar with healthy eating, they will encounter health problems in adulthood, and that is the biggest cost to an employer – a sick or chronically ill employee. Promote healthy eating early on with school-aged children.”

In 2013, the percentage of Harris County residents 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 33). Overall, about one-third of Houston high school students were considered overweight (16.3%) or obese (17.9%) (FIGURE 34) in 2013. At 22.2%, Hispanic

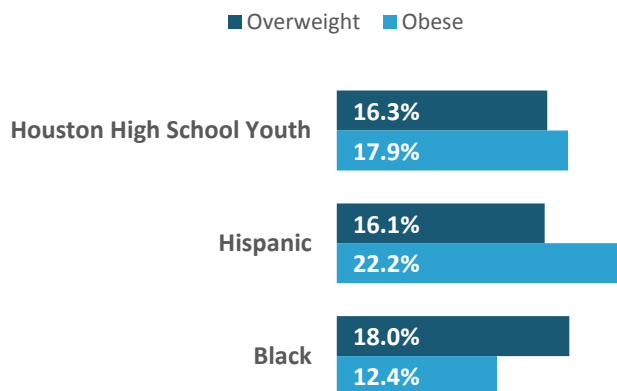
high school students in Houston were most likely to be considered obese, while Black, non-Hispanic high school students were most likely to be considered overweight (18.0%).

FIGURE 33. PERCENT ADULTS SELF-REPORTED TO BE OVERWEIGHT OR OBESE, BY RACE/ETHNICITY, HARRIS COUNTY, 2014



DATA SOURCE: Texas Behavioral Risk Factor Surveillance System, 2014

FIGURE 34. PERCENT HOUSTON YOUTH (GRADES 9-12) SELF-REPORTED TO BE OVERWEIGHT OR OBESE, BY RACE AND ETHNICITY, 2013



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

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

Diabetes

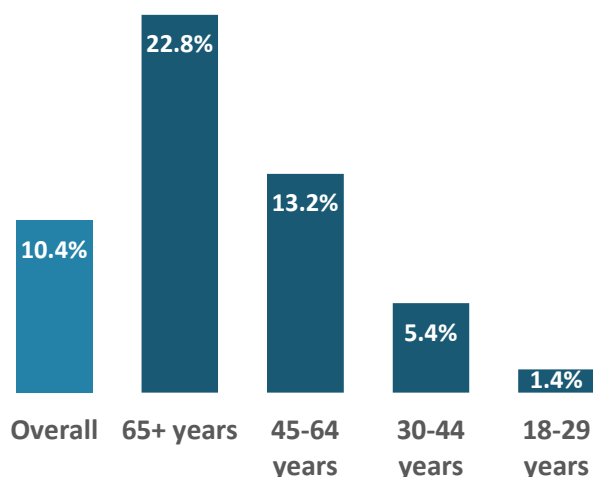
Diabetes is a life-long chronic illness that can cause premature death. According to the American Diabetes Association, care for diagnosed diabetes accounts for 1 in 5 health care dollars in the United States, a figure which has been rising over the last several years. Diabetes is an issue for many residents in communities served by MH Southwest. The majority of focus group participants and key informants named diabetes (along with cancer and hypertension) as a top health issue in the region. Many key informants talked about the unmet needs of diabetes, particularly due to lack of self-management and delaying care. One key informant reported, “We see patients coming in for chronic conditions [like diabetes] that is not managed or controlled. Symptoms, like blindness, are then exacerbated.” Many informants discussed diabetes “running in families” as though diabetes was an expectation of life. “We see people who expect to have diabetes because everyone in their family does.” This creates a burden on residents served by MH Southwest.

In Harris County in 2014, 10.4% of adults self-reported to have been diagnosed with diabetes (FIGURE 35). 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/ethnicities (FIGURE 36). In 2013, Wharton County saw 22.9 hospital admissions per 100,000 population for uncontrolled diabetes, while Harris County had 11.3 admissions per 100,000 population (FIGURE 37).

“Diabetes...it seems to be rampant.”

Low-income focus group participant

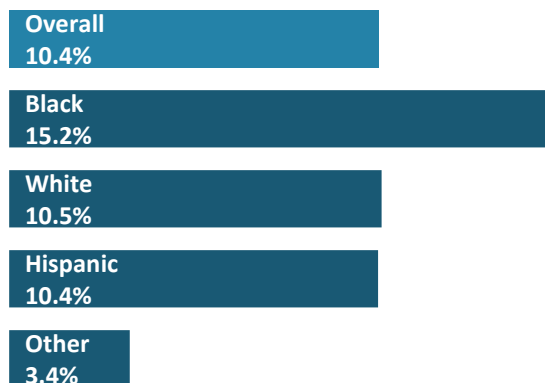
FIGURE 35. PERCENT ADULTS SELF-REPORTED TO HAVE BEEN DIAGNOSED WITH DIABETES, BY AGE, HARRIS COUNTY, 2014



DATA SOURCE: Texas Behavioral Risk Factor Surveillance System, 2014

NOTE: Excludes respondents who were diagnosed during pregnancy

FIGURE 36. PERCENT ADULTS SELF-REPORTED TO HAVE BEEN DIAGNOSED WITH DIABETES, BY RACE/ETHNICITY, HARRIS COUNTY, 2014



DATA SOURCE: Texas Behavioral Risk Factor Surveillance System, 2014

FIGURE 37. HOSPITAL ADMISSIONS DUE TO UNCONTROLLED DIABETES RATE PER 100,000 POPULATION



DATA SOURCE: Texas Health Care Information Collection, Texas Hospital Inpatient Discharge Public Use Data File, 2013, as cited by Texas Department of State Health Services

Heart Disease, Stroke, and Cardiovascular Risk Factors

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, and 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. Focus group participants named hypertension and heart disease as among the top issues affecting their community, especially among seniors. One focus group participant said many diseases affected her community, *“Especially heart disease...everybody has high blood pressure.”* Many senior focus group participants talked about managing their heart disease. One senior said, *“I think there could be many ways to take care of this without medications. Health care companies are taking advantage of us.”* Other informants mentioned acculturation as being related to developing conditions like hypertension. One focus group participant mentioned, *“Hypertension is common in refugees. When they [Cubans] first come to the States, in Cuba, they had a certain amount of food. When they come here [to the States], they have free reign and access to any food.”* Some key informants expressed concern that heart disease and stroke occurs more in populations experiencing health disparities.

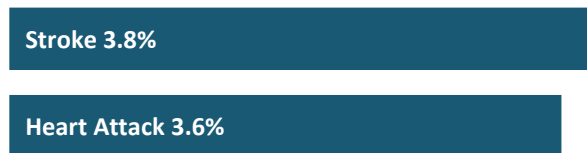
“Everybody I know is on blood pressure medication.”

Senior focus group participant

In Harris County, according to the Texas Behavioral Risk Factor Surveillance System, in 2014 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 (FIGURE 38). 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 39). Harris County residents over the age of 65 were disproportionately likely to report having high blood pressure (71.7%)

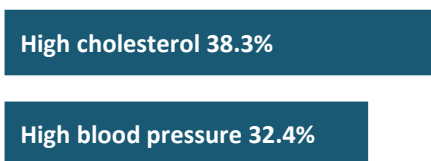
than their younger counterparts (FIGURE 40). White Harris County residents had the highest self-reported rate of high cholesterol (46.6%) while Black, non-Hispanic Harris County residents had the highest self-reported rate of high blood pressure (45.7%) (FIGURE 41).

FIGURE 38. PERCENT ADULTS SELF-REPORTED TO HAVE HAD STROKE AND HEART ATTACK, HARRIS COUNTY, 2014



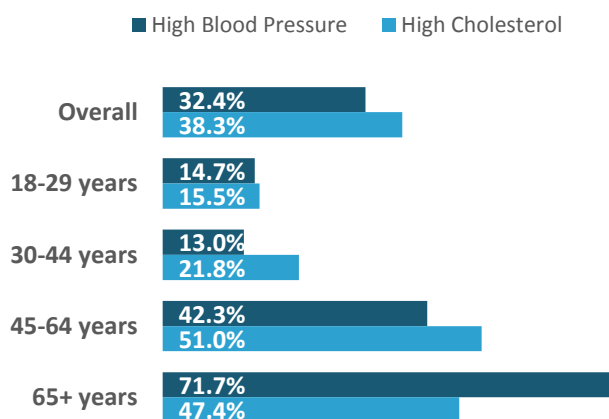
DATA SOURCE: Texas Behavioral Risk Factor Surveillance System, 2014

FIGURE 39. PERCENT ADULTS SELF-REPORTED TO HAVE HAD HIGH BLOOD PRESSURE AND HIGH BLOOD CHOLESTEROL, HARRIS COUNTY, 2013



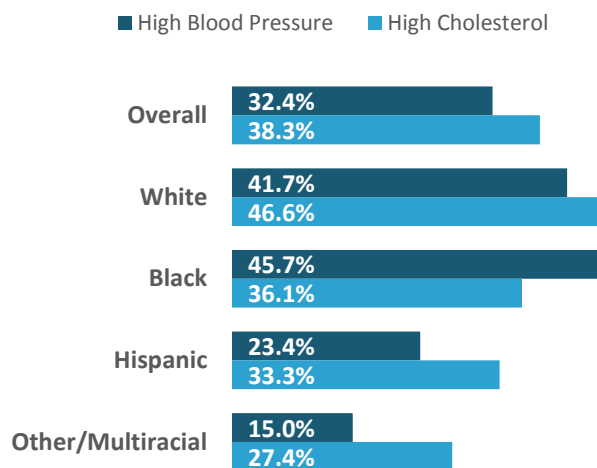
DATA SOURCE: Texas Behavioral Risk Factor Surveillance System, 2014

FIGURE 40. PERCENT ADULTS SELF-REPORTED TO HAVE HAD HIGH BLOOD PRESSURE AND HIGH BLOOD CHOLESTEROL, BY AGE, HARRIS COUNTY, 2013



DATA SOURCE: Texas Behavioral Risk Factor Surveillance System, 2014

FIGURE 41. PERCENT ADULTS SELF-REPORTED TO HAVE HAD HIGH BLOOD PRESSURE AND HIGH BLOOD CHOLESTEROL, BY RACE/ETHNICITY, HARRIS COUNTY, 2013



DATA SOURCE: Texas Behavioral Risk Factor Surveillance System, 2014

Asthma

A few key informant interviewees described air quality as an area of concern for the community, particularly for people living in Houston. One key informant said, “We have environmental challenges of poor air quality. Particularly challenging in the east side of the city where all the chemical plants are. They release polluting gases and people live over there. We have no zoning in Houston. Some residential neighborhoods are right next to petrochemical plants.” 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. Fort Bend County adult residents had the highest self-reported rates of asthma (5.8%) and Harris County adult residents self-reported the lowest rates of asthma (4.6%) (FIGURE 42). In 2012, adult hospital discharges for asthma were the highest in Harris County (8.4 per 100,000 population) and lowest in Wharton County (6.2 per 100,000 population) (FIGURE 43). 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 8.2 per 100,000 population) (FIGURE 44).

