

Community Health Needs Assessment 2023

Table of Contents

Acknowledgements	4
ntroduction	5
TOMAGWA's Service Area	6
Service Area Boundaries	6
Annually Determined Service Area	8
Medically Underserved Areas (MUAs) & Health Professional Shortage Areas (HPSAs)	8
Health Center Penetration & Nearby Health Centers	9
Other Primary Health Care Area Providers & Unmet Need	10
Community Health Needs Assessment Process & Data	12
Timeline & Process for Conducting Needs Assessments	12
How CHNA Results Inform & Improve Service Delivery	14
Current TOMAGWA Service Area Data	15
Estimated Service Area Population	16
Sex	16
Age	17
Limited-English Proficiency	17
Race & Ethnicity	19
Counties Overlapping TOMAGWA's Service Area: Demographic Overview	20
Factors Affecting Access to Care & Utilization of Healthcare	21
Poverty	22
Employment Status	23
Insurance Status	24
Uninsured	27
Educational Attainment	28
Homelessness in Harris & Montgomery Counties	30
Transportation	31
Food Insecurity	31
Leading Causes of Morbidity & Mortality	32
Heart (Cardiovascular) Disease	35
Cancer	36
COVID-19	40

Accidents	41
Stroke	43
Diabetes	43
Pre-term Births, Low Birthweight, & Teen Births	45
Mental Illness	49
Substance Use Disorder	51
Patient Input	52
FOMAGWA's Target Populations & Prioritized Needs	55
Conclusion	56

Tomball Main Clinic: 455 School Street, Suite 30, Tomball, Texas 77375



Magnolia Clinic: 18230 Farm to Market Road 1488, Suite 203, Magnolia, Texas 77354



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Kevin Rudolph, President
Kathy Ann Terry, Vice President; Chair Governance Committee
Richard Ervin, Treasurer; Chair, Finance and Audit Committee
Bill Berger, Secretary; Chair, Development Committee
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For more information about TOMAGWA, please visit our website: https://tomagwa.org/.

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GuideStar recently recognized TOMAGWA with the Platinum Seal of Transparency and the Excellence in Quality Standards awards from both TXACC (Texas Association of Charitable Clinics) and NAFCC (National Association of Free and Charitable Clinics). The American Heart Association and American Medical Association have recognized TOMAGWA's excellence in advanced hypertension and diabetic control outcomes by awarding TOMAGWA the Gold Standard Award. TOMAGWA also received recognition as a leader in Texas for diabetic weight loss by Americares and Omada.











Introduction

TOMAGWA Ministries, Inc. dba TOMAGWA Healthcare Ministries (TOMAGWA) is pleased to present its 2023 Community Health Needs Assessment (CHNA) report. This report provides an overview of TOMAGWA's CHNA process, methods, and data used to identify and prioritize significant health concerns in its service area. The CHNA process highlights key health disparities and social determinants of health affecting community residents. The report outlines TOMAGWA's efforts to address the identified needs among target populations. In accordance with federal requirements, TOMAGWA identifies and annually reviews its service area and completes the CHNA process at least once every three years.

TOMAGWA's 2023 CHNA process was conducted in the first quarter of 2023 and incorporated primary and secondary, quantitative and qualitative data sources referenced throughout the report. The service areas of Houston Methodist-Willowbrook Hospital and Houston Methodist-The Woodlands Hospital overlap with TOMAGWA's service area. Patient survey and interview data collected during the 2022 CHNA processes of these two hospitals were incorporated to inform TOMAGWA's CHNA process.

TOMAGWA's CHNA process acknowledges that a multiplicity of factors make our communities healthier places to live. At the same time significant barriers to healthcare such as lack of transportation, language barriers, lack of financial resources, and lack of access to affordable, life-saving medications continue to negatively influence health outcomes of community residents. TOMAGWA anticipates that becoming a federally qualified health center will increase our sustainability and expand our capacity as a medical and dental home with a culture of providing compassionate Christian healthcare, offering hope, and restoring dignity.

The following sections of the report describe TOMAGWA's federally defined service area, the community health needs assessment process, resulting data, identified target populations, and prioritized needs of these populations. The findings of TOMAGWA's CHNA process provide a sound basis for strategic planning, programming, and community action geared towards improving health outcomes.

TOMAGWA's Mission

TOMAGWA Healthcare Ministries exists to provide compassionate Christian healthcare to community members with limited resources.

TOMAGWA does this by attracting qualified and caring staff who are committed to the vision and mission, by providing comprehensive healthcare services through alliances with other agencies, and by developing a community sense of ownership, support, and action.

Vision

Through God's power TOMAGWA Healthcare Ministries will change lives in the community.

Core Values

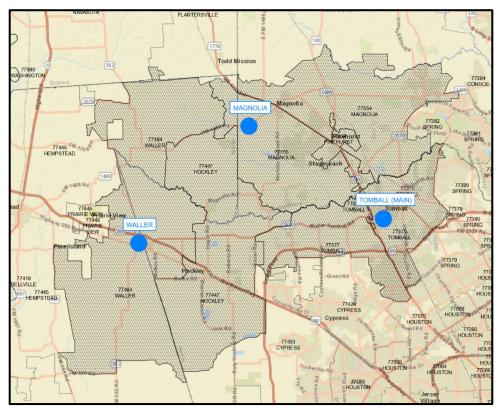
- Compassionate Care
- Quality of Care
- Respect
- Reverence for Life
- Empowerment
- Well-being of the Community

TOMAGWA's Service Area

TOMAGWA HealthCare Ministries was founded in 1989 to provide health services to underserved populations in the <u>To</u>mball, <u>Mag</u>nolia, and <u>Wa</u>ller communities. Its entire service area overlaps with portions of four counties: northwestern Harris County, southwestern Montgomery County, southern Grimes County, and northern Waller County. TOMAGWA is the only safety net provider located in its service area. TOMAGWA currently operates two clinic locations in Tomball and Magnolia. The Tomball location serves as the main clinic location and administrative offices. Since the outbreak of the COVID-19 epidemic the Waller location has not yet reopened.

Service Area Boundaries

As its name implies, TOMAGWA serves the Tomball, Magnolia, and Waller communities and surrounding areas. TOMAGWA annually identifies and reviews its service area based on where most of the patient population resides. TOMAGWA staff pulls a report of patient-level data from Athena One, TOMAGWA's electronic health record system, to identify a service area where at least 75 percent of patients reside.



Source: HRSA (2023) "UDSMapper"

TOMAGWA's service area is defined by Zip Code Tabulation Areas (ZCTAs). Analysis of data from Athena One, including an unduplicated count of patients in 2022, found that 79 percent of TOMAGWA's patients resided in seven ZCTAs, as shown in **Table 1**. These seven ZCTAs are 77354, 77375, 77355, 77377, 77362, 77447, and 77484. TOMAGWA's service area as defined includes an estimated 207,938

residents,¹ and spans a geographic area of 469 square miles.² Patients originating from the seven service area ZCTAs, resided in the communities of Magnolia (38%), Tomball (28%), Pinehurst (5%), Hockley (4%), and Waller (4%). The seven ZCTAs form a contiguous service area encompassing TOMAGWA's service sites. See map above.

Table 1: TOMAGWA Service Area, Total Unduplicated Patients, 2022

	ZCTA	County	Community	Number of Patients	Percentage of Total
	77354	Montgomery	Magnolia	379	21%
7 Service Area	77375*	Harris	Tomball	362	20%
Zip Codes	77355*	Montgomery	Magnolia	304	17%
(79%)	77377*	Harris	Tomball	150	8%
	77362*	Montgomery	Pinehurst	84	5%
	77447	Harris	Hockley	73	4%
	77484	Waller	Waller	70	4%
Subtotal				1422	79%
	77379	Harris	Spring	51	3%
	77389	Harris	Spring	47	3%
	77316	Montgomery	Montgomery	40	2%
Zip Codes for	77070	Harris	Houston	34	2%
Other Patients	77429	Harris	Cypress	31	2%
Served (21%)	77388	Harris	Spring	24	1%
(=170)	77363	Grimes	Plantersville	18	1%
	77072	Harris	Houston	10	1%
	77445	Waller	Hempstead	10	1%
	All others**			110	6%
Total				1797	100%

Source: Athena One, Electronic Health Record System, 2022

Table 1 breaks down the total unduplicated number of TOMAGWA's patients in 2022 by ZCTA of residence, as well as the county and community associated with each ZCTA. Accounting for all unduplicated patients in 2022, TOMAGWA's entire service area spans 16 ZCTAs and overlaps portions of four counties—Harris, Montgomery, Waller, and Grimes. See **Form 1A: General Information Worksheet** and **Attachment 1: Patient Origin and Utilization Information**.

https://data.census.gov/table?q=Poverty&q=010XX00US&tid=ACSST1Y2021.S1701.

^{*} Signifies HRSA "hot spot" ZCTAs. See Section 1E of this narrative for further details.

^{**}Combines ZTCAs with fewer than 10 patients per ZCTA.

¹ U.S. Census Bureau (2021). *American Community Survey 5-year estimates*. Retrieved from Table ID S1701, Poverty Status in the Past 12 months.

² Unitedstateszipcodes.org. (2023). "Search by ZIP, address, city, or county." (Web application.) https://www.unitedstateszipcodes.org/. Accessed February 22, 2023.

Annually Determined Service Area

TOMAGWA staff reviews its patient population data from Athena One, TOMAGWA's electronic health record system, and identifies its service area annually as part of an on-going needs assessment process and an annual budgeting process. The review involves pulling a report from Athena One for the most recent entire year. The report includes the number of unduplicated patients broken down by zip code of residence. The HRSA-defined, TOMAGWA service area includes those seven zip codes where at least 75 percent of TOMAGWA patients reside. If a shift in the service area is identified, health center leadership recommends updates or corrections to the Board of Directors for approval.

Medically Underserved Areas (MUAs) & Health Professional Shortage Areas (HPSAs)

Availability of an adequate number of primary care providers is a major challenge in the TOMAGWA service area. Grimes, Waller and Montgomery counties are designated Medically Underserved Areas (MUAs), indicating insufficient access to primary care providers across the area.³ MUPs (medically underserved populations) have not been designated within TOMAGWA's service area.

Table 2: Medically Underserved Areas (MUAs)

Designation	County	MUA/MUP ID#	Index Score	Rural Status
MUA	Grimes	48185	59.8	Rural
MUA	Montgomery	03512	53.5	Non-Rural
MUA	Waller	1482548406	60.0	Partially Rural

Source: HRSA. (2023). "MUA Find"

Table 3: Health Professional Shortage Areas (HPSAs)

Designation(s)	County	HPSA ID #s	Index Score*	Rural Status
Primary Care, Low-income	Grimes	1486015184	18	Rural
Mental Health, Geographic	Grimes	7486480521	16	Rural
Mental Health, Low-income	Harris	74879292203	12	Non-Rural
Mental Health, Low-income	Waller	7487389757	18	Partially-Rural

Source: HRSA. (2023) "HPSA Find."

The National Health Service Corps (NHSC) created Health Professional Shortage Areas (HPSAs) to identify geographies and populations with primary care, dental, or mental health provider shortages to assist federal agencies in designating program participants and in distributing resources.⁴ According to

^{*}Score out of 26. The higher the score, the higher the priority.

³ Health Resources and Services Administration (HRSA). 2023. "MUA Find" (Web Application). https://data.hrsa.gov/tools/shortage-area/mua-find. Accessed February 22, 2023.

⁴ Health Resources and Services Administration (HRSA). 2023. "HPSA Find" (Web Application). https://data.hrsa.gov/tools/shortage-area/hpsa-find. Accessed February 22, 2023.

the Texas Primary Care Office, Grimes County is designated an HPSA for primary care among the low-income population and is designated for mental health countywide. Harris and Waller Counties are designated HPSAs for mental health among the low-income population.

