MEMORIAL HERMANN Southeast

Community Health Needs Assessment 2022

Board Approved June 23, 2022

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Executive Summary

Since 2013, Memorial Hermann Southeast Hospital and Pearland Hospital have formally completed a comprehensive Community Health Needs Assessment (CHNA) every three years, in accordance with federal IRS regulations §1.501(r)-3, to better understand the population it serves as well as the health issues that are of greatest concern within its community. As part of the CHNA, the hospital system is required to collect input from the community, including professionals, residents, representatives, or leaders in its identified Primary Service Areas.

Memorial Hermann Health System partnered with Conduent Healthy Communities Institute (HCI) to employ a systematic, data-driven approach to conduct a CHNA for Memorial Hermann Southeast Hospital and Pearland Hospital. The purpose of this report is to offer a meaningful understanding of the most pressing health needs in the Primary Service Area (PSA), as well as to guide planning efforts to address those needs. Special attention has been given to the specific needs of unique populations in the PSA including unmet health needs or gaps in services utilizing input from the community.

Findings from this report will be used to identify, develop, and target hospital and community-driven initiatives to improve the health and quality of life of residents in the community.

Primary Service Area

Memorial Hermann Health System defines the community served by a hospital, as those individuals residing within its Primary Service Area (PSA). The PSA includes approximately 75% of inpatient discharges and does not exclude low-income or underserved populations. Memorial Hermann Pearland Hospital is located 14 miles from Memorial Hermann Southeast and is operating under the Southeast license. The geographical boundaries of the Memorial Hermann Southeast and Pearland Hospitals Primary Service Area (to be identified as the Southeast PSA) are defined by 25 zip codes, all within Brazoria, Fort Bend, Galveston, and Harris Counties. The zip codes and percentage of the patient population that reside in each zip code within the PSA are listed in the Primary Service Area description section of this report.

Demographics

The demographics of a community significantly impact its health profile. Different race/ethnic, age, sex, and socioeconomic groups may have unique needs and require varied approaches to health improvement efforts. All demographic estimates in this report are sourced from Claritas Pop-Facts® (2021 population estimates) and American Community Survey one-year (2019) or five-year (2015-2019) estimates unless otherwise indicated.

Methods for Identifying Community Health Needs

Secondary Data

Secondary data used for this assessment were collected and analyzed from Conduent Healthy Communities Institute's community indicator database. The database, maintained by researchers and analysts at HCI, includes over 200 community indicators covering at least 28 topics in the areas of health, determinants of health, and quality of life. The data are primarily derived from state and national public secondary data sources. The value for each of these indicators is compared to other communities, nationally set targets, and to previous time periods.

Primary Data / Community Input

Primary data used in this assessment consisted of key informant interviews (KIIs) and a community survey. KIIs were conducted with leaders and staff from organizations that provide services directly to the community and officials that represent governmental and non-governmental entities. Interviewees invited to participate were recognized as having expertise in public health, special knowledge of community health needs, representing the broad interests of the community served by the hospital, and/or being able to speak to the needs of medically underserved or vulnerable populations. Input from community residents was collected through an online survey. The survey consisted of 12 questions related to top health needs in the community, individuals' perception of their overall health, individuals' access to health care services, as well as demographic, social, and economic determinants of health.

Summary of Findings

The CHNA findings in this report are drawn from the analysis of an extensive set of secondary data (more than 200 indicators from national and state data sources) and in-depth primary data from community leaders, non-health professionals, and organizations that serve the community at large, community-specific populations, and/or populations with unmet health needs.

Significant health needs were identified across all socioeconomic groups, races and ethnicities, ages, and sexes. The assessment highlighted health disparities and needs that disproportionately impact the medically underserved and uninsured. Through a synthesis of the primary and secondary data, the following 15 health topics were considered.

Memorial Hermann Health System Significant Health Needs		
1. Mental Health and Mental Disorders	6. Physical Activity	11. Oral Health
2. Access to Healthcare	7. Children's Health	12. Women's Health
3. Diabetes	8. Obesity/Overweight	13. Cancers
4. Older Adults/Elderly Care	9. Substance Abuse (alcohol, tobacco, drugs)	14. Injuries, Violence & Safety
5. Heart Disease & Stroke	10. Wellness & Lifestyle	15. Respiratory/Lung Disease (asthma, COPD, etc.)

Prioritized Areas

To standardize efforts across the Memorial Hermann Health System and increase the potential for impacting top health needs in the Greater Houston region, secondary data scoring was assessed and prioritized at the regional/system level. In March 2022, key members from the 13 hospital facilities in the Memorial Hermann Health System completed a survey to prioritize the significant health issues, based on the criteria of ability to impact, scope and severity, and consideration within Memorial Hermann's strategic focus. The following topics were identified as priorities to address:

Memorial Hermann Pillars	Memorial Hermann Health System Prioritized Health Needs
Access:	Access to Healthcare
Emotional Well-Being:	Mental Health and Mental Disorders
Food as Health:	Diabetes, Heart Disease, Stroke, Obesity/Overweight
Exercise is Medicine:	Diabetes, Heart Disease, Stroke, Obesity/Overweight

Disparities

Identifying disparities by race/ethnicity, gender, age, and geography helps to inform and focus priorities and strategies. Understanding disparities also helps us better understand root causes that impact health in a community and inform action towards health equity. Community health disparities were assessed in the data collection process using multiple analysis tools including HCI's Health Equity Index (HEI), HCI's Food Insecurity Index (FII), and Index of Disparity. Primary data collection and analysis also incorporated a focus on disparities.

COVID-19 Impact Snapshot

At the time that Memorial Hermann Health System began its CHNA process, the state of Texas and the nation were continuing to deal with the novel coronavirus (COVID-19) pandemic. The process for conducting the assessment remained fundamentally the same. However, there were some adjustments made during the process to ensure the health and safety of those participating. A summary of the community impact of the COVID-19 pandemic in the region and the impact on community issues are incorporated into this report.

Conclusion

This Community Health Needs Assessment (CHNA), conducted for Memorial Hermann Southeast Hospital and Pearland Hospital, used a comprehensive set of secondary and primary data to determine the significant health needs in the Memorial Hermann Health System. The findings in this report will be used to guide the development of the Memorial Hermann Southeast Implementation Strategy, which will outline strategies to address identified priorities and improve the health of the community.

Introduction & Purpose

As a not-for-profit, tax-exempt hospital, Memorial Hermann Southeast Hospital, and Pearland Hospital are pleased to present their 2021-22 CHNA report, which provides an overview of the significant community health needs identified in the hospitals' Primary Service Area, defined as the Memorial Hermann Southeast Primary Service Area. Memorial Hermann Health System partnered with Conduent Healthy Communities Institute (HCI) to conduct the 2021-22 CHNA across Memorial Hermann Health System's regional Primary Service Area, including Memorial Hermann Southeast Hospital and Pearland Hospital. The Memorial Hermann Health System includes 13 licensed facilities:

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

The purpose of this report is to offer a meaningful understanding of the most pressing health needs across Memorial Hermann's regional Primary Service Area, as well as to guide planning efforts to address those needs. Special attention has been given to the needs of community-specific populations, unmet health needs or gaps in services, and input gathered from the community. Additionally, a section has been added to this report that focuses on the impact of the COVID-19 pandemic.

Findings from this report will be used to identify, develop, and target hospital and community-driven initiatives to improve the health and quality of life of residents in the community.

This report includes a description of:

- The community demographics and population served.
- The process and methods used to obtain, analyze, and synthesize primary and secondary data.
- The significant health needs in the community, considering the needs of uninsured, low-income, and marginalized groups.
- The process and criteria used in identifying certain health needs as significant and prioritizing those significant community needs.

Primary Service Area Definition

The geographical boundaries of the Memorial Hermann Southeast Primary Service Area (PSA) are shown in the map below (**Figure 1**). The PSA is defined by 25 zip codes in Brazoria, Fort Bend, Galveston, and Harris Counties and represents approximately 75% of inpatient discharges. The zip codes and percent of the patient population that resides in each zip code within the Memorial Hermann Southeast Hospital and Pearland Hospital PSA are listed in **Table 1a**. The percent of the patient population by county is listed in **Table 1b**.

Figure 1. Memorial Hermann Southeast Primary Service Area

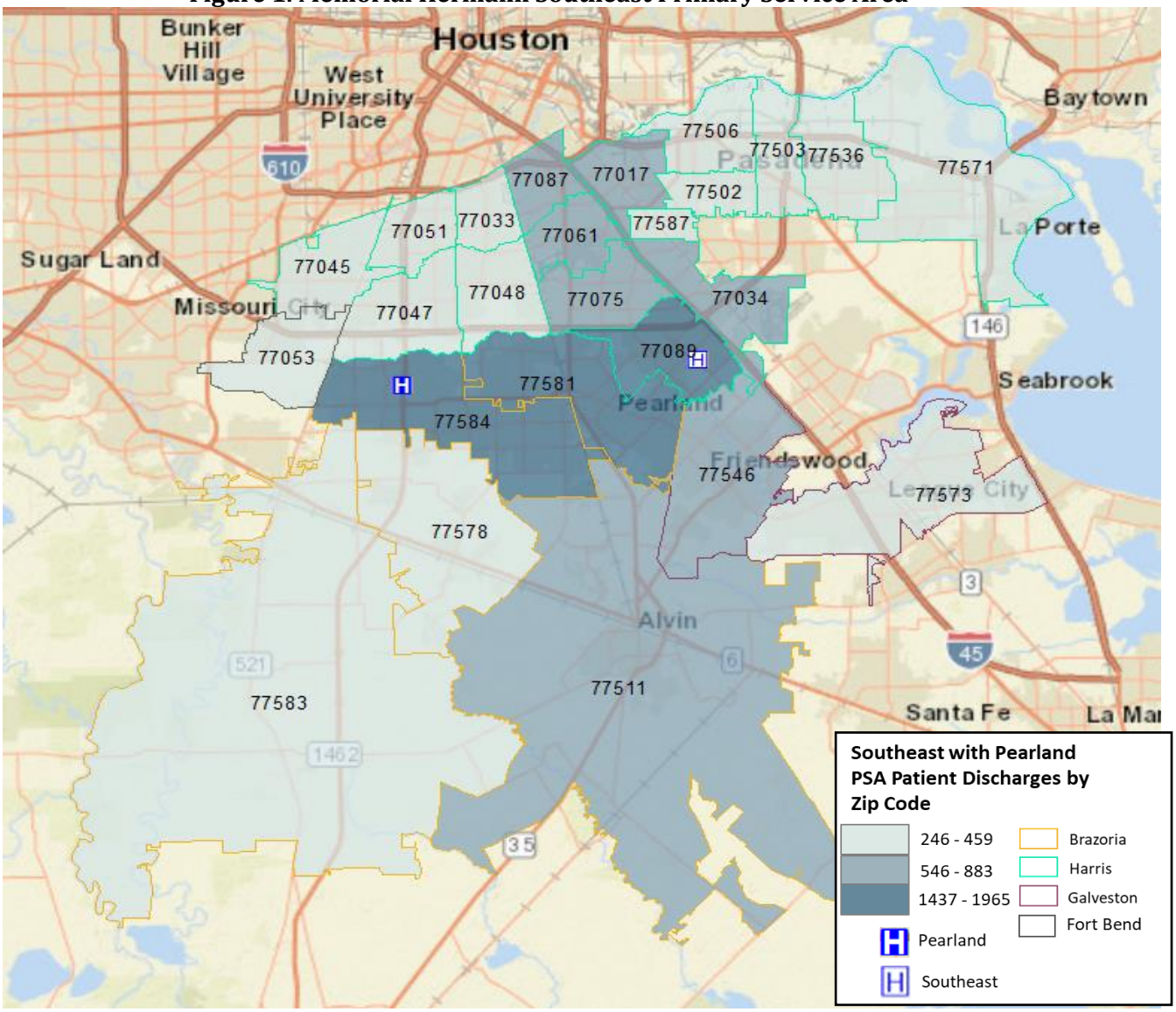


Table 1a. Proportion of Patient Population Served by Zip Code

Zip	County	Primary Service Area Percentage	Patient Count
77089	Harris	9.50%	1,965
77584	Brazoria	6.99%	1,445
77581	Brazoria	6.95%	1,437
77075	Harris	4.27%	883
77511	Brazoria	4.23%	875
77034	Harris	4.21%	871
77546	Galveston	3.41%	706
77087	Harris	3.30%	682
77017	Harris	3.24%	671
77061	Harris	3.03%	626
77033	Harris	2.64%	546
77048	Harris	2.22%	459
77047	Harris	2.20%	455
77573	Galveston	1.91%	394
77583	Brazoria	1.89%	390
77051	Harris	1.83%	378
77578	Brazoria	1.77%	367
77053	Fort Bend	1.73%	357
77045	Harris	1.61%	333
77536	Harris	1.59%	329
77587	Harris	1.51%	312
77502	Harris	1.45%	300
77571	Harris	1.41%	291
77506	Harris	1.33%	276
77503	Harris	1.19%	246
Southeast PSA		**75%**	**15,594**

Table 1b. Percent of Patient Population Served by County

County	Primary Service Area Percentage
Harris	47.53%
Brazoria	21.83%
Galveston	5.32%
Fort Bend	1.73%
Southeast PSA	**75%**

About Memorial Hermann Health System

Memorial Hermann Health System

Charting a better future. A future that's built upon the HEALTH of our community. At Memorial Hermann, this is the driving force as we strive to redefine and deliver health care for the individuals and many diverse populations we serve. Our 6,700 affiliated physicians and 29,000 employees practice the highest standards of safe, evidence-based, quality care to provide a personalized and outcome-oriented experience across our more than 270 care delivery sites. As one of the largest not-for-profit health systems in Southeast Texas, Memorial Hermann has an award-winning and nationally acclaimed Accountable Care Organization, 17* hospitals and numerous specialty programs and services conveniently located throughout the Greater Houston area. Memorial Hermann-Texas Medical Center is one of the nation's busiest Level I trauma centers and serves as the primary teaching hospital for McGovern Medical School at UTHealth Houston. For more than 115 years, our focus has been the best interest of our community, contributing more than $411 in FY 20 through school-based health centers, neighborhood health centers, a nurse health line and other community benefit programs. Now and for generations to come, the health of our community will be at the center of what we do–charting a better future for all.

**Memorial Hermann Health System owns and operates 14 hospitals and has joint ventures with three other hospital facilities, including Memorial Hermann Surgical Hospital First Colony, Memorial Hermann Surgical Hospital Kingwood and Memorial Hermann Rehabilitation Hospital-Katy. These facilities comprise 13 separate hospital licenses.*

Mission Statement

Memorial Hermann Health System is a non-profit, values-driven, community-owned health system dedicated to improving health.

Vision

To create healthier communities, now and for generations to come.

Our Values

Community: We value diversity and inclusion and commit to being the best healthcare provider, employer and partner.
Compassion: We understand our privileged role in people's lives and care for everyone with kindness and respect.
Credibility: We conduct ourselves and our business responsibly and prioritize safety, quality and service when making decisions.
Courage: We act bravely to innovate and achieve world-class experiences and outcomes for patients, consumers, partners and the community.

The extensive geographic coverage and breadth of service uniquely positions Memorial Hermann to collaborate with other providers to assess and create healthcare solutions for individuals in Greater Houston's diverse communities; to provide superior quality, cost-efficient, innovative and compassionate care; to support teaching and research to advance the health professionals and health care of tomorrow; and to provide holistic health care that addresses the physical, social, psychological and spiritual needs of individuals. An integrated health system, Memorial Hermann is known for world-class clinical expertise, patient-centered care, leading-edge technology and

innovation. Supporting and guiding the System in its impact on overall population health is the Memorial Hermann Community Benefit Corporation.

The Memorial Hermann Community Benefit Corporation (CBC) implements initiatives that work with other healthcare providers, government agencies, business leaders and community stake-holders that are designed to improve the overall quality of life in our communities. The work is built on the foundation of four intersecting pillars: Access to Health Care, Emotional Wellbeing, Food as Health and Exercise is Medicine. These pillars are designed to provide care for uninsured and underinsured; to reach those Houstonians needing low-cost care; to support the existing infrastructure of non-profit clinics and federally qualified health centers; to address mental and behavioral care services through innovative access points; to work against food insecurity and physical inactivity; and to educate individuals and their families on how to access the services needed by and available to them. Funded largely by Memorial Hermann with support by various partners and grants, the work takes us outside of our campuses and into the community.

Memorial Hermann Southeast Hospital and Pearland Hospital

Welcoming both patients and their loved ones into the healing process is our philosophy of patient- and family-centered care. **Memorial Hermann Southeast Hospital** has upheld its commitment to bringing the best in healthcare, providing high quality care with the latest technology, close to home in its current facility since 1986, though the hospital's history of service to the community dates back to 1963. Southeast Hospital offers a broad range of medical staff specialties including: Breast Care Center, Cancer Care, Children's Care, Convenient Care Center, Day Surgery, Diabetes Management, Digestive Health, Ear, Nose & Throat, Emergency & Trauma Center, Esophageal Disease Center, Heart & Vascular Care, Imaging Center, Industrial Medicine Services, Neuroscience, Orthopedics and Sports Medicine, Physical, Speech & Occupational Therapy, Sleep Disorders Center, Weight Loss, Wound Care, Women's Health & Gynecology, and Inpatient Rehabilitation.

Memorial Hermann Pearland Hospital brings the expertise of the Memorial Hermann Health System close to home, making the region's top medical experts available to families in the Pearland/Brazoria County area. The hospital features advanced medical equipment and state-of-the-art technology used to address diverse healthcare needs, from quick outpatient visits to procedures requiring highly specialized inpatient care. Designed to expand to 128 beds within the next five years, Memorial Hermann Pearland currently offers 64 inpatient beds (medical/surgical, intensive and cardiac care). The hospital also features operating rooms, cardiac catheterization, nuclear medicine and endoscopy suites. If a higher level of care is needed, Memorial Hermann Pearland patients can be transported within minutes to Memorial Hermann Southeast Hospital, Memorial Hermann-Texas Medical Center or Children's Memorial Hermann Hospital by Memorial Hermann Life Flight®.

Consultants

Memorial Hermann Health System collaborated with Conduent Healthy Communities Institute (HCI) on the completion of its 2021-22 CHNA. HCI works with clients across the U.S. to drive community health improvement outcomes by assessing needs, developing focused strategies, identifying appropriate intervention programs, establishing monitoring systems, and implementing

performance evaluation processes. To learn more about Conduent Healthy Communities Institute, please visit https://www.conduent.com/community-population-health/.

Evaluation of Progress Since Prior CHNA

The CHNA process (**Figure 2**) should be viewed as a three-year cycle. An important piece of that cycle is revisiting the progress made on priority health topics set forth in the preceding CHNA. By reviewing the actions taken to address a priority health issue and evaluating the impact those actions have made in the community, it is possible to better target resources and efforts during the next round of the CHNA cycle.

Figure 2. CHNA Process

Priority Health Needs from Preceding CHNA

Memorial Hermann Southeast Hospital and Pearland Hospital's priority health areas for the years 2019-2021 were:

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

The following section includes notable highlights from a few of the initiatives implemented since the last CHNA to address the priority health needs.

Priority Health Need #1: Access to Health Care

Memorial Hermann Southeast Hospital support initiatives that increase patients' access to care to ensure they receive care at the right location, at the right cost, at the right time. Ongoing efforts include participation in system-wide programs like Nurse Health Line - a 24/7 free resource where community members (uninsured and insured) within the greater Houston community can call to discuss their health concerns, receive recommendations on the appropriate setting for care, and get connected to appropriate resources; ER Navigation – navigating uninsured and Medicaid patients that access the ER for primary care treatable and avoidable issues to a medical home; and OneBridge Health Network - connecting uninsured patients, meeting eligibility criteria, including a referral from a PCP, with the specialty care connections they need to get well.

Priority Health Need #2: Emotional Well-Being

Memorial Hermann Southeast participates in system-wide initiatives that connect and care for community members experiencing a mental health crisis with: access to appropriate psychiatric specialists at the time of their crisis with the Memorial Hermann Psychiatric Response Team; redirection away from the ER and to the Memorial Hermann Mental Health Crisis Clinics; linkage to a permanent, community based mental health provider with the Memorial Hermann Integrated Care Program; and knowledge to navigate the system, regardless of their ability to pay through support from Memorial Hermann Psychiatric Response Case Management.

Priority Health Need #3: Food as Health

Memorial Hermann Southeast has implemented initiatives that increase awareness of food insecurity, provision of food programs, and education that promotes the reduction/postponement of chronic disease through screening for food insecurity via ER staff and care managers and connecting patients to Houston Food Bank for SNAP eligibility and food pantry connections. Memorial Hermann Southeast also provides diabetes education through a series of quarterly Diabetic Support Groups to provide outpatient education for Type 1 and 2 Diabetics and heart disease and stroke education through stroke support groups and AHA Heart Walk participation including year-round general educational opportunities to increase awareness of signs and symptoms of stroke and heart attack at walk events.

Priority Health Need #4: Exercise is Medicine

Memorial Hermann Southeast has implemented initiatives that promote physical activities that promote improved health, social cohesion, and emotional well-being. Efforts include: Walk with a Doc in multiple locations and through a Pediatric Weight Loss Management Program in which a population 12-17 years are taught nutrition including healthy meal recipes, how to pack a healthy lunch, how to eat out healthy, how to read food labels, and exercising for better health.

Community Feedback from Preceding CHNA & Implementation Plan

Memorial Hermann Southeast Hospital and Pearland Hospital 2019-2021 CHNA and Implementation Plan were made available to the public and open for public comment via the website: https://memorialhermann.org/giving-back/community-benefit/reports-community.

No comments were received on either document at the time this report was written.

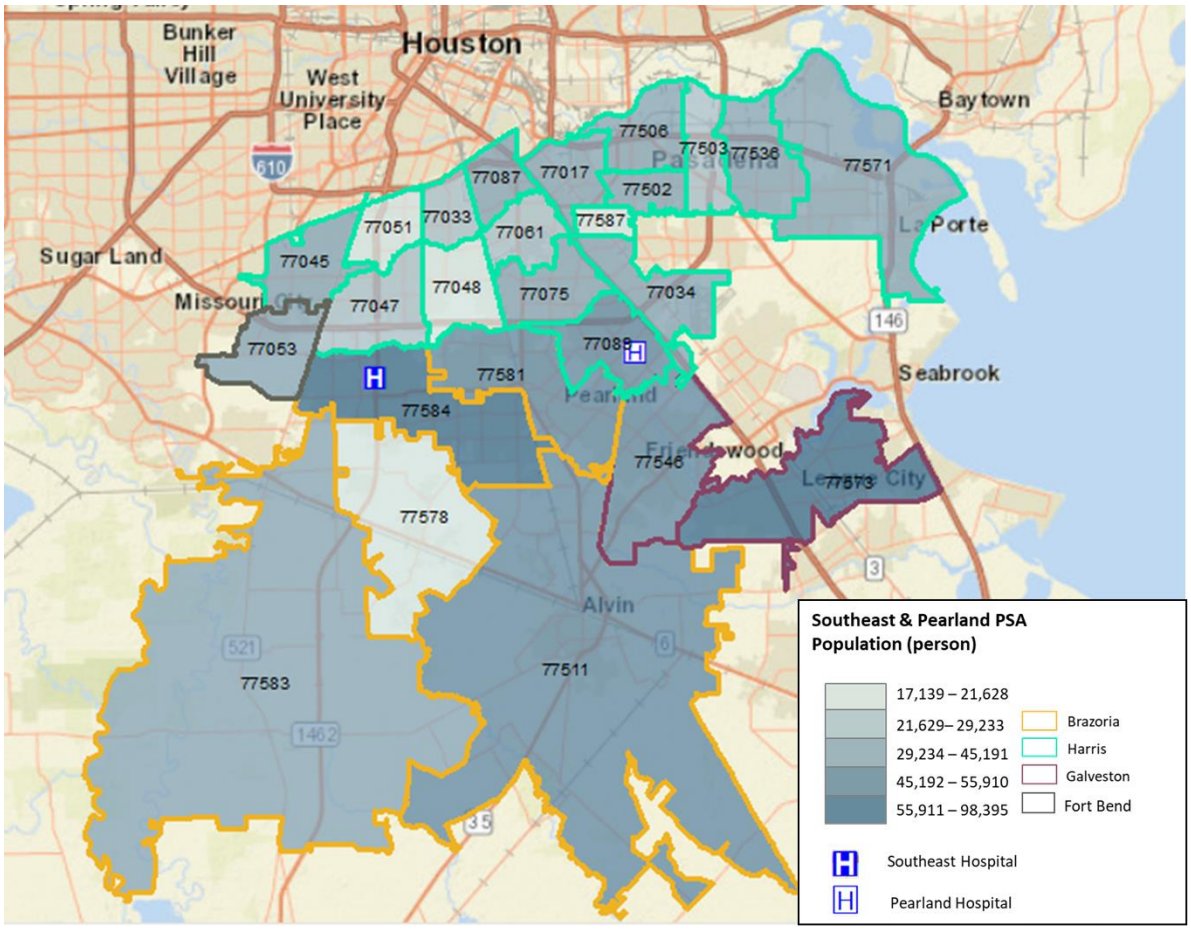
Demographics

The following section explores the demographic profile of Memorial Hermann Southeast Primary Service Area (PSA). The demographics of a community significantly impact its health profile. Different race/ethnic, age, sex, and socioeconomic groups may have unique needs and require varied approaches to health improvement efforts. All demographic estimates are sourced from Claritas Pop-Facts® (2021 population estimates) and American Community Survey one-year (2019) or five-year (2015-2019) estimates unless otherwise indicated.