FIGURE 42. PERCENT ADULTS SELF-REPORTED TO CURRENTLY HAVE ASTHMA, COUNTY, 2013

Harris County 4.6%

Fort Bend County 5.8%

DATA SOURCE: Texas Behavioral Risk Factor Surveillance System, 2013 as cited by Texas Department of State Health Services, Office of Surveillance, Evaluation and Research, Health Promotion and Chronic Disease Prevention Section, in Current Asthma Prevalence Among Adults and Children by Demographic Characteristics, Risk Factors, Other Conditions, and Place of Residence, Texas, 2013

NOTE: Data not available for Wharton County

FIGURE 43. AGE-ADJUSTED ASTHMA HOSPITAL DISCHARGE RATES PER 10,000 POPULATION, COUNTY, 2012

Harris County 8.4

Fort Bend County 5.7

Wharton County 6.2

DATA SOURCE: Texas Health Care Information Collection (THCIC), Inpatient Hospital Discharge Public Use Data File, 2012, as cited by Texas Department of State Health Services, Office of Surveillance, Evaluation and Research, Health Promotion and Chronic Disease Prevention Section, in Asthma Hospital Discharge Rates by County and by Demographics for Selected Counties, Texas, 2005-2012

NOTE: Data do not include HIV and drug/alcohol use patients

FIGURE 44. AGE-ADJUSTED ASTHMA HOSPITAL DISCHARGE RATES PER 10,000 CHILDREN (0-17 YEARS OLD), BY RACE/ETHNICITY, HARRIS COUNTY, 2012

Overall 9.9

Black 24.2

Other 10.9

White 8.2

Hispanic 5.9

DATA SOURCE: Texas Health Care Information Collection (THCIC), Inpatient Hospital Discharge Public Use Data File, 2012, as cited by Texas Department of State Health Services, Office of Surveillance, Evaluation and Research, Health Promotion and Chronic Disease Prevention Section, in Asthma Burden Among Children in Harris County, Texas, 2007-2012

NOTE: White, Black, and Other identifying as non-Hispanic

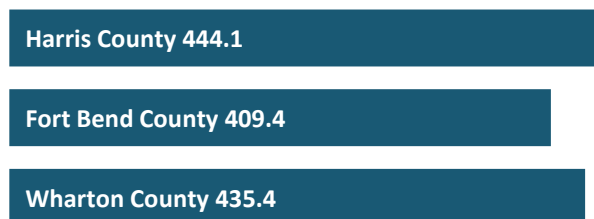
Cancer

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 community. Many 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 get the detail." Another focus group participant reported: "Some people don't know they have an illness [like cancer]."

Harris and Wharton Counties see slightly higher incidence rates of cancer (444.1 per 100,000 populations and 435.4 per 100,000 population) compared to Fort Bend (409.4 per 100,000 population) (FIGURE 45). However, Wharton County (at 173.3 per 100,000 population) experienced a slightly higher cancer mortality rate than the other counties (Harris: 163.4 per 100,000 population and Fort Bend: 133.9 per 100,000 population) (FIGURE 46). Cancer screening data is only available from Harris County. 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

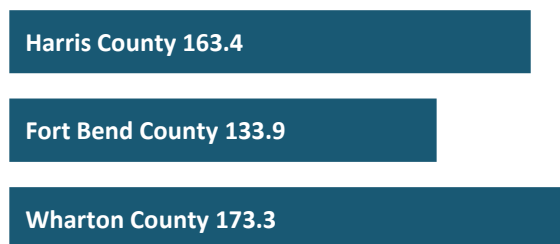
they had had a pap test in the past three years (FIGURE 47). Over two-thirds (64.8%) of adults 50 years of age and older in Harris County self-reported having a colonoscopy or sigmoidoscopy.

FIGURE 45. AGE-ADJUSTED INVASIVE CANCER INCIDENCE RATE PER 100,000 POPULATION, COUNTY, 2008-2012



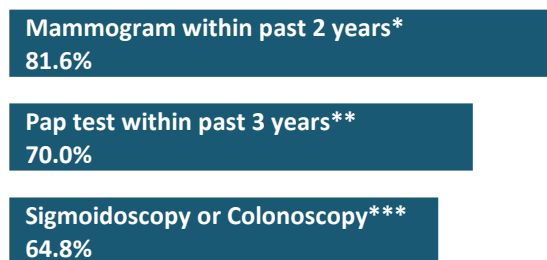
DATA SOURCE: Texas Cancer Registry, 2008-2012

FIGURE 46. AGE-ADJUSTED CANCER MORTALITY RATE PER 100,000 POPULATION, COUNTY, 2008-2012



DATA SOURCE: Texas Cancer Registry, 2008-2012

FIGURE 47. PERCENT ADULTS SELF-REPORTED CANCER SCREENING, HARRIS COUNTY, 2014



DATA SOURCE: Texas Behavioral Risk Factor Surveillance System, 2014

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

Behavioral Health

Behavioral health issues, including mental health and substance use disorders, have a substantial impact on individuals, families, and communities. Mental health status is also closely connected to physical health, particularly in regard to the prevention and management of chronic diseases. This section describes the burden of mental health and substance use and abuse in the communities served by MH Southwest.

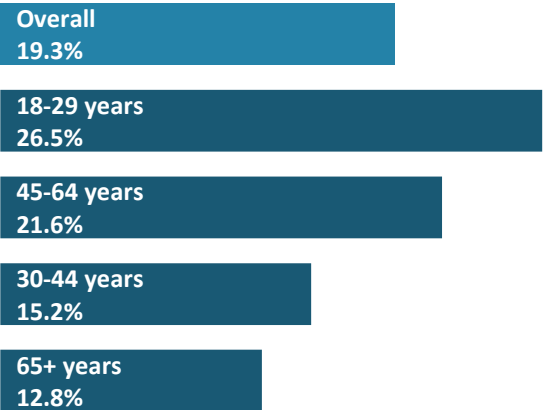
“At a state level, we are funded 49th in behavioral health care. We have not done a good job in Texas of investing in mental health.”

Key informant interviewee

Mental Health

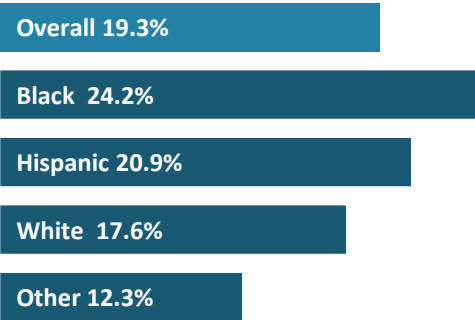
Focus group participants and key informants identified mental health and lack of access to mental health services as a major unmet need in the community served by MH Southwest. For example, one key informant interviewee reported, the “...biggest gap is mental health services...there are not enough services, not enough beds, people are in jails who don’t need to be there; and they are on the streets but need help.” Other key informants echoed 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.” 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 48). Self-report of having had five or more days of poor mental health was highest among residents aged 18 to 29 (26.5%) (FIGURE 48) and Black, non-Hispanic residents (24.2%) in Harris County (FIGURE 49).

FIGURE 48. PERCENT ADULTS SELF-REPORTED HAVE HAD FIVE OR MORE DAYS OF POOR MENTAL HEALTH, BY AGE, HARRIS COUNTY, 2014



DATA SOURCE: Texas Behavioral Risk Factor Surveillance System, 2014
NOTE: Data available only for Harris County

FIGURE 49. PERCENT ADULTS SELF-REPORTED HAVE HAD FIVE OR MORE DAYS OF POOR MENTAL HEALTH, BY RACE/ETHNICITY, HARRIS COUNTY, 2014



DATA SOURCE: Texas Behavioral Risk Factor Surveillance System, 2014
NOTE: Data available only for Harris County

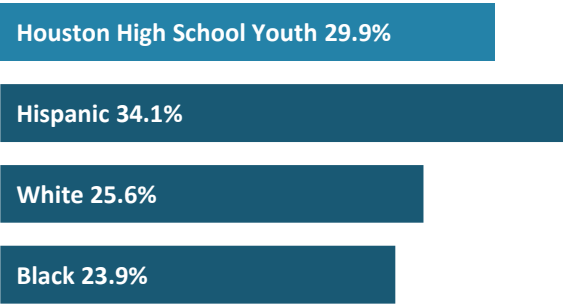
Focus group participants and key informants reported that youth are at high risk for mental health problems, and the response to their needs is inadequate. *“Too many cases are undiagnosed for too long.”* Another informant pointed to teen suicide as a top issue of concern in the community. *“We have high teen suicides. It’s anecdotal...but part of it is because we’re in affluent communities. If you don’t fit in, people will know that. If you live a different lifestyle (if you’re poor, if you’re gay, etc.), people will know and will make sure you fit yourself in.”* Houston Hispanic youth experienced higher mental health needs than youth of other race/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 50). One in eight (12.1%) of Hispanic Houston high school students self-reported 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 51).

“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.”

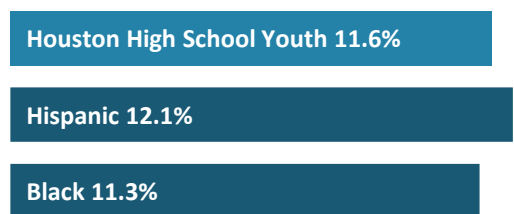
Key informant interviewee

FIGURE 50. PERCENT YOUTH (GRADES 9-12) SELF-REPORTED FELT SAD OR HOPELESS FOR TWO OR MORE WEEKS IN PAST 12 MONTHS IN HOUSTON, BY RACE AND ETHNICITY, 2013



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

FIGURE 51. PERCENT YOUTH (GRADES 9-12) SELF-REPORTED ATTEMPTED SUICIDE ONE OR MORE TIMES IN PAST YEAR IN HOUSTON, BY RACE AND ETHNICITY, 2013



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

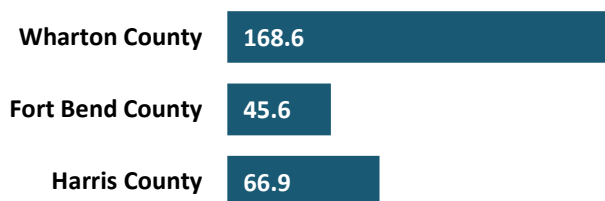
NOTE: There was insufficient data for other race/ethnicities.

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. A low-income suburban focus group participant described this issue in her community: *“In North Richmond, it’s drugs. Drugs, alcohol, and prostitution is everywhere. Not too long ago, we had an outbreak where people were making drugs and people were dying. We need more education.”* Smoking was also identified as a health issue by some focus group participants. *“I have not seen much of a decline in smoking. There’s a hard cultural stigma to drive home.”*

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 that they drank alcohol and drove in the past month. Wharton County has the highest rates of non-fatal drinking-under-the-influence (DUI) motor vehicle accidents in the past month (168.6 per 100,000 population), and Fort Bend County had the lowest rate (45.6 per 100,000 population) according to the Texas Department of Transportation (FIGURE 52).