Health Center Penetration & Nearby Health Centers

UDS Mapper provides the percentage of total residents in each ZCTA served by any health center. (Health Centers are required to report those ZCTAs where at least 11 or more patients reside.) This percentage is referred to as the "HCP Penetration of the Total Population," and is 1.4 percent within TOMAGWA's service area. HCP Penetration of the Low-Income population is 6.4 percent. HCP Penetration of Uninsured is 5.2 percent.⁵ See **Attachment 2: Service Area Map and Table for additional information.**

Table 4: Health Center Program (HCP) Penetration by Zip Code Tabulation Area (ZCTA)

ZCTA / Post Office	Total Population (#) 2016-2020	Patients Seen by Nearby HCPs (#)	HCP Penetration of Total Population (%)	HCP Penetration of Low-income (%)	HCP Penetration of Uninsured (%)
77362 / Pinehurst	4,992	60	1.2%	3.2%	2.2%
77375 / Tomball	60,115	595	1.0%	4.6%	4.1%
77377 / Tomball	38,233	229	0.6%	3.1%	2.7%
77447 / Hockley	16,309	390	2.4%	10.1%	6.7%
77484 / Waller	11,972	495	4.1%	18.2%	15.0%
77354 / Magnolia	39,843	782	2.0%	8.1%	6.1%
77355 / Magnolia	31,201	350	1.1%	5.3%	3.4%
TOMAGWA Service Area Overall	202,665	2,901	1.4%	6.4%	5.2%

Source: HRSA (2023) "UDS Mapper"

No Health Center is physically located within the TOMAGWA service area; however, nine Health Centers serve various portions of the TOMAGWA service area. No Look-Alikes currently serve the TOMAGWA service area or are located near the service area. **Table 5** below displays nearby Health Centers serving parts of the TOMAGWA Service Area and the share of patients served by them based on data from UDS Mapper. The distances and commute times by motor-vehicle from TOMAGWA service sites to existing Health Centers in the surrounding area are noteworthy, with only two centers located within a 30-minute motor-vehicle commute from a TOMAGWA service site.

⁵ Health Resources and Services Administration (HRSA). 2023. "UDS Mapper" (Web Application). Health. https://udsmapper.org. Accessed February 15, 2023.

Table 5: Nearby Health Centers and Share of Patients Served

Dominant Health Centers	Share of Pts (#)	Share of Pts (%)
LONE STAR COMMUNITY HEALTH	318	10.96%
440 Rayford Rd, Ste 150		
Spring, TX 77386		
(16 miles ~30 minutes from TOMAGWA Tomball)		
LONE STAR FAMILY HEALTH CENTER	736	25.37%
605 S Conroe Medical Dr.		
Spring, TX 77386		
(23 miles ~40 minutes from TOMAGWA Magnolia)		
LEGACY COMMUNITY HEALTH SERVICES, INC.	456	15.72%
5620 W Tidwell Rd, Houston, TX 77091		
(21 miles ~40 minutes from TOMAGWA Tomball)		
BRAZOS VALLEY COMMUNITY ACTION AGENCY, INC.	498	17.17%
215 FM 1488 Rd, Hempstead, TX 77445		
(10 miles ~15 minutes from TOMAGWA Waller)		
SAINT HOPE FOUNDATION	423	14.58%
1414 S. Frazier St., Suite 105/106, Conroe, TX 77301		
(22 miles ~40 minutes from TOMAGWA Magnolia)		
SPRING BRANCH COMMUNITY HEALTH CENTER	239	8.25%
7777 Westgreen Blvd, Cypress, TX 77433		
(22 miles ~41 minutes from TOMAGWA Waller)		
HOUSTON AREA COMMUNITY SERVICES, INC.	68	2.34%
7010 Sugar Pine Dr, Houston, TX 77090		
(14 miles ~25 minutes from TOMAGWA Tomball)		
FORT BEND FAMILY HEALTH CENTER, INC.	29	0.99%
533 FM 359 Road S, Brookshire, TX 77423-9006		
(42 miles ~46 minutes from TOMAGWA Tomball)		
ASIAN AMERICAN HEALTH COALITION OF THE GREATER	22	0.76%
HOUSTON AREA, INC.		
3000 Aldine Mail Route Rd., Houston, TX 77039-5612		
(26 miles ~37 minutes from TOMAGWA Tomball)		
OTHER (not displayed in UDS Mapper)	112	3.86%
Patients Seen by Nearby Health Centers	2,901	100%

Source: HRSA (2023) "UDS Mapper"

Other Primary Health Care Area Providers & Unmet Need

TOMAGWA is the only safety net provider physically located in its service area. The nearest Rural Health Clinics are: Baylor, Scott and White Clinic and Brenham Family Family Practice and Obstetrics in Brenham, Texas; BIS Community Clinic in Bedias, Texas; and Hunstville Memorial Hospital in Huntsville, Texas. Nation Health Service Corps sites located just outside of TOMAGWA's service area are: Spring Branch Community Health Center in Cypress, Texas; Houston Area Community Services dba Avenue 360 Health & Wellness in Houston, Texas; St. Hope Foundation, Lone Star Community Health Center, and ICE Montgomery Processing Center in Conroe, Texas. The nearest Veteran's Affairs (VA) clinics are located in Tomball, Conroe, and North Houston.

Houston Methodist Willowbrook Hospital, Houston Methodist The Woodlands Hospital, St. Luke's Hospital (The Vintage and The Woodlands locations), and HCA Houston Hospital (Tomball and

Northwest) provide acute hospital care in and around the TOMAGWA service area. There are a limited number of private specialty providers in the Tomball and Magnolia communities. Lone Star Behavioral Health Hospital is in Cypress, Texas. Three substance use service locations are within or near the TOMAGWA service area. They include: Tri-County Behavioral Healthcare, a psychiatric and substance use disorder outpatient treatment center for individuals aged 13 years and older in Conroe, Texas; Career and Recovery Resources, Inc., an outpatient treatment center for adult women in Hempstead, Texas; and Groundswell, LLC, an adult opioid treatment center in Tomball.

The Health Resources and Services Administration (HRSA) utilizes the Service Area Needs Assessment Methodology (SANAM) to assess unmet need for primary and preventative health care services for the Health Center Program. Using publicly available data, SANAM calculates an Unmet Need Score (UNS) for each ZIP code in the Health Center service area. TOMAGWA used the HRSA Unmet Need Score Workbook to calculate a UNS for the seven ZCTAs in TOMAGWA's service area. A separate analysis included all 16 ZCTAs representing 100 percent of TOMAGWA's unduplicated patient population in 2022, i.e., the "ZIP Codes for Other Patients Served" displayed in **Table 1**.

Four of seven ZCTAs are "hot spots" as defined by HRSA, as indicated in **Table 1** above. These hot spot ZIP codes are 77355, 77362, 77375, and 77377. The resulting Unmet Need Score (UNS) for the TOMAGWA Service Area was 62.71. Analysis of ZIP Codes for Other Patients Served identified three additional hot spot ZIP codes, 77070, 77379, and 77429. The UNS including all 16 ZIP codes was 59.39.⁶

Table 6: Ratio of Patients to Physicians in TOMAGWA Service Area Counties

Provider	Grimes	Harris	Montgomery	Waller	Texas	US
Category						
Primary	3,700:1	1,700:1	1,680:1	8,210:1	1,640:1	1,310:1
Care						
Other Primary	3,370:1	870:1	1,230:1	19,930:1	970:1	810:1
Care Providers						
Dentists	5,050:1	1,360:1	2,020:1	6,640:1	1,610:1	1,380:1
Mental Health	5,050:1	660:1	970:1	4,600:1	690:1	340:1
Providers						

Source: University of Wisconsin Population Health Institute (2023)

In addition to MUA and HPSA designations explained in Section 1C of this narrative, patient-to-provider ratios demonstrate inadequate access to primary care providers in each of four counties overlapping TOMAGWA's service area. **Table 6** displays the ratios of patients to physicians in the TOMAGWA service area counties (i.e., Harris, Montgomery, Waller, and Grimes) based on County Rankings data from the

⁶ Health Resources and Services Administration (HRSA). 2019. "Unmet Need Score (UNS) Workbook." (Web Document). https://bphc.hrsa.gov/funding/funding-opportunities/health-center-program-look-alike-lal-initial-designation-id-application-instructions-resources. Accessed March 9, 2023.

University of Wisconsin Population Health Institute.⁷ All patient-to-provider ratios in Grimes and Waller Counties demonstrate noteworthy gaps in provider access compared to state and national benchmarks. With exception to Harris County, the Other Primary Care Provider ratios in TOMAGWA service area counties also reveal significant gaps relative to state and national benchmarks.

Community Health Needs Assessment Process & Data

Timeline & Process for Conducting Needs Assessments

TOMAGWA HealthCare Ministries (TOMAGWA) completes a community health needs assessment (CHNA) every three years to inform and improve service delivery. The CHNA examines demographic characteristics, key socioeconomic factors associated with access to and utilization of healthcare, and the leading causes of morbidity and mortality within the TOMAGWA service area. Where applicable the CHNA highlights racial and ethnic health disparities, among other unique factors that affect the health of target populations within the service area.

The CHNA process involves the collection and review of two sources of primary data including TOMAGWA's electronic health records system Athena One and patient surveys. Reports from Athena One are pulled as needed to describe the TOMAGWA patient population and monthly to monitor progress on key clinical and quality metrics. Additionally, patient data from Athena One are analyzed annually to refine TOMAGWA's service area. Data related to clinical and quality metrics alongside community-level data inform the on-going processes of identifying target populations, prioritizing target population needs, and developing action steps to improve patient outcomes. In addition to data from Athena One, TOMAGWA regularly conducts patient satisfaction surveys and, as a part of its 2023 community health needs assessment, conducted a patient survey related to social determinants of health. Data from patient surveys inform service delivery and prioritization of target population needs. In addition to primary data, the CHNA process incorporates secondary data about a wide array of health topics from multiple data sources including but not limited to pre-existing CHNAs of local hospitals, the state health department, state Medicaid agency, and the state Primary Care Office. These secondary data sources are referenced as part of this narrative and in TOMAGWA's needs assessment report.

The CHNA process is iterative in that, as data are collected, summaries of the results are shared with the Continuous Process Improvement (CPI) Clinical Programs Committee, which reports directly to TOMAGWA's Board of Directors. CHNA results are also shared with the Chief Executive Officer and administrative and medical leadership teams. Leadership utilizes this information to identify target populations in the service area, to determine which services are most needed, and to identify opportunities for clinical performance improvement. TOMAGWA leadership, including the Clinical Programs Committee, have opportunities to provide input throughout the CHNA process and to provide

⁷ University of Wisconsin Population Health Institute. (2023). *County Health Rankings & Roadmaps*. www.countyhealthrankings.org. Accessed on April 18, 2023.

feedback on drafts of the CHNA report before it is finalized. Once the CHNA report is complete, TOMAGWA makes the report available online to funders, collaborative partners, and the general public.

TOMAGWA's 2023 CHNA process has been informed by the CHNA processes and reports of two area hospitals. The service areas of Houston Methodist Willowbrook Hospital and Houston Methodist The Woodlands Hospital overlap with TOMAGWA's service area. Each of these hospitals conducted CHNAs in 2022, and acknowledgement of the input that TOMAGWA's leadership provided during each of these processes is referenced in each hospital's report. Specifically, TOMAGWA's leadership provided input about medically underserved and low-income populations during these community needs assessment processes. As part of the 2022 CHNA processes, Houston Methodist conducted a community survey with 1,319 respondents. Top health concerns identified by respondents to the Houston Methodist CHNA survey are being considered alongside TOMAGWA's primary and secondary data collected during 2023 CHNA process to identify and prioritize target population needs.

TOMAGWA's 2023 CHNA process follows a nine-step CHNA cycle outlined in the Houston Methodist Willowbrook and Houston Methodist The Woodlands Hospitals' reports. The nine-step CHNA cycle includes:

- Step 1: Reflect and Strategize
- Step 2: Define the Community
- Step 3: Collect and Analyze Data
- Step 4: Identify and Engage Stakeholders
- Step 5: Prioritize Community Health Issues
- Step 6: Document and Communicate Results
- Step 7: Plan Implementation Strategies
- Step 8: Implement Strategies
- Step 9: Evaluate Progress

As with previous CHNAs conducted, TOMAGWA's 2023 CHNA process involves the collection of two sources of primary data and to the extent possible recent secondary data available on a wide array of health topics. The 2023 CHNA data and process are being used to identify target populations and to prioritize the leading health concerns of target populations in the TOMAGWA service area. The 2023 CHNA process thus far has described the most significant causes of morbidity and mortality and, where applicable, has demonstrated health disparities affecting the target populations. The 2023 CHNA also has identified unique healthcare needs and characteristics of the TOMAGWA service area population which impact patients' health status and access to and utilization of primary care.

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⁸ Houston Methodist Willowbrook. (2022). Comprehensive Health Needs Assessment, 2022. (Web Document). https://www.houstonmethodist.org/about-us/community-involvement/community-health-needs-assessment/. Accessed April 4, 2023.

How CHNA Results Inform & Improve Service Delivery

TOMAGWA has used and continues to use the results of CHNA processes to inform and improve service delivery. Below are three examples of how TOMAGWA's 2020 CHNA process translated into improvements in service delivery and ultimately improvements in patient health outcomes.