Population

According to the 2021 Claritas Pop-Facts® population estimates, Memorial Hermann Southeast Hospital and Pearland Hospital have a population of approximately 1,005,062 persons. **Figure 3** shows the population size by each zip code, with darker shades indicating larger populations, and the hospital's Primary Service Area demarcated in blue. **Table 2** provides the actual population estimates for each zip code. The most populated areas within the Primary Service Area are zip code 77584 with a population of 98,395 and 77573 with a population of 90,978. Together these zip codes comprise about 20% of the total population in the Memorial Hermann Southeast PSA.

Figure 3. Southeast PSA Population Size by Zip Code



Source: 2021 Claritas Pop-Facts®, ArcGIS Map

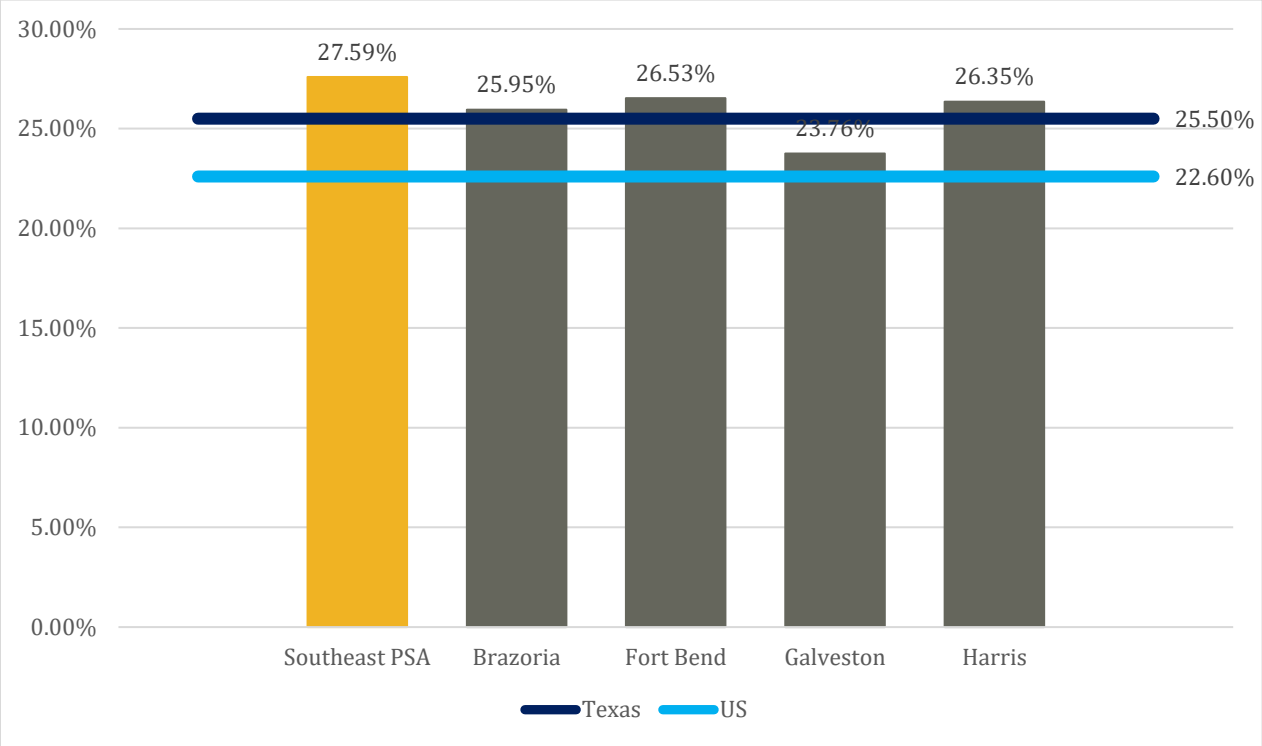
Table 2. Southeast PSA Population by Zip Code

Zip Code	Total Population Estimate	Percent of Total
77584	98,395	10%
77573	90,978	9%
77546	55,910	6%
77089	55,766	6%
77511	54,402	5%
77581	53,039	5%
77075	45,191	4%
77502	40,649	4%
77571	40,631	4%
77087	38,026	4%
77583	37,720	4%
77034	37,466	4%
77506	36,519	4%
77536	34,547	3%
77045	34,286	3%
77017	34,220	3%
77053	33,362	3%
77033	29,233	3%
77047	28,046	3%
77503	27,024	3%
77061	24,914	2%
77578	21,628	2%
77587	18,253	2%
77048	17,718	2%
77051	17,139	2%
Total	**1,005,062**	**100%**

Age

Figure 4 shows the Memorial Hermann Southeast Primary Service Area population under the age of eighteen compared to Brazoria, Fort Bend, Galveston, and Harris Counties, Texas, and the United States. 27.59% of residents in Southeast PSA are under the age of 18, greater than any of the comparative areas.

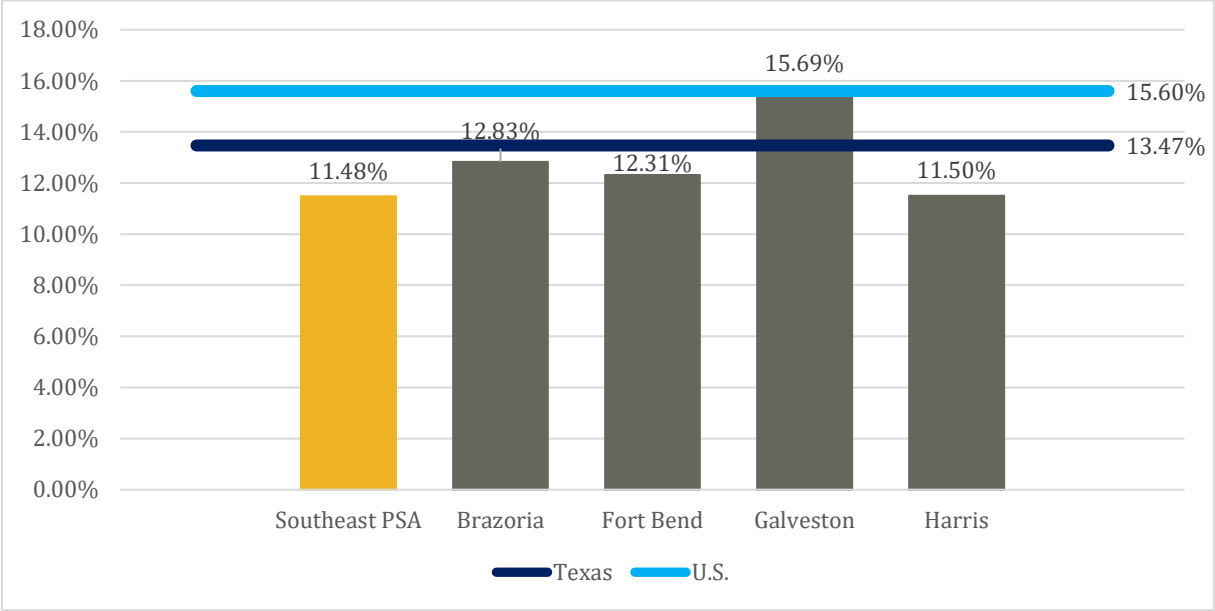
Figure 4. Population Under Age 18



Source: 2021 Claritas Pop-Facts®, American Community Survey 2015-2019

Figure 5 shows the Memorial Hermann Southeast Primary Service Area population over the age of sixty-five as compared to Brazoria, Fort Bend, Galveston, and Harris Counties, Texas, and the United States. Southeast PSA has a lower population of 65 and older than each comparative area with the exception of Harris County.

Figure 5. Population Over Age 65



Source: 2021 Claritas Pop-Facts®, American Community Survey 2015-2019

Table 3 shows the age breakdown of the Memorial Hermann Southeast Primary Service Area compared to county and state. Overall, the age breakdown is similar to the age breakdown of all counties within the service area.

Table 3. Population by Age: Primary Service Area, County, and Texas Comparisons

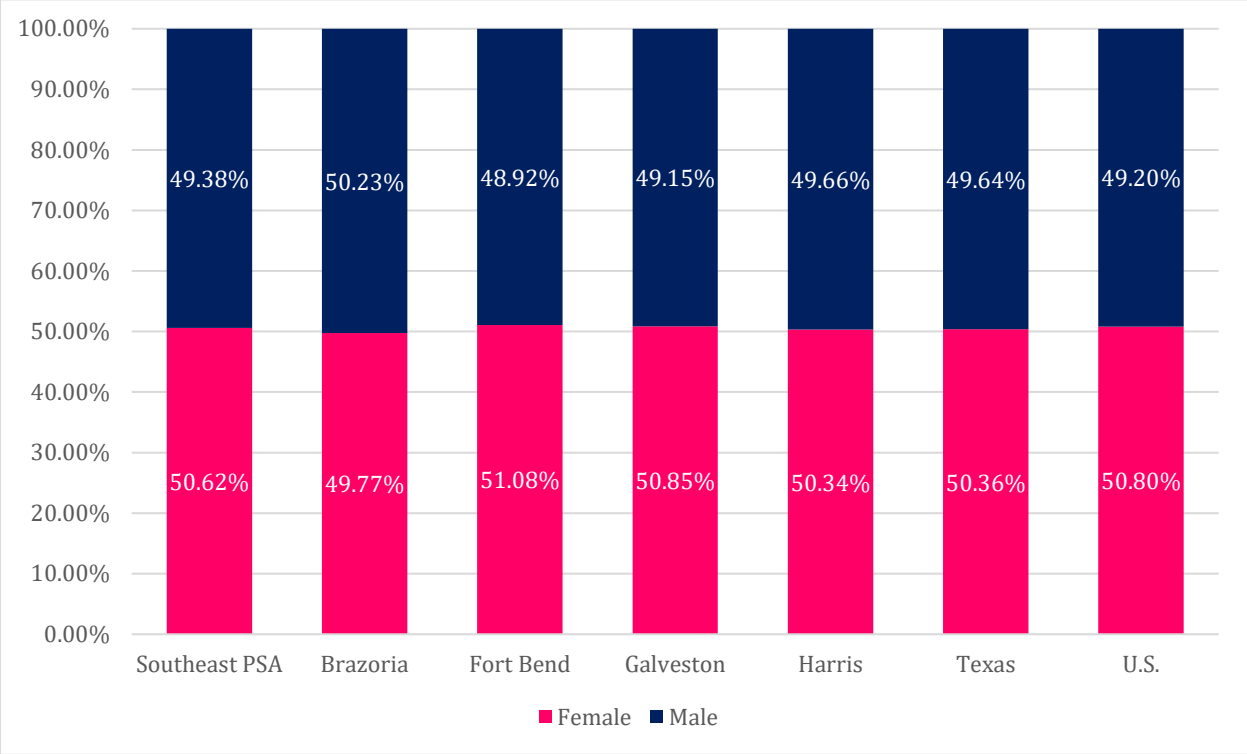
Location	Age 0-4	Age 5-17	Age 18-24	Age 25-34	Age 35-44	Age 45-54	Age 55-64	Age 65+
Southeast PSA	7.75%	19.84%	9.37%	14.12%	14.31%	12.60%	10.53%	11.48%
Brazoria	6.92%	19.03%	8.93%	13.08%	14.54%	13.18%	11.48%	12.83%
Fort Bend	6.84%	19.69%	9.31%	11.43%	14.33%	14.24%	11.84%	12.31%
Galveston	6.33%	17.43%	8.88%	12.71%	13.19%	12.67%	13.10%	15.69%
Harris	7.44%	18.91%	9.34%	15.71%	14.43%	12.48%	10.73%	11.50%
Texas	7.01%	18.49%	9.94%	14.02%	13.50%	12.33%	11.25%	13.47%

Source: 2021 Claritas Pop-Facts®, American Community Survey 2015-2019

Sex

Figure 6 shows the male and female percentages for the Southeast Primary Service Area, Brazoria, Fort Bend, Galveston, and Harris Counties, Texas, and the United States. Males comprise 49.38% of the population, whereas females comprise 50.62% of the population in the Southeast Primary Service Area.

Figure 6. Population by Sex



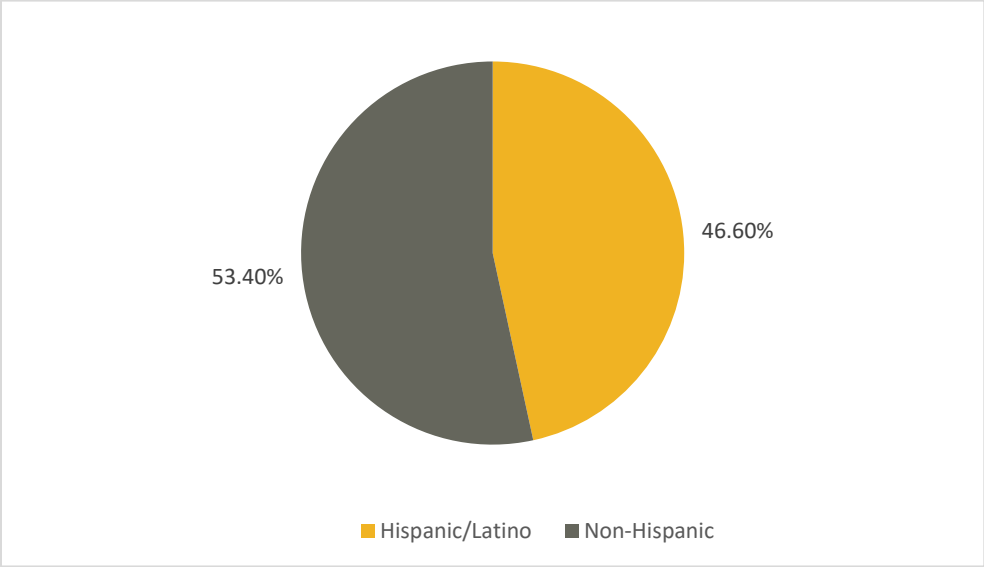
Source: 2021 Claritas Pop-Facts®, American Community Survey 2015-2019

Race and Ethnicity

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

Figure 7 shows the ethnicity of residents in the Memorial Hermann Southeast Primary Service Area with 46.60% of residents identifying as Hispanic or Latino (of any race) and 53.40% identifying as non-Hispanic.

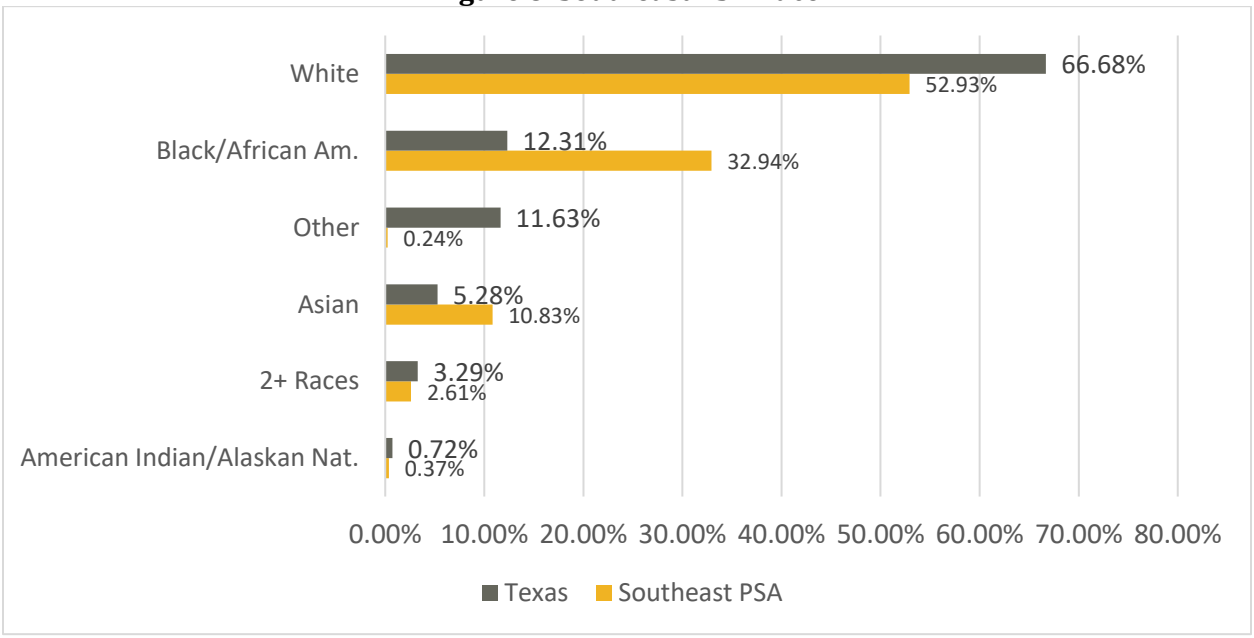
Figure 7. Southeast PSA Ethnicity



Source: 2021 Claritas Pop-Facts®

Figure 8 shows racial composition with 52.93% as White; 32.94% as Black/African American; 10.83% as Asian; 2.61% identify as "two or more Races" and less than one percent as American Indian and Alaska Native, Native Hawaiian, and Other Pacific Islander. **Table 4** shows the comparisons by location, which includes zip code, Primary Service Area, counties, and state comparisons.

Figure 8. Southeast PSA Race



Source: 2021 Claritas Pop-Facts®

Table 4. Population by Race: Zip Code, Primary Service Area, County, State, and U.S.

Location	White	Black/ African American	American Indian/ Alaskan Native	Asian	Native Hawaiian/ Pacific Islander	Other Race	2+ Races
77017	65.89%	3.19%	0.94%	4.45%	0.00%	22.38%	3.15%
77033	16.08%	66.44%	0.43%	0.43%	0.05%	14.53%	2.04%
77034	58.06%	10.25%	0.85%	3.98%	0.07%	22.65%	4.13%
77045	34.64%	35.01%	0.96%	1.95%	0.06%	23.32%	4.05%
77047	21.53%	60.65%	0.60%	4.80%	0.03%	9.21%	3.18%
77048	15.08%	74.63%	0.44%	0.99%	0.03%	6.60%	2.24%
77051	7.09%	84.05%	0.20%	1.41%	0.03%	5.67%	1.55%
77053	38.32%	38.80%	0.59%	0.77%	0.07%	17.66%	3.78%
77061	49.69%	16.59%	0.82%	3.95%	0.03%	25.45%	3.46%
77075	51.53%	15.61%	0.56%	7.53%	0.05%	21.05%	3.67%
77087	55.83%	12.94%	0.64%	0.72%	0.01%	26.51%	3.34%
77089	50.26%	17.50%	0.44%	12.51%	0.08%	15.95%	3.27%
77502	75.04%	2.17%	0.77%	0.42%	0.03%	17.49%	4.08%
77503	75.71%	3.43%	1.00%	0.61%	0.07%	15.70%	3.50%
77506	73.31%	2.30%	0.76%	0.45%	0.05%	20.32%	2.81%
77511	75.18%	3.29%	0.69%	1.24%	0.05%	17.09%	2.46%
77536	81.29%	1.85%	0.73%	2.05%	0.08%	11.08%	2.92%
77546	78.90%	5.68%	0.44%	7.72%	0.08%	3.64%	3.54%
77571	77.33%	6.40%	0.68%	1.45%	0.09%	10.39%	3.66%
77573	78.76%	6.29%	0.43%	6.18%	0.07%	4.68%	3.58%
77578	52.30%	22.64%	0.55%	9.68%	0.04%	11.43%	3.36%
77581	63.57%	12.47%	0.60%	10.08%	0.09%	10.00%	3.19%
77583	49.36%	23.43%	0.50%	7.13%	0.05%	16.69%	2.84%
77584	44.71%	25.18%	0.45%	19.14%	0.06%	6.69%	3.78%
77587	65.17%	1.56%	0.93%	0.41%	0.02%	28.90%	3.01%
Southeast PSA	57.90%	18.09%	0.61%	5.86%	0.06%	14.15%	3.33%
Brazoria	63.42%	14.71%	0.61%	7.17%	0.06%	10.80%	3.23%
Fort Bend	41.64%	26.46%	0.28%	28.29%	0.06%	0.30%	2.96%
Galveston	71.24%	12.62%	0.63%	3.45%	0.08%	8.68%	3.32%
Harris	53.33%	19.02%	0.70%	7.40%	0.07%	15.63%	3.86%
Texas	66.68%	12.31%	0.72%	5.28%	0.10%	11.63%	3.29%
United States	72.50%	12.70%	0.90%	5.50%	0.2%	4.90%	3.30%

Source: 2021 Claritas Pop-Facts®, American Community Survey 2015-2019

Table 5 shows ethnicity by Primary Service Area, county, state, and United States comparisons. In the Memorial Hermann Southeast Primary Service Area, 53.40% identify as Hispanic, higher than in other locations.

