Good Samaritan Medical Center

A STEWARD FAMILY HOSPITAL

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# Community Health Needs Assessment 2021

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# Executive Summary

This report is a comprehensive analysis of health outcomes and perspectives in the Good Samaritan Medical Center (GSMC) primary service area, which encompasses Abington, Avon, Brockton, Easton, East Bridgewater, Holbrook, West Bridgewater, Randolph, Stoughton and Whitman. Data was gathered by analyzing publicly available information, reviewing feedback gathered from community focus groups, conducting extensive reviews of published articles on the health of the population residing in the region and in Massachusetts, and surveying local health professionals. This data-driven methodology allowed GSMC to investigate the needs of the community in order to better streamline resources and inform community-based initiatives. The information highlights some of the public health needs identified within the community and may be used to develop targeted community health improvement strategies as well as to inform the hospital in the development of its subsequent Implementation Strategy and other Community Benefits programming.

The goal has been to engage and learn from community members, particularly those most at-risk for experiencing health disparities, and develop recommendations for Community Benefits programming that bring about improved health outcomes in high priority populations. For the purpose of this CHNA, high priority populations may be defined as members of the community that have been historically marginalized due to racism and/or poverty and have had limited access to health care services. As noted in the Attorney General's Community Benefits Guidelines for Non-Profit Hospitals, released February 2018, "It is well understood that racism – in all of its forms – and institutional bias impact health outcomes, both through their influence on the social determinants of health and also as an independent factor affecting health. The health equity framework illustrates how racism has an independent influence on all the social determinants of health and that racism in and of itself has a harmful impact on health."

Through the development and implementation of evidence-based best practices in Community Benefits programming, GSMC seeks to respond to the guidance offered by the Office of the Attorney General and the health equity framework. We accomplish this to the best of our ability and with our available resources by: addressing root causes of health disparities; educating community members on prevention and self-care particularly for chronic diseases such as cancer, heart disease, diabetes, obesity as well as mental illness and substance use disorder; and addressing social determinants of health.

Social determinants of health, including social, behavioral, and environmental influences, have become increasingly prevalent factors in assessing population health. Experts recommend linking health care and social service agencies in addressing social determinants of health to increase the efficacy of health promotion and chronic disease prevention programs. In particular, services related to housing, nutritional assistance, education, public safety, and income support are areas for cross sector collaboration with local health services.

GSMC is committed to providing Community Benefits programs that support a healthy and thriving community. The information and recommendations are presented as a starting point for discussions and planning with community-based partners to develop truly comprehensive, actionable, and measurable Community Benefits programming.

# Introduction

Good Samaritan Medical Center (GSMC), founded in 1968, is part of Steward Health Care – the nation's largest private, for-profit, physician led health care network in the United States. Headquartered in Dallas, Texas, Steward operates 36 hospitals in the United States.

Good Samaritan Medical Center is an acute-care, 224-bed hospital providing comprehensive inpatient, outpatient, and Level III Trauma emergency services to Brockton and 22 neighboring communities. The hospital offers Centers of Excellence care in orthopedics, oncology, and cardiology, specialized care in surgery, family-centered obstetrics with level-two nursery, and advanced diagnostic imaging. Good Samaritan Medical Center has the Gold Seal of Approval from the Joint Commission on Accreditation of Health Care Organizations.

GSMC is committed to providing the highest quality care with compassion and respect to all members of our community. We strive to do so by delivering affordable health care to all in the communities we serve, by being responsible partners to our neighbors, and by serving as advocates for the poor and underserved in our region.

GSMC maintains a Community Health Department, which works closely with a Community Benefits Advisory Committee comprised of hospital leadership, representatives of local health and human service organizations, community groups, and other agencies. This committee guides the planning and implementation of our community health initiatives.

### Community Benefits Mission Statement

GSMC is committed to collaborating with community partners to improve the health status of community residents. We accomplish this by addressing root causes of health disparities; educating community members on prevention and self-care, particularly for chronic diseases such as cancer, heart disease, obesity, diabetes, substance use disorder; and addressing social determinants of health.

### Community Benefits Statement of Purpose

The GSMC community benefits purpose is to:

- Improve the overall health status of people in our service area.
- Provide accessible, high-quality care and service to all those in our community, regardless of their ability to pay.
- Collaborate with staff, providers, and community representatives to deliver meaningful programs that address statewide health priorities and local health issues.
- Identify and prioritize unmet needs and select those that can most effectively be addressed with available resources.
- Contribute to the well-being of our community through outreach efforts including but not limited to reducing barriers to accessing health care, preventative health education, screening, wellness programs, and community building.
- Regularly evaluate our community benefits program.

# Methods

The 2021 GSMC Community Health Needs Assessment (CHNA) was developed in full compliance with the Commonwealth of Massachusetts Office of Attorney General's Community Benefits Guidelines for Non-Profit Hospitals, released in February 2018. In order to accomplish this, a multi-dimensional approach to the collection of health and social demographic information from the GSMC primary service area was conducted. In accordance with this process, GSMC engaged various community organizations and members to ensure that varying perspectives on health and social topics were taken into account in order to complete this CHNA. Below is a brief description of the data collection process.

## Health Indicators and Demographics- Data Analysis

In order to get a broader view of the health and sociodemographic trends in the GSMC primary service area, extensive public data was collected to enable key findings to be derived from the research of online data sources, in partnership with the Massachusetts Department of Public Health (MA DPH). Data sources used by the team included U.S. Census Bureau, Department of Early and Secondary Education (DESE), Uniform Crime Reporting (UCR) Program of the Federal Bureau of Investigation and the Center for Disease Control and Prevention (CDC). Health indicator data such as mortality, disease prevalence, hospitalizations, admissions to substance abuse programs and reproductive health was provided by MA DPH Office of the Commissioner MassCHIP staff.

## Key Informant Survey

A Key Informant Survey was administered by H&HS Consulting in April 2021. Participants included:

- Tina Cardoso, Counselor-at-Large, CEO, Cape Verdean Women Untied, Inc.
- Catherine Stewart, BAMSI (Brockton Area Local System of Care
- Ellen Greene, VP Association Membership, YMCA Stoughton
- Brenda Azedo, RN, Nurse Department, Old Colony Elder Services
- Nicole Modes, Family & Community Resources, Inc.

## Focus Groups

Two focus groups were conducted virtually through Zoom in the Spring of 2021. Questions asked of participants can be found in Appendix B.

### Brockton NAACP

One group, containing 5 members, was conducted with the Brockton NAACP. Demographics for this group are as follows:

| Age | | Race | | Gender | |
|---|---|---|---|---|---|
| 40-59 | 1 | Black | 5 | Female | 4 |
| 60+ | 4 | | | Male | 1 |

### Brockton VA Hospital

Another group, containing 4 members, was conducted in partnership with the Brockton VA Hospital. Demographics for this group are as follows:

| Age | | Race | | Gender | |
|---|---|---|---|---|---|
| 31-45 | 4 | Black | 4 | Female | 2 |
| | | | | Male | 2 |

## Health Professionals Survey

A Health Professional Survey was developed and distributed electronically to GSMC staff as well as staff at affiliated medical practices and Steward Medical Group offices within the service area. The survey was also distributed to members of the Greater Brockton Health Alliance to ensure that the greater health and human service provider community had the opportunity to contribute their view and opinions.