Establishing new partnerships and utilization of evidence-based tools for prevention and treatment of heart disease: As a result of the high prevalence of hypertension and heart disease identified during the CHNA process, TOMAGWA established a partnership with the American Heart Association. Key developments that resulted from this partnership were the Self-Monitoring Blood Pressure Program and the healthy food shopping formulary for TOMAGWA's food pharmacy. During the heart of the COVID-19 pandemic, the Self-Monitoring Blood Pressure Program empowered patients with poorly controlled hypertension to better self-manage their blood pressure at home with free, digital blood pressure measurement devices that communicate in Spanish and English. Improvements in hypertension management contributed to TOMAGWA's winning the Gold Standard Award in Hypertension Control. As part of TOMAGWA's quality metrics, TOMAGWA was at a 65 percent compliance for maintaining blood pressure control according to American Heart Association guidelines. TOMAGWA improved to 75 percent compliance by the end of 2022. Through the incorporation of the American Hearth Association's Heart-Check digital grocery list tool, TOMAGWA also has been able to better support patients at risk for heart disease who receive food from the food pharmacy.

Increasing access to cancer screening and referral resources: The 2020 CHNA process identified cancer as a leading cause of death in the TOMAGWA service area and highlighted gaps in access to cancer screening for TOMAGWA's patients. In response to this need, TOMAGWA established strategic partnerships and alliances.

- TOMAGWA designated a representative to serve on the Houston Methodist Cancer Center Community Advisory Council to advocate for TOMAGWA's patients, to improve access to cancer screening services, and to ensure that specific cancer burdens and disparities were appropriately addressed with local referral resources and opportunities.
- TOMAGWA established a partnership with Texas A&M and Baylor College of Medicine to provide patient education material and resources for colon, lung and cervical cancer screening.
- TOMAGWA established a partnership with the Rose and MD Anderson Cancer Center to offer breast cancer screening and diagnostic exams at a low cost.

TOMAGWA is committed to providing high quality care, and has tracked cancer screening as part of its quality metrics and continuous process improvement efforts. Colon cancer screening compliance has increased from 36 percent in 2020 to 51 percent in 2022. Lung cancer screening through consistent smoking screening and cessation programs have increased from 91 percent in 2020 to 97 percent in 2022. Cervical cancer screening went from 82 percent in 2020 to 86 percent in 2022. The partnership with the Rose mammogram screening and diagnostic testing has helped increase TOMAGWA's compliance in breast cancer screening from 56 percent in 2020 to 62 percent in 2022.

Improving access to medications for patients who are low-income and uninsured: The 2020 CHNA process identified significant access barriers to needed medications among TOMAGWA's patients who

have acute and chronic illnesses. For example, a large proportion of TOMAGWA's patients speak Spanish as their primary language, and most of these patients are also low-income and uninsured. TOMAGWA addressed barriers to medications by expanding the availability of medications on site in the pharmacy and by expanding pharmacy hours of operation. In January of 2023, TOMAGWA's pharmacy filled 595 prescriptions compared to 322 prescriptions in January of 2022, an 85 percent increase. TOMAGWA's pharmacy also developed a system in collaboration with patient access staff to follow up in Spanish with patients who have been prescribed medications but who have not claimed them at the pharmacy. The pharmacy also uses TOMAGWA's electronic health record system Athena One to communicate directly with patients by sending automated messages when medication is ready for pick up. These service delivery improvements have increased patient compliance by assuring that patients with limited-English proficiency, minimal resources, and no insurance can still access their medications.

TOMAGWA has completed steps 1-4 of its 2023 CHNA process and is currently working on "Step 5: Prioritize Community Health Issues" of the process. The following sections highlight current data collected to inform the 2023 CHNA process. These data describe TOMAGWA's service area population characteristics, factors associated with access to care and health care utilization, and the leading causes of morbidity and mortality.

Current TOMAGWA Service Area Data

The TOMAGWA service area boundaries are defined by Zip Code Tabulation Areas (ZCTAs) and encompass those areas where 79 percent of TOMAGWA patients reside, as displayed in **Table 1** above. ZCTAs included in the HRSA-defined, TOMAGWA service area are 77354, 77375, 77355, 77377, 77362, 77447, and 77484. TOMAGWA's service area includes a total population of 207,938 residents, 9 and it spans a geographic area of 469 square miles. 10 The majority of TOMAGWA's patients reside in the communities of Magnolia (38%), followed by Tomball (28%), Pinehurst (5%), Hockley (4%), and Waller (4%). Thirty percent of TOMAGWA's patients in 2022 originated from ZCTA 77375 which includes the Tomball community and is in Harris County. TOMAGWA's patient population is disproportionately female (65% female) compared to the service area population (49% female).

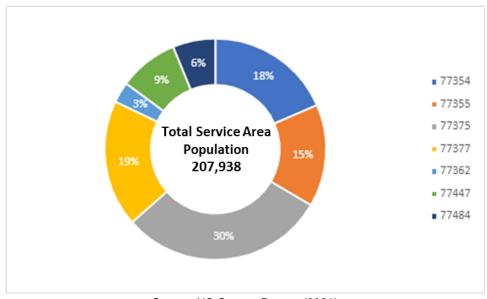
https://data.census.gov/table?q=Poverty&q=010XX00US&tid=ACSST1Y2021.S1701.

⁹ U.S. Census Bureau (2021). *American Community Survey 5-year estimates*. Retrieved from Table ID S1701, Poverty Status in the Past 12 months.

¹⁰ Unitedstateszipcodes.org. (2023). "Search by ZIP, address, city, or county." (Web application.) https://www.unitedstateszipcodes.org/. Accessed February 22, 2023.

Estimated Service Area Population

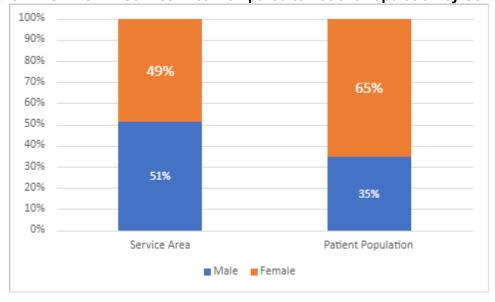
Figure 1. HRSA-Defined TOMAGWA Service Area Population by ZIP Code



Source: US Census Bureau (2021)

Sex

Figure 2. TOMAGWA Service Area Compared to Patient Population by Sex



Sources: Athena One EHR System and the US Census Bureau (2021)

Age

TOMAGWA's patient population reflects a higher concentration of patients aged 18-64 years, and lower percentages of patients under 18 years-old and over 65 years-old, compared to the age distributions of the service area and state. In 2022, 78 percent of TOMAGWA patient population were 18-64 years-old, compared to 60 percent of the population in the service area. TOMAGWA's having a disproportionately larger patient population within the 18-64 age group may be because TOMAGWA serves primarily uninsured patients, who are less likely to have Medicare or Medicaid coverage.

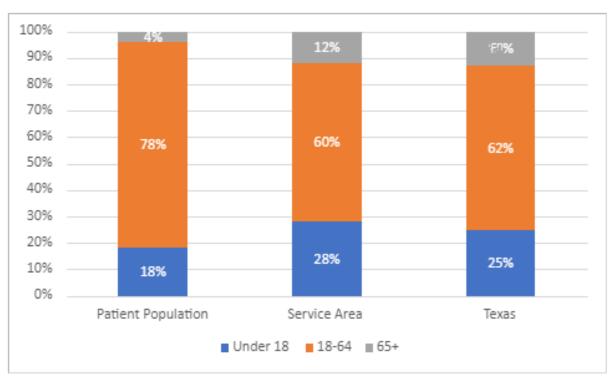


Figure 3. Age Distribution of TOMAGWA Patient Population, Service Area, and Texas

Sources: Athena One EHR System and the US Census Bureau (2021)

Limited-English Proficiency

TOMAGWA's patient population is disproportionately Hispanic / Latino compared to TOMAGWA's service area, 73 percent versus 32 percent respectively. 12 Spanish is the primary language spoken during most patient visits at TOMAGWA. Within the TOMAGWA service area, Spanish is the primary language

¹¹ U.S. Census Bureau (2021). *American Community Survey 5-year estimates*. Retrieved from Table ID S0101, Age and Sex. https://data.census.gov/table?q=Age+and+Sex&g=010XX00US.

¹² U.S. Census Bureau (2021). *American Community Survey 5-year estimates*. Retrieved from Table ID S1701, Poverty Status in the Past 12 months. https://data.census.gov/table?q=Poverty&g=010XX00US&tid=ACSST1Y2021.S1701.

spoken at home in 20 percent of households. Nine percent (9%) of residents within the TOMAGWA service area report that they "speak English less than very well." ¹³

100% | 90% | 21% | 21% | 68% | 68% | 60% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% |

Figure 4. Hispanic / Latino Ethnicity, TOMAGWA's Service Area Compared to Patient Population

Sources: Athena One EHR System and the US Census Bureau (2021)

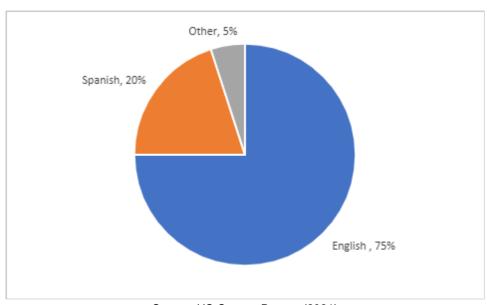


Figure 5: Language Spoken at Home, TOMAGWA's Service Area

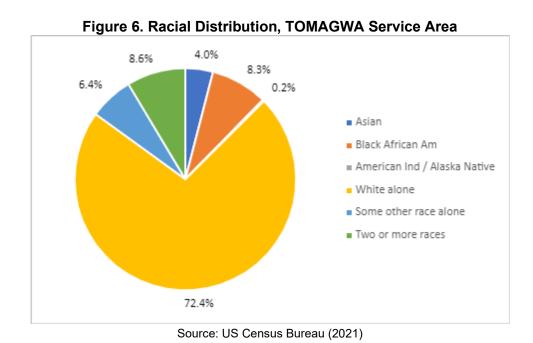
Source: US Census Bureau (2021)

https://data.census.gov/table?q=Language+Spoken+at+Home&g=010XX00US.

¹³ U.S. Census Bureau (2021). *American Community Survey 5-year estimates*. Retrieved from Table ID S1601, Language Spoken at Home.

Race & Ethnicity

TOMAGWA's patient population is predominantly Hispanic / Latino with other racial and ethnic groups underrepresented compared to the service area population. Racial minorities make up 28 percent of the service area population compared to 9 percent of the patient population. Eighty-six percent of TOMAGWA's patient population identified as White (including Hispanics/Latinos who identify as White), 3 percent Black or African American, 3 percent Some Other Race, 1 percent American Indian and 1 percent Asian. Five percent of TOMAGWA's patients declined to identify their race or ethnicity. Individuals who identified as Hispanics / Latinos make up 68 percent of the TOMAGWA service area population compared to 73 percent of the patient population. See **Figure 4** above.



¹⁴ U.S. Census Bureau (2021). *American Community Survey 5-year estimates*. Retrieved from Table ID S1701, Poverty Status in the Past 12 months.

68%

• Hispanic/Latino
• White, not Hispanic/Latino

Figure 7: Hispanic or Latino Ethnicity, TOMAGWA Service Area

Source: US Census Bureau (2021)

Counties Overlapping TOMAGWA's Service Area: Demographic Overview

Four counties overlap with the entire TOMAGWA service area which includes the ZCTAs from where all patients originated. They are Grimes, Waller, Montgomery, and Harris counties. Harris County is the most populous of these counties and includes the city of Houston, Texas. Houston is considered the fourth most populous city in the United States. Grimes County is the most rural county overlapping the TOMAGWA service area, and it is the least populated of the four counties.

The counties that overlap with the TOMAGWA service area, with exception to Montgomery County, surpass national levels for percent uninsured, percent Hispanic/Latino, percent Black or African American, and percent persons in poverty. Also, with exception to Montgomery County, these counties also have lower median household incomes and percentages of individuals aged 25 years or older who have a bachelor's degree or higher compared to national levels. Montgomery County has the highest concentration of veteran residents (i.e., 5 percent of the total population) compared to the other three counties.¹⁵

¹⁵ U.S. Census Bureau (n.d.) *Quick Facts.* (Web Application.) https://www.census.gov/quickfacts/fact/table/montgomerycountytexas,harriscountytexas,TX,US/PST045222. Accessed April 24, 2023.