Table 5. Population by Ethnicity: Primary Service Area, County, State, and U.S. Comparisons

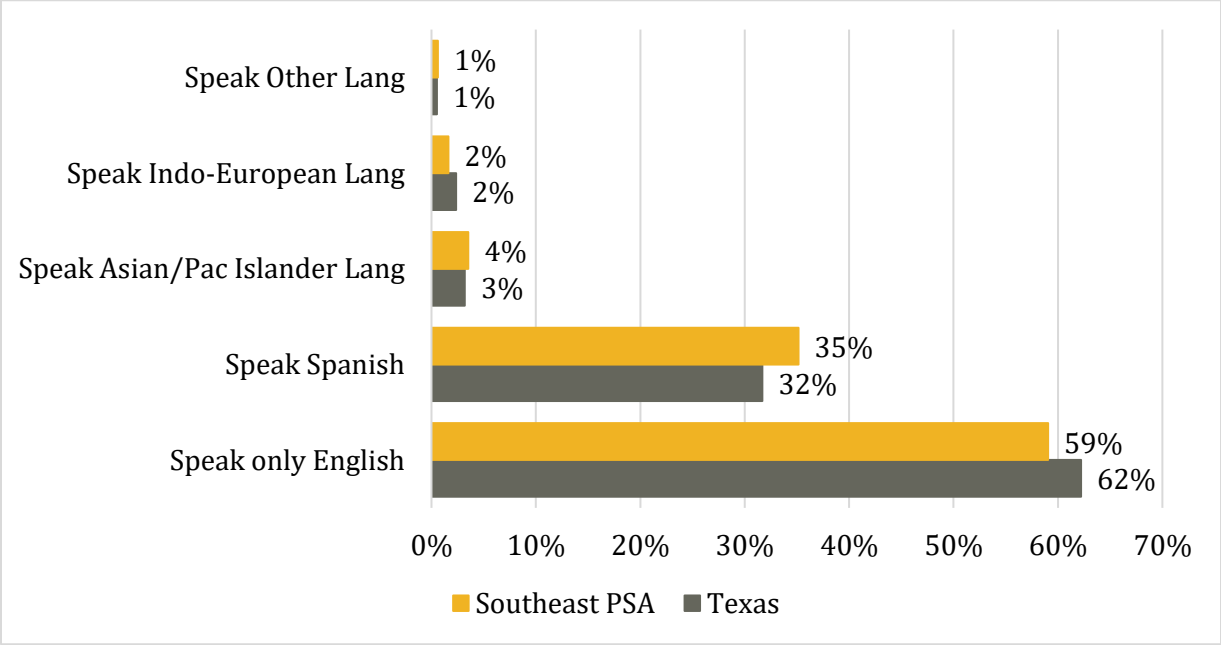
Location	Hispanic	Non-Hispanic
Southeast PSA	53.40%	46.60%
Brazoria	32.78%	67.22%
Fort Bend	25.46%	74.54%
Galveston	26.29%	73.71%
Harris	44.85%	55.15%
Texas	40.90%	59.10%
United States	18.00%	82.00%

Source: 2021 Claritas Pop-Facts®, American Community Survey 2015-2019

Language and Immigration

Language is an important factor to consider for outreach efforts to ensure that community members are aware of available programs and services. **Figure 9** shows the percentage of the population age five and older by language spoken at home. In the Southeast Primary Service Area, the proportion of the population that speaks English at home is 59%. This is an important consideration for the effectiveness of services and outreach efforts, which may be more effective if conducted in languages other than English alone. Spanish is the second most common language spoken at home, at 35% of the population. **Table 6** shows the comparisons by location, which includes zip code, Primary Service Area, county, and state comparisons.

Figure 9. Population Age 5+ by Language Spoken at Home



Source: 2021 Claritas Pop-Facts®, American Community Survey 2015-2019

Table 6. Population Age 5+ by Language Spoken at Home: Zip Code, Primary Service Area, County, and State Comparisons

Location	Only English	Spanish	Asian/Pacific Island Language	Indo-European Lang.	Other Language
77017	27.49%	68.06%	3.61%	0.75%	0.09%
77033	71.69%	25.59%	1.81%	0.30%	0.61%
77034	39.31%	55.67%	2.62%	1.64%	0.77%
77045	49.04%	48.70%	1.44%	0.49%	0.32%
77047	68.62%	21.39%	4.28%	4.65%	1.06%
77048	81.55%	14.02%	1.92%	0.42%	2.10%
77051	80.02%	12.11%	0.99%	1.13%	5.76%
77053	47.93%	50.84%	0.65%	0.28%	0.29%
77061	39.68%	55.63%	3.75%	0.77%	0.16%
77075	37.17%	56.19%	4.83%	0.92%	0.89%
77087	29.72%	68.61%	0.90%	0.57%	0.20%
77089	56.17%	32.04%	7.87%	3.16%	0.76%
77502	38.89%	59.69%	0.27%	0.78%	0.36%
77503	43.32%	53.04%	2.53%	0.87%	0.24%
77506	27.66%	70.55%	1.34%	0.37%	0.08%
77511	68.35%	29.47%	1.14%	0.91%	0.14%
77536	75.95%	21.65%	1.14%	1.07%	0.20%
77546	79.31%	13.23%	3.32%	3.89%	0.26%
77571	73.21%	24.63%	0.87%	1.05%	0.25%
77573	80.20%	13.78%	3.34%	2.33%	0.35%
77578	67.07%	21.25%	7.99%	2.55%	1.15%
77581	70.04%	21.42%	6.22%	2.02%	0.30%
77583	61.51%	30.90%	5.50%	1.24%	0.84%
77584	70.68%	17.62%	7.89%	2.52%	1.29%
77587	24.93%	74.34%	0.47%	0.22%	0.04%
Southeast PSA	59.05%	35.16%	3.54%	1.62%	0.62%
Brazoria	69.27%	24.61%	3.89%	1.69%	0.54%
Fort Bend	61.94%	19.94%	8.33%	8.69%	1.10%
Galveston	77.06%	18.19%	2.33%	2.05%	0.36%
Harris	56.09%	35.82%	4.15%	3.05%	0.89%
Texas	62.22%	31.7%	3.2%	2.35%	0.53%

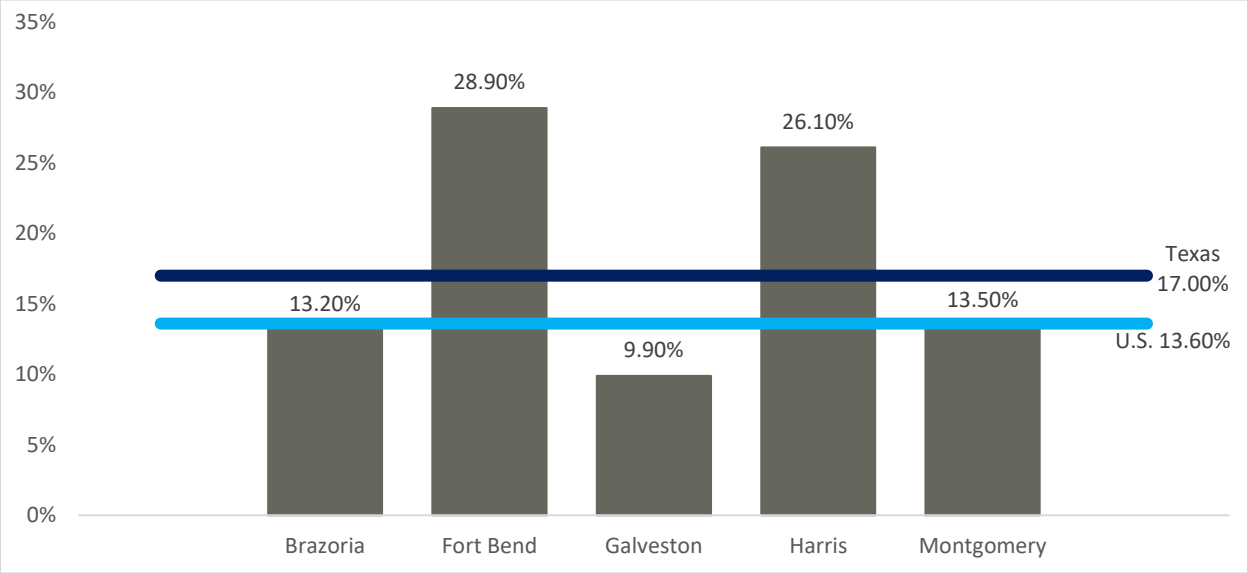
Source: 2021 Claritas Pop-Facts®, American Community Survey 2015-2019

In 2017, the Houston metropolitan area was home to 1.6 million immigrants, making it the fifth-largest foreign-born population in the US, after New York City, Los Angeles, Miami, and Chicago. Immigrants represented 24% of Houston's overall population. Unauthorized immigrants made up approximately one-third of immigrants in the Houston area. Another 30% were naturalized citizens, 32% were legal permanent residents, and 5% were legal nonimmigrants (Migration Policy Institute, 2018).

Unauthorized immigrants comprised 10% of all workers, a share higher than their proportion of the Houston population at 8%. Houston's economic future is critically dependent on continued immigration. Construction and service industries are particularly dependent on immigrant labor today, but other sectors such as health care and IT will increasingly rely on immigrants to meet growing labor demands (Migration Policy Institute, 2018).

Figure 10 shows the estimated percentages of the population who are foreign born. The percentages include all foreign-born persons, regardless of whether they are naturalized U.S. citizens. Data availability was limited to five of twelve counties served by the Memorial Hermann Hospital System.

Figure 10. Foreign Born Persons: County, State, and U.S. Comparisons



Source: American Community Survey 2015-2019

Social & Economic Determinants of Health

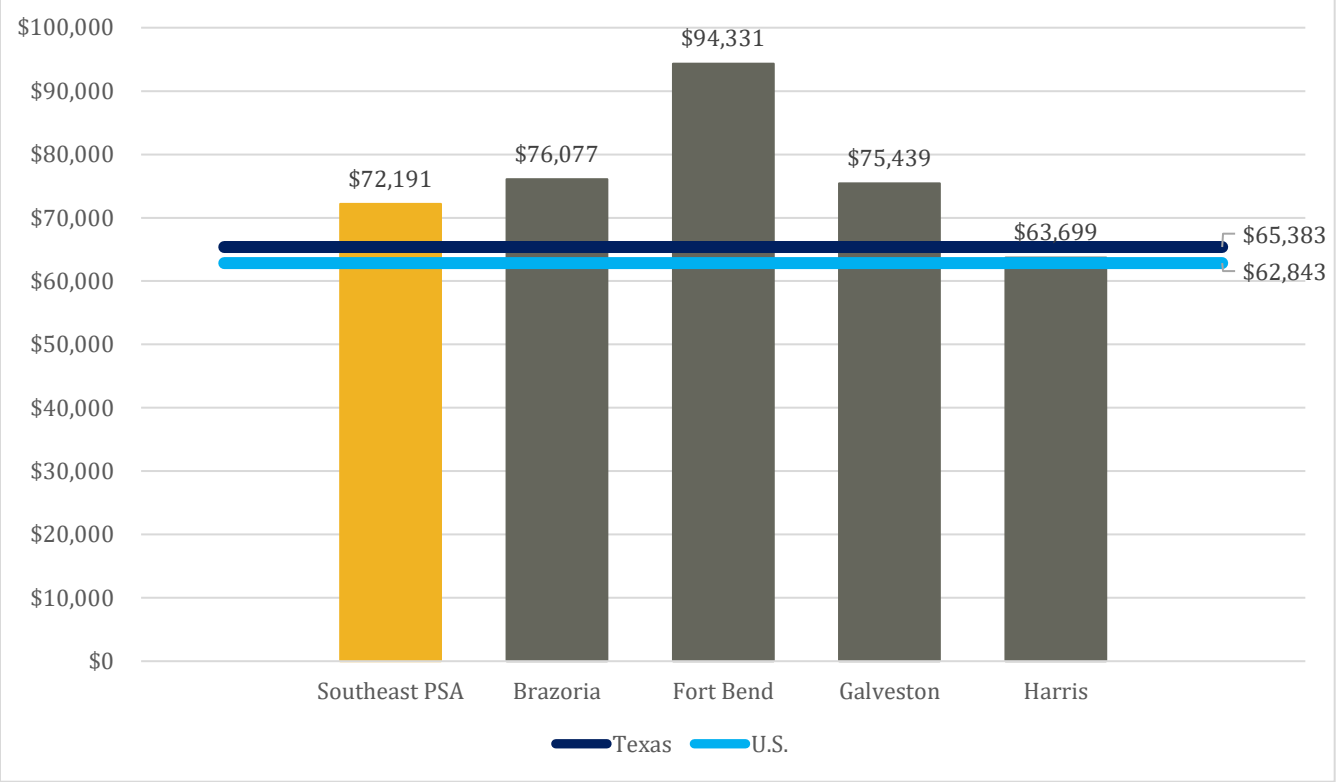
This section explores the economic, environmental, and social determinants of health of the Memorial Hermann Southeast Primary Service Area. Social determinants are the conditions in which people are born, grow, work, live, and age, and the wider set of forces and systems shaping the conditions of daily life.

Income

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

Figure 11 provides a breakdown of households by income in the Memorial Hermann Southeast Primary Service Area, Brazoria, Fort Bend, Galveston, and Harris Counties, Texas, and the United States. The Southeast Primary Service Area median household income is $72,191 which is significantly higher than Harris County, the state of Texas, and the United States, but lower than Brazoria, Fort Bend, and Galveston Counties.

Figure 11. Median Household Income: Primary Service Area, County, State, and U.S. Comparisons



Source: 2021 Claritas Pop-Facts®, American Community Survey 2015-2019

Table 7 shows the median household income by zip code, Primary Service Area, county, state, and the United States. At $107,559, zip code 77573 has the highest median household income and at $33,675, 77051 has the lowest. **Table 8** shows median household income by race/ethnicity. In the Southeast PSA, the Asian population has the highest median income at $97,564 and the Hispanic/ Latino population has the lowest at $53,600.

Table 7. Median Household Income by Zip Code, Primary Service Area, County, State, and the U.S.

Location	Median Household Income
77573	$107,559
77584	$102,322
77546	$101,665
77581	$92,794
77578	$86,510
77583	$84,116
77536	$83,312
77571	$78,701
77089	$71,223
77047	$70,342
77511	$61,615
77075	$59,348
77045	$58,015
77503	$53,555
77053	$52,583
77034	$51,508
77502	$49,483
77017	$48,910
77587	$48,111
77048	$43,761
77506	$41,625
77061	$40,426
77087	$39,740
77033	$38,795
77051	$33,675
Southeast PSA	$72,191
Brazoria	$76,077
Fort Bend	$94,331
Galveston	$75,439
Harris	$63,699
Texas	$65,385
U.S.	$62,843

Source: 2021 Claritas Pop-Facts®, American Community Survey 2015-2019

Table 8. Median Household Income by Race/ Ethnicity: Zip Code, Primary Service Area, County, State, and U.S. Comparisons

Location	White	Black/ African American	American Indian/ Alaskan Native	Asian	Native Hawaiian/ Pacific Islander	Hispanic/ Latino
77017	$52,859	33,182	44,750	38,148	-	54,311
77033	46,250	34,730	30,000	22,500	75,000	47,555
77034	56,300	35,027	36,500	78,086	32,500	53,780
77045	62,353	52,427	54,412	81,915	75,000	61,592
77047	70,238	70,286	57,143	90,104	62,500	65,676
77048	56,512	37,878	44,750	86,250	137,500	58,088
77051	47,206	30,676	54,167	84,868	200,000	51,799
77053	56,716	53,746	56,250	58,594	93,750	49,187
77061	46,551	26,452	44,375	75,765	42,500	46,453
77075	66,403	49,559	74,219	81,312	62,500	59,478
77087	40,943	35,164	41,563	47,132	62,500	40,918
77089	81,565	53,149	60,000	77,089	30,000	73,763
77502	48,520	33,750	51,515	43,438	75,000	52,648
77503	51,081	34,444	84,091	35,750	30,000	56,224
77506	41,177	34,135	31,667	54,167	57,500	43,040
77511	64,970	32,516	40,250	67,279	33,750	58,402
77536	88,936	71,646	83,333	76,087	63,889	86,065
77546	105,079	88,073	61,458	104,478	62,500	88,753
77571	80,964	71,341	64,815	40,000	66,071	73,164
77573	110,490	86,822	69,565	110,787	43,571	76,283
77578	90,414	89,051	37,500	97,126	62,500	64,954
77581	96,890	87,082	84,274	93,500	35,000	88,855
77583	82,725	96,749	33,281	114,946	62,500	61,905
77584	100,356	99,660	69,643	119,653	47,500	88,662
77587	50,459	30,000	43,438	40,357	42,500	48,468
Southeast PSA	78,706	59,063	56,315	97,564	65,288	53,600
Brazoria	76,488	79,353	55,316	109,407	59,546	49,423
Fort Bend	99,913	79,456	110,592	119,646	120,361	69,539
Galveston	84,390	45,863	61,279	90,056	49,423	61,586
Harris	73,122	46,749	56,041	82,719	61,586	51,324
Texas	69,353	49,985	58,487	95,444	56,881	51,128
U.S.	68,785	41,935	43,825	88,204	63,613	51,811

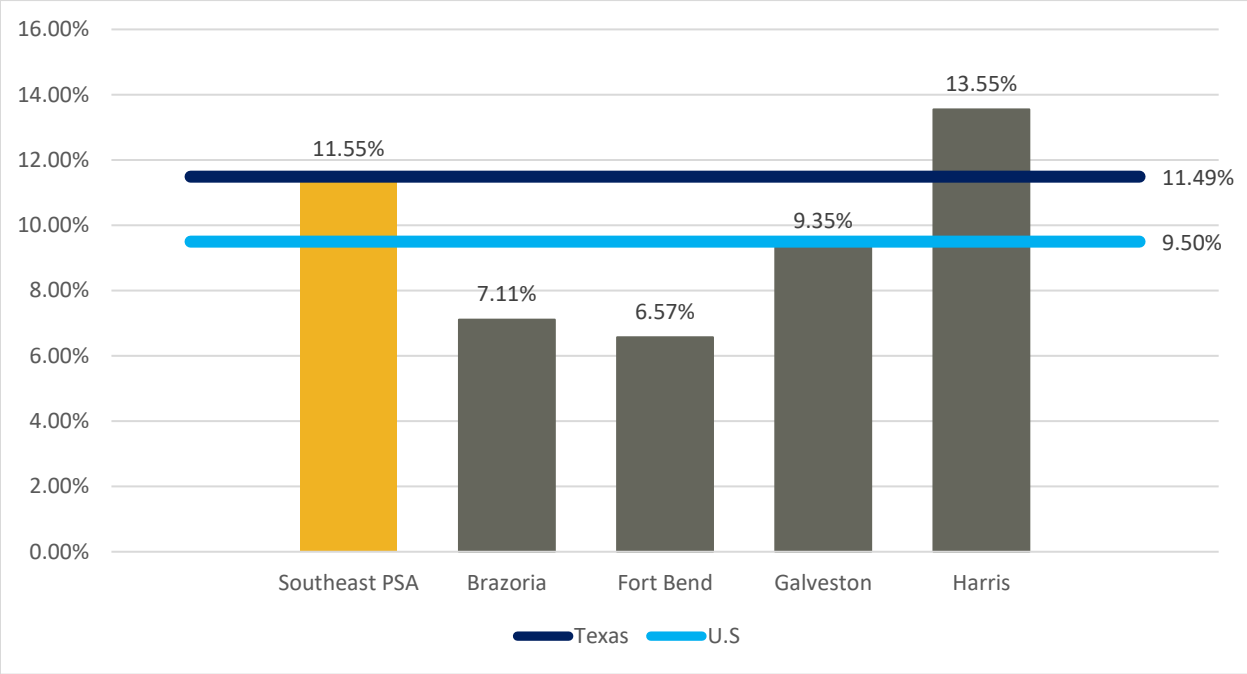
Source: 2021 Claritas Pop-Facts®, American Community Survey 2015-2019

Poverty

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

Figure 12 shows the proportion of families living below the poverty level in Memorial Hermann Southeast Primary Service Area compared to the state and the U.S. The percentage of families living below the poverty level in Memorial Hermann Southeast Primary Service Area is 11.55%, which is higher than the national value (9.5%) and almost equal to the state value (11.49%).

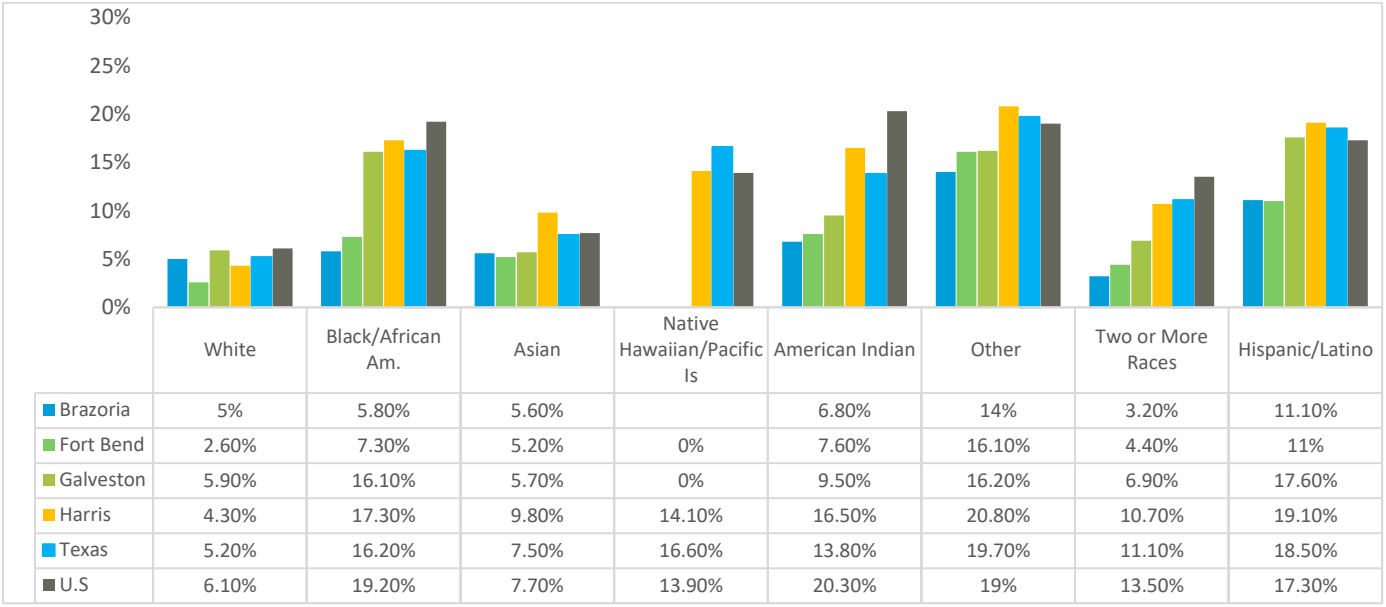
Figure 12. Primary Service Area Families Living Below Poverty Level, Texas & U.S. Comparisons



Source: 2021 Claritas Pop-Facts®, American Community Survey 2015-2019

Figure 13 shows the proportion of residents living below the poverty level by race/ethnicity. In Harris County, 19.10% of Hispanic or Latino residents and 17.30% of Black/African American residents live below the poverty level. The percentage of Black/African American, Hispanic, and Asian residents living below the poverty level in Harris County is each higher than the state value. With the exceptions of White, Asians, and Hispanic/Latino, Brazoria County has fewer residents living below the poverty level than all comparative areas.

Figure 13. Families Living Below Poverty Level by Race/Ethnicity, County, Texas, and the U.S.

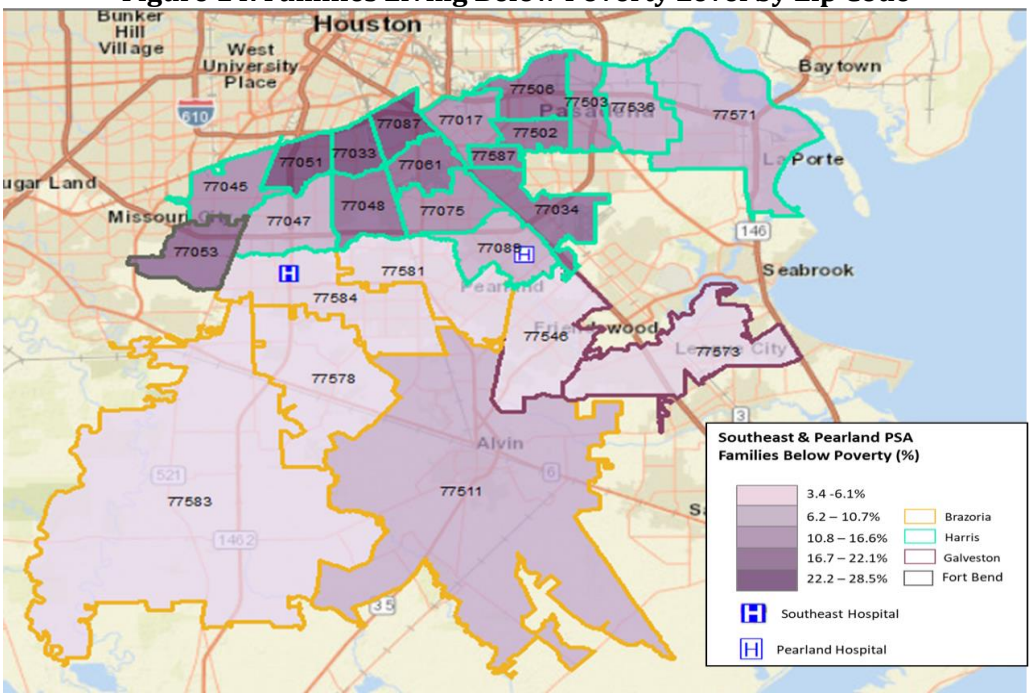


	White	Black/African Am.	Asian	Native Hawaiian/Pacific Is	American Indian	Other	Two or More Races	Hispanic/Latino
Brazoria	5%	5.80%	5.60%		6.80%	14%	3.20%	11.10%
Fort Bend	2.60%	7.30%	5.20%	0%	7.60%	16.10%	4.40%	11%
Galveston	5.90%	16.10%	5.70%	0%	9.50%	16.20%	6.90%	17.60%
Harris	4.30%	17.30%	9.80%	14.10%	16.50%	20.80%	10.70%	19.10%
Texas	5.20%	16.20%	7.50%	16.60%	13.80%	19.70%	11.10%	18.50%
U.S	6.10%	19.20%	7.70%	13.90%	20.30%	19%	13.50%	17.30%

Source: American Community Survey 2015-2019

Figure 14 shows families living below the poverty level by zip code in the Southeast PSA. Zip codes in the darker areas represent higher percentages of poverty. **Table 9** shows zip codes with the highest poverty levels as compared to the Primary Service Area, Brazoria, Fort Bend, Galveston, and Harris Counties, Texas, and United States.