GSMC received 44 responses to the Health Professionals survey, including staff from GSMC and Steward Medical Group (SMG), as well as one individual each from Easton Cardiology and Steward New England Sinai Hospital.

## Literature Review

A literature review of recent governmental, public policy, and scholarly works was conducted. The public health information was analyzed and a summary report, which included common themes and public health trends among high-priority populations in the GSMC service area, was created to inform this Community Health Needs Assessment.

# Findings

### Chronic Conditions

In 2017, approximately 49.8% of mortality cases in Massachusetts were due to cancer, heart disease, lower respiratory disease, and diabetes. However, East Bridgewater (60.4%), Bridgewater (54.6%), Easton (50.2%), Brockton (50.1%), and Stoughton (50.1%) all showed higher rates of deaths due to chronic conditions than the state level. Health professionals identified diabetes, asthma, obesity, heart health, high blood pressure, and stroke as some of the greatest health issues facing consumers.

### Mental Health

In the early stages of the COVID-19 pandemic, rates of depression and anxiety drastically increased with 28.2% of Americans reporting symptoms of depression and 24.4% reporting symptoms of anxiety (NCHS, 2020). Health professionals surveyed indicated mental health was one of the most prevalent health concerns in both 2020 and 2021. Focus group participants identified mental health as a pressing problem, especially among young adults.

### Substance Use Disorder

Substance use is a pressing concern in the United States, where an estimated 53.2 million people aged 12 and older have engaged in using illicit substances. According to health professionals, illicit substance use was one of the biggest health problems facing the community. Based on available data, alcohol, opioid, and other drug-related hospitalizations have remained stable since 2016.

### Housing Stability

Massachusetts has a chronic undersupply of affordable housing for low-and-moderate-income people. Health professionals surveyed rated expanded access to housing support services as one of the services that would most benefit consumers.

# Demographics

The Good Samaritan Medical Center (GSMC) primary service area encompasses cities and towns in Plymouth, Norfolk, and Bristol counties.

Norfolk County has the highest population at 705,388, followed by Bristol County at 565,210, and Plymouth County at 518,132 people. The highest percentage of US citizens was seen in Plymouth County at 95.9%, while the lowest percentage was seen in Norfolk County at 92.3%. The median age was highest in Plymouth County at 43 years old, followed by Bristol County at 40.9 years old, and Norfolk County at 40.7 years old. Median income was highest in Norfolk County at $100,356, followed by Plymouth County at $90,484, and Bristol County at $66,205. In both Norfolk and Plymouth Counties, the largest share of households has an annual income in the $200k+ range while in Bristol County the largest share of households had an income in the $75k - $100k range. Between 2017 and 2018, median income declined by 2.4% and 0.5% in Bristol and Norfolk counties respectively while median income increased by 4.1% in Plymouth County (U.S. Census PEP, 2019).

The residents of Bristol, Plymouth and Norfolk counties are predominantly White (Non-Hispanic) (80.5%, 80.4%, 74% respectively). There is a relatively large Asian population in Norfolk County (11.7%) and a relatively large Black population in Plymouth County (9.8%). Data on the most common foreign languages in these counties is dated, but in 2015 the most common foreign languages spoken in order of popularity were Spanish, Portuguese, and French. It is possible that this data is overlooking the languages spoken by the Asian population centered in Norfolk County.

In 2017, universities in the three counties awarded 16,169 degrees. The student population is skewed towards women, with 26,133 male students and 37,931 female students. Most students graduating from universities are White, followed by Black or African American, Hispanic/Latino, and Unknown. The largest universities in the community by the number of degrees awarded are Bridgewater State University (2,703), the University of Massachusetts-Dartmouth (2,056), and Bristol Community College (1,712). The most popular majors were General Business Administration & Management (1,489), Registered Nursing (704), and General Studies (524) (Data USA, 2019).

In 2018, median property value was highest in Norfolk County at $496,600, followed by Plymouth County at $368,100, and Bristol County at $317,500. Median property values increased by approximately 5% in each county compared to the previous year (Data USA, 2019).

The three counties ranked differently in the Robert Wood Johnson Foundation's Community Health Rankings. Bristol County ranked the worst at 13th out of 14 MA counties for overall health outcomes and health factors. Plymouth County ranked 8th for overall outcomes and 10th for health factors, while Norfolk County ranked 4th for overall outcomes and 2nd for

health factors. Between 97% and 98% of the population in the three counties have health insurance. Between 20% to 30% of the insured population are covered by Medicare or Medicaid (Robert Wood Johnson Foundation, 2020).

The demographic characteristics and social environments of those within GSMC's service area have a stark impact on their experience with, and willingness to receive, medical care. Language barriers, systemic racism, gender biases, and financial barriers contribute to many populations being medically underserved. These medically underserved populations (MUPs) often include those who are homeless, low-income, Medicaid-eligible, Native American, or migrant workers (HRSA, 2021).

## Race and Ethnicity

Service area communities varied substantially in the racial and ethnic proportions of their residents. West Bridgewater (95.9%), Whitman (92.5%), Easton (90.4%), and East Bridgewater (90.2%) were predominantly White at a rate substantially higher than the state average (78.1%). Bridgewater (79.8%) and Stoughton (73.3%) showed a proportion of White residents that was comparable to the state level. Brockton (36.1%) and Randolph (38.1%) were the most diverse communities, with substantially lower proportions of White residents and higher proportions of Black residents at 45.6% and 40.6%, respectively. In Randolph, there was a larger percentage of Asian residents (12%) while in Brockton there was a higher-than-average percentage of residents identifying as Some Other Race (12%).