Table 7: Selected Demographics of the Counties Overlapping TOMAGWA's Service Area

	Grimes County	Waller County	Montgomery County	Harris County	Texas	United States
Population (#)	30,754	61,894	678,490	4,780,913	30,029,572	333,287,557
Percent Uninsured, < 65 years (%)	23%	25%	17%	22%	20.0%	10.0%
Median Household Income (in 2021 dollars)	\$59,086	\$65,379	\$88,597	\$65,788	\$67,321	\$69,021
Bachelor's Degree or Higher, > 25 years (%)	18%	25%	36%	33%	32%	34%
Veterans (#)	1,600	1,968	32,698	152,811	1,426,641	17,431,290
Ethnicity (%)						
White, not Hispanic / Latino	59%	42%	62%	28%	40%	59%
Hispanic / Latino, any race	25%	32%	26%	44%	40%	19%
Black (%)	15%	23%	7%	20%	13%	14%
Asian (%)	1%	2%	4%	7%	6%	6%
Persons in Poverty (%)	16%	14%	11%	16%	14%	12%

Source: US Census (n.d) "Quick Facts"

Factors Affecting Access to Care & Utilization of Healthcare

TOMAGWA's 2023 CHNA identified factors which impact access to and utilization of healthcare for target populations in the service area. Socioeconomic factors included poverty status, employment status, insurance status, educational attainment, homelessness, transportation, and food insecurity. Data that addressed the availability of primary care, dental care, behavioral healthcare, and specialty providers in the area were discussed in Section 1E: Other Primary Health Care Area Providers and Unmet Need.

Linguistic access data were discussed in Section 2C: Current TOMAGWA Service Area Data. The following section addresses socioeconomic barriers to healthcare access and utilization.

Poverty

TOMAGWA's service area includes 42,946 residents or 21 percent of the total service area population, who are below 200 percent federal poverty level. ¹⁶ An estimated 8 percent of the TOMAGWA service area population is living below the federal poverty level. Nine percent of children under the age of 18 live below the federal poverty level. Hispanic/Latino, Black or African American, and individuals who identify as "Some Other Race" are disproportionately impacted by poverty, with over one in ten individuals in these groups living below poverty.

10% 9% 9% 8% 8% 8 6 _% 7% 7% 6% 5% 4% 3% 2% 1% 0% 65+ Under 18 18-64 Male Female

Figure 8. Age and Sex of Residents Living Below Poverty Level: TOMAGWA Service Area

https://data.census.gov/table?q=Poverty&g=010XX00US&tid=ACSST1Y2021.S1701.

Source: US Census Bureau (2021)

¹⁶ U.S. Census Bureau (2021). *American Community Survey 5-year estimates*. Retrieved from Table ID S1701, Poverty Status in the Past 12 months.

14% 13% 13% 12% 10% 9% 8% 6% 4% 4% 3% 0% Some Other Race Two or More Hispanic/Latino White not Black or African American Asian Hispanic or American Indian/Alaska

Figure 9. Residents within Each Racial and Ethnic Group Who Live Below Poverty: TOMAGWA Service Area

Source: US Census Bureau (2021)

Native

Employment Status

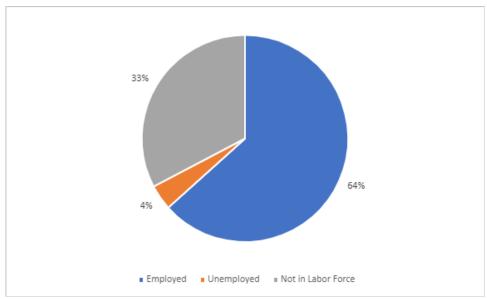
Latino

The unemployment rate in the TOMAGWA service area is 4 percent compared to 7 percent in Harris County, and 5 percent in Montgomery, Waller, and Grimes counties.¹⁷ Racial disparities in employment status exist. Rates of unemployment are notably higher among communities of color compared to non-Hispanic White individuals. Unemployment rates among Black or African American residents are 7 percent in Montgomery and Waller counties, 10 percent in Harris County, and 13 percent in Grimes County.

https://data.census.gov/table?q=Employment+Status&tid=ACSDP1Y2021.DP03.

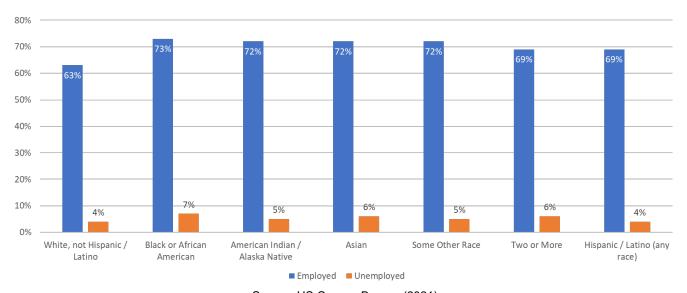
¹⁷ U.S. Census Bureau (2021). *American Community Survey 5-year estimates*. Retrieved from Table ID DP03, Selected Economic Characteristics.

Figure 10. Employment Status for Population 16 Years and Over: TOMAGWA Service Area



Source: US Census Bureau (2021)

Figure 11. Employment Status by Race and Ethnicity, Montgomery County



Source: US Census Bureau (2021)

Insurance Status

Despite increased access to health insurance provided by the Affordable Care Act, Texas has not expanded Medicaid to most low-income adults. In the TOMAGWA service area 10 percent of the

population is covered by Medicaid/CHIP, 12 percent by Medicare, ¹⁸ and 73 percent by private coverage. ¹⁹ According to the Kaiser Family Foundation 17 percent of people in Texas are covered by Medicaid/CHIP. ²⁰

According to data from Texas Health and Human Services, over 75 percent of Medicaid enrollees in the TOMAGWA service area counties in 2021 were under age 21.²¹ Children's Medicaid comprised the largest risk group of Medicaid enrollees across all four counties followed by the Disability-Related risk group and the Aged and Medicare-Related risk group. Children's Health Insurance Program (CHIP) enrollees were 43,810 in Harris County, 4,410 in Montgomery County, 503 in Waller County and 205 in Grimes County.

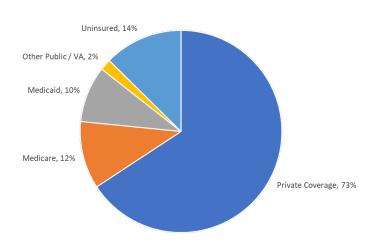


Figure 12. Distribution by Insurance Type: TOMAGWA Service Area

Source: US Census Bureau (2021), Public Health Insurance and Private Health Insurance by Type and Selected Characteristics

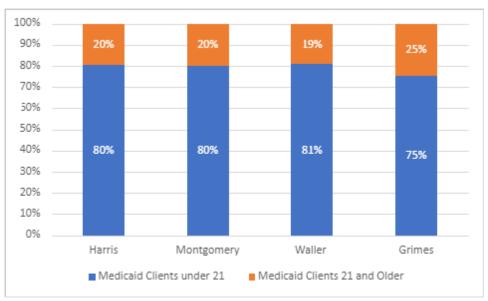
¹⁸ U.S. Census Bureau (2021). *American Community Survey 5-year estimates*. Retrieved from Table ID S2704, Public Health Insurance Coverage by Type and Selected Characteristics. https://data.census.gov/table?q=Health+Insurance&g=010XX00US&tid=ACSST1Y2021.S2704.

¹⁹ U.S. Census Bureau (2021). *American Community Survey 5-year estimates*. Retrieved from Table ID S2703, Private Health Insurance Coverage by Type and Selected Characteristics. https://data.census.gov/table?g=Health+Insurance&g=010XX00US&tid=ACSST1Y2021.S2703.

²⁰ Kaiser Family Foundation. (2022). "Medicaid in Texas." (Web Document). https://files.kff.org/attachment/fact-sheet-medicaid-state-TX. Accessed April 18, 2023.

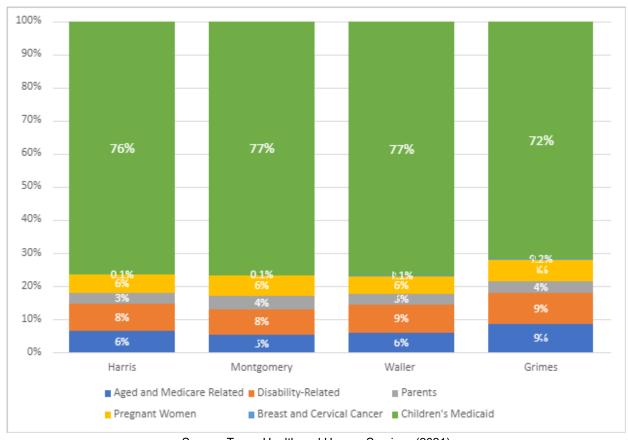
²¹ Texas Health and Human Services. (2021). "Medicaid and CHIP Enrollment by Risk Group by County, Final" (Dataset). https://www.hhs.texas.gov/about/records-statistics/data-statistics/healthcare-statistics. Accessed April 17, 2023.

Figure 13. Percentage of Individuals with Medicaid Coverage in Each Age Group by County



Source: Texas Health and Human Services (2021)

Figure 14. Percentage of Individuals with Medicaid Coverage in Each Risk Group by County



Source: Texas Health and Human Services (2021)

Table 8. Number of Individuals with Medicaid Coverage in Each Risk Group by County

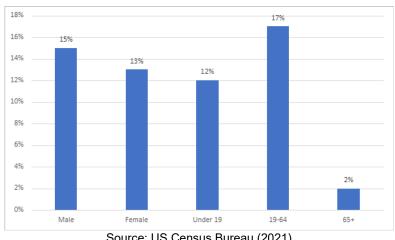
	Harris	Montgomery	Waller	Grimes
Aged and Medicare-Related	52772	4044	481	419
Disability-Related	69032	5770	723	454
Parents	25752	3018	258	180
Pregnant Women	47201	4687	461	310
Breast and Cervical Cancer	781	72	9	10
Children's Medicaid	633138	57768	6416	3507
Total	828676	75359	8348	4880

Source: Texas Health and Human Services (2021)

Uninsured

The proportion of the population that is uninsured in the TOMAGWA service area is 14 percent or 29,111 individuals.²² Over 99 percent of TOMAGWA's patient population did not have health insurance coverage in 2022. Notable differences in uninsured rates exist across TOMAGWA service area zip codes with the highest uninsurance rates in 77362 (28%), 77447 (21%), 77484 (21%), 77355 (16%), and 77354 (14%). The proportion of men who are uninsured is greater than the proportion of women who are uninsured. The proportion of uninsured among the 19-64 age group is greater than other age groups, for reasons previously explained. The proportion of uninsured is greatest among individuals who identified as Some Other Race (27%), Hispanic or Latino (24%), and Two or More Races (19%).²³

Figure 15. Percent Uninsured by Sex and Age: TOMAGWA Service Area



Source: US Census Bureau (2021)

²² U.S. Census Bureau (2021). American Community Survey 5-year estimates. Retrieved from Table ID S2701, Selected Characteristics of Health Insurance Coverage in the United States. https://data.census.gov/table?q=Health+Insurance&g=010XX00US&tid=ACSST1Y2021.S2701.

40% 35% 30% 27% 24% 25% 19% 20% 15% ..-% 10% 5% 0% White, not Hispanic Black or African Asian Some Other Race Two or More Hispanic/Latino or Latino American ■ Texas Montgomery Service Area

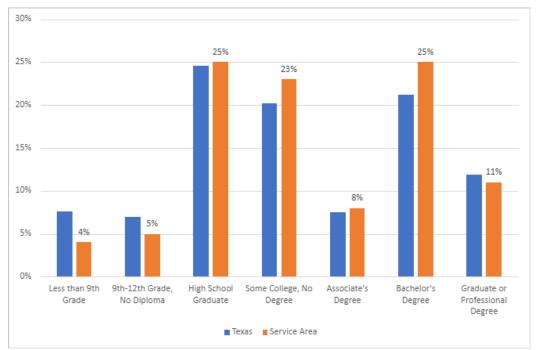
Figure 16. Percent of Uninsured within Each Race and Ethnicity: Texas, Montgomery County, and TOMAGWA Service Area

Source: US Census Bureau (2021)

Educational Attainment

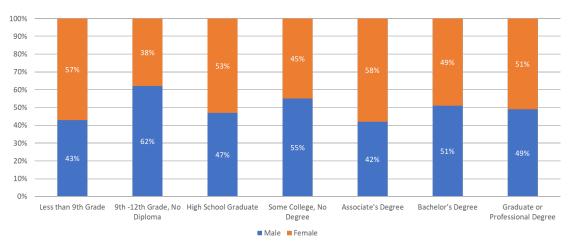
Levels of educational attainment among adults aged 25 years and over within the TOMAGWA service area are comparable to levels of educational attainment in the state overall. The proportions of adults with less than a 9th grade education and with a 9th to 12th grade education are slightly lower in the TOMAGWA service area compared to the state level. The proportions of adults with high school diplomas, with some college, and with a bachelor's degree are slightly greater in the TOMAGWA service area. Among adults with less than a 9th grade education, 57 percent were women.