Figure 14. Families Living Below Poverty Level by Zip Code



Source: 2021 Claritas Pop-Facts®,

Table 9. Families Living Below Poverty Level by Zip Code

Zip Code	Families Living Below Poverty
77051	28.55%
77033	25.91%
77087	23.97%
77506	22.09%
77061	21.54%
77048	21.03%
77502	18.61%
77034	18.31%
77587	18.25%
77053	17.71%
77017	16.60%
77045	15.57%
77075	15.13%
77503	14.07%
77511	10.69%
77047	8.92%
77089	8.55%
77536	8.15%
77571	8.07%
77573	6.08%
77583	5.28%
77581	4.47%
77578	4.39%
77546	4.10%
77584	3.39%
Southeast PSA	11.55%
Brazoria	7.11%
Fort Bend	6.57%
Galveston	9.35%
Harris	13.55%
Texas	11.49%
U.S.	9.50%

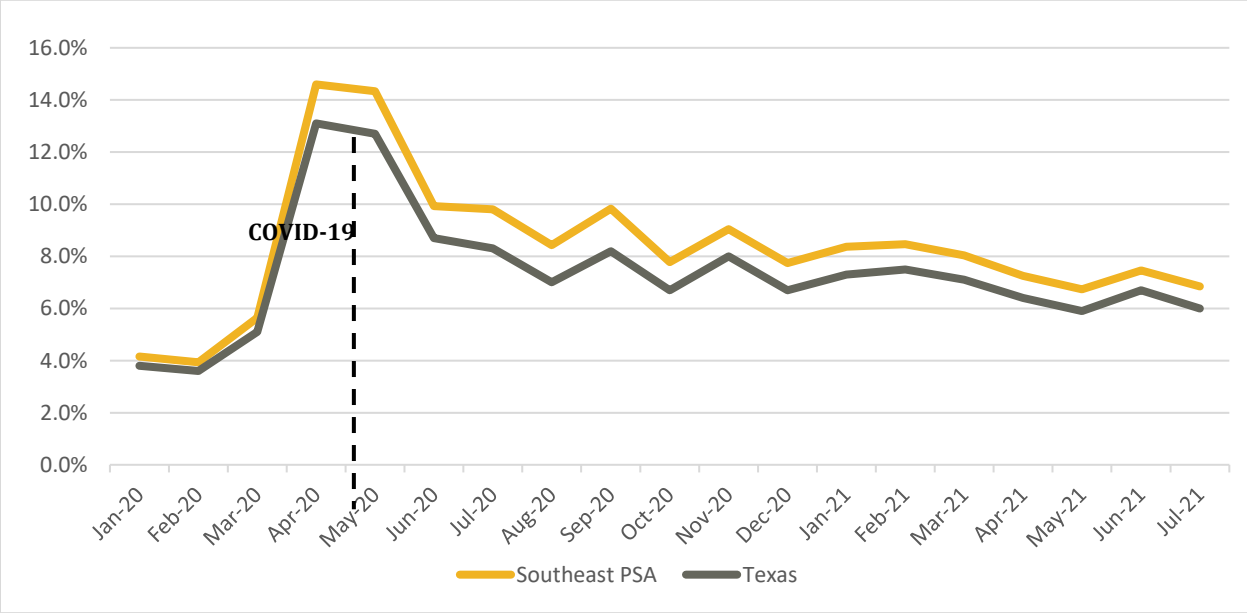
Source: 2021 Claritas Pop-Facts®, American Community Survey 2015-2019

Employment

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

Figure 15 displays the rate of unemployment in the Southeast Primary Service Area between January 2020 and July 2021. Although the unemployment rate has exhibited an increase after the start of the COVID-19 pandemic, it is decreasing towards its pre-pandemic level (3.9%). As of July 2021, the Southeast Primary Service Area (6.8%) was higher compared to the state (6.0%) and national rates (5.3%).

Figure 15. Primary Service Area Unemployment Rate (Population 16+)
January 2020-July 2021



Source: U.S Bureau of Labor Statistics 2021

Table 10 shows unemployment rates for those sixteen and older. As of July 2021, the Southeast PSA rate at 6.8% was a little higher than the Texas unemployment rate at 6.0%.

Underemployment can also limit access to health insurance coverage and preventive care services. Underemployment is described as involuntary part-time employment, poverty-wage employment, and insecure employment. Types of employment and working conditions can also have significant impacts on health. Work-related stress, injury, and exposure to harmful chemicals are examples of ways employment can lead to poorer health.

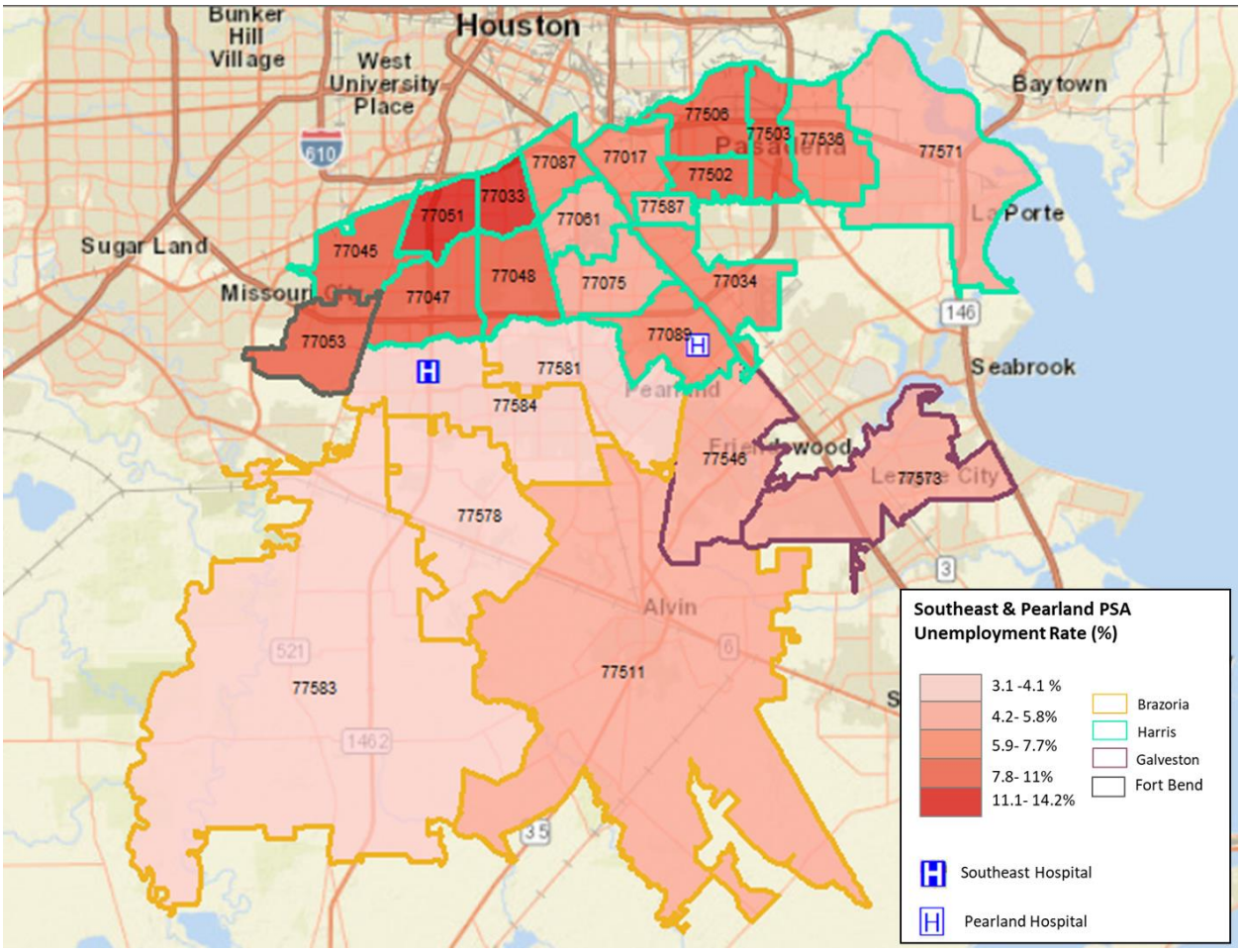
Table 10. Unemployment Rate (Population 16+) July 2021

Location	Unemployment Rate
77051	14.24%
77033	12.89%
77506	11.07%
77048	9.54%
77047	9.46%
77503	9.41%
77502	9.32%
77053	9.19%
77045	8.91%
77089	7.70%
77536	7.60%
77034	6.68%
77017	6.61%
77087	6.12%
77061	5.82%
77587	5.81%
77571	5.35%
77546	5.29%
77511	4.72%
77573	4.61%
77075	4.44%
77583	4.12%
77584	3.44%
77581	3.33%
77578	3.17%
Southeast PSA	6.80%
Brazoria	4.44%
Fort Bend	6.40%
Galveston	6.63%
Harris	6.80%
Texas	6.00%
United States	5.30%

Source: 2021 Claritas Pop-Facts®, U.S Bureau of Labor Statistics 2021

Figure 16 shows the Southeast Primary Service Area map of unemployment rates for individuals sixteen and older. Zip codes 77051 and 77033 have higher rates of unemployment compared to other zip codes in the Southeast Primary Service Area.

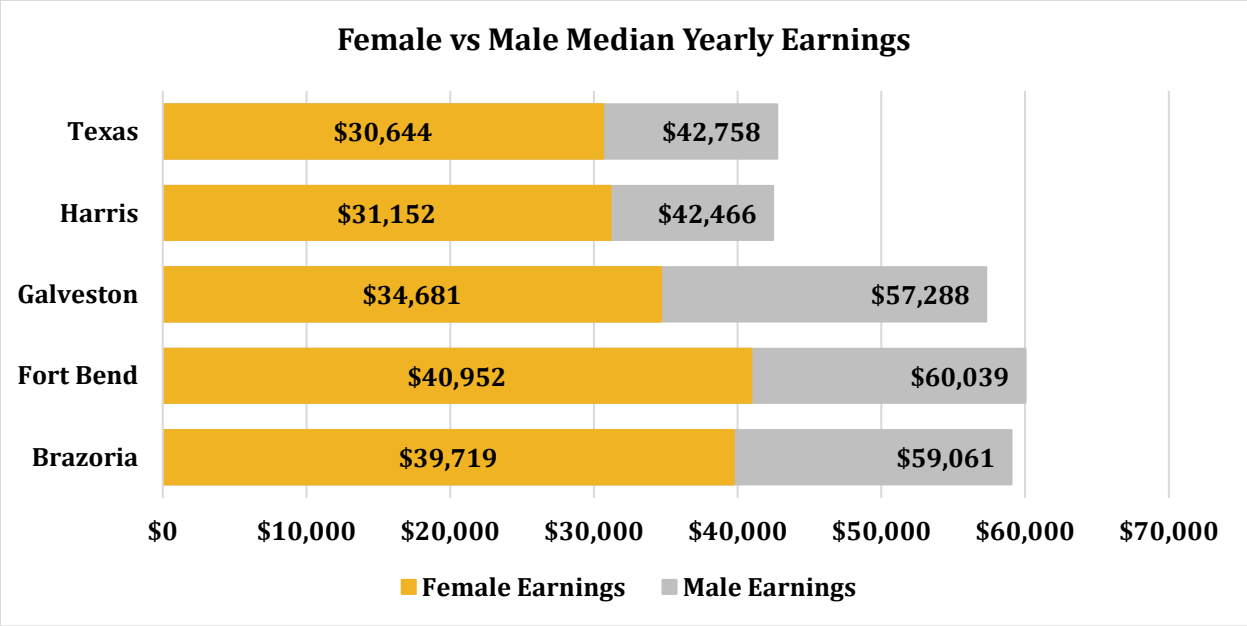
Figure 16. Southeast PSA Map of Unemployment Rate (Population 16+) 2021



Source: 2021 Claritas Pop-Facts® ArcGIS Map

Disparities between men's and women's wages can hinder economic growth, by constricting income and spending. These disparities can heighten the risk of financial stress and inadequate savings. **Figure 17** shows working women generally make less than their male counterparts. Although Southeast Primary Service Area comparisons are unavailable, all zip codes within the service area are located within three counties and may represent similar yearly earnings. In Harris County, women make a median of $31,152 compared to their male counterparts at $42,466. Galveston has the highest wage gap among the four counties with women making a median of $34,681 to men's $57,288. In the state of Texas, the median yearly earnings for females are $30,644 compared to males at $42,758. Although data is not available by race/ethnicity from this source, national trends suggest that this wage gap persists and is worsened by the race/ethnicity of women heavily affecting low-income and single-income families.

Figure 17. Gender Wage Gap: County and State Comparisons



Source: American Community Survey 2015-2019

Education

Education is an important indicator of health and well-being across the lifespan. Education can lead to improved health by increasing health knowledge, providing better job opportunities and higher income, and improving social and psychological factors linked to health. People with higher levels of education are likely to live longer, experience better health outcomes, and practice health-promoting behaviors. **Table 11a** shows that 18.81% of individuals in the Southeast PSA do not have a high school diploma compared to the state of Texas, with 16.26%.

Table 11a. Primary Service Area Educational Attainment by Primary Service Area and State Comparisons

Educational Attainment Population Age 25+	Southeast PSA	Texas
Less than 9th Grade	10.22%	8.12%
Some High School, No Diploma	8.59%	8.14%
High School Grad	27.00%	25.07%
Some College, No Degree	21.80%	21.49%
Associate Degree	7.48%	7.12%
Bachelor's Degree	16.22%	19.47%
Master's Degree	5.91%	7.65%
Professional Degree	1.52%	1.67%
Doctorate Degree	1.52%	1.17%

Source: 2021 Claritas Pop-Facts®

Table 11b shows the percentage of people age 25 years and older who have completed at least a high school degree or higher and a bachelor's degree or higher. High school graduation rates are an important indicator of the performance of the educational system. Having a degree increases career opportunities in a variety of fields and is often a prerequisite to a higher paying job.

Table 11b. Primary Service Area Educational Attainment by Zip Code, County, State, U.S. Comparisons

Zip Code	Population 25+ with a High School Degree or Higher	Population 25+ with a Bachelor's Degree or Higher
77017	62.1%	9.2%
77033	72.8%	8.5%
77034	70.9%	13.7%
77045	73.4%	14.3%
77047	88.1%	26.3%
77048	84.7%	17.2%
77051	78.7%	11.9%
77053	69.2%	11.9%
77061	67.2%	13.8%
77075	71.7%	12.3%
77087	58.9%	9.0%
77089	82.6%	22.3%
77502	62.1%	7.5%
77503	76.2%	10.7%
77506	56.4%	5.0%
77511	83.8%	15.2%
77536	89.0%	19.7%
77546	95.5%	46.9%
77571	88.1%	16.9%
77573	96.5%	48.5%
77578	94.6%	37.5%
77581	94.5%	40.6%
77583	77.8%	22.4%
77584	94.1%	51.1%
77587	57.9%	6.4%
Southeast PSA	78.0%	24.0%
Brazoria	87.9%	30.0%
Fort Bend	90.6%	46.2%
Galveston	89.0%	31.1%
Harris	81.4%	31.5%
Texas	83.7%	29.9%
U.S.	88.0%	32.1%

Source: American Community Survey 2015-2019

Housing & Transportation

Spending a high percentage of household income or rent can create financial hardship, especially for lower-income renters. Paying a high rent may not leave enough money for other expenses such as food, transportation, and medical expenses. High rent also reduces the proportion of income a household can allocate to savings each month. **Table 12** in the Southeast Primary Service Area 50.0% of residents spend 30% or more of household income on rent. This is also higher than all counties within the service area, Texas (47.8%), and national percentages (49.6%).

Table 12. Spending 30% or More on Rent: Zip Code, County, State, U.S. Comparisons

Zip Code	Renters Spending 30% or More of Household Income on Rent
77053	64.5%
77583	64.2%
77578	61.9%
77033	60.1%
77087	58.8%
77051	57.5%
77048	57.4%
77503	55.85
77045	52.7%
77075	49.7%
77061	49.1%
77502	48.1%
77581	46.5%
77536	45.1%
77546	44.7%
77587	43.6%
77017	43.5%
77034	43.4%
77511	43.2%
77571	43.2%
77506	41.5%
77584	39.9%
77089	39.0%
77573	36.1%
77047	35.9%
Southeast PSA	50.0%
Brazoria	43.7%
Fort Bend	48.2%
Galveston	47.8%
Harris	49.9%
Texas	47.8%
U.S.	49.6%

Source: American Community Survey 2015-2019

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

Table 13 displays the different modes of commuting used by residents in the Southeast Primary Service area. Zip codes 77033 and 77061 have the highest proportions of residents commuting by public transportation (6.61% and 6.33%, respectively).

Table 13. Modes of Transportation: Zip Code, Primary Service Area, County, and State Comparisons

Location	Commute by Public Transportation	Commute by Walking	Commute by Biking	Commute by Driving Alone
77017	2.53%	1.82%	0.03%	78.48%
77033	6.61%	0.49%	0.02%	78.97%
77034	1.04%	1.53%	0.04%	76.05%
77045	4.37%	0.15%	0.18%	75.62%
77047	2.04%	0.04%	0.00%	82.97%
77048	3.08%	0.39%	0.03%	82.93%
77051	5.41%	1.16%	0.07%	78.56%
77053	2.04%	0.32%	0.01%	76.85%
77061	6.33%	0.49%	0.03%	74.67%
77075	1.39%	1.21%	0.02%	79.14%
77087	3.26%	1.61%	0.01%	74.05%
77089	2.59%	0.43%	0.15%	82.43%
77502	0.32%	1.38%	0.09%	77.37%
77503	0.57%	1.59%	0.02%	82.11%
77506	0.24%	2.17%	0.49%	74.41%
77511	0.13%	1.27%	0.18%	84.94%
77536	0.42%	1.38%	0.10%	86.87%
77546	0.99%	0.62%	0.05%	86.79%
77571	0.16%	1.35%	0.06%	85.99%
77573	1.44%	0.34%	0.25%	86.51%
77578	0.00%	0.42%	0.03%	83.91%
77581	0.40%	0.57%	0.01%	87.38%
77583	0.08%	0.44%	0.09%	81.96%
77584	0.11%	0.55%	0.00%	87.05%
77587	1.69%	2.17%	1.14%	73.03%
Southeast PSA	1.46%	0.87%	0.11%	82.28%
Brazoria	0.10%	0.77%	0.06%	86.20%
Fort Bend	1.51%	0.48%	0.06%	81.10%
Galveston	0.90%	1.23%	0.70%	83.61%
Harris	2.49%	1.24%	0.25%	80.11%
Texas	1.34%	1.50%	0.24%	80.66%

Source: 2021 Claritas Pop-Facts®, American Community Survey 2015-2019

Disparities

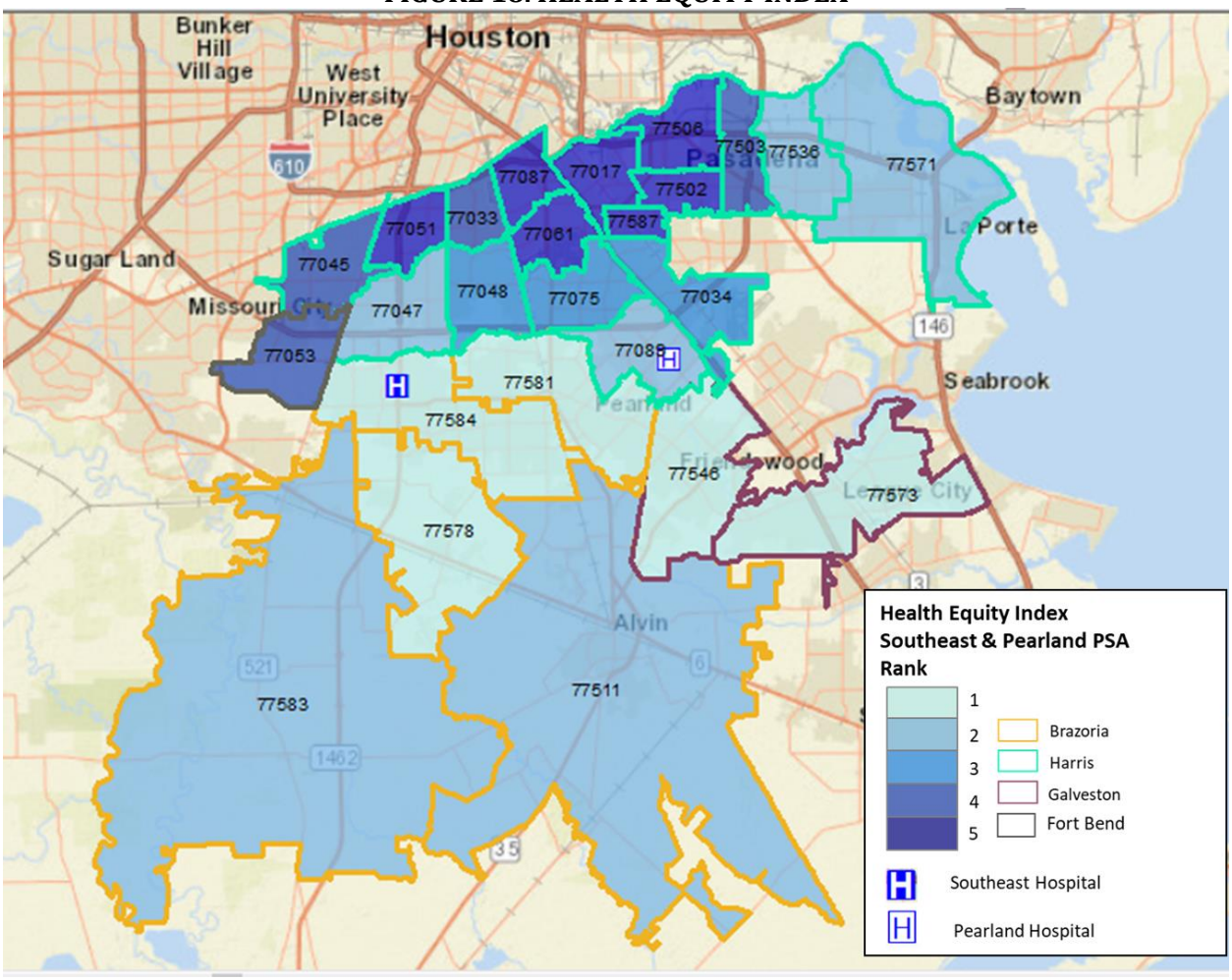
Geographic Disparities

Conduent Healthy Communities Institute developed the Health Equity Index (formerly SocioNeeds Index®) and the Food Insecurity Index (FII) to easily identify areas of higher socioeconomic need. County-level data can sometimes mask what might be going on at the zip code level in many communities. While county-level indicators may be strong, using these indices in combination with county-level data can reveal disparities and ensure that efforts are directed to the communities with the highest need.