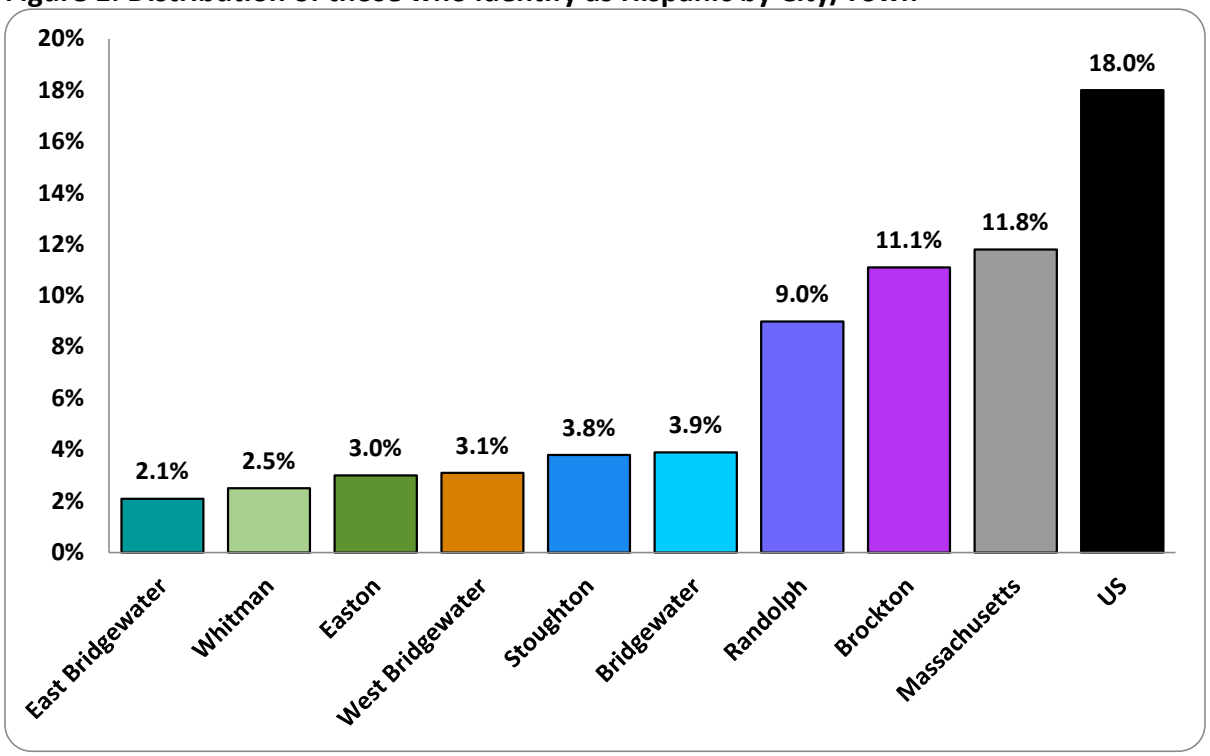
**Table 1: Distribution of Race by City/ Town - 2019**

| | White | Black or African American | American Indian and Alaska Native | Asian | Native Hawaiian and Other Pacific Islander | Some Other Race | Two or More Races |
|---|---|---|---|---|---|---|---|
| Brockton | 36.1% | 45.6% | 0.5% | 2.0% | 0.0% | 12.3% | 3.5% |
| Randolph | 38.1% | 40.6% | 0.0% | 12.1% | 0.1% | 5.5% | 3.6% |
| Stoughton | 73.3% | 15.0% | 0.4% | 5.0% | 0.0% | 2.8% | 3.5% |
| Bridgewater | 79.8% | 13.4% | 0.1% | 1.7% | 0.2% | 2.1% | 2.8% |
| East Bridgewater | 90.2% | 3.9% | 0.0% | 1.5% | 0.0% | 1.5% | 2.9% |
| Easton | 90.4% | 4.2% | 0.0% | 2.5% | 0.0% | 1.6% | 1.3% |
| Whitman | 92.5% | 1.9% | 0.0% | 0.8% | 0.0% | 2.1% | 2.7% |
| West Bridgewater | 95.9% | 1.8% | 0.0% | 1.0% | 0.0% | 0.0% | 1.3% |
| Massachusetts | 78.1% | 7.6% | 0.2% | 6.6% | 0.0% | 4.2% | 3.3% |
| US | 72.5% | 12.7% | 0.8% | 5.5% | 0.2% | 4.9% | 3.3% |

*Source: US Census Bureau, 2015-2019 American Community Survey 5-Year Estimate*

Most communities within GSMC's service areas had low proportions of residents identifying as Hispanic. Communities with the highest proportions of Hispanic residents were Brockton (11.1%) and Randolph (9.0%); however, these were still lower than the state level (11.8%).

**Figure 1: Distribution of those who identify as Hispanic by City/Town**




*Source: US Census Bureau, 2015-2019 American Community Survey 5-Year Estimates*

In 2019, the Massachusetts public school population was more racially diverse than the adult population (Table 2). Brockton (17.1%) and Randolph (11.7%) had lower proportions of public-school students who identified as White than the state (57.5%) or national level (46.6%). Brockton and Randolph were both especially diverse, with 59.8% of students identifying as Black or African American in Brockton and 50.2% of students identifying as Black or African American in Randolph.

**Table 2: Distribution of Race in Public School Population by City/Town (2019-20)**

| | White | Black or African American | Hispanic | Asian | Native American | Native Hawaiian | Multi-Race |
|---|---|---|---|---|---|---|---|
| Brockton | 17.1% | 59.8% | 16.1% | 1.9% | 0.4% | 0.2% | 4.4% |
| Randolph | 11.7% | 50.2% | 16.0% | 16.9% | 0.2% | 0.2% | 4.8% |
| Stoughton | 50.8% | 24.4% | 13.4% | 5.9% | 0.1% | 0.3% | 5.0% |
| Bridgewater | 86.3% | 5.4% | 1.4% | 2.1% | 0.1% | 0.1% | 4.6% |
| East Bridgewater | 89.5% | 3.4% | 2.7% | 1.0% | 0.5% | 0.0% | 2.9% |
| Easton | 80.8% | 6.5% | 5.8% | 3.2% | 0.4% | 0.1% | 3.2% |
| Whitman | 87.6% | 2.8% | 4.9% | 1.3% | 0.5% | 0.1% | 2.8% |
| West Bridgewater | 84.1% | 5.1% | 4.5% | 1.1% | 0.3% | 0.1% | 4.8% |
| Massachusetts | 57.5% | 9.3% | 21.9% | 7.1% | 0.2% | 0.1% | 3.9% |
| US | 46.6% | 15.1% | 27.3% | 5.4% | 1.0% | 0.4% | 4.3% |

*Source: MA Dept. of Elementary and Secondary Education, 2019-2020, School and District Profiles*

## Age

In 2019, census data indicated that all service area communities except Brockton (26.8%), West Bridgewater (29.2%), and East Bridgewater (28.8%) had higher proportions of residents under 24 compared to the state level (30.2%). Brockton (18.5%), West Bridgewater (18.7%), and East Bridgewater (16.5%) also had higher proportions of residents 65 or older compared to the state level (16.1%). However, each community was within 5% of the state level for each age group.