Figure 17. Educational Attainment: Texas and TOMAGWA Service Area



Source: US Census Bureau (2021)

Figure 18. Educational Attainment by Gender: TOMAGWA Service Area



Source: US Census Bureau (2021)

Homelessness in Harris & Montgomery Counties

The total number of individuals experiencing homelessness in Harris and Montgomery counties has increased, based on annual reports from the Coalition for the Homeless.²⁴ In Harris County the number of unsheltered individuals decreased slightly from 2021 to 2022, but the number of sheltered individuals increased. In Montgomery County the number of unsheltered individuals decreased and the number of sheltered individuals more than doubled between 2021 and 2022. Although data on homelessness can be collected in Athena One, it currently is not collected consistently to report these data for the patient population.

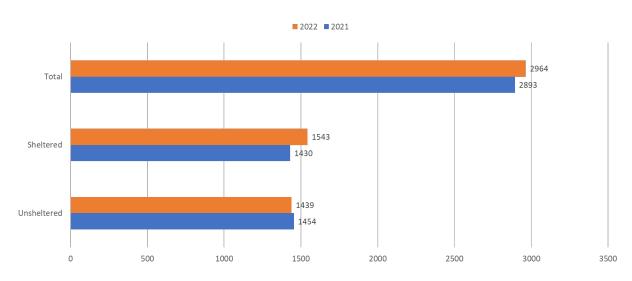


Figure 19. Individuals Experiencing Homelessness, 2021-2022: Harris County

30

Source: Coalition for the Homeless (2022)

²⁴ Coalition for the Homeless. (2022). *Homeless Count and Survey Analysis*. https://irp.cdn-website.com/2d521d2c/files/uploaded/Homeless%20Count%202022_fact%20sheet_final.pdf. Accessed April 4, 2023.

Total

Sheltered

0 20 40 60 80 100 120 140 160 180 200

Figure 20. Individuals Experiencing Homelessness, 2021-2022: Montgomery County

Source: Coalition for the Homeless (2022)

Transportation

Walk Score® considers the zip codes in the TOMAGWA service area to be car-dependent, somewhat bikeable, and with little to no access to public transportation. ²⁵ Commuter data underscores how much residents rely on motor vehicle transportation to arrive to work and other destinations. Workers in the four TOMAGWA service area counties have commutes that are longer than the state average to work. Among workers who commute in their car alone, the percentage that commute more than 30 minutes is 37 percent in the United States, 39 percent in Texas, 47 percent in Harris County, 50 percent in Montgomery and Waller counties, and 54 percent in Grimes County. ²⁶ In Texas, traffic volume on major roadways averaged 505 vehicles per meter per day, compared to 809 in Harris County, 274 in Montgomery County, 60 in Waller County, and 94 in Grimes County. ²⁷

Food Insecurity

The main Tomball clinic is located in the center of census tracts where a significant number or share of residents is more than 1 mile (urban) or 10 miles (rural) from the nearest supermarket (bright green).²⁸

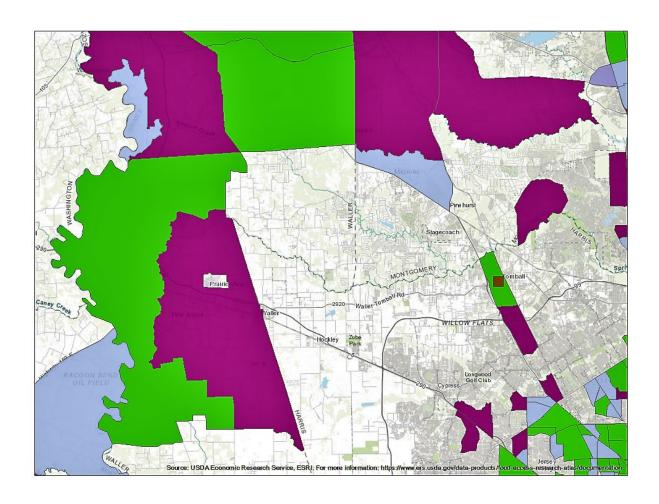
²⁵ Walk Score®. (2023) "Get Scores." (Web Application.) https://www.walkscore.com/cities-and-neighborhoods/. Accessed February 22, 2023.

²⁶ University of Wisconsin Population Health Institute. (2023). *County Health Rankings & Roadmaps*. www.countyhealthrankings.org. Accessed on April 18, 2023.

²⁷ Ibid

²⁸ USDA Economic Research Service, US Department of Agriculture. (2019). Food Access Research Atlas. (Web Application). https://www.ers.usda.gov/data-products/food-access-research-atlas/go-to-the-atlas/. Accessed April 21, 2023.

The Magnolia clinic is located in an area with a poverty rate of 20 percent or higher, or tracts with a median family income less than 80 percent of median family income for the state or metropolitan area (light blue).²⁹ The Waller clinic is adjacent to an area with more than 100 households that have no access to a vehicle and are more than 1/2 mile from the nearest supermarket, or a significant number or share of residents are more than 20 miles from the nearest supermarket.³⁰



Source: USDA Economic Research Service, US Department of Agriculture (2019)

Leading Causes of Morbidity & Mortality

The five leading causes of death in the United States and Texas (2018-2021) were heart disease, cancer (malignant neoplasms), COVID-19, accidents (unintentional injury), and stroke (cerebrovascular disease).³¹ Heart disease and cancer are the leading causes of death across the US, Texas, and all four

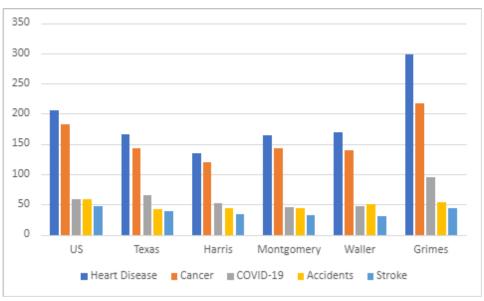
²⁹ Ibid.

³⁰ Ibid.

³¹ Centers for Disease Control and Prevention, National Center for Health Statistics. (2021). "National Vital Statistics System, Mortality 2018-2021" (CDC WONDER Online Database). Data are from the

counties that overlap with the TOMAGWA service area. Chronic lower respiratory diseases, Alzheimer disease, diabetes, kidney disease, liver disease, pneumonia, and intentional self-harm are other leading causes of death. Black or African American residents in the United States and Texas have disproportionately higher death rates than other racial and ethnic groups. The mortality rate in Grimes County exceeds mortality rates at the national, state, and other service area county levels.

Figure 21. Top Five Causes of Death in the US, Crude Rates per 100,000 Deaths: United States, Texas, and TOMAGWA Service Area Counties



Source: CDC, NCHS (2021)

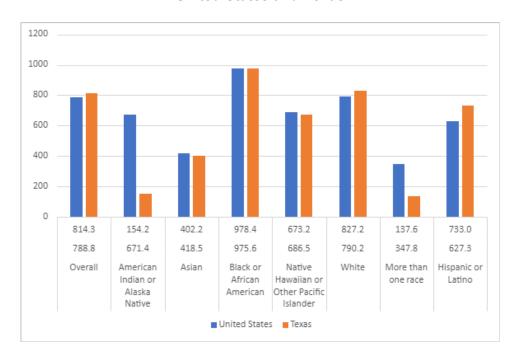
Table 9: Top 10 Causes of Death: United States, Texas, and Montgomery County

United States	Texas	Montgomery County
Heart Disease	Heart Disease	Heart Disease
2. Cancer	2. Cancer	2. Cancer
3. COVID-19	3. COVID-19	3. COVID-19
4. Accidents	4. Accidents	4. Accidents
5. Stroke	5. Stroke	Chronic Lower Respiratory Diseases
Chronic Lower Respiratory Diseases	6. Alzheimer Disease	6. Stroke
7. Alzheimer Disease	7. Chronic Lower Respiratory Disease	7. Alzheimer Disease
8. Diabetes Mellitus	8. Diabetes Mellitus	8. Intentional Self-harm
9. Kidney Disease	9. Liver Disease	9. Diabetes Mellitus
10. Influenza Pneumonia	10. Kidney Disease	10. Liver Disease

Multiple Cause of Death Files, 2018-2021, as compiled from data provided by the 57 vital statistics jurisdictions through the Vital Statistics Cooperative Program. http://wonder.cdc.gov/ucd-icd10-expanded.html. Accessed Apr 18, 2023

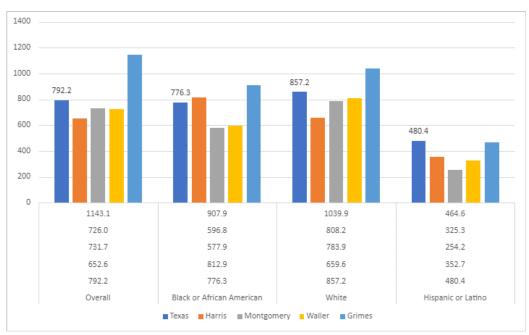
Source: CDC, NCHS (2021)

Figure 22. Age-adjusted All-Cause Death Rates per 100,000 Deaths by Race and Ethnicity:
United States and Texas



Source: CDC, NCHS (2021)

Figure 22: Crude All-Cause Death Rates per 100,000 Deaths by Race/Ethnicity, Texas and TOMAGWA Service Area Counties

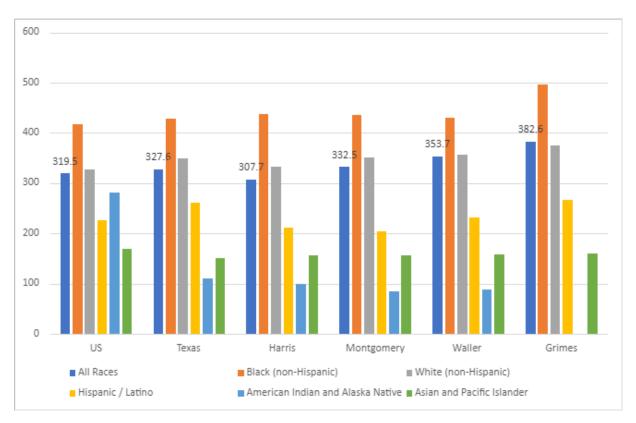


Source: CDC, NCHS (2021)

Heart (Cardiovascular) Disease

The leading cause of death in the U.S. is heart disease. The leading cause of death in Texas and TOMAGWA's service area counties (i.e., Harris, Montgomery, Waller, and Grimes) is also heart disease. Heart disease disproportionately affects Black (non-Hispanic) and White (non-Hispanic) individuals compared to other racial and ethnic groups.³²

Figure 23: Heart Disease Death Rates per 100,000 Deaths by Race and Ethnicity: US, Texas, and TOMAGWA Service Area Counties



Source: CDC (n.d.), "Interactive Atlas of Heart Disease and Stroke"

The prevalence of high blood pressure, high cholesterol, and coronary heart disease in the TOMAGWA service area counties is higher than it is nationally.³³ The prevalence of risk factors for heart disease including smoking, lack of physical activity, and obesity in the TOMAGWA service area counties is higher

³² Centers for Disease Control and Prevention (CDC). (n.d.) "Interactive Atlas of Heart Disease and Stroke." (Web Application). http://nccd.cdc.gov/DHDSPAtlas. Accessed on April 18, 2023.

³³ Centers for Disease Control and Prevention (CDC). (2023). "PLACES." (Web Application). https://www.cdc.gov/places. Accessed April 4, 2023.

than it is nationally. Respondents in Grimes and Waller Counties reported the highest prevalence of heart disease, 7.1 and 6.2 percent respectively.³⁴

Table 10. Age-Adjusted Prevalence of Health Outcomes and Risk Factors Related to Heart Disease: United States and TOMAGWA Service Area Counties

Health Outcome: High blood pressure among adults 18 years and older (2019)					
US	Harris	Montgomery	Waller	Grimes	
29.6%	32.5%	30.4%	34.3%	36.0%	
Health Outcome: Higher past 5 years (2019)	gh cholesterol among	adults 18 years and	older who have been	screened in the	
US	Harris	Montgomery	Waller	Grimes	
28.7%	33.6%	31.9%	31.0%	32.6%	
Health Outcome: Co	pronary heart disease	among adults 18 yea	rs and older (2020)		
US	Harris	Montgomery	Waller	Grimes	
5.5%	5.9%	5.6%	6.2%	7.1%	
Risk factor: Self-rep	orted obesity among	adults 18 years and o	older (2020)		
US	Harris	Montgomery	Waller	Grimes	
32.0%	37.7%	32.3%	37.2%	39.7%	
Risk factor: Self-rep (2020)	orted lack of leisure t	ime physical activity	among adults age 18	years and older	
US	Harris	Montgomery	Waller	Grimes	
22.9%	28.7%	23.7%	26.5%	28.9%	
Risk factor: Self-reported current smoking among adults 18 years and older (2020)					
US	Harris	Montgomery	Waller	Grimes	
14.6%	15.8%	15.7%	17.8%	21.7%	

Source: CDC (2023), "PLACES"

Cancer

The second leading cause of death is cancer. Commonly diagnosed cancers in order of highest mortality rates are lung, breast, prostate, colorectal, pancreatic, liver, cervical and skin cancer. The most common cancers in the TOMAGWA service area counties are breast, prostate, lung, and colorectal cancer. Highest rates of new cancer cases are in Waller and Grimes counties. Rates of new cancer cases are highest among White (not Hispanic or Latino) and Black or African American residents.³⁵

³⁴ Ibid.