Health Equity Index

The Health Equity Index incorporates estimates for six different social and economic determinants of health that are associated with poor health outcomes. The data, which cover income, poverty, unemployment, occupation, educational attainment, and linguistic barriers, are then standardized, and averaged to create one composite index value for every zip code in the United States with a population of at least 200. Zip codes have index values ranging from 0 to 100, where higher values are estimated to have the highest socioeconomic need and are correlated with poor health outcomes including preventable hospitalizations and premature death. Within the Memorial Hermann Southeast Primary Service Area, zip codes are ranked based on their index value to identify the relative levels of need, as illustrated by the map in **Figure 18**. The following zip codes had the highest level of socioeconomic need that is correlated with poor health outcomes (as indicated by the darkest shades): 77506, 77087, 77033, 77502, 77587, 77051, and 77061.

FIGURE 18. HEALTH EQUITY INDEX



SOURCE: CONDUENT SOCIONEEDS INDEX SUITE: HEALTH EQUITY INDEX MAP

Table 14 provides the index values for each zip code in the Memorial Hermann Southeast Primary Service Area. Understanding where there are communities with high socioeconomic needs and associated poor health outcomes is critical to targeting prevention and outreach activities.

TABLE 14. HEALTH EQUITY INDEX VALUES BY ZIP CODE FOR MEMORIAL HERMANN SOUTHEAST PRIMARY SERVICE AREA

Zip Code	HEI Value	Rank
77506	99	5
77087	98.1	5
77033	97.8	5
77502	97.2	5
77587	97.1	5
77051	96.9	5
77061	96.7	5
77017	95.8	4
77053	93.9	4
77034	93.7	4
77503	92.6	3
77045	92.2	3
77048	90.8	3
77075	89.7	3
77511	66.2	3
77089	64.7	2
77047	60.2	2
77571	46.6	2
77536	46.2	2
77583	36.4	2
77578	19.3	1
77581	16.2	1
77573	11.2	1
77584	9.6	1
77546	9	1

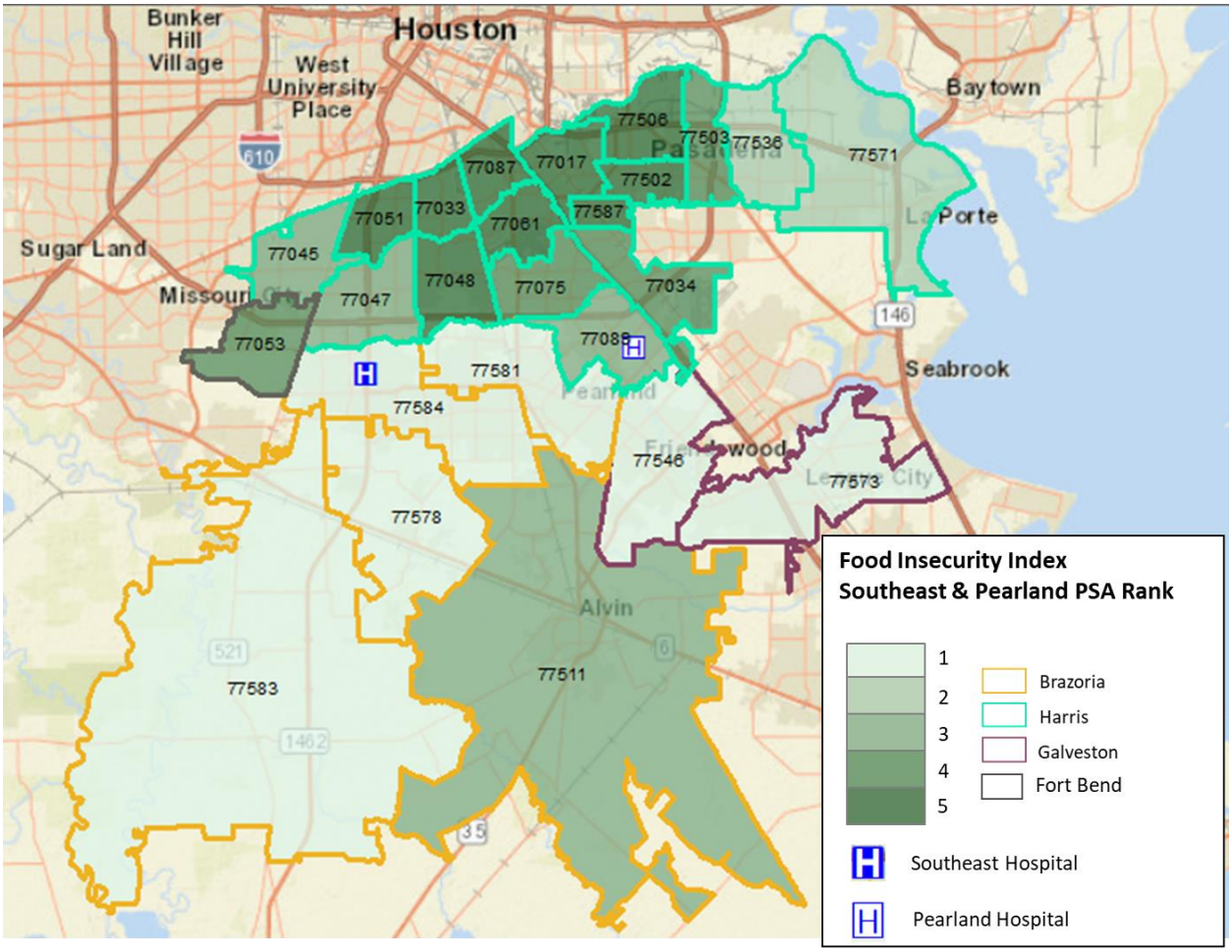
Food Insecurity Index

The Food Insecurity Index (FII) is a measure of food accessibility that is correlated with social and economic hardship and eligible persons for the Supplemental Nutrition Assistance Program (SNAP). This index combines multiple socioeconomic and health indicators into a single composite value. These indicators are from the following topic areas: Medicaid insurance enrollment, perceived health status, household expenditures, household income, and single-parent headed households.

All zip codes, census tracts, and counties in the United States are given an index value from 0 (low need) to 100 (high need). To help find the areas of highest need in the Memorial Hermann Southeast Primary Service Area, locales were ranked from 1 to 5 based on their index value.

Figure 19 shows Memorial Hermann Southeast Primary Service Area zip codes based on their index value to identify which areas are of the highest need. The following zip codes have the highest level of food insecurity that is correlated with poor health outcomes (as indicated by the darkest shades): 77051, 77506, 77033, 77587, and 77087.

FIGURE 19. FOOD INSECURITY INDEX



SOURCE: CONDUENT SOCIONEEDS INDEX SUITE: FOOD INSECURITY MAP

Table 15 provides the Food Insecurity index values for each zip code in the Memorial Hermann Southeast Primary Service Area. The index can serve as a concise way to identify individual communities experiencing food insecurity.

TABLE 15. FOOD INSECURITY INDEX VALUES BY ZIP CODE

ZIP CODE	FOOD INSECURITY VALUE	RANK
77051	**97**	5
77506	**96.4**	5
77033	**95.4**	5
77587	**95.4**	5
77087	**94.9**	5
77502	**94.5**	5
77061	**93.9**	5
77048	**93.4**	5
77017	**92.2**	5
77034	**88.4**	4
77053	**88.2**	4
77503	**87.1**	4
77075	**76.5**	4
77045	**70.4**	3
77047	**57.6**	3
77511	**55.5**	3
77089	**52.8**	2
77571	**35.7**	2
77536	**29.5**	2
77583	**21.8**	1
77581	**20.3**	1
77578	**19.4**	1
77573	**17**	1
77584	**15.8**	1
77546	**14.1**	1

Race & Ethnic Disparities

Identifying disparities by race/ethnicity helps to inform and focus priorities and strategies. Understanding disparities also helps us better understand root causes that impact health in a community and inform action towards health equity. Health equity focuses on the fair distribution of health determinants, outcomes, and resources across communities.[1] National trends have shown that systemic racism, poverty, and gender discrimination have led to poorer health outcomes for groups such as Black/African American, Indigenous, or People of Color, individuals living below the poverty level, and LGBTQ+ communities.

Community health disparities were assessed in the data collection process. The indicators listed in **Table 16** show a statistically significant difference in race and ethnicity according to the Index of Disparity analysis. Secondary data reveal that different racial and ethnic groups are negatively impacted among many health and socio-economic indicators. These important gaps in data should be recognized and considered for implementation planning to mitigate the disparities often faced by age groups, gender, race, or ethnicity. See Appendix A for specific health indicators.

Table 16. Indicators with Significant Race/Ethnic Disparities

Health and Socio-Economic Indicators	Group Negatively Impacted (highest rates)
High School Drop Out Rate	American Indian/Alaska Native, Pacific Islander, Black/African American, Hispanic
Lung and Bronchus Cancer Incidence Rate	Black/African American, White, Asian/Pacific Islander
Age-Adjusted Death Rate Due to Lung Cancer	Black/African American, White, Asian/Pacific Islander
Workers Commuting by Public Transportation	Native Hawaiian/Pacific Islander, Black/African American
Age-adjusted Death Rate due to Prostate Cancer	Black/African American, White, Hispanic
Babies with Very Low Birth Weight	Black/African American

[1] Klein R, Huang D. Defining and measuring disparities, inequities, and inequalities in the Healthy People initiative. National Center for Health Statistics. Center for Disease Control and Prevention. https://www.cdc.gov/nchs/ppt/nchs2010/41_klein.pdf

People 65+ Living Below Poverty Level	Other Race, American Indian/Alaska Native, Hispanic
Infants Born to Mothers with <12 years of Education	Hispanic, Black/African American, Other Race
Teen births	Hispanic, Black/African American
Workers Who Walk to Work	American Indian/Alaska Native, Multi-Race, Other

Future Considerations

While identifying barriers and disparities are critical components in assessing the needs of a community, it is equally important to understand the social determinants of health and other upstream factors that influence a community's health as well. The challenges and barriers faced by a community must be balanced by identifying practical, community-driven solutions. Together, these factors come to inform and focus strategies to positively impact a community's health. The following sections outline opportunities for guiding ongoing work as well as the potential to impact the identified community health needs.

Primary and Secondary Methodology

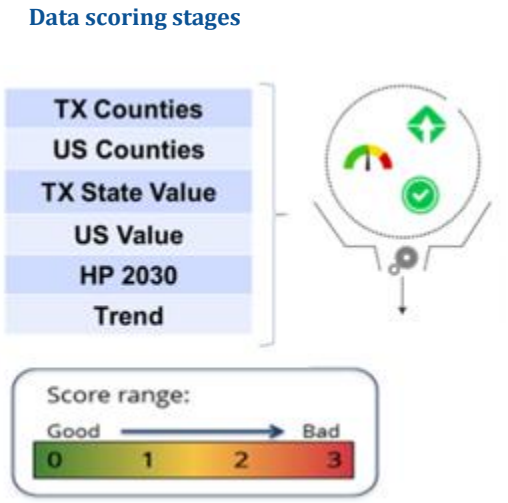
Overview

Two types of data were used in this assessment: primary and secondary data. Primary data were obtained through a community health survey and key informant interviews. Secondary data are health indicators that have already been collected by public sources such as government health departments. Each type of data was analyzed using a unique methodology. Findings from each data source were categorized by health topics and then synthesized for a comprehensive overview of the health needs in the Memorial Hermann Southeast Primary Service Area.

Secondary Data Sources & Analysis

Secondary data used for this assessment were collected and analyzed from Healthy Communities Institute's community indicator database. The database, maintained by researchers and analysts at HCI, includes over 200 community indicators covering at least 28 topics in the areas of health, determinants of health, and quality of life. The data are primarily derived from state and national public secondary data sources. The value for each of these indicators is compared to other communities, nationally set targets, and to previous time periods.

Secondary Data Scoring



HCI's Data Scoring Tool® was used to systematically summarize multiple comparisons to rank indicators based on the highest need. For each indicator, the county values were compared to a distribution of Texas and US counties, state and national values, Healthy People 2030 targets, and significant trends. Each indicator was then given a score based on the available comparisons. These comparison scores range from 0 to 3, where 0 indicates the best outcome and 3 the worst.

Availability of each type of comparison varies by indicator and is dependent upon the data source, comparability with data collected from other communities, and changes in methodology over time. The comparison scores were summarized for each indicator, and the indicators were grouped into topic areas for a higher-level ranking of community health needs. Health topic areas with fewer than three indicators were considered a data gap. Data gaps were specifically assessed and factored into primary data methods to ensure that, where the secondary data fell short, primary data could provide a more accurate picture of a particular health topic area.

To standardize efforts across the Memorial Hermann Health System and increase the potential for impacting top health needs in the greater Houston region, secondary data scoring was assessed and prioritized at a regional/system level. The system-level consists of the 12 counties comprising most Memorial Hermann discharges. (Austin, Brazoria, Chambers, Fort Bend, Galveston, Harris, Liberty, Montgomery, San Jacinto, Walker, Waller, and Wharton.) **Table 17** shows the health topic scoring results. Health Care Access and Quality was the poorest performing topic area followed by Heart

Disease & Stroke and Wellness & Lifestyle. Topics that received a score of 1.50 or higher were considered to be a significant health need. Six health topics scored at or above the threshold.

Please see Appendix A for further details on the qualitative data scoring methodology as well as secondary data scoring results.

Table 17. Secondary Data Scoring for the Memorial Hermann 12-County Region

Health Topics	12 County Region Score
Health Care Access & Quality	1.71
Heart Disease & Stroke	1.62
Wellness & Lifestyle	1.57
Older Adults	1.57
Oral Health	1.54
Physical Activity	1.51
Children's Health	1.49
Mental Health & Mental Disorders	1.48
Diabetes	1.45
Women's Health	1.42
Maternal, Fetal & Infant Health	1.40
Other Conditions	1.37
Cancer	1.34
Alcohol & Drug Use	1.32
Sexually Transmitted Infections	1.30
Prevention & Safety	1.21
Immunizations & Infectious Diseases	1.18
Respiratory Diseases	1.16

Primary Data Collection & Analysis

HCI collected community input through primary sources to expand upon the secondary data analysis. Primary data used in this assessment consisted of key informant interviews and a community survey.
When appropriate, primary data collection methods were conducted in a way to maintain social distancing and protect the safety of participants by emphasizing virtual data collection. In-person data collection was applied only where necessary.

As a critical aspect of the primary data collection, community participants were asked to share and describe resources available in the community. Although not reflective of every resource available in the community, the collected list can help Memorial Hermann Health System continue to build partnerships that may support existing programs and resources. This resource list is available in Appendix C.

Key Informant Interviews

Key informant interviews (KIIs) were conducted with leaders and staff from organizations that provide services directly to the community and officials that represent governmental and non-governmental entities. Interviewees invited to participate were recognized as having expertise in public health, special knowledge of community health needs, representing the broad interests of the community served by the hospital, and/or being able to speak to the needs of medically underserved or vulnerable populations.

Forty-seven individuals agreed to participate as key informants. **Table 18** lists the represented organizations that participated in the interviews.

Table 18. Key Informant Organizations

- AccessHealth
- Alvin City
- Alvin ISD Board of Trustees
- Avenue CDC
- Baker Ripley
- Catholic Charities - Archdiocese of Galveston
- Child Advocates of Fort Bend
- Children at Risk
- Colorado County - Indigent Health Care
- Department of State Health Services
- East Fort Bend Human Needs Ministry
- El Centro de Corazon
- Episcopal Health Foundation
- Fort Bend County Health and Human Services
- Fort Bend County Sheriff's Office
- Healthcare for the Homeless - Houston
- Houston Galveston Institute (HGI)
- Houston Health Department
- Houston Housing Authority
- Interfaith Community Clinic
- Kinder Institute for Urban Research
- Legacy Community Health
- Liberty County Sheriff's Office
- LoneStar Family Health Center
- Montgomery County Food Bank
- Patient Care Intervention Center (PCIC)
- Pearland ISD School Board
- Prairie View A&M - College of Nursing
- Santa Maria Hostel, Inc.
- Texas House of Representatives - District 29

- Fort Bend Regional Council on Substance Abuse
- Fort Bend Seniors
- Fort Bend Women's Center
- Galveston County Health District
- Greater Houston Partnership
- Harris County Public Health
- Health Center of Southeast Texas - Shepherd (San Jacinto County)
- Health Centers for Schools
- The Harris Center for Mental Health and IDD (MHMRA)
- The Meadows Mental Health Policy Institute
- The Rose
- TOMAGWA
- Tri-County Services Behavioral Healthcare
- United Way of Brazoria County
- United Way of Greater Houston
- United Way of Greater Houston - Montgomery County Center
- Waller County Judge's Office

The forty-seven KIIs took place between October 25, 2021, and February 11, 2022. Each of the 47 interviews was conducted via web conference. The questions focused on the interviewee's background and organization, the biggest perceived health needs and barriers of concern in the community, and the impact of health issues on the populations they serve. A list of the questions asked in the key informant interviews can be found in Appendix C.

Key Informant Analysis Results

Transcripts captured during the key informant interviews were uploaded to the web-based qualitative data analysis tool, Dedoose[2]. Interview excerpts were coded by relevant topic areas and key health themes. The approach used to assess the relative importance of the needs discussed in the interviews included the frequency by which a topic was described by the key informant as a barrier or challenge and the frequency by which a topic was mentioned per interviewee. The following top themes emerged from the analysis of the transcripts:

KEY INFORMANT THEMES

Top Health Concerns/Issues	Social Determinants of Health	Impacted Populations
Inequitable access to health care is largely due to the Texas State legislature's decision not to expand Medicaid **Mental Health & Mental Disorders**: access to affordable care, limited inpatient psychiatric beds/providers/counselors, police intervention is not always positive (not trained in crisis intervention) **Substance Use Disorder:** limited treatment options, underfunding of services, and lack of provider capacity	Food Insecurity Housing Lack of or Limited Insurance Transportation Built Environment Employment Homelessness Immunizations	Immigrant/Refugee Children Black/African American Latino/Hispanic Low-Income, those living in Poverty Women Homeless

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

Community Survey

Input from community residents was collected through an online survey. The survey consisted of 12 questions related to top health needs in the community, individuals' perception of their overall health, individuals' access to health care services, as well as demographic, social, and economic determinants of health. Conduent HCI built the online survey tool in Survey Monkey[3] and paper surveys were developed to mirror the online version. Online survey distribution included email outreach and social media posts. Both online and paper formats of the surveys were made available in English and Spanish. The community survey tool is included in Appendix B.

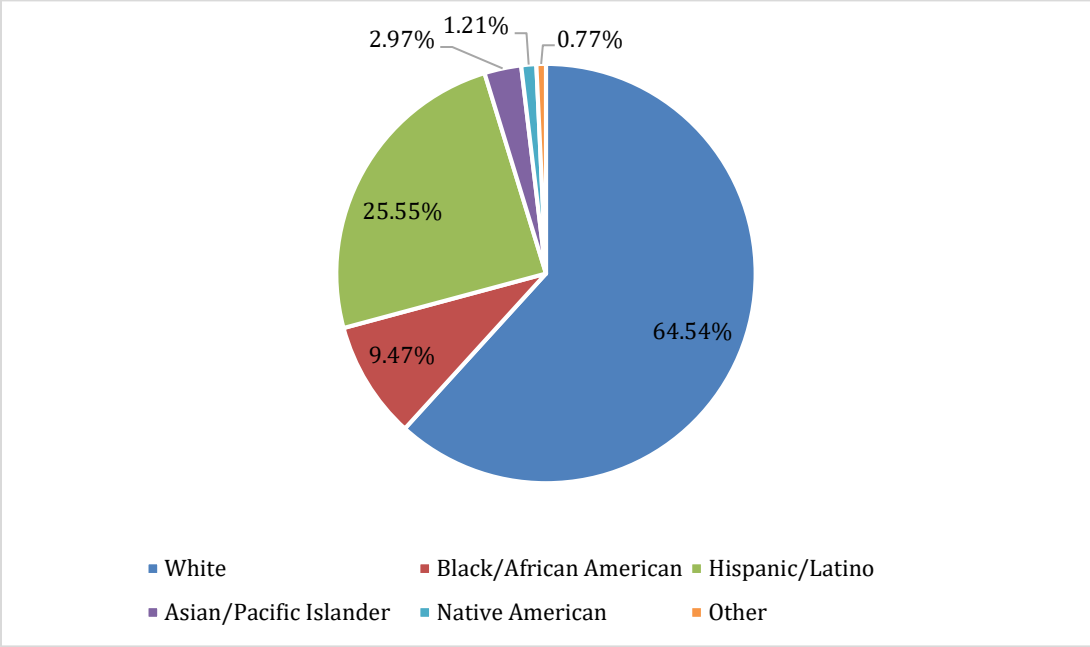
The community survey was promoted by all Memorial Hermann Health System Facilities and select community partners across the 12 counties that compose the health system's overall Primary Service Area from November 17, 2021, to January 28, 2022. A total of 1,056 responses were collected. The data in this section represents the overall survey responses.

Community Survey Analysis Results

The community survey response is a convenience sample and therefore the demographics of the community survey respondents are not an exact representation of the demographics of the population in the Memorial Hermann Primary Service Area. To adjust for this discrepancy, results were filtered by demographic variables – race, ethnicity, age, and geography – where possible. Any notable variations were included in the analysis process. For the purposes of this CHNA, the survey data that follows is based on an analysis of responses from community members residing in the Houston area, unless otherwise noted.

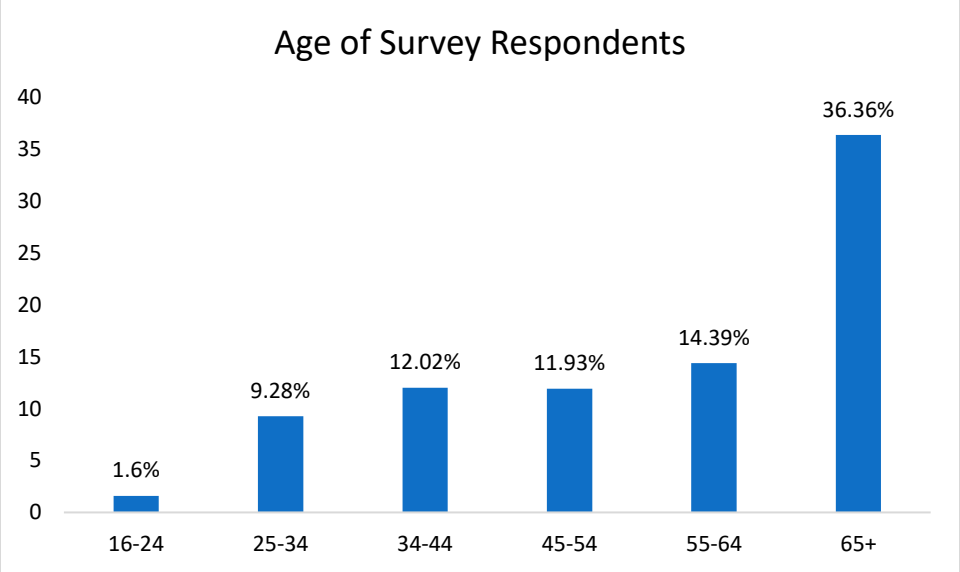
Surveys were completed in English and Spanish. There were 953 respondents who completed the survey in English and 103 completed in Spanish. **Figure 20** shows the race/ethnicity make-up of survey respondents. The largest proportion of respondents identified as White at 64.54%, followed by 25.55% as Hispanic or Latino, 9.47% as Black/African American, 2.97% as Asian/Pacific Islander, 1.21% as Native American, and 0.77% identified as Other (Mixed, Multi-racial.