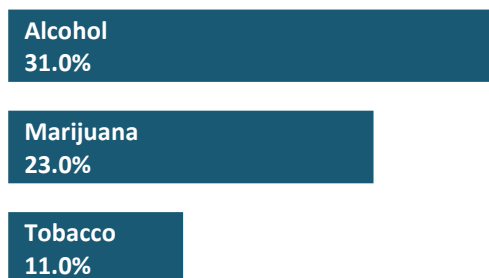
FIGURE 52. NON-FATAL DRINKING UNDER THE INFLUENCE (DUI) MOTOR VEHICLE CRASH RATE PER 100,000 POPULATION, BY COUNTY, 2010-2014



DATA SOURCE: Texas Department of Transportation, 2010-2014, as cited in Prevention Resource Center 6, Regional Needs Assessment, 2015

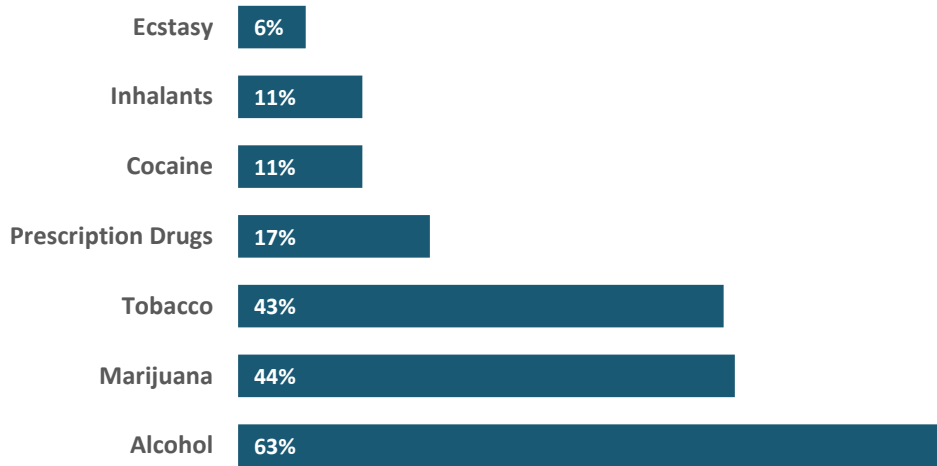
According to the Texas Youth Risk Behavior Survey, in 2013 Houston high school students self-reported using alcohol (31%), marijuana (23%), or tobacco (11%) in the past month (FIGURE 53). Just under two-thirds (63%) of Houston high school students self-reported lifetime substance use of alcohol, followed by marijuana (44%), and tobacco (43%) (FIGURE 54). White Houston high school students had disproportionately higher rates of ever using tobacco and prescription drugs than students of other race/ethnicities (FIGURE 55).

FIGURE 53. PERCENT HOUSTON YOUTH (GRADES 9-12) SELF-REPORTED SUBSTANCE USE IN PAST 30 DAYS, 2013



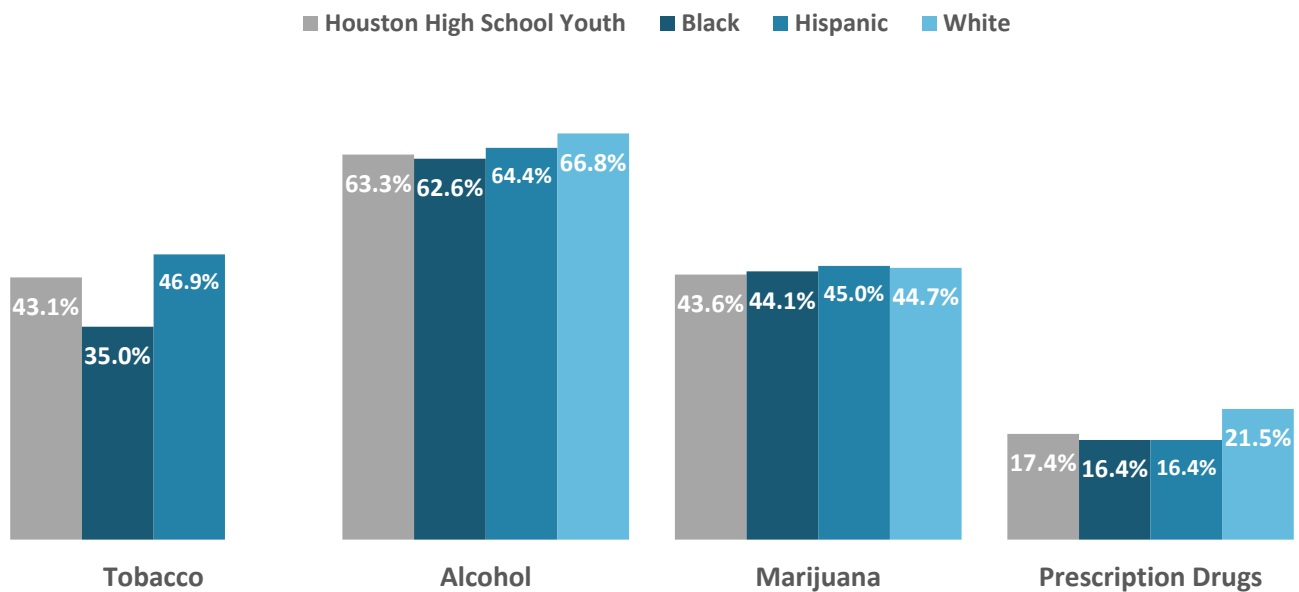
DATA SOURCE: Texas Youth Risk Behavior Survey, 2013, as cited in Prevention Resource Center, Regional Needs Assessment, 2015

FIGURE 54. PERCENT HOUSTON YOUTH (GRADES 9-12) SELF-REPORTED SUBSTANCE USE, 2013



DATA SOURCE: Texas Youth Risk Behavior Survey, 2013, as cited in Prevention Resource Center, Regional Needs Assessment, 2015

FIGURE 55. PERCENT HOUSTON YOUTH (GRADES 9-12) SELF-REPORTED SUBSTANCE USE, BY RACE AND ETHNICITY, 2013



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 concerns or comments about communicable disease apart from concern about vaccinations and HIV/AIDS education. Some informants reported concern about parents not getting their children vaccinated against diseases such as measles. One focus group participant said she was concerned about “...*vaccination misinformation...People don’t get their kids vaccinated. We need to ensure that everyone is vaccinated.*” Still other participants reported being afraid of vaccinations. 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

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

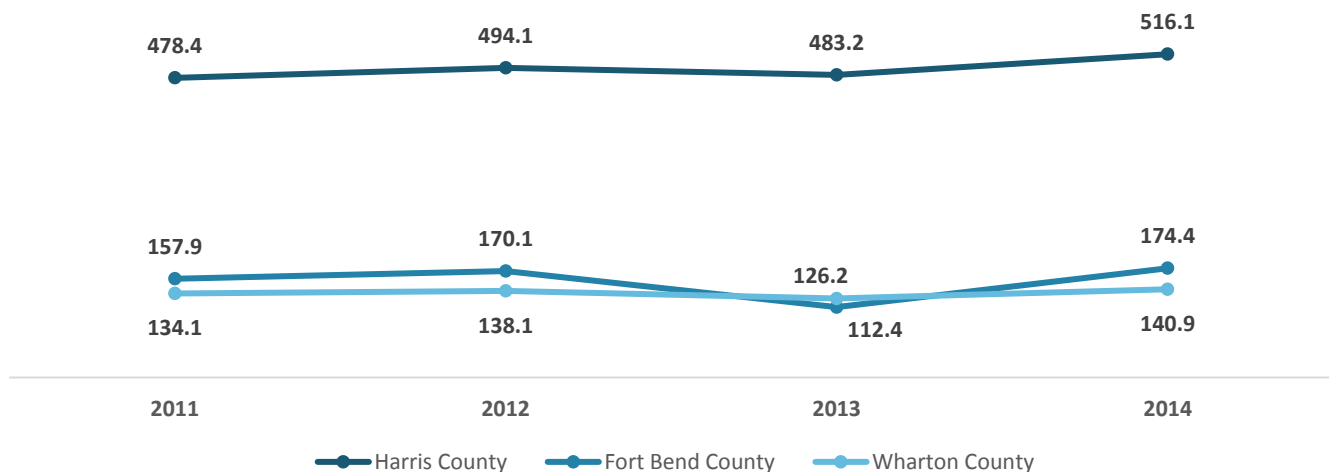
Key informant interviewee

resources in low-income areas, contributing to disparate levels of education.

HIV

Harris County experiences the highest HIV rate in the region, with 516.1 people per 100,000 population living with HIV in the county, up from 478.4 people per 100,000 population in 2011 (FIGURE 56). Wharton County has the lowest HIV rate (140.9 people per 100,000 population) in 2014 across the three-county region served by MH Southwest.

FIGURE 56. RESIDENTS LIVING WITH HIV RATE PER 100,000 POPULATION, BY COUNTY, 2011-2014



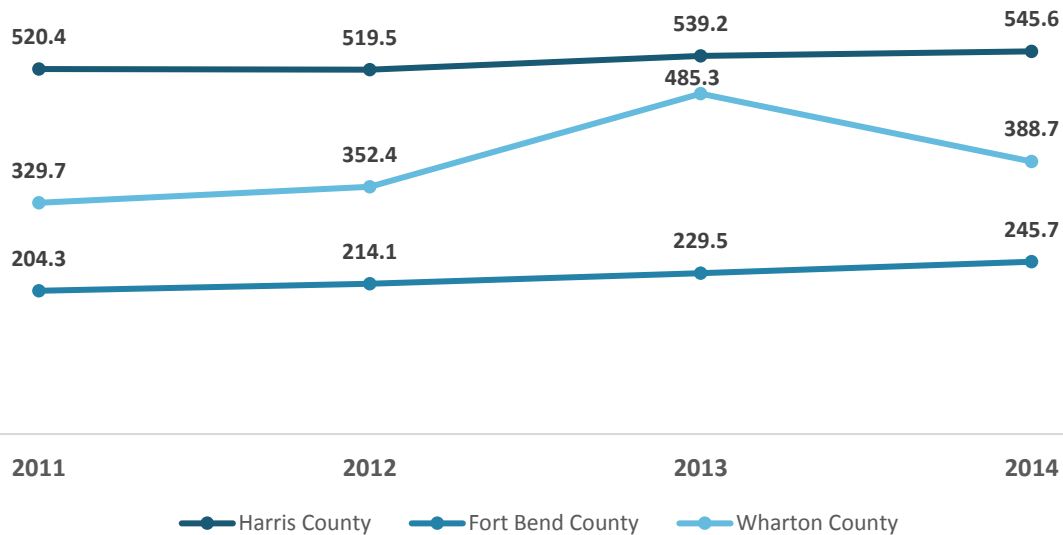
DATA SOURCE: Texas Department of State Health Services, Texas HIV Surveillance Report, 2011, 2012, 2013, and 2014

Other Sexually-Transmitted Diseases

Trends in rates of chlamydia, gonorrhea, and syphilis varied by county. From 2011 to 2014, chlamydia and syphilis case rates have increased in all three counties (FIGURE 57 and FIGURE 58). In Wharton County, chlamydia rates dramatically increased in 2013 to 485.3 per 100,000 population from 352.4 per 100,000 population in

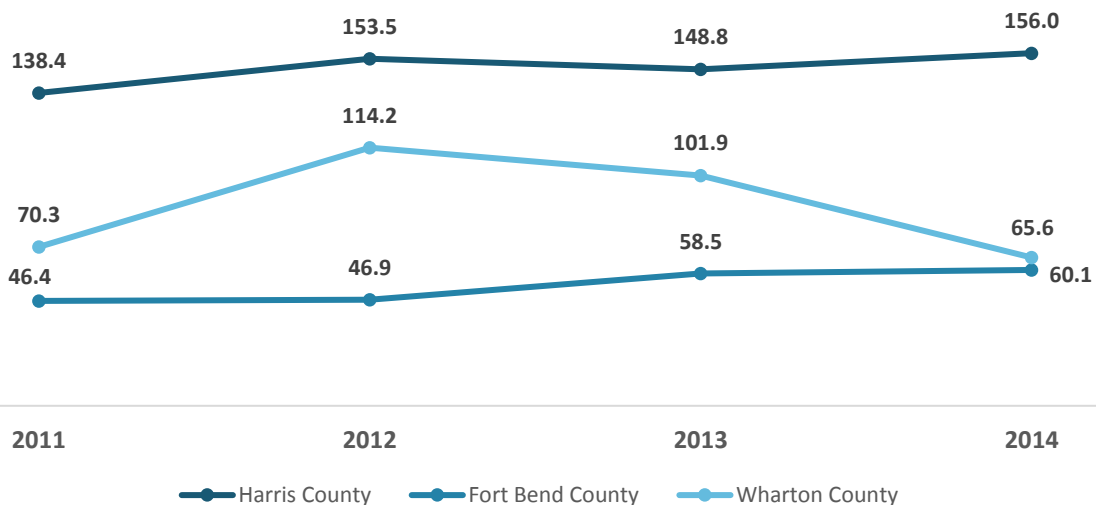
2012; however, this rate decreased to 388.7 per 100,000 population in 2014. A similar trend occurred for syphilis case rates in Wharton County over the same period. Gonorrhea case rates increased in Harris and Fort Bend Counties but decreased in Wharton County from 2011-2014 (FIGURE 59).