³⁵ Texas Health and Human Services. (2023). "Texas Cancer Registry, Web Query Tool." (Web Application). https://www.cancer-rates.info/tx/. Accessed April 4, 2023.

Table 11: Age-adjusted Incidence and Mortality Rates per 100,000 by Cancer Type and Geography

Cancer Type	Texas	Harris	Montgomery	Waller	Grimes
Lung					
Incidence rate	48.3	44.2	49.6	50.2	55.6
Mortality rate	146.0	141.2	144.3	146.2	171.5
Breast					
Incidence rate	117.0	113.4	109.8	102.0	134.9
Mortality rate	123.7	121.7	122.6	125.0	155.7
Prostate					
Incidence rate	102.7	107.9	90.7	122.7	91.2
Mortality rate	17.6	18.8	15.6	15.5	NA
Colorectal					
Incidence rate	38.0	37.2	32.7	33.5	37.4
Mortality rate	13.8	13.5	12.2	10.9	14.2
Pancreatic					
Incidence rate	12.9	12.7	13.0	14.2	14.3
Mortality rate	10.3	10.0	9.8	9.2	NA
Liver					
Incidence rate	10.5	10.9	7.6	NA	15.6
Mortality rate	6.4	6.4	4.9	NA	11.9
Cervical					
Incidence rate	9.4	10.1	8.2	NA	NA
Mortality rate	2.8	2.9	2.4	NA	NA
Skin (Melanoma)					
Incidence rate	14.1	11.8	24.5	16.0	19.6
Mortality rate	1.8	1.3	1.7	NA	NA

Source: Texas Health and Human Services (2023), "Texas Cancer Registry"

Potential risk factors that may increase the risk of cancer include age, personal habits and behaviors, family history, existing health conditions, and the physical environment. Smoking, excessive drinking, excessive sun exposure, obesity, and practicing unsafe sex can increase a person's risk of certain types of cancer. The prevalence of smoking and self-reported binge drinking is higher in the TOMAGWA service area counties than at the national level.³⁶ The prevalence of obesity in the TOMAGWA service area counties is also higher than the national level.³⁷

³⁶ Centers for Disease Control and Prevention (CDC). (2023). "PLACES." (Web Application). https://www.cdc.gov/places. Accessed April 4, 2023.

³⁷ Ibid.

Table 12. Age-Adjusted Prevalence of Risk Factors for Cancer: United States and TOMAGWA Service Area Counties

Risk factor: Self-reported current smoking among adults 18 years and older (2020)				
US	Harris	Montgomery	Waller	Grimes
14.6%	15.8%	15.7%	17.8%	21.7%
Risk factor: Self-reported binge drinking among adults age 18 years and older (2020)				
US	Harris	Montgomery	Waller	Grimes
16.7%	17.9%	18.5%	17.9%	18.6%
Risk factor: Self-reported obesity among adults 18 years and older (2020)				
US	Harris	Montgomery	Waller	Grimes
32.0%	37.7%	32.3%	37.2%	39.7%

Source: CDC (2023), "PLACES"

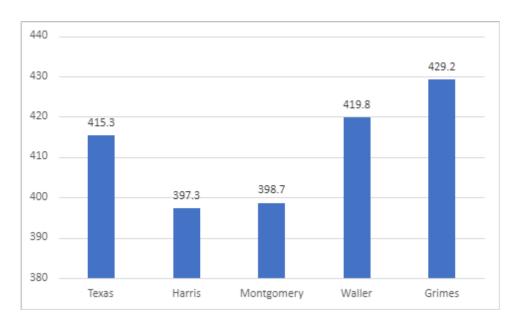
Cancer screening is an important method to detect cancer before it becomes too severe or too difficult to treat. Cervical cancer screening (i.e., pap test), breast cancer screening (i.e., mammography), and colorectal cancer screening (i.e., stool sample, sigmoidoscopy, or colonoscopy) are common screening methods to detect the presence of cancer before it is too late. According to BRFSS, the self-reported percentage of cervical cancer screening among women ages 21-65 in the US was 83 percent. In the TOMAGWA service area counties, percentages of cervical cancer screening are lower than the national level. The percentage of women ages 50-74 in the US who reported ever having had a mammogram was 78 percent, which is higher than the same percentages in the TOMAGWA service area counties. A similar pattern exists for colorectal screening with the national level being higher than the local levels of screening.

Table 13. Age-Adjusted Self-Reported Screening for Cancer: United States and TOMAGWA Service Area Counties

Prevention: Adult women aged 21-65 years who self-reported ever having had a cervical cancer screening (pap test) (2020)					
US	Harris	Montgomery	Waller	Grimes	
83.7%	79.9%	80.0%	79.7%	77.8%	
Prevention: Adult w	Prevention: Adult women aged 50-74 years who self-reported ever having had a mammography (2020)				
US	Harris	Montgomery	Waller	Grimes	
77.8%	72.2%	69.4%	70.6%	68.2%	
Prevention: Adults ages 50-75 who self-reported having had a fecal occult blood test (FOBT) with the past year, a sigmoidoscopy within the past 5 years and a FOBT within the past 3 years, or a colonoscopy within the past 10 years (2020)					
US	Harris	Montgomery	Waller	Grimes	
70.6%	64.3%	66.1%	64.7%	62.2%	

Source: CDC (2023), "PLACES"

Figure 24. Invasive Cancer Incidence Rates per 100,000, All Types, Texas and TOMAGWA Service Area Counties



Source: Texas Health and Human Services (2023), "Texas Cancer Registry"

Figure 25. Invasive Cancer Incidence Rates per 100,000 by Race and Ethnicity, Texas and TOMAGWA Service Area Counties



Source: Texas Health and Human Services (2023), "Texas Cancer Registry"

COVID-19

As the third leading cause of death, the COVID-19 pandemic has cumulatively resulted in a total of 6,660,470 confirmed cases and 92,159 fatalities in the state of Texas as of April 12, 2023. Fatalities have disproportionately impacted men (58%). The largest proportion of fatalities have occurred among individuals who identify as White (46%) and Hispanic or Latino (41%). Eleven percent (11%) of fatalities have occurred among individuals who identify as Black or African American. The percentage of the population older than 6 months-old that is fully vaccinated is 64 percent in Texas compared to 65 percent in Harris County, 60 percent in Montgomery County, 46 percent in Waller County, and 57 percent in Grimes County. The percentage of the population aged 65 and older that is fully vaccinated is much higher, 88 percent in Texas compared to 90 percent in Harris County, 88 percent in Montgomery County, 78 percent in Waller County, and 89 percent in Grimes County.

Table 14. COVID-19 Cumulative Counts by TOMAGWA Service Area County

	Fatalities	Confirmed Cases
Harris County	11,671	1,169,189
Montgomery County	1,392	129,376
Waller County	113	9,536
Grimes County	129	8,107

Source: Texas Health and Human Services (2023) "COVID-19 Dashboard"

Table 15. Percentage of Persons over 6 Months of Age, Fully Vaccinated: Texas and TOMAGWA Service Area Counties

	Fully Vaccinated (#)	Fully Vaccinated (%)
Texas	18,354,418	77%
Harris County	3,066,846	65%
Montgomery County	358,281	60%
Waller County	24,610	46%
Grimes County	16,529	57%

Source: Texas Health and Human Services (2023) "COVID-19 Vaccination Dashboard"

³⁸ Texas Health and Human Services. (2023). "COVID-19 Dashboard." (Web Application). https://txdshsea.maps.arcgis.com/apps/dashboards/4ae43eefd0f641d59d35c3df82ee59cc. Accessed March 14, 2023.

³⁹ Texas Health and Human Services. (2023). "COVID-19 Vaccination Dashboard." (Web Application). <a href="https://tabexternal.dshs.texas.gov/t/THD/views/COVID-19/accineinTexasDashboard/Summary?%3Aorigin=card_share_link&%3Aembed=y&%3AisGuestRedirectFromVizportal=y. Accessed March 14, 2023.

Accidents

Accidents or unintentional injuries are the fourth leading cause of death in the United States. The five leading causes of unintentional injury in the United States in 2020 were unintentional poisoning (30.8%), unintentional falls (14.8%), unintentional motor vehicle traffic (14.3%), suffocation (8.6%), and homicide by firearm (6.8%).⁴¹ The top five leading causes of unintentional injury in Texas in 2020 were unintentional poisoning (31.2%), unintentional motor vehicle traffic (30.4%), unintentional fall (18.7%), unintentional unspecified (4.9%), and suffocation (3.7%).⁴² Of the deaths due to unintentional poisoning 93 percent were due to drug overdose and 4 percent were due to alcohol poisoning.⁴³

The rate of motor vehicle deaths in the state of Texas was 4 per 100,000 people compared to 6 per 100,000 in Harris County and 8 per 100,000 in Montgomery County. 44 Harris and Montgomery counties were highest among the four TOMAGWA service area counties for percentage of driving deaths involving alcohol. 45 Alcohol-involved driving deaths in Harris and Montgomery counties were also higher than the statewide and national levels. 46

All TOMAGWA service area counties have lower drug overdose death rates compared to the national rate; however, Harris, Montgomery and Grimes counties have rates that are higher than the state level. Based on 2020 data in Harris County 826 people died of accidental drug overdose, and in Montgomery County 100 people died of accidental drug overdose.⁴⁷

⁴¹ Centers for Disease Control and Prevention (CDC), National Center for Injury Prevention and Control. (2023). "Web-based Injury Statistics Query and Reporting System (WISQARS)." (Web Application). https://www.cdc.gov/injury/wisqars/index.html. Accessed March 16, 2023.

⁴² Ibid.

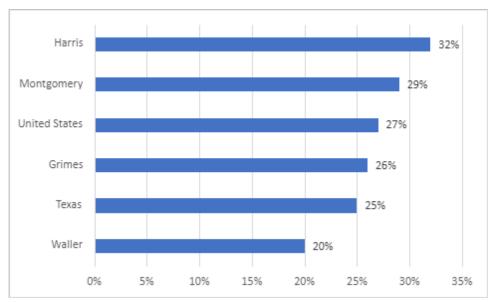
⁴³ Ibid.

⁴⁴ Texas Department of State Health Services. (2023). "Texas Health Data: Statewide Number of Motor Vehicle Deaths for Texas Residents versus Total Crashes from 2014-2020." (Web Application.) https://healthdata.dshs.texas.gov/dashboard/births-and-deaths/motor-vehicle-deaths. Accessed March 22, 2023.

 ⁴⁵ University of Wisconsin Population Health Institute. (2023). County Health Rankings & Roadmaps.
 www.countyhealthrankings.org. Accessed on April 18, 2023
 ⁴⁶ Ibid

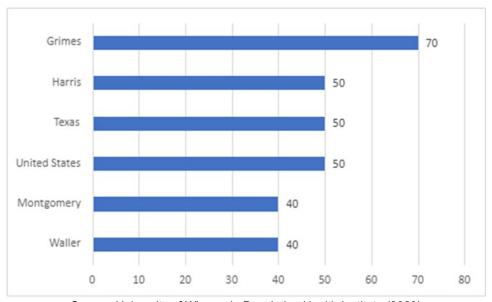
⁴⁷ Ibid.

Figure 26. Percentage of Driving Deaths with Alcohol Involvement: US, Texas, and County-Level Comparison



Source: University of Wisconsin Population Health Institute (2023)

Figure 27. Drug Overdose Death Rates (per 100,000): US, Texas, and County-Level Comparison



Source: University of Wisconsin Population Health Institute (2023)

Stroke

Cerebrovascular disease or stroke is the fifth leading cause of death in the United States. The prevalence of stroke in Harris (3.0%), Waller (3.0%), and Grimes (3.5%) counties is higher than nationally (2.8%). The prevalence of stroke in Montgomery County is 2.5 percent. Men have disproportionately higher death rates due to stroke compared to women at the state level and in Harris and Waller counties. Black or African American individuals have disproportionately higher death rates due to stroke compared to other racial and ethnic groups across all geographic areas. 49

120 100 78.8 78 73.4 80 73. 70.3 60 40 20 0 US Harris Texas Montgomery Waller Grimes All Races Black (non-Hispanic) White (non-Hispanic) Hispanic / Latino ■ American Indian and Alaska Native ■ Asian and Pacific Islander

Figure 28: Stroke Death Rates (per 100,000) by Race and Ethnicity: United States, Texas, and TOMAGWA Service Area Counties

Source: CDC (n.d.) "Interactive Atlas of Heart Disease and Stroke"

Diabetes

Diabetes is among the ten leading causes of death in the United States. Type II diabetes is preventable and is of particular concern due to rising numbers of children and adults who are developing it. In 2000

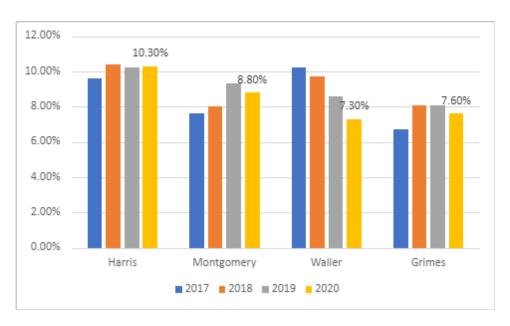
⁴⁸ Centers for Disease Control and Prevention (CDC). (2023). "PLACES." (Web Application). https://www.cdc.gov/places. Accessed April 4, 2023.