Figure 20. Community Survey Race & Ethnicity



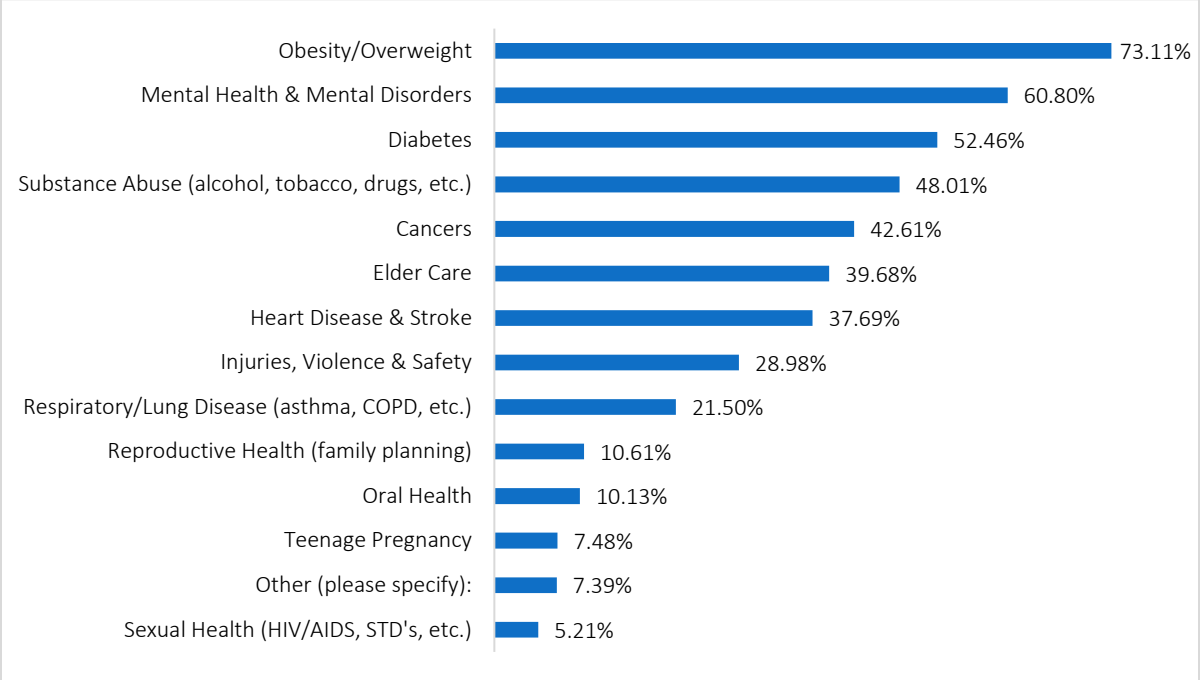
Survey respondents were asked their age. The largest age group ranged from 65 years and older, followed by 55-64 years (**Figure 21**).

Figure 21. Community Survey Age Ranges



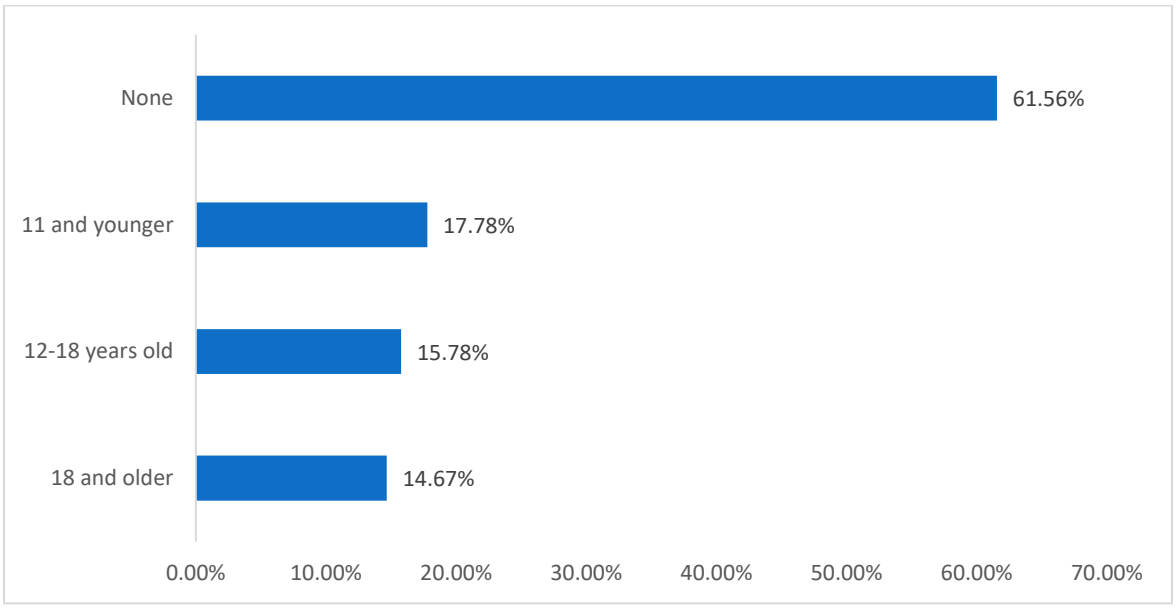
Survey respondents were asked to select the top issues most affecting the community's quality of life. As shown in **Figure 22**, the majority of respondents identified Obesity/Overweight (73.11%), Mental Health and Mental Disorders (60.80%), Diabetes (52.46%), Substance Abuse (alcohol, tobacco, drugs, etc.) (48.01%), and Cancers (42.61%). The survey included questions on the impact COVID-19 has had on the respondents and their community. Feedback on the impact of COVID-19 on the community is included in the *Covid-19 Impact Snapshot* of this report.

Figure 22. Issues Most Affecting Quality of Life



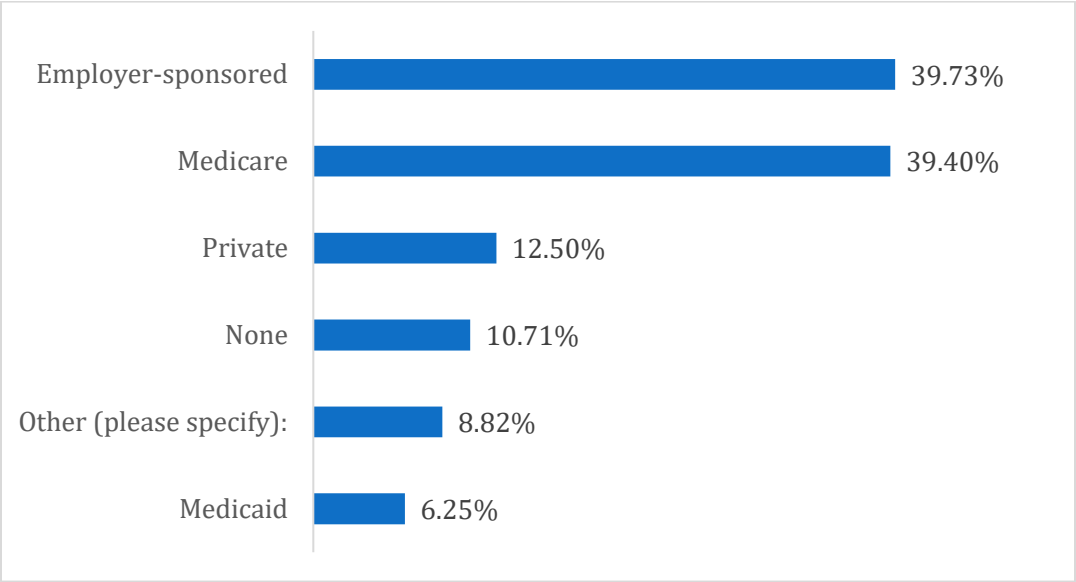
Survey respondents were asked about the ages of children living in the household. 61.56% of respondents indicated there were no children in the household, whereas 17.78% indicated 11 years and younger, 15.78% of respondents responded 12-18 years old, and 14.67%, 18 and older (**Figure 23**).

Figure 23. Ages of Children in Home



Survey respondents were asked about their medical insurance or coverage. As shown in **Figure 24**, 39.73% indicated Employer-sponsored, 39.40% Medicare, 12.50% Private Insurance, 10.71% None, 8.82% Other, and 6.25% Medicaid.

Figure 24. Type of Insurance/Coverage



Data Considerations

Conduent HCI and Memorial Hermann Health System made substantial efforts to comprehensively collect and analyze CHNA data. However, several limitations of the data should be considered when reviewing the findings presented in this report. Although the topics by which data are organized cover a wide range of health and health-related areas, within each topic, there is a varying scope and depth of secondary data indicators and primary data findings.

Secondary Data

Regarding the secondary data, some health topic areas have a robust set of indicators, but for others, there may be a limited number of indicators for which data is available. Population health and demographic data are often delayed in their release, so data is presented for the most recent years available for any given data source. There is also variability in the geographic level at which data sets are available, ranging from census tract or zip code to statewide or national geographies. Whenever possible, the most relevant localized data is reported. Due to variations in geographic boundaries, population sizes, and data collection techniques for different locations (Primary Service Areas, zip codes, and counties), some datasets are not available for the same time spans or at the same level of localization. The Index of Disparity[4], used to analyze the secondary data, is also limited by data availability. In some instances, there are no subpopulation data for some indicators, and for others, there are only values for a select number of race/ethnic groups. Finally, persistent gaps in data systems exist for certain community health issues.

Primary Data

For the primary data, the breadth of findings is dependent upon who was identified and agreed to be a key informant. Additionally, the community survey was a convenient sample, which means results may be vulnerable to selection bias and make the findings less generalizable. A limitation of the survey is that it was conducted in only two languages, English and Spanish.

For all data, efforts were made to include a wide range of secondary data indicators and community member expertise areas. Memorial Hermann Health System is committed to investigating strategies for addressing data system gaps for future assessment and implementation processes.

[4] Pearcy, J. & Keppel, K. (2002). A Summary Measure of Health Disparity. Public Health Reports, 117, 273-280.

Data Synthesis and Prioritization

To gain a comprehensive understanding of the significant health needs for Memorial Hermann Health System, the findings from both the primary data and the secondary data across all Primary Service Areas were compared and considered together. The secondary data, key informant interviews, and community survey were treated as three separate sources of data.

The top health needs identified from data sources were analyzed for areas of overlap. Primary data from the community survey, and key informant data as well as secondary data findings identified 15 areas of greater need.

Table 19 displays the results of this synthesis. For many of the health topics evidence of need was present across multiple data sources, including mental health, access to healthcare, diabetes, older adults, heart disease and stroke, physical activity, children's health, obesity/overweight, and substance abuse. For other health topics, the evidence was present in just one source of data which may be reflective of the strengths and limitations of each type of data that was considered in this process.

Table 19. Data Synthesis Results

Health/Quality of Life Category	*Data Source(s)*
Mental Health and Mental Disorders	*Secondary Data, Community Survey, Key Informant Interviews*
Access to Healthcare	*Secondary Data, Community Survey, Key Informant Interviews*
Diabetes	*Secondary Data, Community Survey, Key Informant Interviews*
Older Adults/Elderly care	*Secondary Data, Community Survey, Key Informant Interviews*
Heart Disease & Stroke	Secondary Data, Community Survey
Physical Activity	Secondary Data, Key Informant Interviews
Children's Health	Secondary Data, Key Informant Interviews
Obesity/Overweight	Community survey, Key Informant Interviews
Substance Abuse (alcohol, tobacco, drugs)	Secondary Data, Key Informant Interviews
Wellness & Lifestyle	Secondary Data
Oral Health	Secondary Data
Women's Health	Secondary Data
Cancers	Survey
Injuries, Violence & Safety	Survey
Respiratory/Lung Disease (asthma, COPD, etc.)	Survey

Prioritization

To prioritize significant health needs and to better target activities to address the most pressing health needs in the community, Memorial Hermann convened a group of hospital leaders who participated in an online webinar session. One session was scheduled for March 8, 2022, and a second session on March 10, 2022. Each session consisted of an overview of data results and synthesis.

Process

In February 2021, over 100 hospital leaders were invited to an online session to prioritize the key health needs for the 2022-2025 CHNA. On March 8th and 10th, eighty participants reviewed and discussed the results of HCI's primary and secondary data analyses leading to the preliminary significant health needs. (These health needs are discussed in detail in the key health needs portion of this report.) Following the session, participants were given three days to access an online link to score each of the significant health needs by how well they met the criteria set forth by HCI and the Memorial Hermann Health System. Forty-eight participants submitted feedback. Of the forty-eight, some submissions represented multiple hospital leadership feedback.

The criteria for prioritization included:

- Ability to Impact: the perceived likelihood of positive impact on each health issue
- Scope & Severity: their gauge on the magnitude of each health issue

The group also agreed that root causes, disparities, and social determinants of health should be considered for all prioritized health topics resulting from prioritization.

Participants scored each health area against each criterion on a scale from 1to 3 with 1 meaning it did not meet the given criterion, 2 meaning it met the criterion, and 3 meaning it strongly met the criterion. In addition to considering the data presented by HCI in the presentation and on the health topic note sheet, participants were encouraged to use their judgment and knowledge of the community in considering how well a health topic met the criteria.

Completion of the online exercise resulted in a numerical score for each health need that correlated with how well that need met the criteria for prioritization. HCI downloaded the online results, calculated the scores, and then ranked the significant health needs according to their topic scores. The highest scoring health needs received the highest priority ranking. Results were shared with the Memorial Hermann Community Benefit team and approval was received for the ranked health needs. **Table 20** are the results of prioritization combined scores from both criteria, Ability to Impact and Scope and Severity. Fifteen health topics were considered.

Table 20. Ability to Impact & Scope & Severity Results

Diabetes	58.33 %
Heart Disease & Stroke	55.21 %
Obesity/Overweight	50.00 %

Mental Health and Mental Disorders	50.00 %
Access to Healthcare	40.63 %
Older Adults/Elderly care	38.55 %
Women's Health	38.54 %
Cancers	34.38 %
Children's Health	28.13 %
Respiratory/Lung Disease (asthma, COPD, etc.)	26.04 %
Wellness & Lifestyle	21.88 %
Substance abuse (alcohol, tobacco, drugs, etc.)	20.84 %
Injuries, Violence & Safety	19.79 %
Physical Activity	16.67 %
Oral Health	1.04 %

These health topics are aligned with Memorial Hermann's strategic focus areas, the four pillars which are illustrated in **Figure 25**. Each of the intersecting pillars connects through various points in Memorial Hermann programs and initiatives advancing the health of the community. Memorial Hermann Community Benefit team took both the results and strategic focus areas into consideration to determine final health priorities as presented in **Table 21**.

Figure 25. Memorial Hermann Health System Four Pillars for Community Health

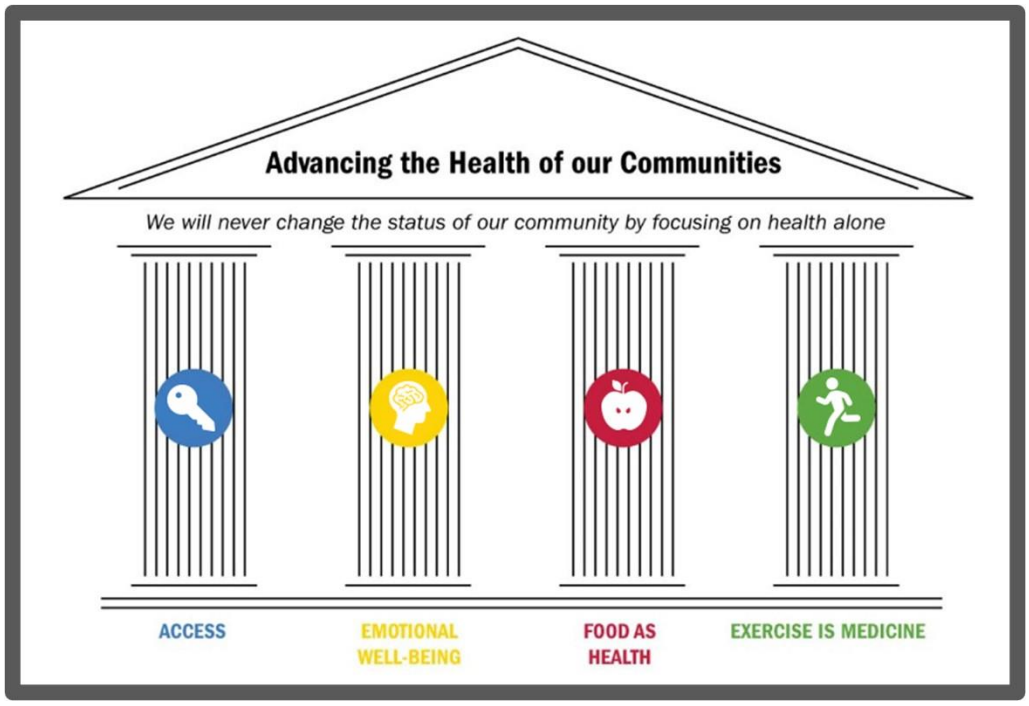


Table 21. 2022-2025 Prioritized Health Needs

Pillars	Memorial Hermann Health System (MHHS) Prioritized Health Needs
Access:	Addressing Access to Healthcare
Emotional Well-Being:	Addressing Mental Health and Mental Disorders
Food as Health:	Addressing Diabetes, Heart Disease & Stroke, Obesity/Overweight
Exercise is Medicine:	Addressing Diabetes, Heart Disease & Stroke, Obesity/Overweight

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

Prioritized Significant Health Needs

The following section provides a deeper look into each of the community health needs to understand how findings from secondary and primary data led to the health topic becoming a significant need. Secondary data scoring is presented at the Memorial Hermann System (MHHS) level. The five health needs are presented in rank order.

Pillar: Access

Prioritized Health Topic #1: Access to Care

Access to Care

Secondary Data Score: **1.71** MHHS

Key Themes from Community Input

- Low health literacy, language, transportation barriers
- Lack of knowledge regarding programs, services
- Difficulty navigating the healthcare system
- Deep inequalities in access to/quality of health services
- What kind of medical insurance/coverage do you have? (21% none)
- In the past 12 months, I had a problem getting the health care I needed for me/for a family member from any type of health care provider, dentist, pharmacy, or other facility. (33% agree/strongly agree)

Warning Indicators

- Adults without health insurance
- Adults who have had a routine check-up (lack of)
- Children with health insurance
- Adults who visited a dentist
- Adults with health insurance
- Primary care provider rate
- Mental health provider rate
- Non-physician primary care provider rate
- Dentist rate

Secondary Data

Based on the secondary data scoring results, Access to Healthcare was identified as a top health need. This health topic includes data on health insurance coverage, provider rates, and healthcare utilization. Using HCI's Secondary Data scoring technique, analysis was done to identify specific indicators of concern across the counties. Individual indicators with high data scores within a topic area were categorized as indicators of concern and are listed in **Table 22** below.

Table 22. Access to Care

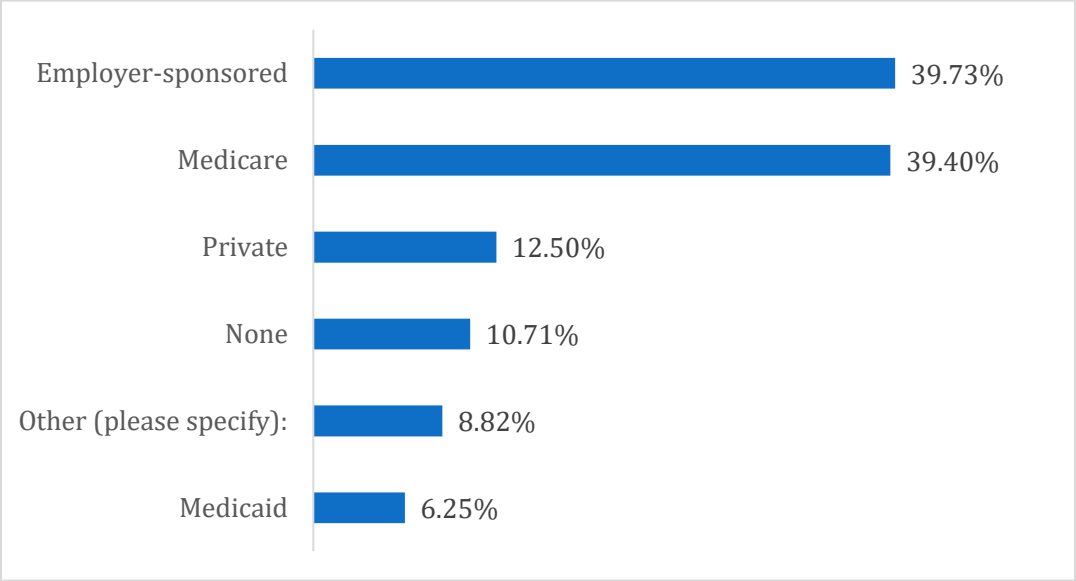
	County			County Value compared to:			
Indicator	**Name**	**Values**	**Data Score**	**TX value**	**U.S. value**	**HP2030 Target**	**Trend over time**
Adults with Health Insurance, 2019	Brazoria	81 percent	1.5	75.5	87.1	-	-
	Fort Bend	82.5 percent	1.5	75.5	87.1	-	-
	Galveston	81 percent	1.5	75.5	87.1	-	-
	Harris	71 percent	1.83	75.5	87.1	-	-

	County			County Value Compared to:			
Indicator	**Name**	**Values**	**Data Score**	**TX value**	**U.S. values**	**HP 2030 Target**	**Trend over time**
Children with Health Insurance, 2019	Brazoria	90 percent	1.5	87.3	94.3	-	-
	Fort Bend	90.9 percent	1.5	87.3	94.3	-	-
	Galveston	88.9 percent	1.5	87.3	94.3	-	-
	Harris	85 percent	1.67	87.3	94.3	-	-
Source: American Community Survey							
Adults who have had a Routine Checkup, 2018	Brazoria	73.2 percent	1.92	-	76.7	-	-
	Fort Bend	74.5 percent	1.58	-	76.7	-	-
	Galveston	74.9 percent	1.58	-	76.7	-	-
	Harris	73 percent	1.92	-	76.7	-	-
Adults without Health Insurance, 2018	Brazoria	23.6 percent	1.92	-	12.2	-	-
	Fort Bend	20 percent	1.75	-	12.2	-	-
	Galveston	23.4 percent	1.92	-	12.2	-	-
	Harris	28.9 percent	2.08	-	12.2	-	-
Source: CDC - PLACES							
Non-Physician Primary Care Provider Rate, 2020	Brazoria	64.9 providers/ 100,000 population	1.33	88.6	-	-	Increasing, Significant
	Fort Bend	71.1 providers/ 100,000 population	1.33	88.6	-	-	Increasing, Significant
	Galveston	91.8 providers/ 100,000 population	0.67	88.6	-	-	Increasing, Significant
	Harris	97.9 providers/ 100,000 population	0.5	88.6	-	-	Increasing, Significant
Primary Care Provider Rate, 2018	Brazoria	62.9 providers/ 100,000 population	1.22	60.9	-	-	Decreasing, Non-Significant
	Fort Bend	85.9 providers/ 100,000 population	0.33	60.9	-	-	Increasing, Non-Significant
	Galveston	75.8 providers/ 100,000 population	0.61	60.9	-	-	Increasing, Non-Significant
	Harris	58.5 providers/ 100,000 population	1.11	60.9	-	-	Increasing, Non-Significant

Primary Data

Access to Care was a top health need identified in the overall community survey responses and key informant interviews. Barriers included literacy, language, knowledge of services and programs, navigating the healthcare system, technology, fear, transportation, cost (health care services being too expensive or could not pay), insurance not accepted, hours of operation did not fit the schedule, and wait time to see a doctor or health provider. Survey respondents were asked about their medical insurance or coverage. As shown in **Figure 26**, 39.73% indicated Employer-sponsored, 39.40% Medicare, 12.50% Private Insurance, 10.71% None, 8.82% Other, and 6.25% Medicaid.