**Table 3: Age Distribution by City/Town - 2019**

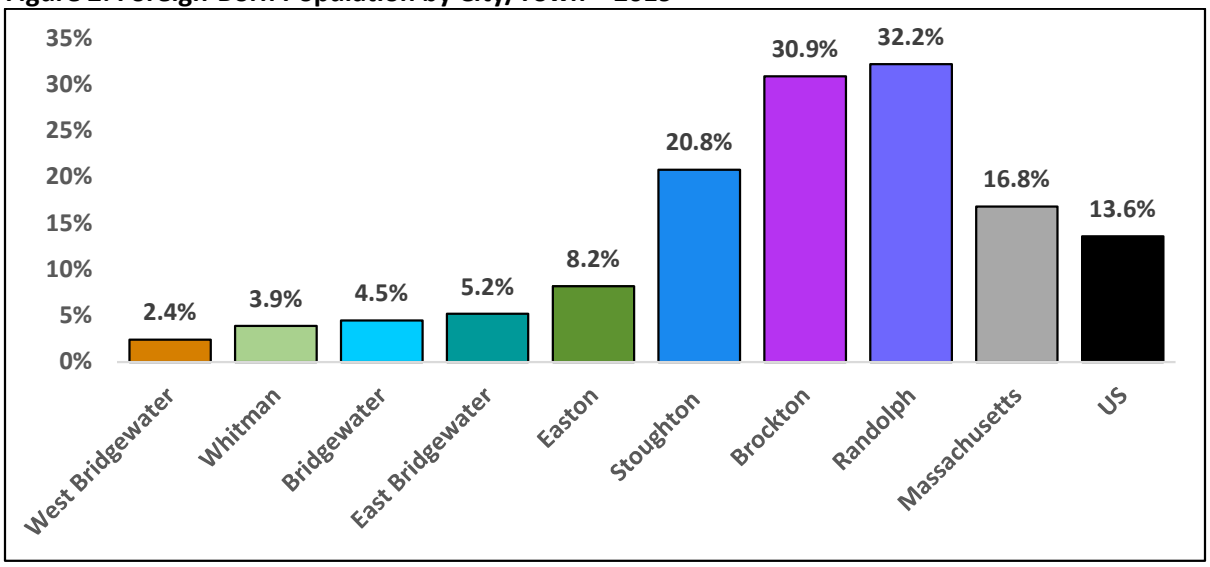
| | 24 and under | 25 to 44 | 45-64 | 65 and over |
|---|---|---|---|---|
| Brockton | 26.8% | 23.3% | 31.3% | 18.5% |
| Randolph | 32.5% | 25.6% | 29.1% | 12.9% |
| Stoughton | 34.7% | 26.7% | 25.6% | 13.0% |
| Bridgewater | 32.2% | 26.4% | 25.9% | 15.4% |
| East Bridgewater | 28.8% | 25.0% | 29.6% | 16.5% |
| Easton | 34.4% | 21.0% | 29.6% | 15.2% |
| Whitman | 32.5% | 25.6% | 29.1% | 12.9% |
| West Bridgewater | 29.2% | 22.6% | 29.4% | 18.7% |
| Massachusetts | 30.2% | 26.4% | 27.3% | 16.1% |
| US | 32.0% | 26.5% | 25.9% | 15.6% |

*Source: US Census Bureau, 2015-2019 American Community Survey 5-Year Estimates*

## Citizenship

Stoughton (20.8%), Brockton (30.9%), and Randolph (32.2%) reported higher proportions of foreign-born residents compared to the state (16.8%) and national (13.6%) levels (Figure 2).

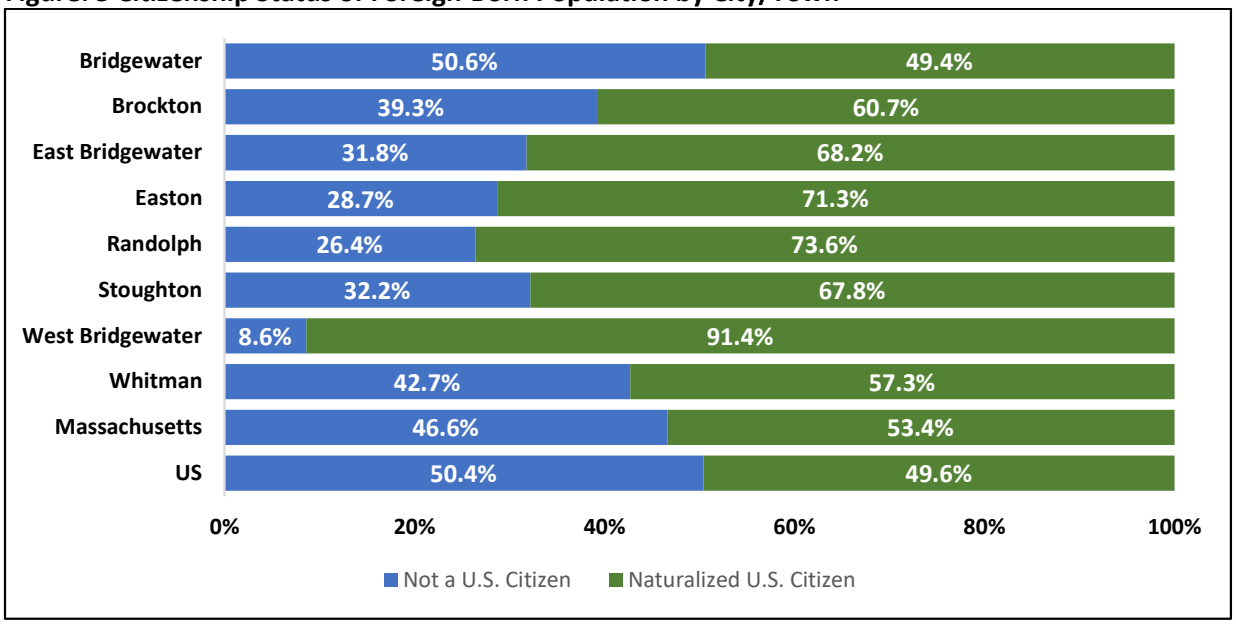
**Figure 2: Foreign-Born Population by City/Town – 2019**




*Source: US Census Bureau, 2015-2019 American Community Survey 5-Year Estimates*

Of those who are foreign-born, Bridgewater (50.6%) had the highest proportion of Non-U.S. Citizens (Figure 3). Meanwhile, West Bridgewater (8.6%) had the lowest proportion of non-U.S. Citizens.

**Figure: 3 Citizenship Status of Foreign-Born Population by City/Town**




*Source: US Census Bureau, 2015-2019 American Community Survey 5-Year Estimates*

Brockton (47.3%), Stoughton (42.6%), and West Bridgewater (37.9%) all had a higher proportion of foreign-born residents from Latin American countries than the state average (37.0%) (Figure 4). All cities and towns in the service area, except for Brockton (3.7%) and Whitman (15.3%), had higher proportions of European-born residents than the state average (20.4%) level. No cities or towns in the service area had higher proportions of Asian-born residents than the state (30.5%) or national (31.0%) levels. Brockton (44.2%) and Whitman (20.4%) had higher proportions of African-born residents than the state (9.1%). Randolph (51.7%), Bridgewater (36.8%), Whitman (8.3%), and West Bridgewater (17.8%) all had higher proportions of Oceania-born residents than the state average (0.4%). East Bridgewater (4.7%), Easton (3.2%), and Whitman (4.4%) all had higher proportions of Canada-born residents than the state average (2.6%).