FIGURE 57. CHLAMYDIA CASE RATES PER 100,000 POPULATION, BY COUNTY, 2011-2014



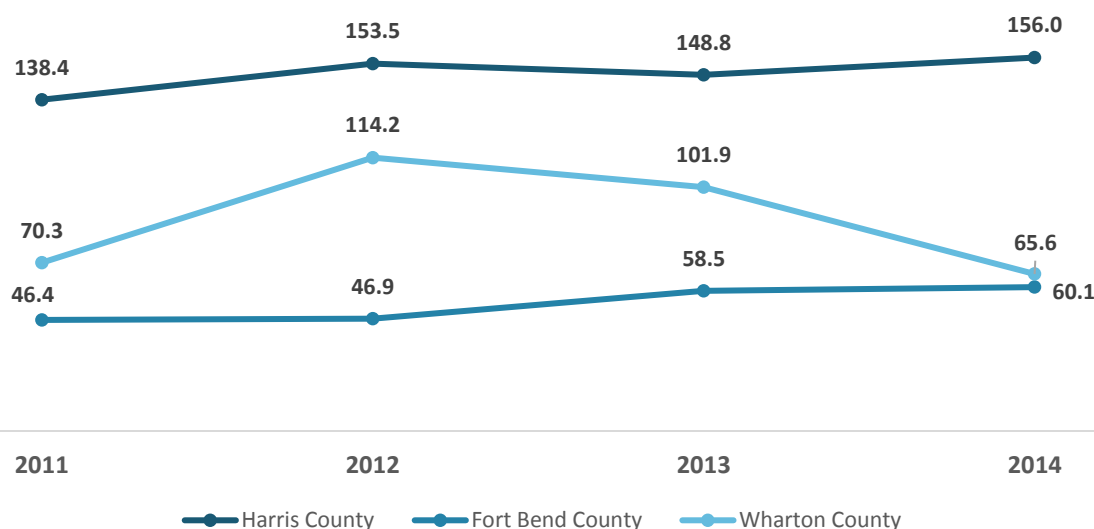
DATA SOURCE: Texas Department of State Health Services, TB/HIV/STD Epidemiology and Surveillance Branch, Texas STD Surveillance Report, 2014

FIGURE 58. SYPHILIS CASE RATES PER 100,000 POPULATION, BY COUNTY, 2011-2014



DATA SOURCE: Texas Department of State Health Services, TB/HIV/STD Epidemiology and Surveillance Branch, Texas STD Surveillance Report, 2014

FIGURE 59. GONORRHEA CASE RATES PER 100,000 POPULATION, BY COUNTY, 2011-2014



DATA SOURCE: Texas Department of State Health Services, TB/HIV/STD Epidemiology and Surveillance Branch, Texas STD Surveillance Report, 2014

Tuberculosis

Harris County sees the highest tuberculosis rate in the area, with 7.2 cases per 100,000 population compared. The rate of tuberculosis in Harris County is almost three times the rate in Fort Bend (2.8 per 100,000 population) and Wharton (2.4 per 100,000 population) Counties (FIGURE 60).

FIGURE 60. TUBERCULOSIS CASE RATE PER 100,000 POPULATION, BY COUNTY, 2014

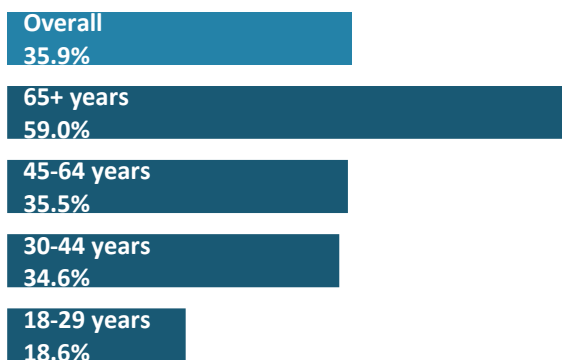


DATA SOURCE: Texas Department of State Health Services, TB-HIV-STD and Viral Hepatitis Unit, TB Counts and Rates by, 2014

Influenza

Data on influenza rates is only available for Harris County. In 2014, 35.9% of adults self-reported as having a seasonal flu shot or vaccine via nose spray, according to the Texas Behavioral Risk Factor Surveillance System. Residents aged 65 years or older were disproportionately more likely to have received a flu shot (59.0%) than other age groups (FIGURE 61).

FIGURE 61. PERCENT ADULTS SELF-REPORTED TO HAVE HAD SEASONAL FLU SHOT OR SEASONAL FLU VACCINE VIA NOSE SPRAY, BY AGE, COUNTY, 2014



DATA SOURCE: Texas Behavioral Risk Factor Surveillance System, 2014

Reproductive and Maternal Health

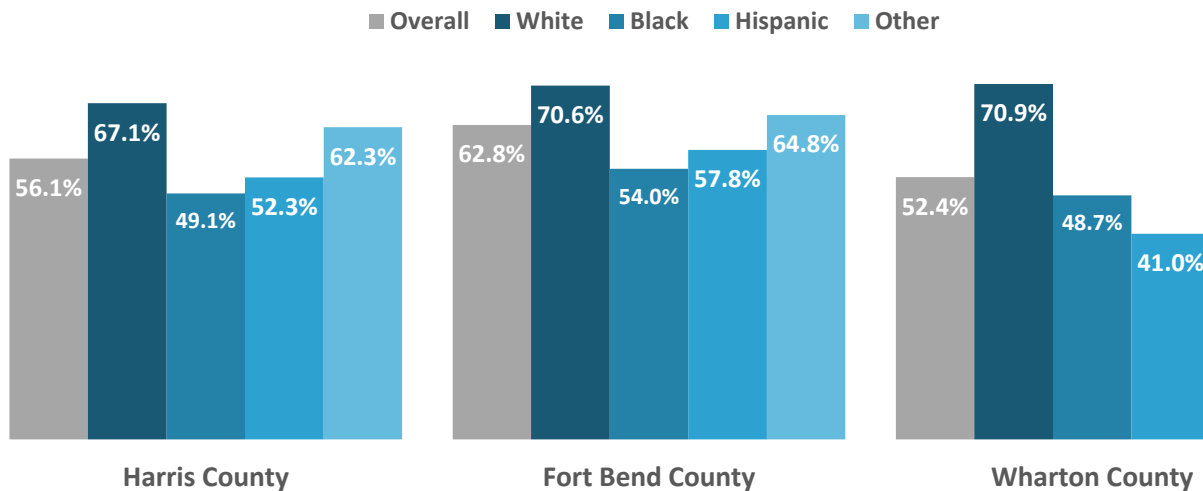
Good reproductive and maternal health provides a stronger foundation for newborns and children to have a more positive health trajectory across their lifespans. This section presents information about birth outcomes and teen pregnancy in the communities served by MH Southwest.

Prenatal Care

According to the Texas Department of State Health Services, 56.1% of live births in Harris County in 2013 occurred to mothers who received prenatal care in their first trimester compared to 62.8% of Fort Bend County live births and 52.4% Wharton County live births (FIGURE 62). Rates of first trimester prenatal care in all three counties were highest for White, non-Hispanic mothers; first trimester prenatal care rates were lowest in Harris

and Fort Bend Counties for Black, non-Hispanic mothers and for Hispanic in Wharton County. Rates of receiving no prenatal care were 3.9% and 1.9% for Harris and Wharton County mothers, respectively (data unavailable for Wharton County) (FIGURE 63). Rates of receiving no prenatal care in Harris and Fort Bend counties were highest for Black, non-Hispanic mothers (5.4% in Harris County and 2.6% in Fort Bend County).

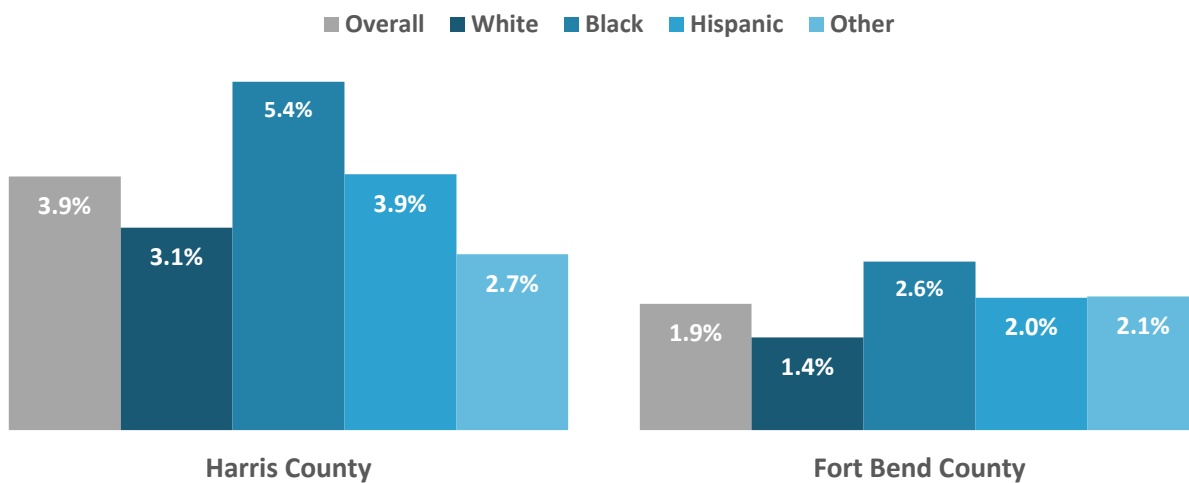
FIGURE 62. PERCENT BIRTHS WITH PRENATAL CARE IN THE FIRST TRIMESTER, BY RACE AND ETHNICITY OF MOTHER, 2013



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

NOTE: Insufficient data for Other race and ethnicity in Wharton County

FIGURE 63. PERCENT BIRTHS WITH 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