⁴⁹ Centers for Disease Control and Prevention (CDC). (n.d.) "Interactive Atlas of Heart Disease and Stroke." (Web Application). http://nccd.cdc.gov/DHDSPAtlas. Accessed on April 18, 2023.

the prevalence of diabetes among adults 18 years and older in Texas was 6.5 percent compared to 12.1 percent in 2020. Nationally, the prevalence of diabetes increased from 6.0 percent in 2000 to 8.2 percent in 2020. Harris County had the highest prevalence of diabetes in 2020 among the TOMAGWA service area counties.

Lack of exercise and obesity are contributing risk factors for developing diabetes. The TOMAGWA service area counties exceed the national percentages of 22.9 percent and 32.0 percent for lack of physical activity and obesity respectively. ⁵² Rates of obesity are approaching 40 percent in Harris, Waller, and Grimes counties, based on 2020 estimates. ⁵³

Figure 29. Adults Aged 20+ Years with Diagnosed Diabetes, Age-Adjusted Percentage: TOMAGWA Service Area Counties



Source: CDC (2020)

⁵⁰ Centers for Disease Control and Prevention (CDC). (2020). United States Diabetes Surveillance System. (Web Application). https://gis.cdc.gov/grasp/diabetes/diabetesatlas-surveillance.html. Accessed April 19, 2023.

⁵¹ Ibid.

⁵² Centers for Disease Control and Prevention (CDC). (2023). "PLACES." (Web Application). https://www.cdc.gov/places. Accessed April 4, 2023.

250

200

190.4

187.4

183.8

165.4

100

Texas

Harris

Montgomery

Waller

Grimes

2017

2018

2019

2020

Figure 30. Diabetes Hospitalization Rates: Texas and TOMAGWA Service Area Counties

Source: Texas Department of State Health Services (2023), Chronic Disease

Table 16. Age-Adjusted Prevalence of Risk Factors for Diabetes: United States and TOMAGWA Service Area Counties

Risk factor: Self-reported lack of leisure time physical activity among adults age 18 years and older (2020)					
US	Harris	Montgomery	Waller	Grimes	
22.9%	28.7%	23.7%	26.5%	28.9%	
Risk factor: Self-reported obesity among adults 18 and older (2020)					
US	Harris	Montgomery	Waller	Grimes	
32.0%	37.7%	32.3%	37.2%	39.7%	

Source: CDC (2023), "PLACES"

Pre-term Births, Low Birthweight, & Teen Births

The three leading causes of infant mortality in the state of Texas are: 1) congenital malformations, deformations, and chromosomal abnormalities; 2) disorders related to short gestation and low birthweight; 3) sudden infant death syndrome (SIDS); 4) newborn affected maternal complications of pregnancy; and 5) accidents.⁵⁴ In 2022, the number of infant deaths (within 1 year) was 6 per 1,000 live

⁵⁴ Centers for Disease Control and Prevention (CDC), National Center for Health Statistics (NCHS). (2020). "National Vital Statistics System, Natality 2016-2020" (CDC WONDER Online Database). Data are from the Natality Records 2016-2021, as compiled from data provided by the 57 vital statistics

births in the United States, Texas, Harris County and Waller County. Montgomery County had an infant mortality rate of 5 per 1,000 live births, which was less than the state and national levels.⁵⁵

United States 6

Texas 6

Harris 6

Montgomery 5

Figure 31. Number of Infant Deaths (within 1 year): US, Texas, Harris, Montgomery, and Waller

Source: University of Wisconsin Population Health Institute (2023)

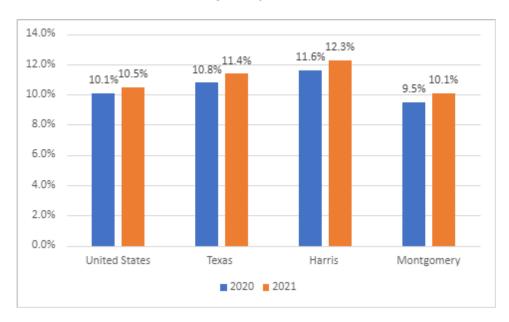
Pre-term births are defined as births that occur before 37 weeks of gestation. Babies progress through many stages of development during gestation. When babies are born prematurely, they are at higher risk for short-term and long-term health complications. Examples of short-term complications include breathing issues, digestive problems, and bleeding in the brain. The percentage of pre-term births in the state of Texas and Harris County exceed the national level in 2020 and 2021. In 2021, the rate of obstetric/clinical estimate (OE) pre-term births was higher among Black or African American individuals (12%) than among White (10%) and Hispanic/Latino (10%) individuals.⁵⁶

jurisdictions through the Vital Statistics Cooperative Program. http://wonder.cdc.gov/natality-expanded-current.html. Accessed on Apr 19, 2023 2:02:58 PM

⁵⁵ University of Wisconsin Population Health Institute. (2023). *County Health Rankings & Roadmaps*. www.countyhealthrankings.org. Accessed on April 18, 2023.

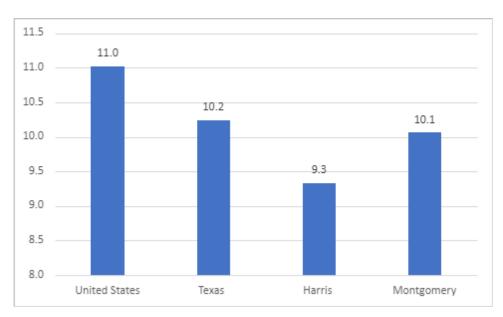
⁵⁶ Centers for Disease Control and Prevention (CDC), National Center for Health Statistics (NCHS). (2020). "National Vital Statistics System, Natality 2016-2020" (CDC WONDER Online Database). Data are from the Natality Records 2016-2021, as compiled from data provided by the 57 vital statistics jurisdictions through the Vital Statistics Cooperative Program. http://wonder.cdc.gov/natality-expanded-current.html. Accessed on Apr 19, 2023 2:02:58 PM

Figure 32: Percent of Pre-Term Births (<37 weeks gestation): United States, Texas, Harris and Montgomery Counties



Source: CDC (2020) "WONDER"

Figure 33. Average Number of Prenatal Visits: United States, Texas, Harris and Montgomery Counties



Source: CDC (2020) "WONDER"

Prenatal care that starts early and continues throughout the pregnancy can help to identify and address health concerns for the pregnant person and the baby. The estimated percentage of live births with first trimester prenatal care entry were 60.8 percent in Harris County, 70.4 percent in Montgomery County,

65.4 percent in Waller County, and 70.7 percent in Grimes County.⁵⁷ Texas, Harris County and Montgomery County have lower levels of average prenatal visits compared to nationally.

In 2022, the percentage of live births with low birthweight, defined as a birthweight less than five pounds and eight ounces, was 8 percent in the United States, Texas, and Waller County.⁵⁸ The percentage of low birthweight in Harris and Grimes counties was 9 percent.⁵⁹ The percentage of low birthweight in Montgomery County was 7 percent. The prevalence of low birthweight was highest among Black or African American infants compared to other racial or ethnic groups.⁶⁰

10% 9% 9% 9% 8% 8% 8% 8% 7% 7% 6% 5% 4% 3% 2% 1% 0% United States Texas Harris Waller Grimes Montgomery

Figure 34. Percentage of Live Births with Low Birthweight: United States, Texas, and TOMAGWA Service Area Counties

Source: University of Wisconsin Population Health Institute (2023)

Teenage birth rates in Texas as well as Harris, Montgomery, and Grimes counties exceeded the national teenage birth rate of 19 per 1,000 females aged 15-19.⁶¹ Rates were 31 per 1,000 females in Grimes County, 29 in Harris County, and 20 in Montgomery County. The teen birth rate was highest among Hispanic / Latino females across the four TOMAGWA service area counties, 38 per 1,000 females in Harris County, 29 in Montgomery County, 43 in Waller County, and 35 in Grimes County.⁶²

⁵⁷ Health Resources and Services Administration HRSA). "Maternal and Infant Health Mapping Tool." (Web Application). Estimates are derived from the National Center for Health Statistics' Birth Files for 2017-2019 as compiled from data provided by the 57 vital statistics jurisdictions through the Vital Statistics Cooperative Program. County-level identifiers were obtained through an approved project and data use agreement. https://data.hrsa.gov/maps/mchb/. Accessed April 21, 2023.

⁵⁸ University of Wisconsin Population Health Institute. (2023). *County Health Rankings & Roadmaps*. www.countyhealthrankings.org. Accessed on April 18, 2023.

⁵⁹ Ibid.

⁶⁰ Ibid.

⁶¹ Ibid.

⁶² Ibid.

Grimes Harris Texas 29 Montgomery 20 United States 19 Waller 18 0 5 10 15 20 25 30 35

Figure 35: Number of Teen Births per 1,000 Females Ages 15-19: United States, Texas and County-Level Comparison

Source: University of Wisconsin Population Health Institute (2023)

Mental Illness

The American Psychiatric Association defines mental illnesses as health conditions involving changes in emotion, thinking, or behavior, (or a combination of these), which result in distress or problems functioning during social, work, or family activities. ⁶³ Illnesses that are considered serious mental health conditions include bipolar disorder, major depressive disorder, and schizophrenia. Common mental illnesses include anxiety disorders, addictive behaviors, eating disorders, attention deficit disorders, and post-traumatic stress disorders.

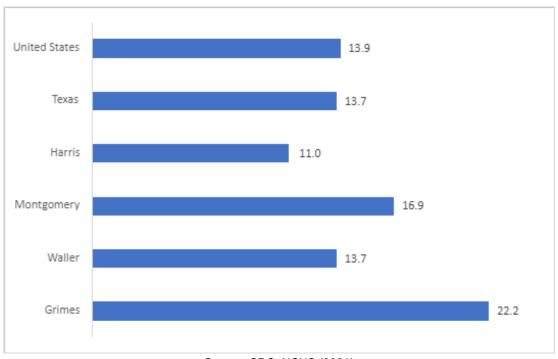
In the United States, 18.5 percent of adults 18 years and older have been diagnosed with depression compared to 21.3 percent in Montgomery County, 20.9 percent in Waller County, and 22.2 percent in Grimes County. Also in the United States 13.9 percent of adults 18 years and older reported having poor mental health for 14 days or more during the past month compared to 14.5 percent in Harris County,

⁶³ American Psychiatric Association. (2018). What is Mental Illness? (Web Page). https://www.psychiatry.org/patients-families/what-is-mental-illness. Accessed April 21, 2023.

⁶⁴ Centers for Disease Control and Prevention (CDC). (2023). "PLACES." (Web Application). https://www.cdc.gov/places. Accessed April 4, 2023.

14.9 percent in Montgomery County, 15.6 percent in Waller County, and 15.7 percent in Grimes County. 65 Suicide rates in Montgomery, Waller, and Grimes counties are higher than state and national rates. 66

Figure 36: Number of Deaths Due to Suicide per 100,000 Population, Age-Adjusted (2018-2021): United States, Texas, and TOMAGWA Service Area Counties



Source: CDC, NCHS (2021)

According to the Substance Abuse and Mental Health Data Archive (SAMHDA), the prevalence of any mental illness in the past year among adults aged 18 or older was 18.8 percent in the United States compared to 16.3 percent in Texas and 15.4 percent in the Greater Houston Area (Texas Region 6). The prevalence of a major depressive episode in the past year was 7 percent in the United States, 5.7 percent in Texas, and 5.2 percent in the Greater Houston Area (Texas Region 6).

⁶⁵ Ibid.

⁶⁶ Centers for Disease Control and Prevention (CDC), National Center for Health Statistics (NCHS). (2021). "National Vital Statistics System, Mortality 2018-2021" (CDC WONDER Online Database). Data are from the Multiple Cause of Death Files, 2018-2021, as compiled from data provided by the 57 vital statistics jurisdictions through the Vital Statistics Cooperative Program. http://wonder.cdc.gov/ucd-icd10-expanded.html. Accessed Apr 18, 2023.