**Table 4: Country of Origin – Foreign Born Population by City/Town – 2019**

| | Latin America | Europe | Asia | Africa | Oceania | Canada (Northern America) |
|---|---|---|---|---|---|---|
| Brockton | 47.3% | 3.7% | 4.2% | 44.2% | 0.0% | 0.6% |
| Randolph | 6.8% | 27.1% | 13.4% | 0.0% | 51.7% | 0.9% |
| Stoughton | 42.6% | 24.8% | 22.2% | 9.4% | 0.3% | 0.6% |
| Bridgewater | 11.5% | 27.0% | 20.5% | 4.3% | 36.8% | 0.0% |
| East Bridgewater | 35.5% | 22.3% | 24.5% | 13.0% | 0.0% | 4.7% |
| Easton | 28.9% | 33.5% | 30.4% | 3.7% | 0.4% | 3.2% |
| Whitman | 24.6% | 15.3.% | 27.0% | 20.4% | 8.3% | 4.4% |
| West Bridgewater | 37.9% | 33.3% | 6.3% | 4.6% | 17.8% | 0.0% |
| Massachusetts | 37.0% | 20.4% | 30.5% | 9.1% | 0.4% | 2.6% |
| US | 50.6% | 10.8% | 31.0% | 5.1% | 0.6% | 1.9% |

*Source: US Census Bureau, 2015-2019 American Community Survey 5-Year Estimates*

## Language

In 2019, Brockton (46.7%), Randolph (40.0%), and Stoughton (24.5%) had a higher proportion, of residents who spoke a language other than English, than the state (23.8%) or national level (21.6%) (Table 5). Brockton (19.9%), Randolph (16.6%), and Stoughton (11.2%) had high proportions of residents who spoke English "less than very well", which were all well above state (9.2%) and national (8.4%) levels.

**Table 5: Distribution of Language Characteristics by Town/City –2019**

| | Speaks only English | Speaks language other than English | Speaks English "less than very well" |
|---|---|---|---|
| Brockton | 53.3% | 46.7% | 19.9% |
| Randolph | 60.0% | 40.0% | 16.6% |
| Stoughton | 75.5% | 24.5% | 11.2% |
| Bridgewater | 89.7% | 10.3% | 2.7% |
| East Bridgewater | 89.9% | 10.1% | 1.9% |
| Easton | 92.6% | 7.4% | 1.9% |
| Whitman | 94.4% | 5.6% | 2.1% |
| West Bridgewater | 95.7% | 4.3% | 0.1% |
| Massachusetts | 76.2% | 23.8% | 9.2% |
| US | 78.4% | 21.6% | 8.4% |

*Source: US Census Bureau, 2015-2019 American Community Survey 5-Year Estimates*

For each GSMC service area community, other Indo-European languages were the most common spoken other than English (Table 6). No towns/cities in the service area had a higher proportion of Spanish-speaking residents than the state (9.1%) or national (13.4%) levels and all were below 4%. Randolph (9.5%) had a higher proportion of Asian and Pacific-Islander language speakers than all other cities and towns in the service area.

**Table 6: Language Distribution (Other Than English) by Town/City – 2019**

| | Spanish | Other Indo-European languages | Asian and Pacific Islander languages | Other languages |
|---|---|---|---|---|
| Brockton | 8.7% | 35.4% | 1.2% | 1.4% |
| Randolph | 6.1% | 20.7% | 9.5% | 3.7% |
| Stoughton | 2.9% | 16.5% | 3.1% | 2.0% |
| Bridgewater | 1.9% | 6.3% | 0.8% | 1.0% |
| East Bridgewater | 1.1% | 4.6% | 1.1% | 0.6% |
| Easton | 2.8% | 5.2% | 1.3% | 0.9% |
| Whitman | 2.6% | 2.1% | 0.4% | 0.5% |
| West Bridgewater | 2.5% | 1.9% | 0.0% | 0.0% |
| Massachusetts | 9.1% | 9.0% | 4.3% | 1.4% |
| US | 13.4% | 3.7% | 3.5% | 1.1% |

*Source: US Census Bureau, 2015-2019 American Community Survey 5-Year Estimates*

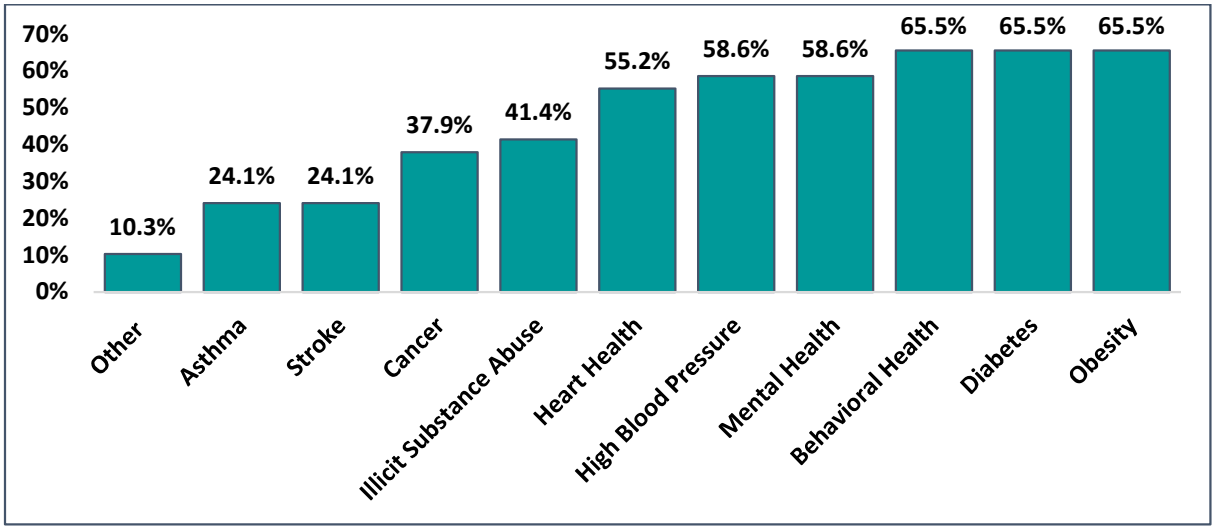
# Prioritization of Community Health Needs

To identify the community's health needs, GSMC surveyed health professionals in their service area, conducted focus groups with vulnerable citizens within the community, and interviewed key informants who serve those in the community. Issues that were most commonly identified by these groups served as the basis for GSMC's prioritized health needs.

## Health Professionals Survey

When asked what they perceived to be the greatest health issues impacting the community they serve, most health professionals selected issues pertaining to heart health (68.1%), behavioral health (66.0%), high blood pressure (66.0%), mental health (63.8%), obesity (61.7%), and diabetes (59.6%) (Figure 5). Issues related to cancer (38.3%) and illicit substance use (38.3%) were also moderately endorsed, followed by stroke (27.7%) and asthma (12.8%).

**Figure 5: Perceived Major Health Concerns (other than COVID-19)**




## Interviews and Focus Groups

When asked what the specific health needs of their community were, focus group participants mentioned a variety of issues. Chief among these were mental health, including increased youth suicide rates and increased rates of anxiety and depression among adults. Chronic conditions, such as diabetes were also a major cause of concern, along with lack of access to physical fitness or healthy eating. Focus group participants also identified culturally competent care as a major health concern of their community, discussing the low rates of health literacy among area residents and the need for more providers of diverse races and ethnicities. When asked what their top 3 health and wellness concerns were within the community, the most common responses among key informants were mental health, affordable housing, and substance abuse.