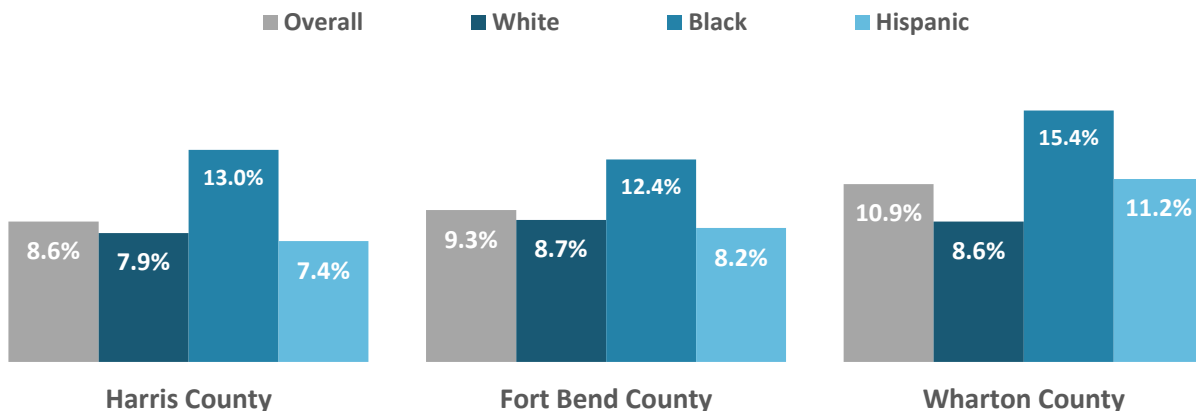
NOTE: Insufficient data in Wharton County

Birth Outcomes

Approximately one in ten babies born in Harris, Fort Bend, and Wharton Counties were born premature, meaning born before 37 weeks gestation, in 2013 (FIGURE 64). Similarly, approximately one in ten babies in the county are born low birthweight, although this varies by race. Babies who are Black,

non-Hispanic in the counties are more likely to be born low birthweight than babies of other races or ethnicities with rates for Black, non-Hispanic babies ranging from 12.4% in Fort Bend to 15.4% in Wharton County. 11.2% of babies who are Hispanic were born low birthweight in Wharton County.

FIGURE 64. PERCENT LOW BIRTH WEIGHT INFANTS, OVERALL AND BY RACE AND ETHNICITY, BY COUNTY, 2013



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

NOTE: White includes Other and Unknown race/ethnicity

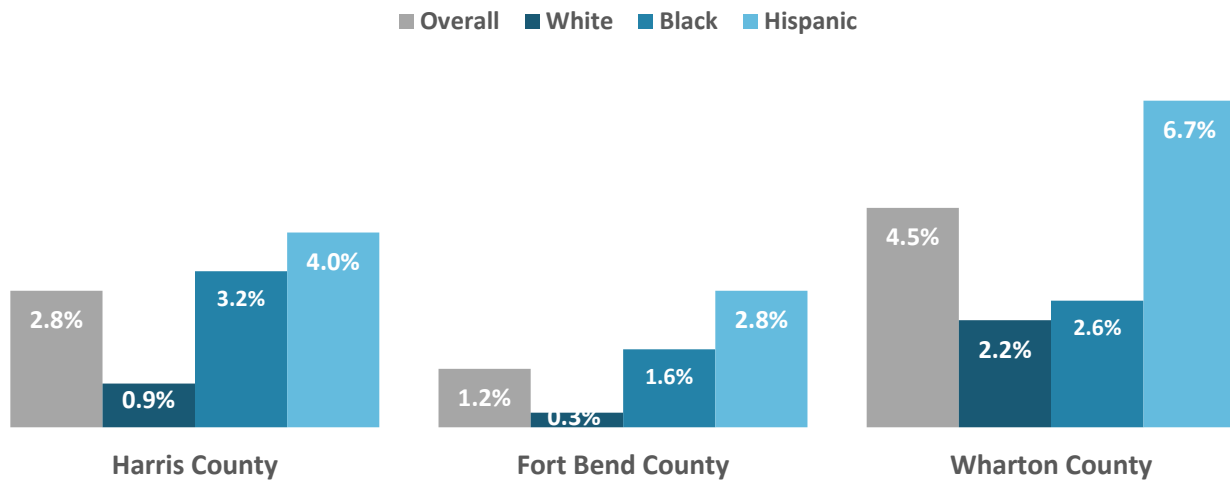
NOTE: Low birth weight is defined as under 2,500 grams

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). Among the three counties served by MH Southwest,

Wharton has the highest percentage of teen births (4.5%) and Fort Bend has the lowest rate of teen births (1.2%) (FIGURE 65). Teen birth rates varied by race/ethnicity. Hispanic teen mothers has the highest birth rates across the three-county region, with a high of 6.7% in Wharton County.

FIGURE 65. PERCENT BIRTHS TO TEENAGED MOTHERS AGE 17 YEARS OLD AND UNDER, BY COUNTY, 2013



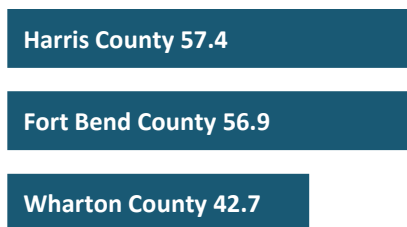
DATA SOURCE: Texas Department of State Health Services, Texas Vital Statistics Annual Report, 2013

NOTE: White includes Other and Unknown race/ethnicity

Oral Health

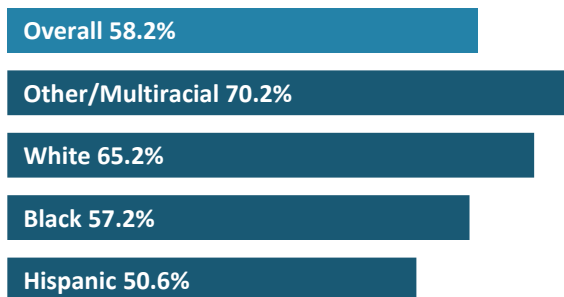
Oral health is a strong indicator of overall well-being and health. In addition to tooth decay and gum disease, poor oral hygiene has been linked in some studies to premature birth, cardiovascular disease, and endocarditis. Oral bacteria and inflammation can also lead to infection in people with diabetes and HIV/AIDS. Across the three counties served by MH Southwest, Fort Bend County had the highest number of dentists (56.9 dentists per 100,000 population) and Wharton County had the lowest number of dentists (42.7 dentists per 100,000 population) (FIGURE 66). 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 67). Hispanic adults in Harris County reported lower rates of annual dental visitation (50.6%). 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 68). Similarly, adults with higher incomes were more likely to have received dental care (FIGURE 69).

FIGURE 66. NUMBER OF DENTISTS PER 100,000 POPULATION, BY COUNTY, 2014



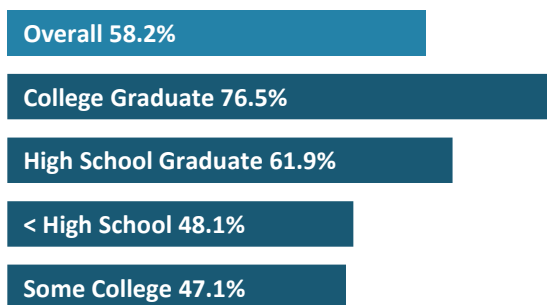
DATA SOURCE: Texas Medical Board, as cited by Texas Center for Health Statistics, 2014

FIGURE 67. PERCENT ADULTS SELF-REPORTED TO HAVE VISITED DENTIST OR DENTAL CLINIC WITHIN PAST YEAR FOR ANY REASON, BY RACE/ETHNICITY, HARRIS COUNTY, 2014



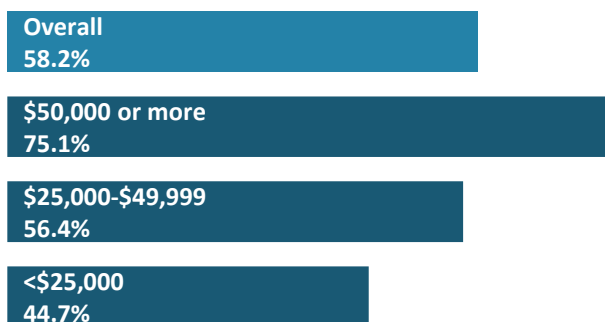
DATA SOURCE: Texas Behavioral Risk Factor Surveillance System, 2014

FIGURE 68. PERCENT ADULTS SELF-REPORTED TO HAVE VISITED DENTIST OR DENTAL CLINIC WITHIN PAST YEAR FOR ANY REASON, BY EDUCATION, HARRIS COUNTY, 2014



DATA SOURCE: Texas Behavioral Risk Factor Surveillance System, 2014

FIGURE 69. PERCENT ADULTS SELF-REPORTED TO HAVE VISITED DENTIST OR DENTAL CLINIC WITHIN PAST YEAR FOR ANY REASON, BY INCOME, HARRIS COUNTY, 2014



DATA SOURCE: Texas Behavioral Risk Factor Surveillance System, 2014

HEALTH CARE ACCESS AND UTILIZATION

Health Insurance

Health insurance is a significant predictor of access to health care services and overall population health. While interview and focus group participants generally stated that community members have access to health insurance, some noted gaps. 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.” Many focus group participants from low-income areas reported frustration regarding their lack of health insurance. One participant said, “You work 30+ years and retire, now I have no insurance; they know you don’t have insurance and a whistle goes off. You have selective discrimination, that’s what I call it. You have to fill out a book to get care. After taking care of people all your life, you struggle.” A key informant health care provider also reported that being uninsured or underinsured affects the health of many residents. “People who aren’t insured or underinsured tend to neglect their health. They ignore it and hope it will go away so they won’t have to pay \$1,000 to fix it. They will suffer the consequences of an untreated condition. Do I pay my light bill or put groceries on the table or do I pay someone to look at me? If they aren’t suffering the consequences from a disease then it makes sense that they won’t pay for care.”

Uninsurance rates decreased for Harris and Fort Bend counties following the passage of the Affordable Care Act in 2010 (FIGURE 70). Harris County had higher rates of uninsurance than Fort

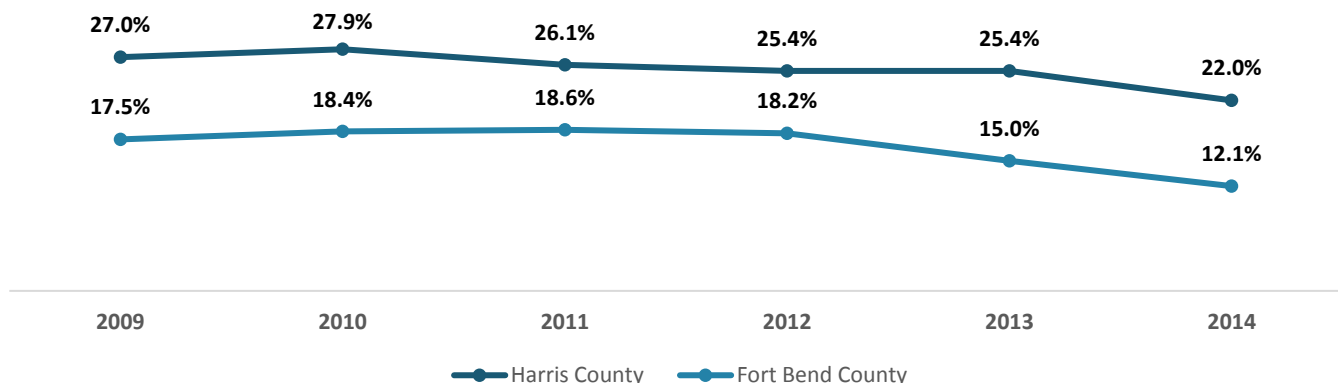
Bend County during the 2009-2014 period. In 2014, 22.0% of the total population in Harris County was uninsured compared to 12.1% in Fort Bend County. Rates of uninsurance varied by zip code across the communities served by MH Southwest. In 2013, the zip codes in the immediate geographic area around the MH Southwest facility had the highest rates of uninsurance for the total population (FIGURE 71). The following zip codes reported rates of uninsurance over 40% in 2013: 77081 (49.2%), 77036 (45.6%), 77074 (40.7%), and 77072 (40.5%). 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% for those 18 and younger in 2013: 77036 (25.2%), 77099 (22.3%), 77081 (21.3%), 77085 (21.3%), 77045 (20.9%), 77074 (20.7%), and 77498 (20.1%) (FIGURE 72).