⁶⁷ Substance Abuse and Mental Health Data Archive (SAMDHA). (2016-2018). (Web Application.) https://pdas.samhsa.gov/saes/substate. Accessed April 21, 2023.

Substance Use Disorder

According to the Centers for Disease Control and Prevention, substance use disorders occur when a person repeatedly uses a substance and use of that substance negatively affects the person's physical health and other aspects of the person's life such as school, work, and relationships. The diagnosis of a substance use disorder (SUD) can be applied to the following drug classes: alcohol; tobacco (nicotine); cannabis; hallucinogens; inhalants; opioids; sedatives, hypnotics, or anxiolytics; and stimulants. Coordinated care is important in treating anyone with a SUD.

Unintentional (drug) poisoning was the leading cause of unintentional injury death in the state of Texas in 2020; however, drug and alcohol-induced deaths were notably lower in Texas and the TOMAGWA service area counties compared to nationally. The crude rate of drug poisoning in Texas was 13.8 deaths per 100,000 population which is half of the national rate.⁶⁹ The prevalence of alcohol use disorder, cocaine use, and heroin use in the past year are also lower than nationally. The prevalence of pain reliever misuse in the United States was 3.58 percent compared to 3.62 in the state of Texas.⁷⁰

The Texas School Survey is conducted every two years and asks students in grades 7 through 12 about their use of selected substances. The question asks students to report any use of substances in the past school year. Based on 2020 data, 32 percent of students reported having used alcohol, 18 percent reported tobacco use, 15 percent reported marijuana use, and 9 percent reported use of prescription pain killers.⁷¹

Only three substance use service centers are located within or near the TOMAGWA service area. They include: Tri-County Behavioral Healthcare, a psychiatric and substance use disorder outpatient treatment center for individuals aged 13 years and older in Conroe, Texas; Career and Recovery Resources, Inc., an outpatient treatment center for adult women in Hempstead, Texas; and Groundswell, LLC, an adult opioid treatment center in Tomball.

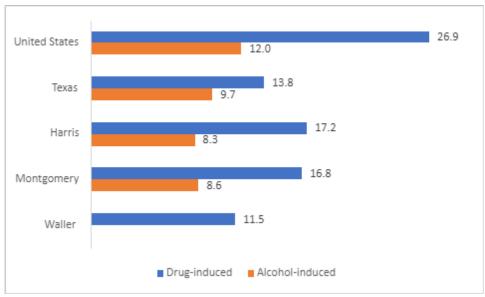
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⁶⁹ Centers for Disease Control and Prevention (CDC), National Center for Health Statistics (NCHS). (2021). "National Vital Statistics System, Mortality 2018-2021" (CDC WONDER Online Database). Data are from the Multiple Cause of Death Files, 2018-2021, as compiled from data provided by the 57 vital statistics jurisdictions through the Vital Statistics Cooperative Program. http://wonder.cdc.gov/ucd-icd10-expanded.html. Accessed Apr 18, 2023

⁷⁰ Substance Abuse and Mental Health Data Archive (SAMDHA). (2016-2018). (Web Application.) https://pdas.samhsa.gov/saes/substate. Accessed April 21, 2023.

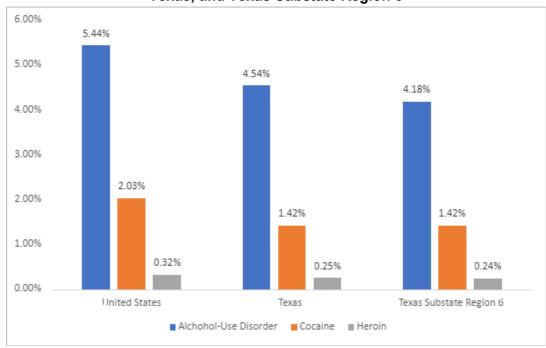
⁷¹ Texas Department of State Health Services. (2023). "Texas Health Data: Texas School Survey of Drugs and Alcohol Use." (Web Application.) https://healthdata.dshs.texas.gov/dashboard/drugs-and-alcohol. Accessed March 22, 2023.

Figure 37. Drug or Alcohol-Induced Death Rates per 100,000 Population: United States, Texas and TOMAGWA Service Area Counties



Source: CDC, NCHS (2021)

Figure 38: Alcohol Use Disorder, Cocaine Use, and Heroin Use in the Past Year, 2016-2018: US, Texas, and Texas Substate Region 6



Source: SAMHDA (2023)

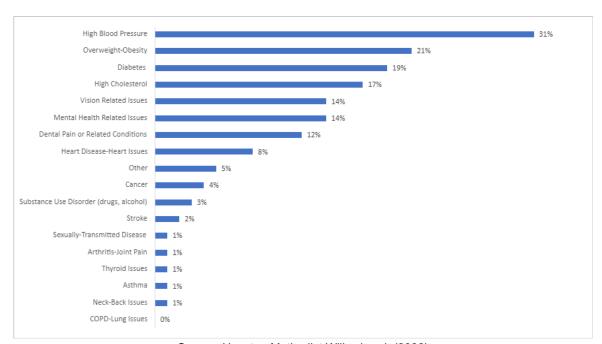
Patient Input

Houston Methodist conducted a 41 item, community survey targeting the Greater Houston area to understand the needs of the communities surrounding each of its hospitals. The service areas of Houston Methodist Willowbrook Hospital and Houston Methodist The Woodlands hospital overlap with

TOMAGWA's service area. In total 1,319 survey responses were collected between February 24, 2022, and April 22, 2022.

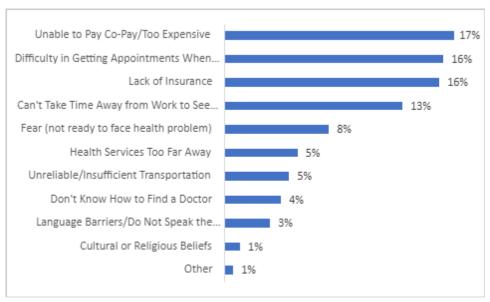
Most informative for prioritizing needs within TOMAGWA's service area were the results from survey items about the "primary health conditions negatively impacting health" and the "top three biggest barriers to seeking medical treatment." The five leading health conditions that negatively impact residents' health in the service area are: high blood pressure, overweight-obesity, diabetes, high cholesterol, and vision-related issues. Five key barriers to accessing medical treatment were: inability to pay, difficulty getting appointments when needed, lack of insurance, inability to get time off from work, and fear (not being ready to face the health issue).

Figure 39: What are the current primary health conditions negatively impacting your health? (N = 1,270)



Source: Houston Methodist Willowbrook (2022)

Figure 40: What are the top 3 biggest barriers that prevent you and/or your immediate family from seeking medical treatment? (N = 884)



Source: Houston Methodist Willowbrook (2022)

TOMAGWA conducted a 14-item patient survey to better understand patients' perceived priorities in terms of social determinants of health. Surveys were collected from January 18, 2023, to February 20, 2023. Results included 102 completed patient surveys. Respondents were 25 percent male, 68 percent female, with 7 percent unreported sex. Respondents identified as 70 percent Hispanic, 9 percent White, 0.1 percent Black, and 21 percent other/unreported. Counties of residents among respondents were 37 percent in Montgomery, 47 percent in Harris, 3 percent in Waller, and 11 percent unreported. The five leading social determinants of health were cost of healthcare, literacy, energy insecurity, food insecurity, and housing insecurity. In addition to social determinants of health, family dynamics were also assessed. Nine percent of respondents reported domestic violence at home, and six percent reported living in households with family conflict.

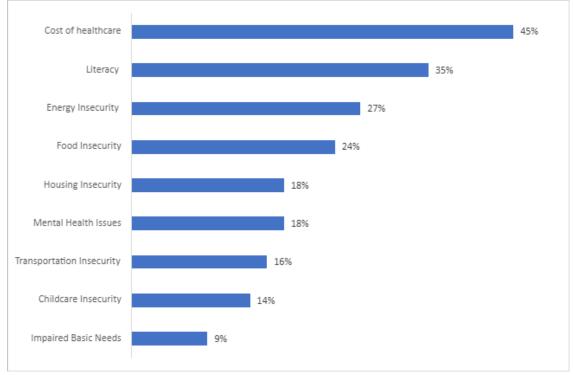


Figure 41: TOMAGWA Patient Survey, Priority Social Determinants of Health (N = 102)

Source: TOMAGWA Patient Survey

TOMAGWA's Target Populations & Prioritized Needs

Based on the data presented above, TOMAGWA's 2023 CHNA process identified patients who are uninsured, patients who are low-income, and patients who are Hispanic/Latino as its target populations. Priority subgroups of these target populations include women and children, limited-English speaking patients, patients experiencing mental illness, patients in need of oral/dental care, and patients living with preventable, chronic conditions such as cardiovascular disease (e.g., hypertension), diabetes, and obesity. Patients at-risk of developing cancer is an additional subgroup among TOMAGWA's target populations of particular concern.

The pediatric population represents an initial access point to healthcare for underserved Hispanic/Latino families. By prioritizing their care, TOMAGWA opens the door to healthcare access for the rest of the family. This approach helps to break the cycle of health disparities and ensures that underserved families receive the care that they need to maintain good health and well-being. Conversely, prioritizing women's health and prenatal care leads to a healthier pediatric population and better support for mothers who are often the key to health for the rest of the family.

Improving access to primary care, including preventative screening, chronic disease management, dental, and mental health services, has a significant impact on the health outcomes of families, particularly those who are facing barriers to healthcare. Improving access to educational and referral resources delivered in appropriate ways and in the appropriate language is essential for improving chronic disease management among TOMAGWA's target populations. By prioritizing these target

populations, subgroups, and needs, TOMAGWA can ensure health equity and healthcare access for underserved patients in the service area to live healthy, fulfilling lives.

Conclusion

For 34 years TOMAGWA has proven itself to be an exemplary model of charitable care and continues to fulfill its mission to provide compassionate Christian healthcare to community members with limited resources. TOMAGWA's services include award winning primary care, dental, vision, lab, pharmacy, diagnostics, and case management services. TOMAGWA's services are provided regardless of race, ethnicity, creed, religion, or ability to pay. Immunization and school based dental clinics extend TOMAGWA's reach into the broader community. TOMAGWA is also a teaching facility for future healthcare and dental care professionals and is a site for cancer research and prevention.

As a comprehensive medical and dental home in the community TOMAGWA has much work to do. TOMAGWA has identified key priorities and strategic initiatives to address the needs identified in this report for its target populations.

- Federally Qualified Look Alike and Federally Qualified Health Center Designations: A key
 strategic initiative is the pursuit of Federally Qualified Health Center (FQHC) Look Alike (LAL) and
 Federally Qualified Health Center designations. These designations are important to enhance
 TOMAGWA's long term sustainability and to expand the circle of care to more patients in our
 service area.
- Stronger Community Partnerships: TOMAGWA brings with it a vast network of community partnerships which include volunteer healthcare providers, educational institutions, health systems, community-based organizations, local and national public servants, and private donors. TOMAGWA will expand current partnerships to increase access to obstetric/gynecological, behavioral/mental health, case management, dental, radiology, nutrition, language, and transportation services.
- Expanded Hours and Services in Montgomery County: As of June 2023, the TOMAGWA Clinic in Magnolia expanded its hours of operation to full time, Monday through Friday. This important development will increase the number of patients seen at TOMAGWA's health centers and will increase access to primary care services for uninsured patients in the service area.
- Increased Access for Women, Children, and Families: TOMAGWA plans to contract with Medicare, Medicaid, managed care organizations (MCOs), and other private insurance companies to increase access to primary care services for insured and underinsured patients in the service area. TOMAGWA's recent contractual relationship with Texas Children's Health Plan is just one of several relationships which will increase access to primary care services in the local area for women and children.
- Increased Access to Affordable Medications: TOMAGWA has expanded its Class D pharmacy
 to Magnolia and has established a prescription mail delivery service. Along with its pursuit of LAL

and FQHC designations, TOMAGWA hopes to eventually participate in the 340B drug pricing program, which will increase the availability of affordable medications.

- Reduced Burden of Healthcare Costs through Sliding Fee Discount Program: Through TOMAGWA's expanded sliding fee discount program, women and expectant mothers who are uninsured will have full access to obstetrics and gynecological (OB) services at discounted rates. Pregnant women will be able to see an OB practitioner while working with our patient navigators to gain covered benefits for prenatal care, deliveries, and, due to new state legislation, extended postnatal care for mothers.
- Increased Access to Affordable Dental Services: TOMAGWA plans to expand dental care to full time at its Magnolia location in Montgomery County to serve more patients who are uninsured. Many of these patients would not otherwise have access to dental care.