Based on this feedback, we believe the top 4 prioritized needs for GSMC's service area are:


# Profiles of Prioritized Community Health Needs

## Chronic Conditions

According to the Massachusetts Department of Public Health (MDPH, 2017), prevention and treatment of chronic illnesses are public health priorities. Chronic illness is a broad term used to describe health conditions lasting longer than a year; these conditions require ongoing care and are leading causes of death and disability in the United States (CDC). The CDC estimates that, when combined with mental illness, chronic illnesses, including heart disease, cancer, and diabetes, accounts for 90% of the nation's $3.8 trillion in annual healthcare expenditures (Martin et al., 2020). The leading drivers of death, disability, and monetary cost are heart disease, cancer, obesity, and diabetes. What is unique about these conditions is that they are often caused (at least in part) by a short list of high-risk behaviors like tobacco use, lack of physical activity, poor diet/nutrition, and excessive alcohol consumption (NCCDPHP, 2021).

The association with these modifiable risk factors has led to many cases of these conditions being classified as preventable. Prevention requires a comprehensive approach that not only treats the symptoms but also addresses the underlying lifestyle behaviors behind so many of these chronic conditions. These approaches must also address access to healthcare at different levels of the socio-economic model to best generate the largest impact. The CDC has estimated that up to 80% of heart disease, stroke, and type 2 diabetes; as well as 40% of cancer is likely preventable (Fight Chronic Disease, 2006). Additionally, the CDC and other sources have found evidence showing that efforts at all levels, from policymaking to individual interventions, can have a positive impact on preventing chronic illness in communities (NCCDPHP, 2021).

### Health Professionals Survey

Chronic disease represents a major area of concern for health professionals. When asked what they perceive as major health concerns among their consumers, diabetes (65.5%), obesity (65.5%), high blood pressure (58.6%), heart health (55.2%), cancer (37.9%), stroke (24.1%), and asthma (24.1%) emerged as top areas of concern.

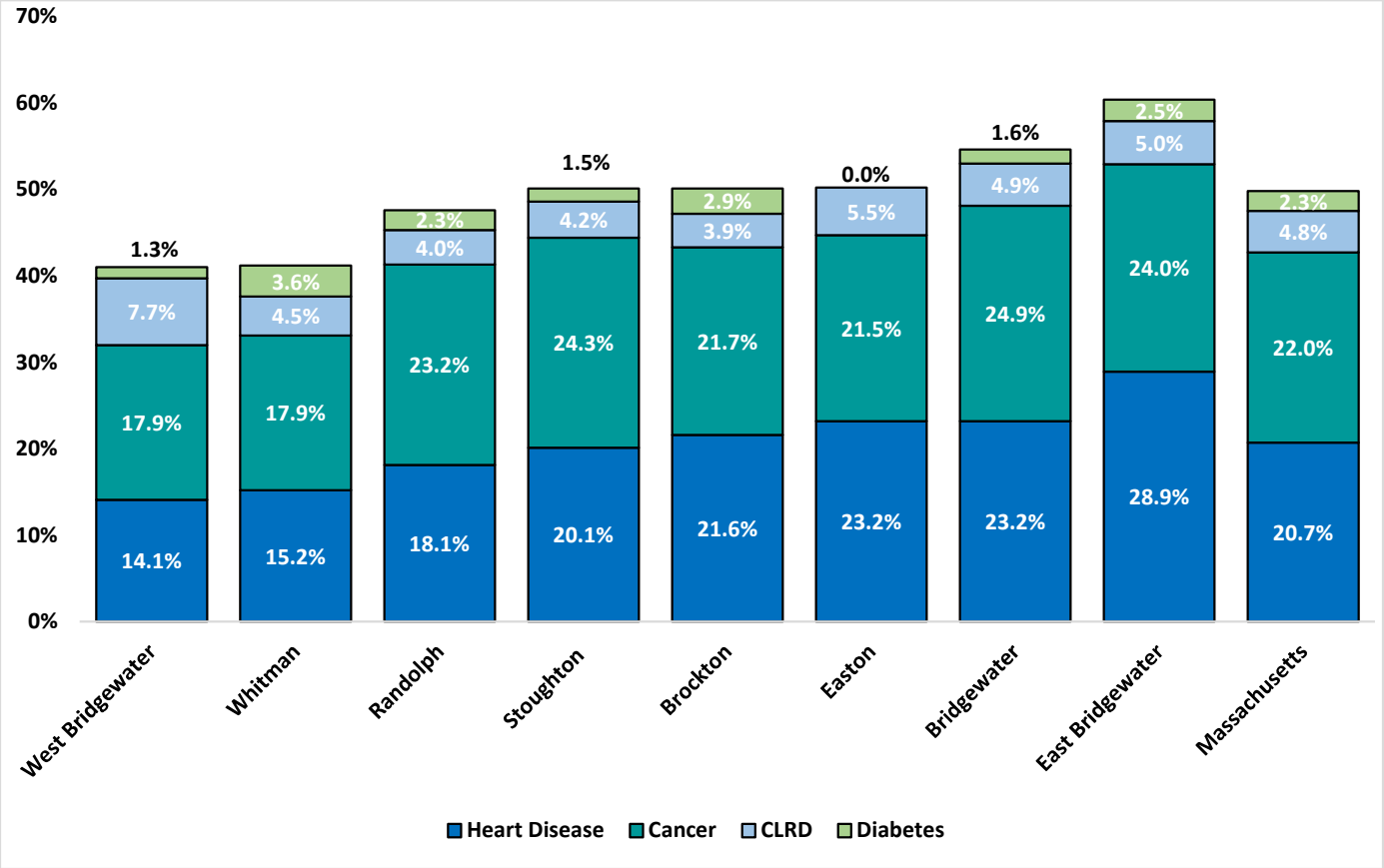
### Interviews and Focus Groups

Key informants identified asthma as a key chronic health condition affecting their community. Focus group participants identified diabetes and high blood pressure as major chronic conditions affecting their community.

### Prevalence

East Bridgewater (60.4%) and Bridgewater (54.6%) reported the highest percentage of chronic disease-related deaths in the GSMC service area. West Bridgewater (41.0%) had the lowest reported percentage of deaths related to chronic disease.

**Figure 6: Chronic Disease Mortality 2017 (percentage of all causes)**




*Source: Massachusetts Deaths 2017, Massachusetts Department of Public Health*

## Cancer

Since 2006, cancer has surpassed heart disease as the leading cause of death in Massachusetts. Cancer has a significant impact on the public health system at multiple levels. The effect of cancer can be quantified in years of life lost due to premature death, economic burden from medical costs and lost productivity, and in reduced quality of life for survivors. While deaths from cancer did decrease in 2018, cancer remained the second leading cause of death in the United States (CDC Wonder, 2021).