“Most people are worried about medicine rather than food.”

Senior focus group participant

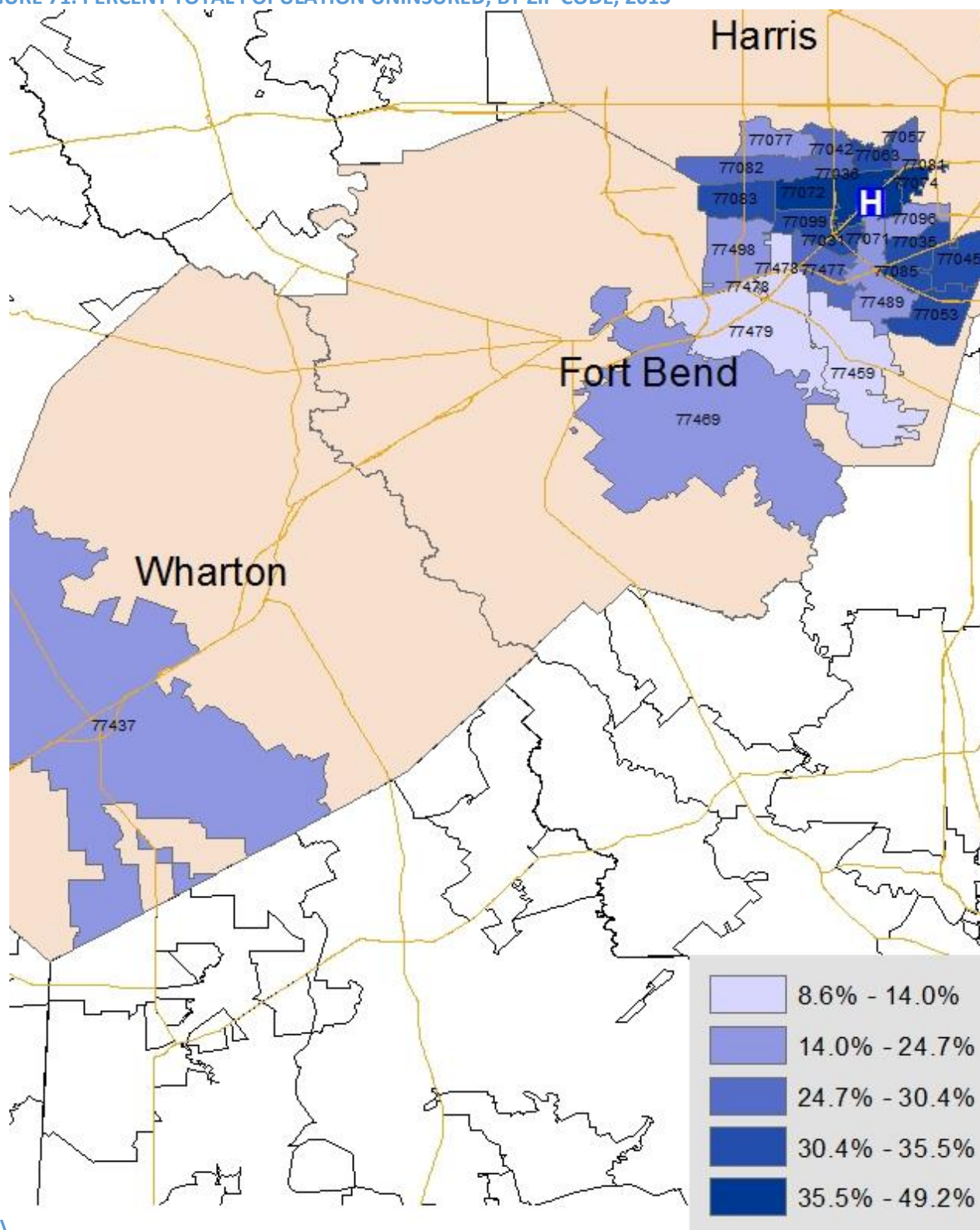
Among the zip codes served by MH Southwest, 180,332 residents were enrolled in Medicaid. In Harris County, the zip code with the most Medicaid enrollees was 77036 in Houston (20,058 enrollees). In Fort Bend County, the zip code with the most Medicaid enrollees was in 77489 in Missouri City (6,456 enrollees) (FIGURE 73).

FIGURE 70. PERCENT TOTAL POPULATION UNINSURED, BY COUNTY, 2009-2014



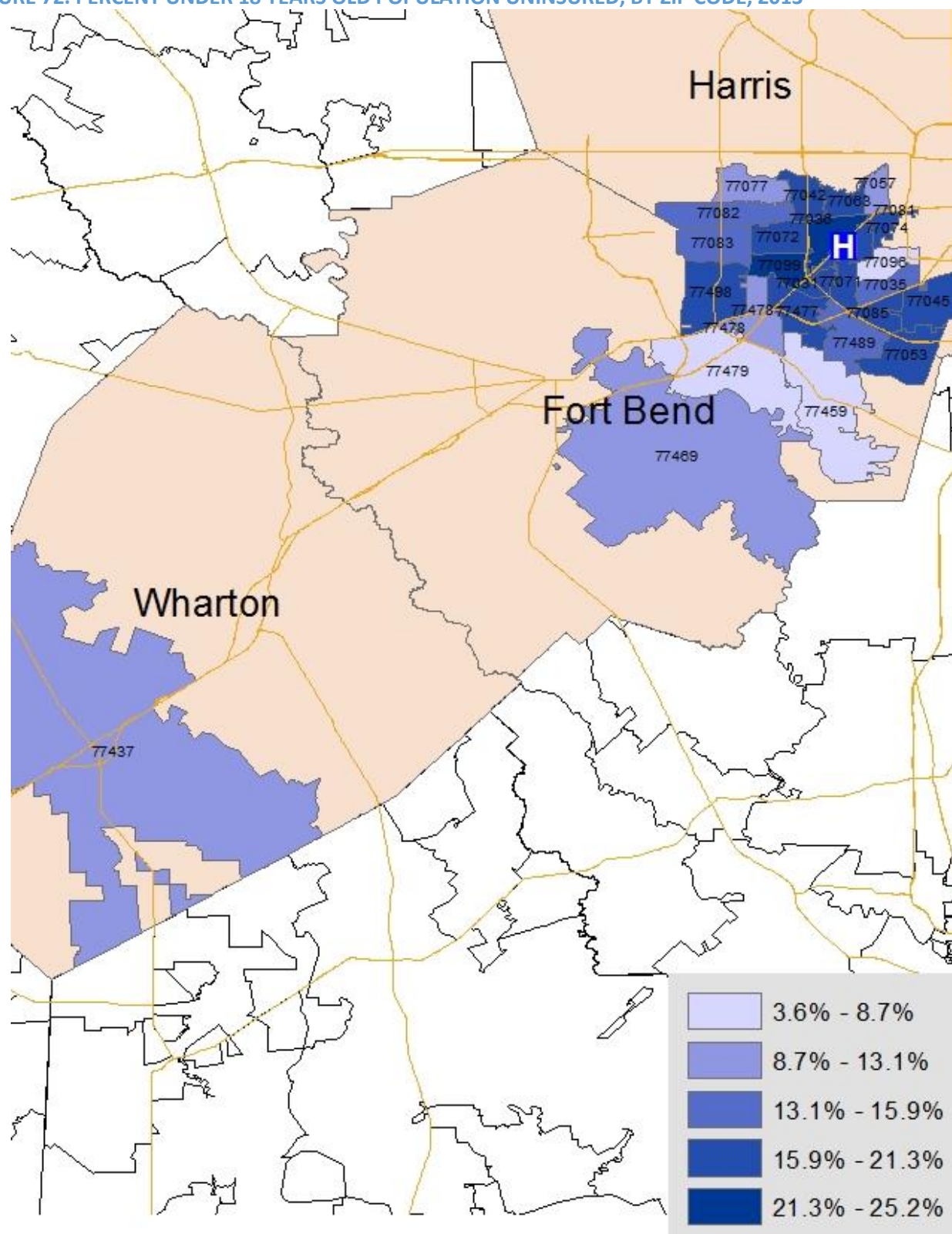
DATA SOURCE: U.S. Census Bureau, American Community Survey 1-Year Estimates, 2010-2014