Figure 26. Type of Insurance/Coverage

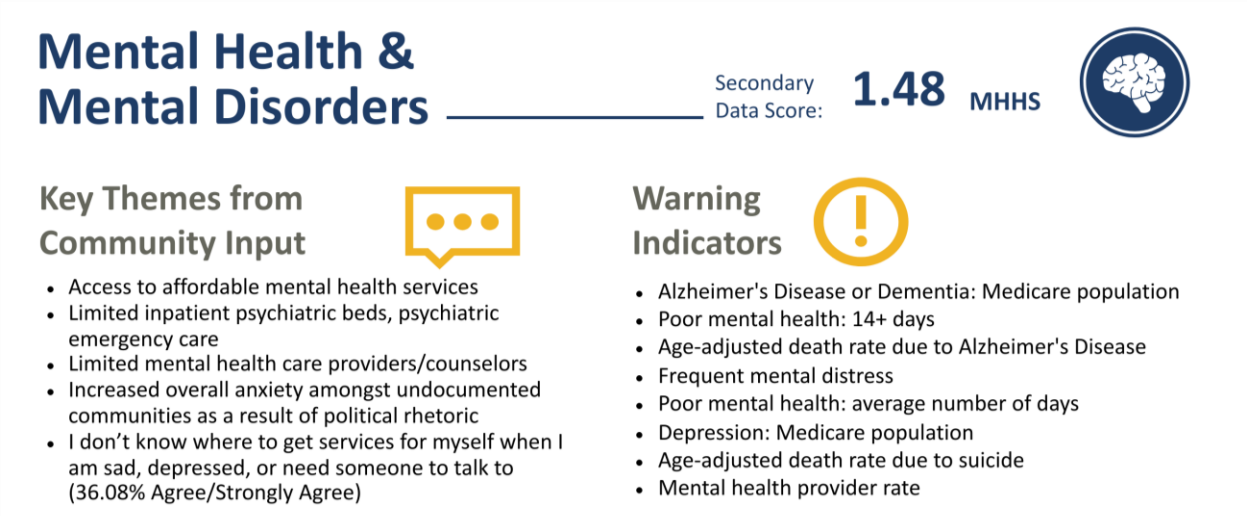


During the key informant interview process, some barriers or challenges were low health literacy, language, uninsured/underinsured populations, and access to specialty care. Other additional barriers or challenges stood out as key factors, including inequitable access to health care largely due to the Texas State legislature's decision not to expand Medicaid, food insecurity, and transportation.

"When I look at access, I just don't mean having a physician or practitioner to go to, but the ability to have transportation to get there. The ability to have resources. If you need childcare so you can get to the doctor. There is not just one thing with access, it's everything, … I've been working in communities probably for 35 years, and often it's not just the access, but it's …getting there or whether or not you're employed or where you live and housing its environment that you're living in its nutrition. It's multifaceted." – Key Informant Participant

Pillar: Emotional Well-Being

Prioritized Health Topic #2: Mental Health and Mental Disorders



Secondary Data

Based on the secondary data scoring results, Mental Health & Mental Disorders was identified as a top health need. This health topic includes data on Alzheimer's Disease/Dementia in the Medicare population and Poor Mental Health: 14+ days. Using HCI's Secondary Data scoring technique, analysis was done to identify specific indicators of concern across the counties. Individual indicators with high data scores within a topic area were categorized as indicators of concern and are listed in **Table 23** below.

Table 23. Mental Health and Mental Disorders Indicators

	County			County Value compared to:			
Indicator	**Name**	**Values**	**Data Score**	**TX value**	**U.S. value**	**HP2030 Target**	**Trend over time**
Poor Mental Health: 14+ Days, 2018	Brazoria	12.3 percent	0.92	-	12.7	-	-
	Fort Bend	10.6 percent	0.75	-	12.7	-	-
	Galveston	13.4 percent	1.25	-	12.7	-	-
	Harris	13 percent	1.25	-	12.7	-	-
Source: CDC - PLACES							

	County			County Value compared to:			
Indicator	**Name**	**Values**	**Data Score**	**TX value**	**U.S. value**	**HP2030 Target**	**Trend over time**
Age-Adjusted Death Rate due to Suicide, 2017-2019	Brazoria	13.4 deaths/ 100,000 population	1.53	13.5	14.1	12.8	Increasing, Significant
	Fort Bend	10.6 deaths/ 100,000 population	0.81	13.5	14.1	12.8	Increasing, Non-Significant
	Galveston	15.4 deaths/ 100,000 population	1.69	13.5	14.1	12.8	Decreasing, Non-Significant
	Harris	10.6 deaths/ 100,000 population	0.81	13.5	14.1	12.8	Increasing, Non-Significant
Depression: Medicare Population, 2018	Brazoria	16.4 percent	1.14	18.2	18.4	-	Increasing, Non-Significant
	Fort Bend	13.8 percent	0.92	18.2	18.4	-	Increasing, Significant
	Galveston	18.5 percent	1.83	18.2	18.4	-	No Change
	Harris	16.1 percent	0.97	18.2	18.4	-	Increasing, Non-Significant
Source: Centers for Disease Control and Prevention							
Frequent Mental Distress, 2018	Brazoria	12.3 percent	1	11.6	13	-	-
	Fort Bend	10.6 percent	0.67	11.6	13	-	-
	Galveston	13.6 percent	1.5	11.6	13	-	-
	Harris	12.7 percent	1	11.6	13	-	-
Mental Health Provider Rate, 2020	Brazoria	71.6 providers/ 100,000 population	1.33	120.9	-	-	Increasing, Significant
	Fort Bend	74 providers/ 100,000 population	1.33	120.9	-	-	Increasing, Significant
	Galveston	114.6 providers/ 100,000 population	1	120.9	-	-	Increasing, Significant
	Harris	124.9 providers/ 100,000 population	0.67	120.9	-	-	Increasing, Significant

Poor Mental Health: Average Number of Days, 2018	Brazoria	4.1 days	1.17	3.8	4.1	-	-
	Fort Bend	3.4 days	0.5	3.8	4.1	-	-
	Galveston	4.3 days	1.5	3.8	4.1	-	-
	Harris	4 days	1	3.8	4.1	-	-
Source: County Health Rankings							

	County			County Value compared to:			
Indicator	**Name**	**Values**	**Data Score**	**TX value**	**U.S. value**	**HP2030 Target**	**Trend over time**
Age-Adjusted Death Rate due to Alzheimer's Disease, 2017-2019	Brazoria	42.1 deaths/ 100,000 population	2	38.5	30.5	-	No Change
	Fort Bend	29 deaths/ 100,000 population	0.69	38.5	30.5	-	Decreasing, Non-Significant
	Galveston	37.2 deaths/ 100,000 population	2.08	38.5	30.5	-	Increasing, Significant
	Harris	30.9 deaths/ 100,000 population	1.14	38.5	30.5	-	Increasing, Non-Significant
Source: Centers for Disease Control and Prevention							
Alzheimer's Disease or Dementia: Medicare Population, 2018	Brazoria	11.8 percent	1.81	12.6	10.8	-	Increasing, Non-Significant
	Fort Bend	11.9 percent	1.97	12.6	10.8	-	Increasing, Non-Significant
	Galveston	12.1 percent	1.97	12.6	10.8	-	Increasing, Non-Significant
	Harris	12.4 percent	2.14	12.6	10.8	-	Increasing, Non-Significant

Primary Data

Mental Health and Mental Disorders were identified as top health issues in the survey and key informant interviews. When survey respondents were asked what were the top five most affecting their quality of life, 60.80% indicated mental health and mental disorders. When survey respondents were asked how much they agree or disagree with the following statement, "I don't know where to get services for myself when I am sad, depressed or need someone to talk to," 71.20% disagreed or strongly disagreed with the statement.

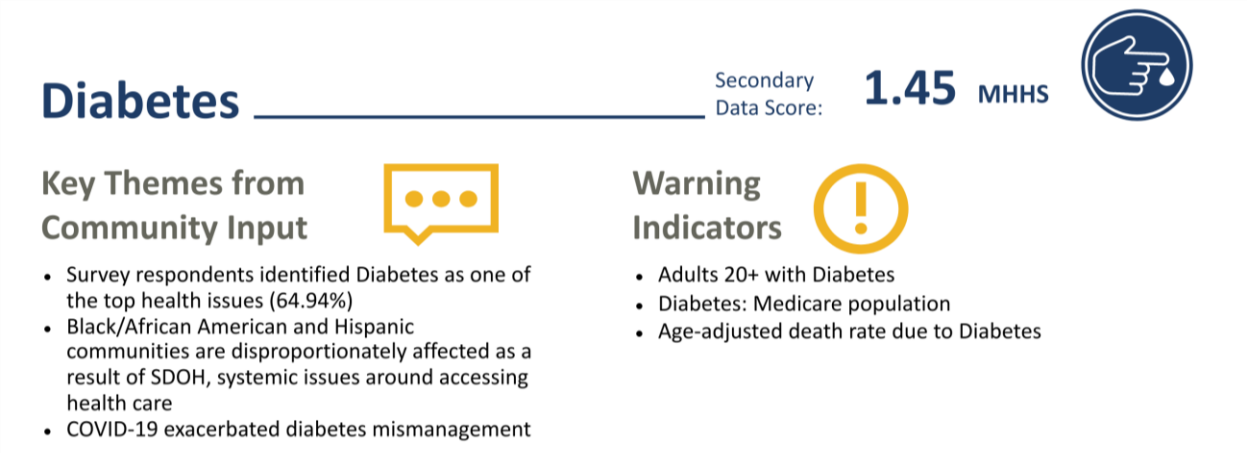
Key informant participants discussed the continued need to address mental health as part of a holistic approach similar to how chronic disease is managed. Some particularly vulnerable populations that would benefit from a broader approach to treatment, inclusive of mental health, are immigrants, Black/African Americans, Hispanics, and the homeless. Several participants

mentioned issues regarding a need for more behavioral health providers and services in the community. Participants always discussed the need to reduce mental health stigma and trust.

"What I will say is that people need to be more comfortable when exploring the idea of getting support and help. We are not quite there yet, and it goes back to the trust gap." -Key informant participant

Pillars: Food as Health & Exercise is Medicine

Prioritized Health Topic #3-5: Diabetes, Heart Disease & Stroke, Obesity/Overweight



Secondary Data

Diabetes was identified as a significant health need. Further analysis was done to identify specific indicators of concern and those with high data scores are listed in **Table 24** for Brazoria, Fort Bend, Galveston, and Harris Counties, specifically Adults 20+ with Diabetes and individuals in the Medicare population with diabetes.

Table 24. Diabetes Indicators

	County			County Value compared to:			
Indicator	**Name**	**Values**	**Data Score**	**TX value**	**U.S. value**	**HP2030 Target**	**Trend over time**
Adults 20+ with Diabetes, 2019	Brazoria	11.7 percent	2.14	-	-	-	Increasing, Non-Significant
	Fort Bend	10.2 percent	2.14	-	-	-	Increasing, Non-Significant
	Galveston	11.4 percent	2.14	-	-	-	Increasing, Non-Significant
	Harris	10.2 percent	2	-	-	-	No Change

	County			County Value compared to:			
Indicator	**Name**	**Values**	**Data Score**	**TX value**	**U.S. value**	**HP2030 Target**	**Trend over time**
Age-Adjusted Death Rate due to Diabetes, 2017-2019	Brazoria	17.3 deaths/ 100,000 population	0.92	22	21.5	-	Increasing, Significant
	Fort Bend	14.7 deaths/ 100,000 population	0.92	22	21.5	-	Increasing, Significant
	Galveston	14.9 deaths/ 100,000 population	0.64	22	21.5	-	Increasing, Non-Significant
	Harris	20.4 deaths/ 100,000 population	1.17	22	21.5	-	No Change
Diabetes: Medicare Population, 2018	Brazoria	30.2 percent	2.31	28.8	27	-	Increasing, Non-Significant
	Fort Bend	30.8 percent	2.03	28.8	27	-	Decreasing, Non-Significant
	Galveston	28.1 percent	1.64	28.8	27	-	Increasing, Non-Significant
	Harris	28.7 percent	1.67	28.8	27	-	No Change
Source: Centers for Disease Control and Prevention							

Primary Data

Diabetes is a serious, costly, and growing health problem in Greater Houston. When survey respondents were asked to list issues affecting their quality of life in the community, 52.46% of survey respondents listed diabetes. The key informant participants identified diabetes as one of the top health issues and specified that Black/African American and Hispanic communities struggled with diabetes more than other races/ethnicities in their communities. Participants also indicated that the cost of healthy foods, lack of places to exercise, culture, and stress contributed to increased rates of diabetes.

"One of the main things we see is when we interview our clients for financial/food assistance, they have to make tough decisions…can I afford my BP (Blood Pressure) or diabetes medications and if I do, will I be able to afford to pay my electric bill?" -Key Informant Participant

Heart Disease & Stroke

Secondary Data Score: **1.62** MHHS

Key Themes from Community Input

- Survey respondents indicated the following:
  - Heart Disease & Stroke was identified as one of the top health issues affecting quality of life (26.62%%)
  - When asked if they have been told by their doctor that they had high cholesterol- (35.22%)
  - When asked if they have been told by their doctor that they had high blood pressure- (41.7%%)

Warning Indicators

- Adults who have taken medications for high blood pressure
- Stroke: Medicare population
- Heart failure: Medicare population
- Age-adjusted death rate due to Cerebrovascular Disease (Stroke)
- Cholesterol test history
- Ischemic Heart Disease: Medicare population
- Hyperlipidemia: Medicare population
- Atrial Fibrillation: Medicare population
- Hypertension: Medicare population
- Age-adjusted death rate due to Heart Attack
- High cholesterol prevalence: adults 18+
- High blood pressure prevalence
- Adults who experienced a stroke
- Adults who experienced Coronary Heart Disease
- Age-adjusted death rate due to Coronary Heart Disease

Secondary Data

From the secondary data scoring results, heart disease and stroke were identified as significant health needs, with a topic score of 1.62. Further analysis was done to identify specific indicators of concern across the county. Individual indicators with high data scores within the topic area were categorized as indicators of concern and are listed in **Table 25** below.

Table 25. Heart Disease and Stroke Indicators

	County			County Value compared to:			
Indicator	**Name**	**Values**	**Data Score**	**TX value**	**U.S. value**	**HP2030 Target**	**Trend over time**
Adults who Experienced a Stroke, 2018	Brazoria	2.9 percent	0.75	-	3.4	-	-
	Fort Bend	2.6 percent	0.75	-	3.4	-	-
	Galveston	3.3 percent	0.92	-	3.4	-	-
	Harris	3.2 percent	0.92	-	3.4	-	-
Adults who Experienced Coronary Heart Disease, 2018	Brazoria	6 percent	0.75	-	6.8	-	-
	Fort Bend	5.2 percent	0.75	-	6.8	-	-
	Galveston	6.7 percent	0.92	-	6.8	-	-
	Harris	6.2 percent	0.92	-	6.8	-	-

	County			County Value compared to:			
Indicator	**Name**	**Values**	**Data Score**	**TX value**	**U.S. value**	**HP2030 Target**	**Trend over time**
Adults who Have Taken Medications for High Blood Pressure, 2017	Brazoria	73.5 percent	2.08	-	75.8	-	-
	Fort Bend	74.6 percent	1.92	-	75.8	-	-
	Galveston	75 percent	1.92	-	75.8	-	-
	Harris	71.7 percent	2.08	-	75.8	-	-
Cholesterol Test History, 2017	Brazoria	81.5 percent	1.25	-	81.5	-	-
	Fort Bend	83.1 percent	0.92	-	81.5	-	-
	Galveston	80.8 percent	1.42	-	81.5	-	-
	Harris	79.5 percent	1.75	-	81.5	-	-
High Blood Pressure Prevalence, 2017	Brazoria	32.9 percent	1.17	-	32.4	27.7	-
	Fort Bend	32 percent	1	-	32.4	27.7	-
	Galveston	34.8 percent	1.33	-	32.4	27.7	-
	Harris	31 percent	1	-	32.4	27.7	-
High Cholesterol Prevalence: Adults 18+, 2017	Brazoria	33.7 percent	0.92	-	34.1	-	-
	Fort Bend	33.6 percent	0.92	-	34.1	-	-
	Galveston	35.7 percent	1.25	-	34.1	-	-
	Harris	34.9 percent	1.08	-	34.1	-	-
Source: CDC - PLACES							
Age-Adjusted Death Rate due to Cerebrovascular Disease (Stroke), 2017-2019	Brazoria	39.7 deaths/ 100,000 population	1.28	40.2	37.2	33.4	Decreasing, Non-Significant
	Fort Bend	32.3 deaths/ 100,000 population	0.33	40.2	37.2	33.4	Decreasing, Non-Significant
	Galveston	48.8 deaths/ 100,000 population	2.56	40.2	37.2	33.4	Increasing, Non-Significant
	Harris	40.6 deaths/ 100,000 population	1.75	40.2	37.2	33.4	No Change
Age-Adjusted Death Rate due to Coronary Heart Disease, 2017-2019	Brazoria	100.6 deaths/ 100,000 population	2.33	93	90.5	71.1	Increasing, Significant
	Fort Bend	64.9 deaths/ 100,000 population	0.33	93	90.5	71.1	Decreasing, Non-Significant

	County			County Value compared to:			
Indicator	**Name**	**Values**	**Data Score**	**TX value**	**U.S. value**	**HP2030 Target**	**Trend over time**
Age-Adjusted Death Rate due to Coronary Heart Disease, 2017-2019	Galveston	84.3 deaths/ 100,000 population	1.22	93	90.5	71.1	Increasing, Non-Significant
	Harris	85.3 deaths/ 100,000 population	0.67	93	90.5	71.1	Decreasing, Significant
Source: Centers for Disease Control and Prevention							
Atrial Fibrillation: Medicare Population, 2018	Brazoria	8.4 percent	1.81	7.8	8.4	-	Increasing, Non-Significant
	Fort Bend	7.3 percent	1.42	7.8	8.4	-	Increasing, Significant
	Galveston	8.6 percent	1.97	7.8	8.4	-	Increasing, Non-Significant
	Harris	7.9 percent	1.47	7.8	8.4	-	Increasing, Non-Significant
Heart Failure: Medicare Population, 2018	Brazoria	17.6 percent	2.31	15.6	14	-	Increasing, Non-Significant
	Fort Bend	14.5 percent	1.33	15.6	14	-	No Change
	Galveston	17.6 percent	2.19	15.6	14	-	Decreasing, Non-Significant
	Harris	16.2 percent	1.83	15.6	14	-	No Change
Hyperlipidemia: Medicare Population, 2018	Brazoria	49 percent	1.81	49.5	47.7	-	Increasing, Non-Significant
	Fort Bend	51.1 percent	2.31	49.5	47.7	-	Increasing, Non-Significant
	Galveston	43.1 percent	1.14	49.5	47.7	-	Increasing, Non-Significant
	Harris	46.7 percent	1.64	49.5	47.7	-	Increasing, Non-Significant
Hypertension: Medicare Population, 2018	Brazoria	61.9 percent	1.97	59.9	57.2	-	Increasing, Non-Significant
	Fort Bend	60.1 percent	1.81	59.9	57.2	-	Increasing, Non-Significant
	Galveston	59.3 percent	1.5	59.9	57.2	-	No Change
	Harris	57.9 percent	1.31	59.9	57.2	-	Increasing, Non-Significant

	County			County Value compared to:			
Indicator	**Name**	**Values**	**Data Score**	**TX value**	**U.S. value**	**HP2030 Target**	**Trend over time**
Ischemic Heart Disease: Medicare Population, 2018	Brazoria	30.5 percent	1.86	29	26.8	-	Decreasing, Non-Significant
	Fort Bend	29.3 percent	1.81	29	26.8	-	Increasing, Non-Significant
	Galveston	29.7 percent	1.97	29	26.8	-	Increasing, Non-Significant
	Harris	29.2 percent	1.67	29	26.8	-	No Change
Stroke: Medicare Population, 2018	Brazoria	4.6 percent	2.03	4.2	3.8	-	Decreasing, Non-Significant
	Fort Bend	4.6 percent	2.03	4.2	3.8	-	Decreasing, Non-Significant
	Galveston	4.5 percent	1.75	4.2	3.8	-	Decreasing, Significant
	Harris	4.7 percent	1.92	4.2	3.8	-	Decreasing, Significant
Source: Centers for Medicare & Medicaid Services							
Age-Adjusted Death Rate due to Heart Attack, 2018	Brazoria	46 deaths/ 100,000 population 35+ years	0.58	70.1	-	-	Decreasing, Significant
	Fort Bend	46.6 deaths/ 100,000 population 35+ years	0.86	70.1	-	-	Decreasing, Non-Significant
	Galveston	46.2 deaths/ 100,000 population 35+ years	0.58	70.1	-	-	Decreasing, Significant
	Harris	51.1 deaths/ 100,000 population 35+ years	1.14	70.1	-	-	Increasing, Non-Significant
Source: National Environmental Public Health Tracking Network							

Primary Data

Heart disease and stroke were identified as top health issues in the community health survey. When participants were asked if they had ever had a doctor tell them they had high blood pressure, 50.67% indicated they had and 10.11% indicated a doctor told them they had heart disease. Key

informant participants were asked about health issues in the community. One participant mentioned many patients dying due to hypertension and it being a number one cause of death.

"What they're recognizing is the number one cause of death in their community is hypertension, and that hasn't changed as long as I've been a nurse. So, what are we going to do to address that?" -Key Informant Participant

Secondary Data

The topic area of Obesity/Overweight was unable to be scored using HCI's Scoring Tool® due to secondary data limitations. **Table 26** shows Adults 20+ who are Obese.

Table 26. Adults 20+ who are Obese

	County			County Value Compared to:			
Indicator	**Name**	**Value**	**Data Score**	**TX Value**	**U.S. Value**	**HP2030 Target**	**Trend Over Time**
Adults 20+ who are Obese	Brazoria	37 percent	2.17	-	-	36	Increasing, Non-Significant
	Fort Bend	28.6 percent	1.61	-	-	36	Decreasing, Non-Significant
	Galveston	32.2 percent	1.78	-	-	36	Decreasing, Non-Significant
	Harris	30.9 percent	----	28.8	27	36	Increasing, significantly
Centers for Disease Control and Prevention							

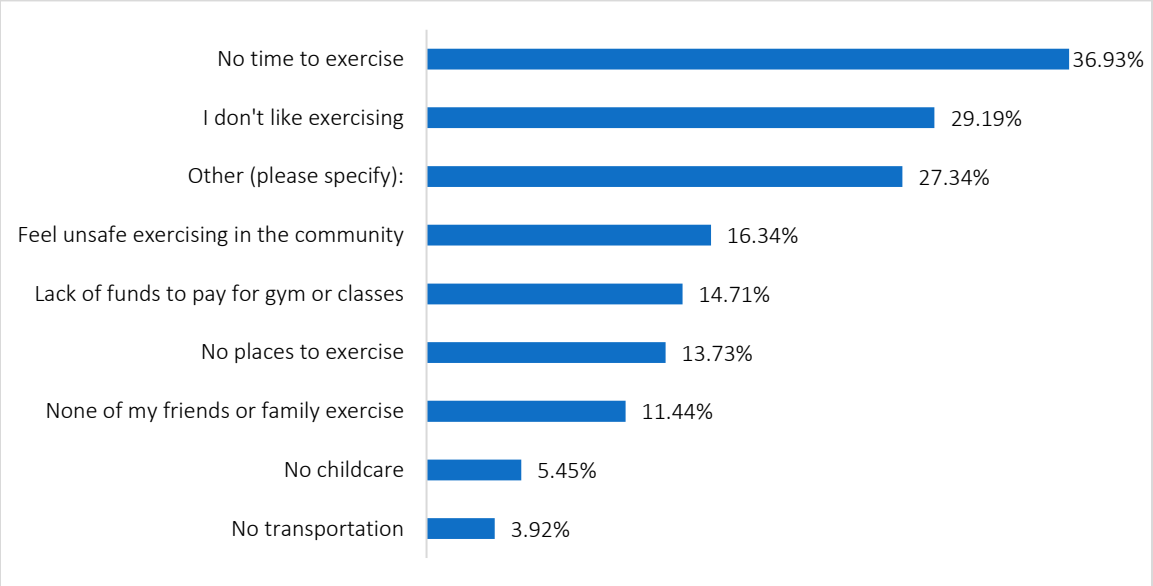
Primary Data

Overall survey responses and key informant interviews identified obesity as a top health issue. There were 73.11% survey respondents who indicated Obesity/Overweight as a top issue affecting their quality of life. When asked about their personal health, 88.12% of survey respondents rated

their health as somewhat healthy or very healthy and 12.17% rated their health as unhealthy or very unhealthy. Survey respondents were also asked how many times they exercised or performed a physical activity, 41.81% indicated 2-3 times a week, 25.33% less than one time a week, and 7.11% indicated never exercising.