The incidence rate for cancer (on all sites) in Massachusetts was 456.9 per 100,000 in the population, with men having a higher cancer incidence rate than women (470.8 versus 439.5 per 100,000 population) (American Cancer Society, 2019). Of the three service area counties, the highest rate of new cancer cases (of any type) was 490.4 per 100,000 population, seen in Plymouth County (Center for Disease Control and Prevention, 2020).

Historic data has shown that Black, non-Hispanic men and White, non-Hispanic women had the highest incidence rate of cancer when looking at all sites. Across the Commonwealth, breast cancer among women and prostate cancer among men have the highest incidence rates. Lung cancer, colon cancer, and melanoma have also been among the leading types of cancer in both women and men. Together, these five cancers account for more than half of all cancer cases across the Commonwealth (American Cancer Society, 2020).

### Health Professionals Survey

37.9% of health professionals identified cancer as the most pressing health concern in their community.

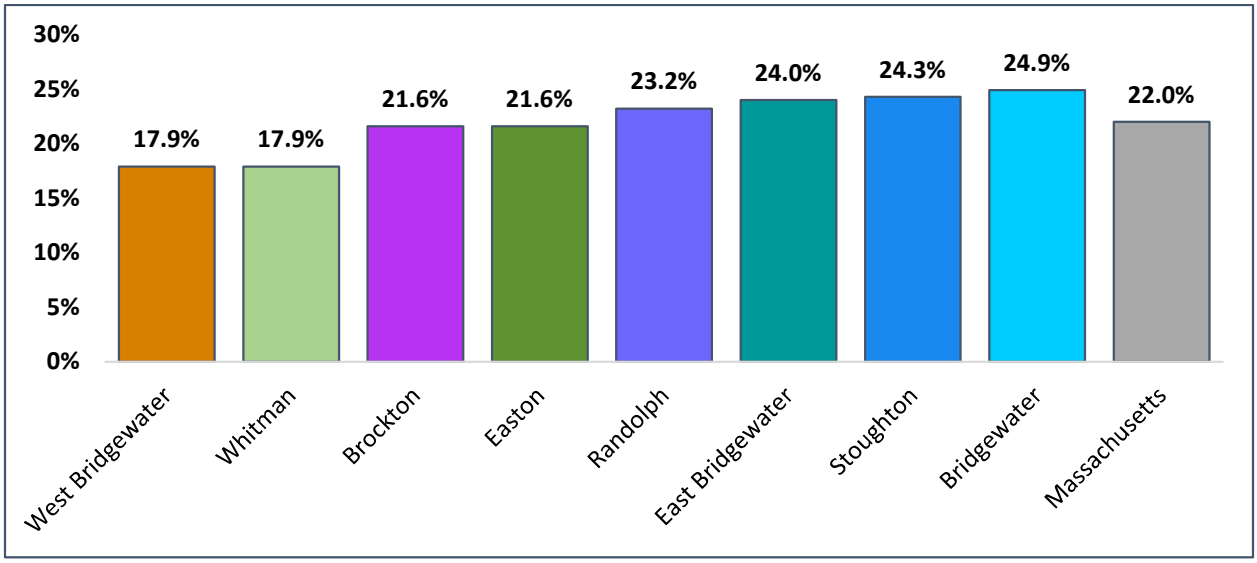
### Interviews and Focus Groups

Cancer was not mentioned by participants, however several socioeconomic factors that contribute to the prevalence of cancer were discussed. Focus group participants identified issues surrounding food insecurity and limited access to healthy food options, as well as limited opportunities for physical fitness as inhibitors to health in their communities. These lifestyle factors may contribute to increasing one's risk of developing cancer.

### Prevalence

In 2017, Bridgewater (24.9%), Stoughton (24.3%), East Bridgewater (24.0%), and Randolph (23.2%) reported rates of cancer mortality above the state level (22.0%) (Figure 7).

**Figure 7: Total Cancer Mortality (percentage of all mortality causes) -- 2017**




*Source: Massachusetts Deaths 2017, Massachusetts Department of Public Health*

Of the reported deaths due to certain types of cancer, lung cancer appeared to have the highest level of mortalities in every town/service area, followed by colorectal cancer (Table 7).

**Table 7: Total Cancer Counts by Diagnosis (observed and expected case counts)**

| | Breast | Lung | Cervix | Colorectal | Melanoma | Oral |
|---|---|---|---|---|---|---|
| Brockton | 8 | 23 | 0 | 8 | 1 | 1 |
| Randolph | 6 | 11 | 0 | 2 | 0 | 1 |
| Stoughton | 0 | 16 | 0 | 9 | 0 | 2 |
| Bridgewater | 4 | 11 | 0 | 2 | 1 | 0 |
| East Bridgewater | 1 | 9 | 0 | 3 | 0 | 0 |
| Easton | 0 | 5 | 0 | 2 | 1 | 2 |
| Whitman | 2 | 4 | 0 | 2 | 0 | 2 |
| West Bridgewater | 0 | 5 | 0 | 1 | 0 | 0 |

*Source: Cancer Deaths Steward—this data may be incomplete or missing*

## Cardiovascular disease

Cardiovascular disease is a broad term that encompasses several adverse health outcomes, including congestive heart failure, myocardial infarction, and stroke. In Massachusetts, cardiovascular disease is the second leading cause of death after cancer. Cardiovascular disease will remain an important issue in the coming years. The American Heart Association believes that cardiovascular disease will likely be the cause of death most impacted by COVID-19 in future years. This is due to the impact that the virus has on the cardiovascular system and lifestyle behaviors during and following the pandemic (American Heart Association, 2021).

Cardiovascular diseases are the most common causes of death in men, women, and most racial and ethnic groups in the United States. It's estimated that 655,000 Americans die annually from

cardiovascular disease, approximately one in every four deaths (CDC "About Heart Disease," 2021). Cardiovascular disease is so widespread that it is responsible for upwards of $219 billion in medical costs and lost productivity each year (CDC "Heart Disease Facts," 2020). Cardiovascular disease is associated with several key risk factors. Among these are several preventable risk factors such as cigarette smoking, poor diet and nutrition, and physical inactivity; nearly half of all Americans have at least one of these risk factors (CDC "About Heart Disease," 2021). Data suggests that cardiovascular disease is more prevalent in men and African Americans (Black, non-Hispanics) relative to women and Caucasians (CDC "Heart Disease Facts," 2020).

In Massachusetts, mortality rates from cardiovascular disease are low compared to other states. Massachusetts had the third-lowest rate of death from cardiovascular disease at just 127.2 deaths per 100,000 residents (CDC Wonder, 2021). The national trend of higher rates of cardiovascular disease among Black (Non-Hispanic) than Whites (Non-Hispanic) was also observed in Massachusetts. However, the difference in mortality rate between these two races is not significant in MA (CDC Wonder, 2021). The highest rate of cardiovascular disease was seen in Bristol County, where 191.6 deaths from cardiovascular disease per 100,000 population (Center for Disease Control and Prevention, 2020). The average across the three counties was 177 deaths per 100,000 population (Center for Disease Control and Prevention, 2020).