FIGURE 71. PERCENT TOTAL POPULATION UNINSURED, BY ZIP CODE, 2013



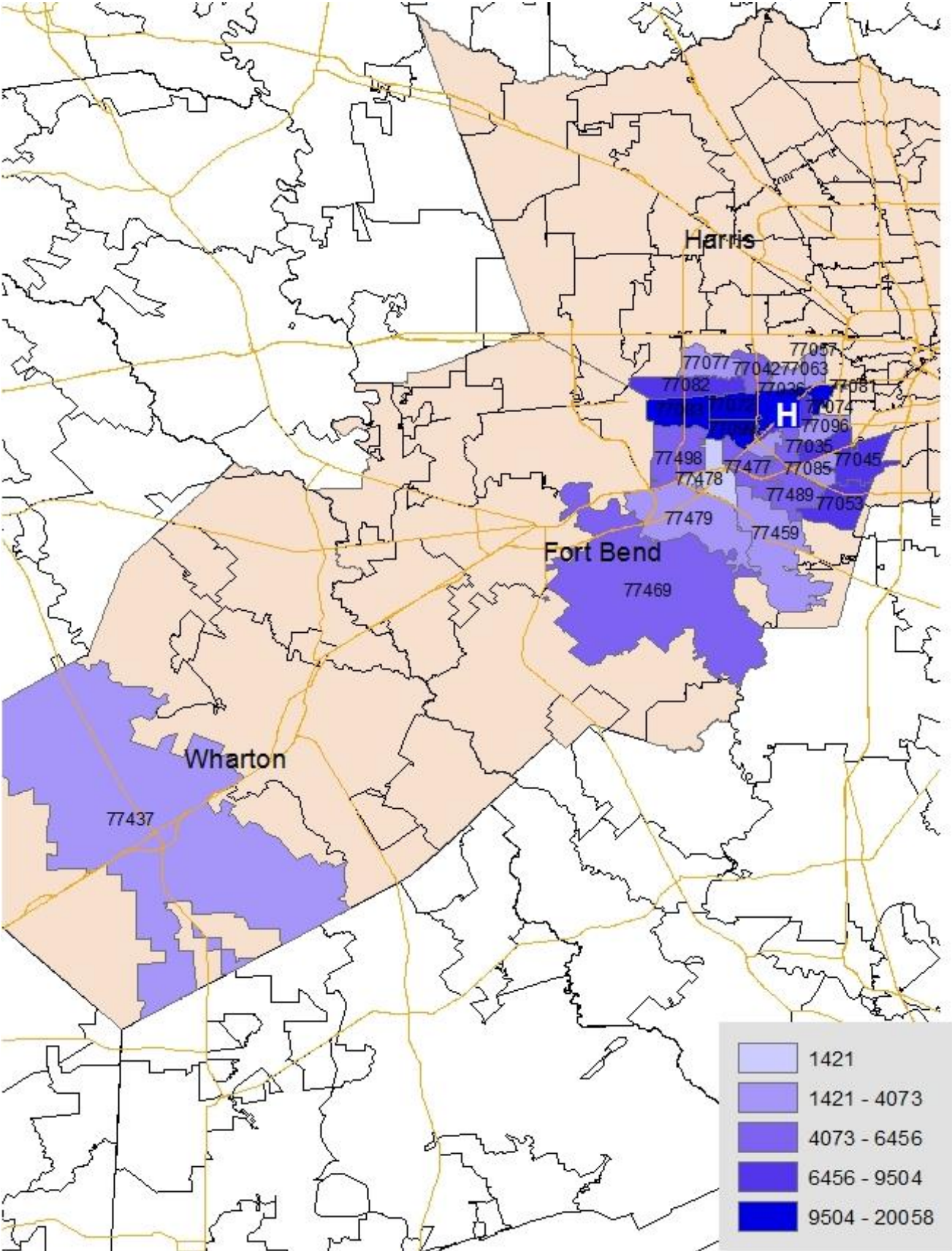
DATA SOURCE: U.S. Census Bureau, American Community Survey 5-Year Estimates, 2009-2013

FIGURE 72. PERCENT UNDER 18 YEARS OLD POPULATION UNINSURED, BY ZIP CODE, 2013



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

FIGURE 73. NUMBER OF MH SOUTHWEST PATIENTS ENROLLED IN MEDICAID, BY ZIP CODE, FISCAL YEAR 2015



DATA SOURCE: Memorial Hermann Health System, Medical Enrollment Data, Fiscal Year 2015

Health Care Access and Utilization

Focus group participants and key informants reported that shortages of specialty providers, particularly in psychiatry, presented a barrier to access to care for area residents. *"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. I grew up in this community, and while tremendous evolution and growth has happened, it grows faster than our response...even our strategic response. We do not have enough service providers and not enough funding. Before you have innovative programming, you need providers in those arenas. Houston has made tremendous strides in investing in those systems."*

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 finding availability of assistance programs in some geographic areas. One focus group participant residing in a low-income area reported that *"...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. There are a lot more programs in Harris and Galveston...not Fort Bend."*

In addition to the barriers described above, cultural and language minorities face unique challenges to accessing health care according to respondents. Newcomers often take low wage jobs with no health insurance. They must negotiate a complex and unfamiliar U.S. health care system and much paperwork. While respondents reported that some healthcare providers have bilingual staff or use translation services, not all do. Again, undocumented individuals were identified by several respondents as a particularly vulnerable population. As one key informant shared, *"People who are undocumented often feel scared to seek out services. So we see those residents have the most challenges when accessing health care."*

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."

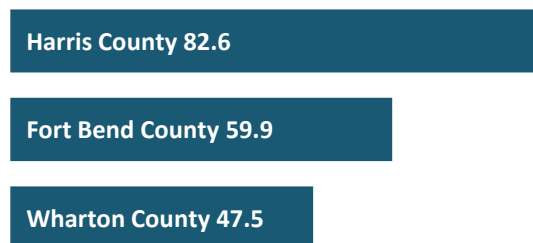
Focus group participants and key informants reported that awareness of available health and social services programs is low. One focus group participant from a low-income area reported, *"There is not enough information about the places that can help you...I just heard about a health center (federally qualified health center) on the street. I don't know what I would do without this place. You will only hear about it by word of mouth."*

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 compared to Fort Bend (59.9 per 100,000 population) and Wharton Counties (47.5 per 100,000 population). In Harris County, 38.2% of adult residents reported in the BRFSS survey that they did not have a doctor or healthcare provider. (FIGURE 74). (Data unavailable for Fort Bend and Wharton Counties.)

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 the Houston-The Woodlands-Sugar Land MSA, which includes Montgomery and Harris counties, 34% of physicians accepted all new Medicaid patients, 24% limited their acceptance of new Medicaid patients, and 42% accepted no new Medicaid patients. 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. (Data on Medicaid acceptance is unavailable for Fort Bend and Wharton Counties due to low survey response rates.)

FIGURE 74. NUMBER OF PRIMARY CARE PHYSICIANS PER 100,000 POPULATION, BY COUNTY, 2014



DATA SOURCE: Texas Medical Board, as cited by Texas Center for Health Statistics, 2014

Emergency and Inpatient Care for Primary Care Treatable Conditions

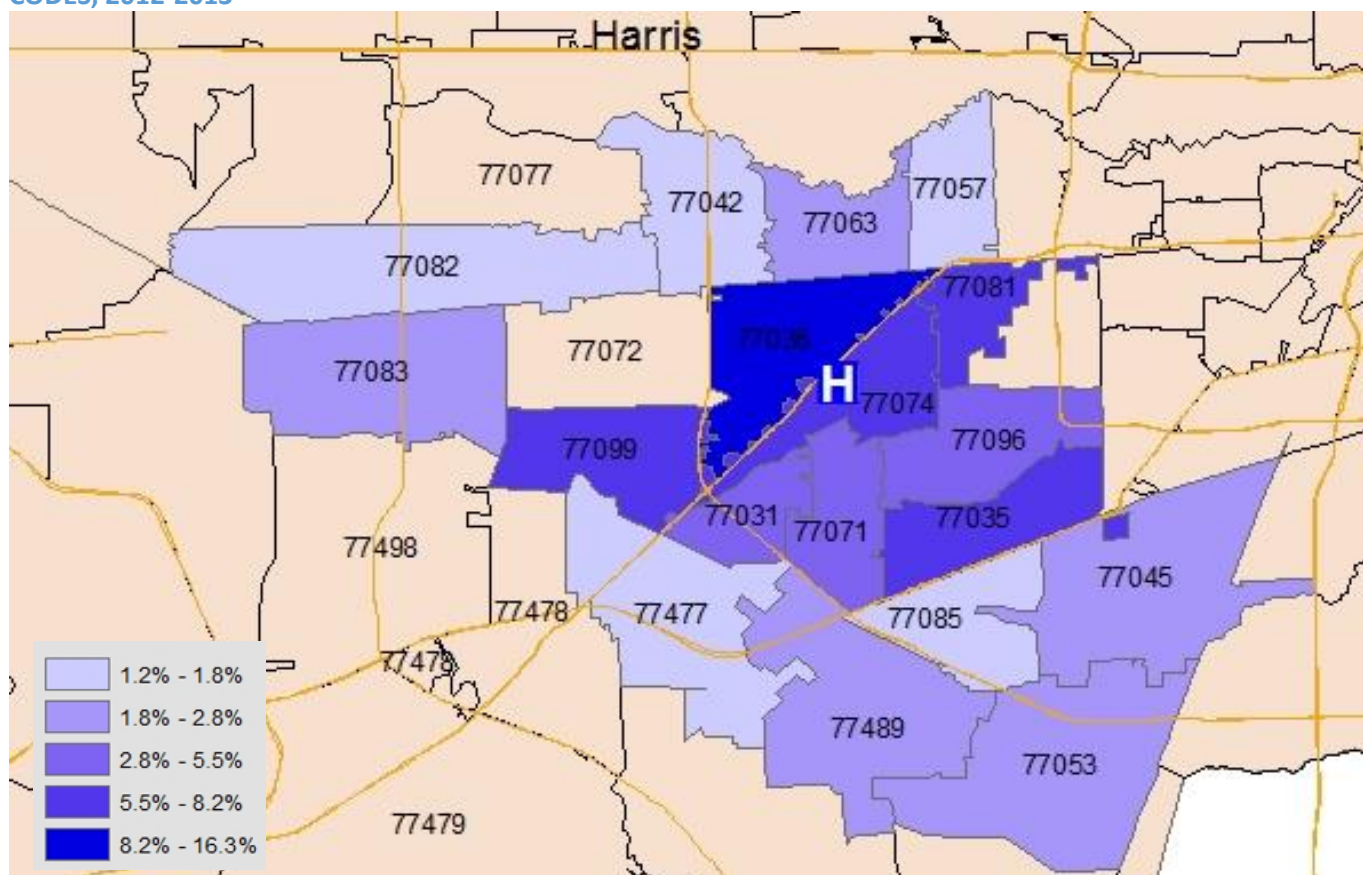
People who are poor, uninsured or covered by Medicaid, certain racial/ethnic minorities and immigrants, and individuals with limited education, literacy, or English language skills are all less likely to have a usual source of care (USOC) provider other than using a hospital emergency department

(ED). In 2013, about four in ten ED visits were classified as primary care-related.

Of MH Southwest's 59,681 ED visits in 2013, 67.7% were from patients who were uninsured or on Medicaid, and 34.8% were classified as non-emergent or with primary care treatable conditions. Of all ER visits, 25% were for chronic conditions of which 18% were hypertension related. Eighteen zip codes in the MH Southwest's CHNA-defined community were among the top 20 zip codes for the highest number of primary care treatable ED visits at the MH Southwest in 2013 (FIGURE 75).

Of MH Southwest's 17,176 inpatient discharges in 2015, 7,650 inpatient discharges or 38.2% were related to an ambulatory care sensitive condition. The top four ambulatory care sensitive conditions that resulted in inpatient care at MH Southwest in 2015 were diabetes (189 discharges), congestive heart failure (167 discharges), chronic obstructive pulmonary disorder (81 discharges), and bacterial pneumonia (81 discharges).

FIGURE 75. PRIMARY CARE TREATABLE EMERGENCY DEPARTMENT VISITS AT MH SOUTHWEST BY TOP 20 ZIP CODES, 2012-2013



DATA SOURCE: Memorial Hermann Health System, Emergency Department Data, 2012-2013

COMMUNITY ASSETS AND RESOURCES

"Houston is recognized as a world class medical care city with a mix of the most extensive high-end hospitals. Yes we have access issues, but the health care infrastructure is strong."

Key informant interviewee

"Our school systems are strong [in Houston]."

Focus group participant

"Diverse cultures, races, ethnicities, and countries of origin contribute to the strength of the city."

Key informant interviewee

"The advantage [of Houston] is the financial stability right now."