Figure 27 shows that 36.93% had no time to exercise, 29.19% did not like to exercise, 27.34% selected other barriers including, physical disabilities, fear of COVID-19, and time, 16.34% felt unsafe exercising in the community, and 14.71% lacked funds to pay for a gym/classes.

Figure 27. Barrier/Challenges to Exercising on A Regular Basis



"I think obesity and our fast-paced culture create an idea where health doesn't take a top priority. I think a lot of it can stem back to generational trauma and the ways that people carry stress and deal with relationships. I think there are so many different facets that contribute to one's health, I don't know that it can be answered in a broad stroke..." -Key Informant Participant

Non-Prioritized Significant Health Needs

The following additional significant health needs emerged from a review of the primary and secondary data. With the necessity to focus on the prioritized health needs described above, these topics are not specifically prioritized for efforts to be outlined in the 2022-2025 Implementation Strategy. **However, due to the interrelationship of social determinants and health, many of these areas fall, tangentially, within the prioritized health needs and may be addressed through the upstream efforts of the prioritized health needs.** Additionally, many of them are addressed within ongoing programs and services in Memorial Hermann Health System. Examples of these efforts are provided below by topic area.

Non-Prioritized Health Need #1: Older Adults and Elderly Care

Older Adults & Elderly Care

Secondary Data Score: **1.57** MHHS

Key Themes from Community Input

- Higher socioeconomic status is a direct correlate to better health outcomes for seniors
- Senior more connected to the community were more responsive to COVID-19 vaccination
- Repeating themes revealed the elderly population suffers, due to:
  More health issues
  Mental health (lack of access to inpatient/outpatient resources)
  Lack of knowledge of available resources

Warning Indicators

- Chronic kidney disease: Medicare population
- Osteoporosis: Medicare population

Ongoing Health System Efforts

Memorial Hermann-Texas Medical Center has received a Level 3 designation, becoming the first hospital in Houston and the second in Texas to receive geriatric emergency department accreditation. A geriatric emergency center is distinguished from standard emergency rooms through enhanced mobility equipment, specialized staff, and an increase in routine screening for conditions such as dementia and fall risk as well as advanced coordination for post-emergency department care. Memorial Hermann-TMC has also implemented a protocol to improve medication regimens for geriatric patients who have been discharged from their emergency center to address any potential adverse side effects.

Memorial Hermann's Acute Care of Elders (ACE) Unit is a closed unit designed to manage acute medical issues in the elderly, prevent the decline that comes with the hospitalization of older people, and arrange for a successful discharge that meets the needs of the family and patient.

Additional efforts supporting the care of older adults in Greater Houston include Memorial Hermann's system-wide Hip Fracture Program and the Medication Therapy & Wellness Clinics located at MH Texas Medical Center, MH Southeast, and TIRR Memorial Hermann.

The specialists of the Memorial Hermann Hip Fracture Program are dedicated to providing the highest quality of care through standardized protocols resulting in expedited care that appropriately addresses clinical conditions. With the overarching goal to minimize pain and prevent complications commonly caused by lack of mobility, including bedsores, blood clots, and pneumonia.

The Memorial Hermann Medication Therapy & Wellness Clinics (MTWC) provide services where clinically trained pharmacists ensure patients' medications are safe and effective to help manage medical conditions, including anticoagulation, diabetes, hypertension, heart failure, dyslipidemia, and COPD, among others.

Each year, one in three adults aged 65 or older will experience a fall, risking traumatic injury or disability and increasing the likelihood of future falls. Memorial Hermann collaborates with several organizations throughout Greater Houston to extend fall prevention efforts and education to prevent incidents before they become an emergency.

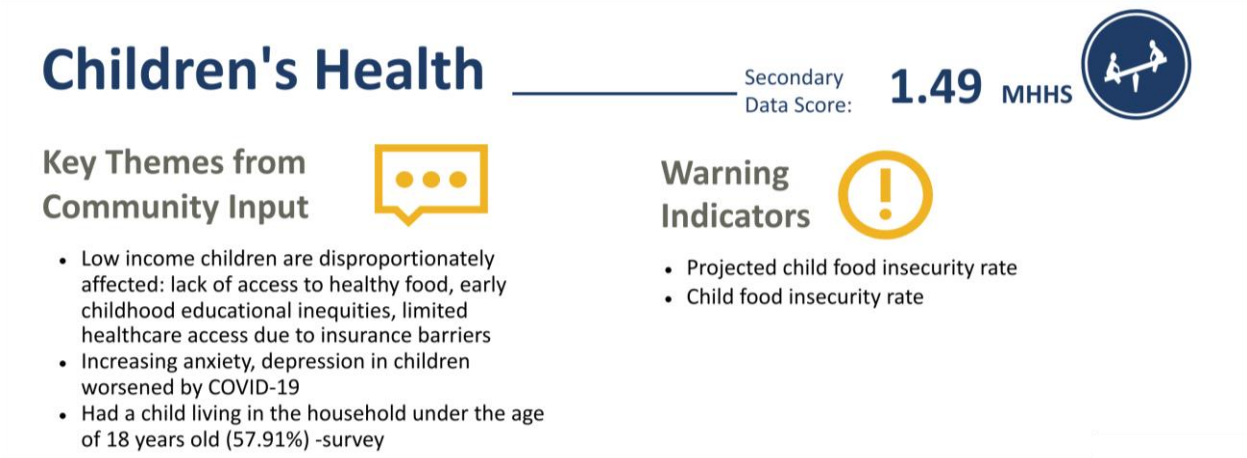
Non-Prioritized Health Need #2: Cancer

Ongoing Health System Efforts

As leading providers of cancer treatment in Houston, Memorial Hermann Cancer Centers offer the entire continuum of cancer care -- education, prevention, screening, diagnosis, treatment, survivorship, and rehabilitation. Cancer patients can take advantage of services in their neighborhood through the convenient network which includes 8 cancer centers, more than 20 breast care locations, 17 hospitals, 12 acute care hospitals, and dozens of other affiliated programs. Patients who receive care at any of the system's accredited centers are guaranteed access to: comprehensive care; a multidisciplinary, collaborative team approach for coordinating the best available treatment options; state-of-the-art equipment and services; information about clinical trials and new treatment options; education, and support; and lifelong patient follow-up through the Cancer Registry.

Memorial Hermann Cancer Centers offer a variety of classes, events, and support groups to care for the physical, social, emotional, and spiritual needs that patients, survivors, and caregivers have along the cancer journey. Following evidence-based guidelines, Memorial Hermann Cancer Centers develop and conduct dozens of support and wellness programs each year focused on prevention, education, screening, community outreach, and survivorship support. The wellness programs include General and Breast Cancer Support Groups, Art Therapy, Chair Yoga, Integrative Medicine, Lymphedema Support, Nutrition Counseling, Survivorship Centers, and more.

Non-Prioritized Health Need #3: Children's Health



Ongoing Health System Efforts

Children's Memorial Hermann Hospital is a 310-bed quaternary care women and children's hospital, located in the Texas Medical Center. As a primary teaching hospital for the pediatric and obstetrics/gynecology programs with an academic partner, McGovern Medical School at UTHealth, Children's Memorial Hermann is committed to serving the global community. The multidisciplinary team of affiliated doctors, nurses, therapists, and other allied healthcare professionals are focused on the personalized needs of women and children with an emphasis on quality, education, outcomes, customer service, and advanced research.

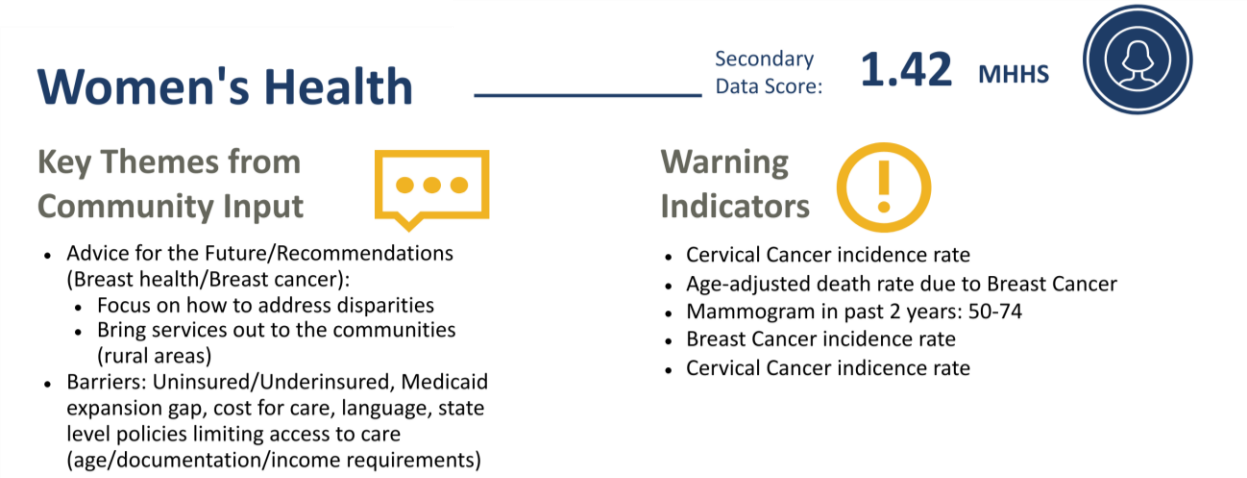
Children's Memorial Hermann Hospital is affiliated with more than 135 pediatric practices across the Greater Houston area, including BlueFish Pediatrics and Children's Memorial Hermann Pediatrics, with convenient locations across Houston in Katy, Memorial City, and Sugar Land.

Memorial Hermann operates ten Health Centers for Schools offering access to primary medical, dental and mental health services to underserved children in more than 80 schools in the Greater Houston Area. The primary goal of the program is to keep children healthy and feeling well so that they stay in school and can perform well academically, creating a foundation for a brighter future. By providing improved access to health care to at-risk children across the region, Memorial Hermann has demonstrated success in creating healthier outcomes for kids, including

improvements in their physical health, their mental wellbeing, and even their attendance rate at school.

Additionally, Memorial Hermann is an ongoing financial collaborator with Children at Risk, a 501(c)(3) non-profit organization that drives change for children through research, education, and influencing public policy.

Non-Prioritized Health Topic #4: Women's Health



Ongoing Health System Efforts

At Memorial Hermann Health System, all facilities offer a patient-centered, multidisciplinary approach to deliver safe, comprehensive, quality care to women of all ages. Memorial Hermann's affiliated team offers a comprehensive program of distinguished gynecology, obstetric and neonatal services, including fertility services, urogynecology, high-risk pregnancy, labor and delivery, menopause care, pelvic floor health, and neonatal intensive care.

At The Women's Center at Children's Memorial Hermann Hospital, caring for women of all ages has always been a priority. As a Level IV Maternal Facility, which denotes the highest level of care as designated by the Texas Department of State Health Services (DSHS), the affiliated team takes a patient-centered approach to delivering advanced heart, bone, and breast care, as well as providing a broad range of gynecology, obstetric and neonatal services, including fertility services, urogynecology, high-risk pregnancy, labor and delivery, menopause care, pelvic floor health, and neonatal intensive care. As a leading obstetric hospital, the labor and delivery unit provide mom and baby with a full range of specialized, comfortable care, including high-risk obstetrical and neonatal care within the same facility.

COVID-19 Impact Snapshot

COVID-19 Community Impact Timeline

Introduction

At the time that Memorial Hermann Health System began its CHNA process, the state of Texas and the nation were continuing to deal with the novel coronavirus (COVID-19) pandemic. The process for conducting the assessment remained fundamentally the same. However, there were some adjustments made during the event to ensure the health and safety of those participating.

Pandemic Overview

On March 13, 2020, a U.S. national emergency was declared over the novel coronavirus outbreak first reported in the Wuhan Province of China in December 2019. Officially named COVID-19 by the World Health Organization (WHO), WHO declared COVID-19 a pandemic on March 11, 2020. To learn more about COVID-19 hospitalization, vaccinations, cases, and deaths in Texas, visit The Texas Tribune. Upon completion of this report in May 2022, the pandemic continued to be a health crisis across the United States and in most countries.

Community Insights

The CHNA project team looked for additional sources of secondary data and gathered primary data to provide a snapshot of the impact of COVID-19 on the Memorial Hermann Health System Primary Service Area. This data was collected from September 2021 to January 2022. Findings are reported below.

COVID-19 Cases and Deaths in Texas

For current cases and deaths due to COVID-19 visit: https://www.dshs.state.tx.us/coronavirus/ and the Harris County/City of Houston COVID-19 Data Hub https://publichealth.harriscountytx.gov/Resources/2019-Novel-Coronavirus

Vulnerability Index

Beyond looking at what we know about COVID-19 cases and deaths, the Conduent COVID-19 Vulnerability Index[5] is a measure of potential severe illness burden due to COVID-19 by county. Counties are given an index value from 1 (low vulnerability) to 10 (high vulnerability). A county with a high vulnerability score can be described as a location where a higher percentage of COVID-19 cases would result in severe outcomes such as hospitalization or death as compared to a county with a low vulnerability score.

What does this score mean?

[5] Conduent HCI COVID-19 Vulnerability Index is a measure of potential severe illness burden due to COVID-19 across the country by county: https://www.covid19atrisk.org/.

Figure 28 shows each county's Vulnerability Index Score as of May 2, 2022. All counties have a score ranging from 2-to 3, meaning residents of these counties have lower death rates due to chronic conditions, lower socio-economic needs, and adequate access to healthcare and services to protect themselves from more severe COVID-19 cases and more death than counties with higher rates of chronic disease, risky behavior, and/or low access to health services.

Figure 28. Vulnerability Index Score

County	Vulnerability Index Score
Brazoria	2
Fort Bend	3
Galveston	3
Harris	2

Please note, that this is a predictive model based on various chronic conditions, SocioNeeds Index®, and recent case counts and deaths. For more information, please see the "Learn More" section in the Conduent Vulnerability Index.

Community Feedback

Both the community survey and key informant interviews included questions to assess the impact of COVID-19 on the Memorial Hermann Health System regional Primary Service Area.

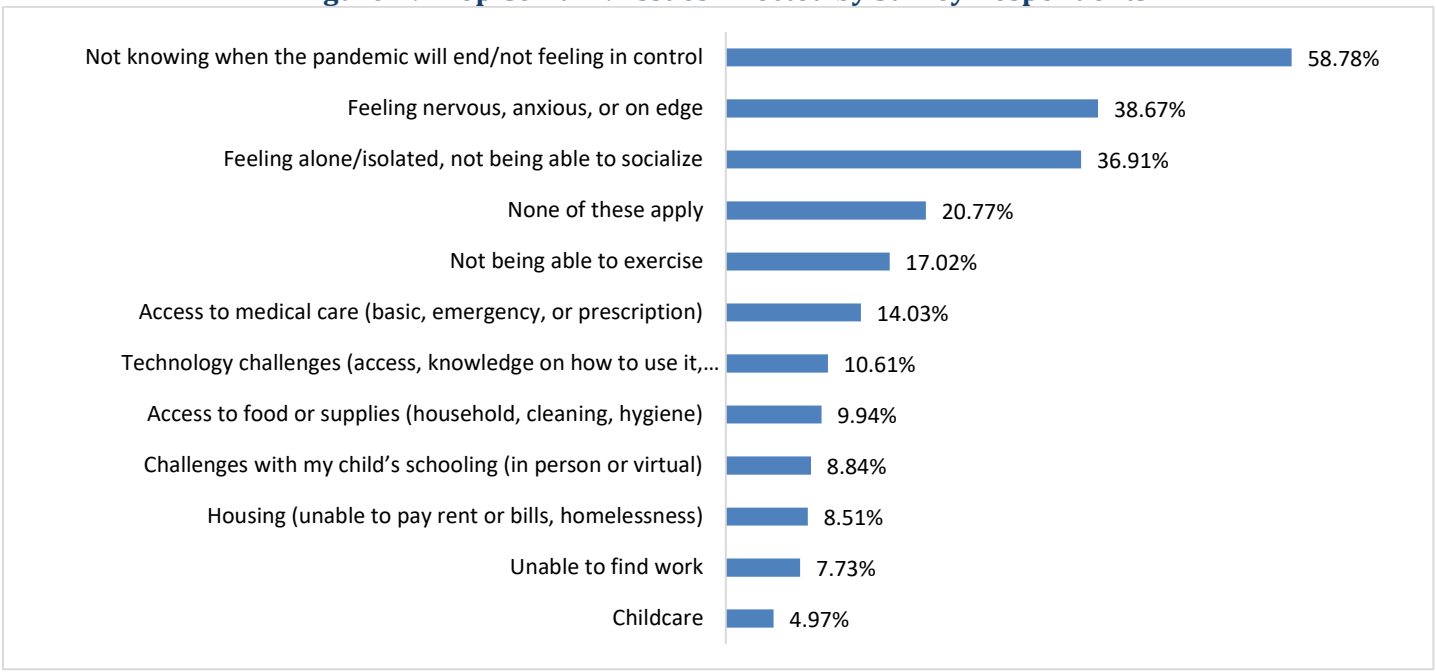
Community Survey

Community survey respondents were asked to identify those issues that are currently the biggest challenge for their households because of the COVID-19 pandemic. Data was collected between November 2021 and January 2022. Survey respondents were especially asked about the biggest challenges their households were currently facing due to COVID-19. Below indicates what survey respondents reported.

- 58.78% reported not knowing when the pandemic will end
- 38.67% reported feeling nervous, anxious, or on edge
- 36.91% reported feeling alone/isolated, not being able to socialize
- 17.02% reported not being able to exercise

Figure 29 provides additional insight into the challenges residents faced during the pandemic.

Figure 29. Top Covid-19 Issues Affected by Survey Respondents



Key Informant Interviews

Key informants were asked to share the biggest challenges in the community as a result of the COVID-19 pandemic. They were also asked to share some positive outcomes that emerged during the response to the pandemic. **Table 27** summarizes key insights gathered from these discussions, which were conducted from September 2021 through January 2022.

Table 27. COVID-19 Key Informant Interview Insights

Challenges	Positive Outcomes
Childcare	Telehealth increased access to care
Delay in dental care, primary care (childhood immunizations delayed)	A greater understanding of the value of community
Compounding impact of COVID-19 on existing health disparities/inequities, Stress	Increased access to virtual community meetings and forums
Distrust in healthcare	Less stigma associated with Mental Health issues/seeking care
Telehealth exposed barriers (internet access, digital divide)	Systemic issues illuminated: people had to confront inequities
Housing Instability	Upwards wage pressure

Recommended Data Sources

As local, state, and national data are updated and become available, these data can continue to help inform approaches to meeting existing and developing needs related to the pandemic. Recommended data sources are included below.

National Data Sources

- Center for Disease Control: https://www.cdc.gov/coronavirus/2019-ncov/php/open-america/surveillance-data-analytics.html
- Johns Hopkins Coronavirus Resource Center: https://coronavirus.jhu.edu/us-map
- Conduent COVID At-Risk – Vulnerability Index: https://www.covid19atrisk.org/
- Conduent COVID-19 Vulnerability Index: https://www.covid19atrisk.org/vulnerability.html
- NACCHO Coronavirus Resources for Health: https://covid19-naccho.hub.arcgis.com/
- Feeding America (The Impact of the Coronavirus on Local Food Insecurity): https://www.feedingamerica.org/sites/default/files/2020-05/Brief_Local%20Impact_5.19.2020.pdf
- Unemployment Rates: https://fred.stlouisfed.org/series/ILDEKA5URN and https://fred.stlouisfed.org/series/ILKEND3URN

State Data Sources

Data and recommendations from the following websites are updated regularly and may provide additional information on the impact of COVID-19 in the state of Texas and the Memorial Hermann Health System regional Primary Service Area.

- Texas Department of State Health Services: https://www.dshs.state.tx.us/coronavirus/
- Memorial Hermann Health System: https://www.memorialhermann.org/services/conditions/coronavirus
- 2-1-1 Texas: https://tx.211counts.org/
- Austin County Services: https://www.austincounty.com/page/austin.Services
- Brazoria County Health Department: https://www.brazoriacountytx.gov/departments/health-department
- Chambers County Public Health: https://www.co.chambers.tx.us/page/coronavirus
- Colorado County Public Health: http://www.co.colorado.tx.us/page/COVID-19
- Fort Bend Health & Human Services: https://www.fbchealth.org/
- Galveston County Health District: https://www.gchd.org/
- Harris County Public Health: https://publichealth.harriscountytx.gov/Resources/2019-Novel-Coronavirus
- Liberty County Services: https://www.co.liberty.tx.us/page/liberty.coronavirus
- Montgomery County Public Health District: https://mcphd-tx.org/
- San Jacinto County Services: http://www.co.san-jacinto.tx.us/
- Walker County Service: https://www.co.walker.tx.us/
- Waller County Services: https://www.co.waller.tx.us/page/EM.COVID-19
- Wharton County Services: http://www.co.wharton.tx.us/

Conclusion

This Community Health Needs Assessment (CHNA), conducted for Memorial Hermann Southeast Hospital and Pearland Hospital, and the Memorial Hermann Health System, used a comprehensive set of secondary and primary data to determine the 15 significant health needs in the Memorial Hermann Health System. The prioritization process identified six top health needs: Pillar: Access: Priority Health Need 1: Access to Healthcare, Pillar Emotional Well-Being: Priority Health Need 2: Mental Health and Mental Disorder, Pillars Food as Health & Exercise is Medicine: Priority Health Need 3-6, Diabetes, Heart Disease & Stroke, Obesity/Overweight, and a special focus on Women's Health.

The findings in this report will be used to guide the development of Memorial Hermann Southeast Hospital and Pearland Hospital's Implementation Strategy, which will outline strategies to address identified priorities and improve the health of the community.

Please send any feedback and comments about this CHNA to: Deborah.ganelin@memorialhermann.org with "CHNA Comments" in the subject line. Feedback received will be incorporated into the next CHNA process.

References

Capps and Ariel G. Ruiz Soto (2018) Migration Policy Institute. *A Profile of Houston's Diverse Immigrant Population in a Rapidly Changing Policy Landscape.*

COVID-19 Vulnerability Index. (2022, March 27). Conduent SocioNeeds Index Suite. https://www.covid19atrisk.org/.

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

Food Insecurity Index. (2022, March 15). Conduent SocioNeeds Index Suite. https://help.healthycities.org/hc/en-us/articles/360060385334-What-is-the-Food-Insecurity-Index-.

Health Equity Index. (2022, March 15). Conduent SocioNeeds Index Suite. https://help.healthycities.org/hc/en-us/articles/220054548-What-is-the-Health-Equity-Index-.

Klein R, Huang D. Defining and measuring disparities, inequities, and inequalities in the Healthy People initiative. National Center for Health Statistics. Center for Disease Control and Prevention. https://www.cdc.gov/nchs/ppt/nchs2010/41_klein.pdf

Pearcy, J. & Keppel, K. (2002). A Summary Measure of Health Disparity. Public Health Reports, 117, 273-280.

Appendices Summary

The following support documents are shared separately on https://www.memorialhermann.org/locations/southeast/community-health-needs-assessment.

A. Secondary Data (Methodology and Data Scoring Tables)

A detailed overview of the Conduent HCI data scoring methodology and indicator scoring results from the secondary data analysis.

B. Community Input Assessment Tools

Quantitative and qualitative community feedback data collection tools that were vital in capturing community feedback during this collaborative CHNA:

- Community Survey (English & Spanish)
- Key Informant Interview Guide

C. Prioritization Tools

This section includes the tools and criteria used for the prioritization process.

D. Community Resources and Partners

This document highlights existing resources that organizations are currently using and available widely in the community. This document also includes tables highlighting potential community partners who were identified during the qualitative data collection process for this CHNA.