Key informant interviewee

Diverse, Cohesive Community

Residents and stakeholders described diversity and social cohesion as being among the primary assets and strengths of their community. The Greater Houston area 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 and the high quality of those services, both in Houston and within communities served by MH Southwest. *"[We have] one of the strongest complex of medical services in the United States and the world."* The health care system was 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."* 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

The communities of MH Southwest are 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. *"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. *"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

The communities served by MH Southwest have strong schools, according to key informants and focus group respondents. 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 to parents by schools and the social cohesion among parents. As one education-based key informant noted, *“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 the communities served by MH Southwest. *“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. *“There’s a lower cost of living. I came from California. Everything is cheaper here.”* One key informant representing the Asian-American community described the positive growth of many businesses in the community served by MH Southwest. *“We find that we have a lot of entrepreneurs. For example, we have the Chinatown area. Within a one mile area of Chinatown, we can find 200 restaurants. You can find Chinese, Vietnamese, Korean...you wonder how they survive, but they thrive.”*

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. Key informants and focus group participants had many ideas about the strategies that might be used to promote healthy living. For example, one informant suggested insurance incentives: *“An insurance product can encourage healthy lifestyles. If you can put a reasonable one in people’s hands...that incentivizes people. It could have the biggest effect.”* 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.”* 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. This 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 Southwest, 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. As stated by one key informant: *“Having more vehicles available and more people to hire would help.”* 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 overcoming the number of barriers to accessing health care services in the communities served by MH Southwest. Stakeholders indicated that existing strategies such as community health workers should be expanded. For example, a stakeholder stated that she suggested *“navigator programs for people to access healthcare”* should be increased. Senior focus group respondents were particularly insistent that advocates be available for them to navigate the complexities of the health care system. *“We need personal advocates for us seniors. We don’t have anyone to fight for us, no one to talk for us.”* Some stakeholders suggested the health care system become more holistic and consider incentivizing social support in the clinical space. 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 Southwest 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. *“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 Southwest. *"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 the communities that serve MH Southwest. 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. 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."*

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 Southwest, 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 is unique in terms of demographics and population health needs compared to Fort Bend and Wharton counties.** 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 experiences more challenges in terms of population health than its more suburban and rural neighbors in the MH Southwest community, 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 contributes to residents' barriers to pursuing a healthy lifestyle.** The residents of communities served by MH Southwest are experiencing challenges associated with rapid population growth, including strain on housing availability, concerns about public safety, 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 without a payment source. 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. It also 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 Southwest, particularly the burden of mental illness in 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.
- **Communities served by MH Southwest 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, other some communities served by MH Southwest have limited access to public health 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 participating in their communities.

PRIORITIZATION OF COMMUNITY HEALTH NEEDS

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 76, 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 Southwest. 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 Southwest, 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 76. PRIORITIZATION CRITERIA

RELEVANCE <i>How Important Is It?</i>	APPROPRIATENESS <i>Should We Do It?</i>	IMPACT <i>What Will We Get Out of It?</i>	FEASIBILITY <i>Can We do It?</i>
<ul style="list-style-type: none"> • Burden (magnitude and severity, economic cost; urgency of the problem) • Community concern • Focus on equity and accessibility 	<ul style="list-style-type: none"> • Ethical and moral issues • Human rights issues • Legal aspects • Political and social acceptability • Public attitudes and values 	<ul style="list-style-type: none"> • Effectiveness • Coverage • Builds on or enhances current work • Can move the needle and demonstrate measureable outcomes • Proven strategies to address multiple wins 	<ul style="list-style-type: none"> • Community capacity • Technical capacity • Economic capacity • Political capacity/will • Socio-cultural aspects • Ethical aspects • Can identify easy short-term wins

APPENDIX A. REVIEW OF 2013 INITIATIVES

CHNA PRIORITIES	OBJECTIVES	RESULTS
Education and prevention for diseases and chronic conditions	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.	In the past three years, MH-Southwest served 148,858 individuals through 12 programs focused on education and prevention for diseases and chronic conditions.
Address issues with service integration, such as coordination among providers and the fragmented continuum of care	To address information sharing, patients' needs for medical homes, and inappropriate ED use through several programs.	<p>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.</p> <p>The ER Navigation services at MH-Southwest 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. Certified Community Health Workers (CHWs) 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.</p> <p>MH-Southwest continues to care for patients without resources post-acute needs by operating the Transitional Care Unit for the Memorial Hermann Health System.</p>

CHNA PRIORITIES	OBJECTIVES	RESULTS
		<p>MH-Southwest provides pharmaceutical support to a Memorial Hermann' school-based clinics located in southwest Houston. 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 3200 visits annually.</p> <p>MH-Southwest ER and Case Management Departments educate patients and patient families who are uninsured or underinsured. A one page handout was created with Affordable Health Clinics and services such as dental, medical, OB-GYN within 5 to 10 miles from the hospital. The addresses, telephone numbers, services provided and hours of operation are outlined.</p> <p>MH-Southwest supports former patients who may need insurance coverage as well as current patients within the system by partnering with Alegis Revenue Group, LLC, a Certified Application Counselor Organization under the Affordable Care Act.</p> <p>MH-Southwest has a referral coordinator to assist patients with coordinating PCP relationships in the community. In 2013, 605 appointments with new PCP's were made.</p> <p>The Palliative Care Team serves more than 500 patients each year.</p>
Address barriers to primary care, such as affordability and shortage of providers	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.	<p>The recruitment of new PCPs to the Southwest Community reduces barriers to health care with additional coverage for the community.</p> <p>Through additional marketing initiatives (physician newsletters, physician liaisons, business development, section meetings, and service line meetings) MH-Southwest has experienced increased Hospitalist Service Line usage.</p>
Address unhealthy lifestyles and behaviors	To continue to reinforce healthy lifestyles and	- "Mindful" is visible throughout the hospital café at each station; main entrée, deli, grill, soup. It incorporates fresh and delicious

CHNA PRIORITIES	OBJECTIVES	RESULTS
	influence and encourage behavior change.	<p>recipes that meet established guidelines into daily retail food offerings.</p> <ul style="list-style-type: none"> -Nutritional information is posted for a vast majority of the offerings. -Mindful logos are utilized on signage to identify the healthy offerings. -A Mindful wellness board is located at the entrance of the café that provides educational materials for customers to encourage healthier lifestyle choices. -Mindful Specials are offered weekly at a variety of stations within the café. -Cooking for Wellness occurs where chefs and dietitians in the Café host cooking demonstrations using healthy cooking techniques. -Innovation cooking is offered Monday and Friday in the café and incorporates Mindful recipes. During National Nutrition Month, the Dietitian Department partners with the Chef and provides healthy cooking demonstrations and wellness information to customers. -Executive Chef Darian Hewitt's is seen on the patient channel 66, where he stars on Memorial Hermann TOP CHEFS – Light with a Flair, demonstrating how to prepare healthy entrees that are featured and available on the patient dining menu at MH-Southwest. -Diet Redesign- Less Is More: Optimizing Nutrition by Reducing Restrictions focuses on reducing the risk of malnutrition in the hospital setting by liberalizing the diet, which is important due to the statistic of >40% of hospital inpatients are admitted with malnutrition. -Nutrition Oncology Monthly Classes are FREE to all who register through 222-CARE. -The clinical staff annually educates the public on nutrition guidelines/healthy eating at Community Health Fairs. -Support groups are ongoing for patients undergoing weight loss surgery and weight loss by medical management. -Classes on topics such as weight loss and exercise, behavior modification, and label reading are on-going. -My Fitness Pal, free for iPhone and Android, provides a personalized diet profile to one's unique weight loss goals.

CHNA PRIORITIES	OBJECTIVES	RESULTS
		<p>-Meatless Mondays encourage reduction of meat consumption by 15% to improve personal health.</p> <p>-"Eat This...Not That" signage drives awareness of options, calories, and ingredients.</p> <p>-Current vending has been enhanced to easily identify wellness offerings in the vending machines. Wellness offering are identified within the machine. In the main vending area touch screens have been added as an option to view the nutritional analysis prior to purchase.</p> <p>-Catering and Patient Menus were revised.</p> <p>-Employee wellness programs continue to include incentive/disincentive for wellness/non wellness selections.</p>
<p>Address barriers to mental healthcare, such as access to services and shortage of providers</p>	<p>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.</p>	<p>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.</p> <p>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.</p> <p>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 up with other outpatient providers for their mental health needs. The clinic aims to promote better health outcomes for patients with mental health treatment needs, decrease</p>

CHNA PRIORITIES	OBJECTIVES	RESULTS
		<p>unnecessary ED visits, and decrease inpatient hospitalizations and incarcerations due to inability to engage and remain in mental health treatment. Licensed Clinic Social Workers and Licensed Professional Counselors assist in linking to outpatient follow-up, either by helping patients establish an appointment with an outpatient provider or by providing patients with resources and referrals. These clinics are not designed to provide continuous outpatient follow-up for mental health needs; rather, they serve as part of the mental health safety net in lieu of expensive ED visits. There are three clinic locations in the greater Houston area. From 2015-2016, patient encounters, including follow-up visits, totaled 7,149.</p> <p>Memorial Hermann Home Health has a behavioral health trained home health nurse that is available for home health needs that are complicated by behavioral health disease.</p> <p>Psych Response Team transfers geropsychiatric patients to the STAR Unit at (Geropsych Unit) MH-Southwest from emergency departments and bedded patients throughout the Memorial Hermann System.</p> <p>In May 2013, MH-Southwest started transferring psychiatric patients (all adult ages) from the emergency center to the Specialty Medicine Unit to be evaluated by a psychiatrist to facilitate flow from the emergency center and reduce length of stay.</p>
Decrease health disparities by targeting specific populations	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.	<p>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.</p> <p>Language Line interpretation resources are available for any patient needing assistance with interpretation.</p> <p>Cab vouchers are provided.</p>
Increased access to affordable dental care	Not Applicable	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.

CHNA PRIORITIES	OBJECTIVES	RESULTS
		Memorial Hermann fully supports local governments in their efforts to impact these issues.
Increased access to transportation	Not Applicable	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.

Note: Appendix A, Review of 2013 Initiatives, added to the 2016 Community Health Needs Assessment on 4/24/17.

APPENDIX B. FOCUS GROUP AND KEY INFORMANT ORGANIZATIONS

Organizations Involved in Focus Group Recruitment by Population Segment

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

Organizations Contributing Key Informant Interviews

ACCESS Health (FQHC)	Interfaith Ministries of Greater Houston
Asian American Health Coalition	LoneStar Family Health Center
Association for the Advancement of Mexican Americans	Mayor's Office for People with Disabilities
Blue Cross Blue Shield	Memorial Hermann Texas Medical Center
Children at Risk	Memorial Hermann Health System
Childrens Defense Fund	Office of Harris County Judge Ed Emmett
Christ Clinic	One Voice Texas
City of Houston, Department of Neighborhoods	Pasadena Independent School District
City of Houston, Department of Parks and Recreation	SETRAC (Southeast Texas Regional Advisory Council)
Community Health Choice	Sheltering Arms Senior Services, Neighborhood Centers Inc.
Fort Bend Health and Human Services	Southwest Management District
Harris County Public Health and Environmental Services	Texas Legislature
Harris Health	The Harris Center for Mental Health and IDD (MHMRA)
Houston Independent School District	Tri County Services
Institute for Spirituality and Health	United Way of Montgomery County
Interfaith Community Clinic	University of Texas School of Public Health

APPENDIX C. FOCUS GROUP GUIDE

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 TRANSPORTATION, 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 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 TRANSPORTION, 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:

Deborah Ganelin

Associate Vice President, Community Benefit Corporation

Email: Deborah.Ganelin@memorialhermann.org

909 Frostwood Avenue, Suite 2.205

Houston, TX 77024