### Health Professionals Survey

55.2% of health professionals noted heart health as a major health concern within their community, and 58.6% noted high blood pressure as a major factor. 24.1% of health professionals rated stroke as a major health concern within their community.

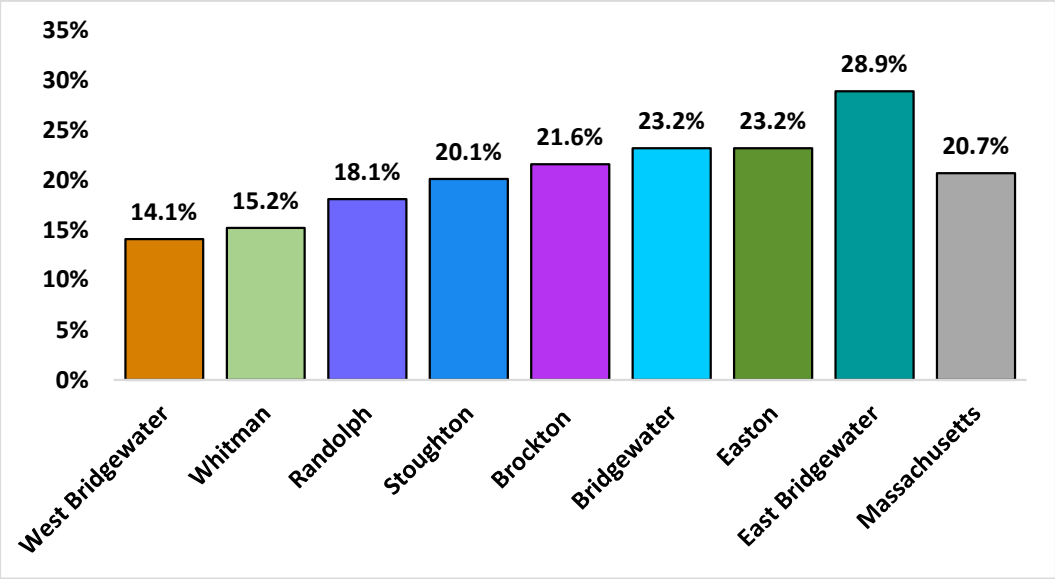
### Interviews and Focus Groups

Focus group participants identified low-income populations as especially at risk for chronic illnesses, including heart disease, because they are unable to access preventative care measures, including access to health and lifestyle services such as gyms.

### Prevalence

In 2017, the mortality rate of due to heart disease in the state of Massachusetts was 20.7% (Figure 8). East Bridgewater (28.9%), Bridgewater (23.2%), Easton (23.2%), and Brockton (21.6%) all reported higher rates of heart disease mortality than the state.

**Figure 8: Total Heart Disease mortality (percentage of all mortality causes)-2017**




*Source: Massachusetts Deaths 2017, Massachusetts Department of Public Health*

## Diabetes

Diabetes was the seventh leading cause of death in the United States in 2018. According to recent data from the CDC, around 8.4% of Massachusetts residents had diabetes in 2019. This is 2.4% less than the national rate (United Health Foundation, 2019). In Massachusetts, Black non-Hispanics (13.1%) and Hispanics (10.6%) had higher rates of diabetes compared to White non-Hispanics (7.8%). Similar trends were seen at the national level (United Health Foundation, 2019). Studies show that the onset of type 2 diabetes can be largely prevented through weight loss as well as increasing physical activity and improving dietary choices.

Socioeconomic disparities exist in diabetes prevalence. In Massachusetts, adults with an annual household income of less than $25,000 (16.2%) are more than two times as likely to be diagnosed with diabetes as compared to those with an annual household income of more than $75,000 (5.8%) (United Health Foundation, 2019). The prevalence of diabetes also decreases as educational attainment increases. A total of 17.9% of adults without a high school degree were diagnosed with diabetes compared to 5.6% of adults with four or more years of post-high school education (United Health Foundation, 2019).

### Health Professionals Survey

65.5% of health care professionals identified diabetes as a pressing health concern within their community.

### Interviews and Focus Groups

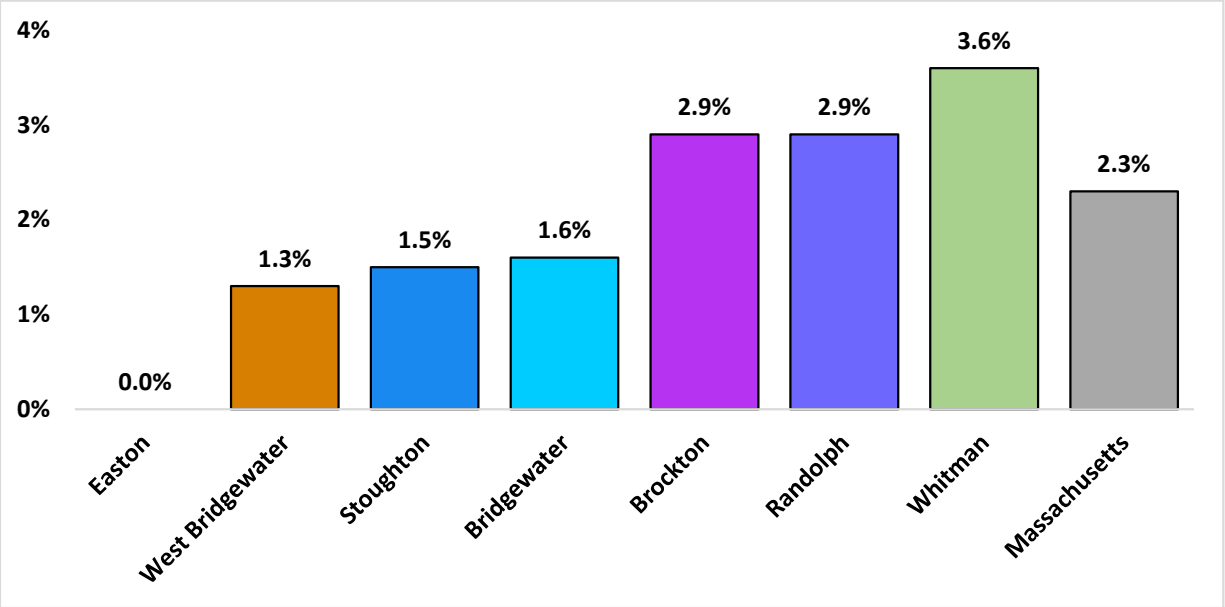
Diabetes was mentioned as a significant health concern among community members, especially in connection to access to healthy eating. Further, many of the lifestyle behaviors that may lead

to diabetes, including lack of physical exercise, poor diet and nutrition, and stress, were amplified by the pandemic and have caused people to develop an unhealthy lifestyle.

## Prevalence

Whitman (3.6%), Brockton (2.9%), and Randolph (2.9%) all reported higher percentages of diabetes-related mortality than the state (2.3%) (Figure 10). Easton reported no diabetes-related deaths.

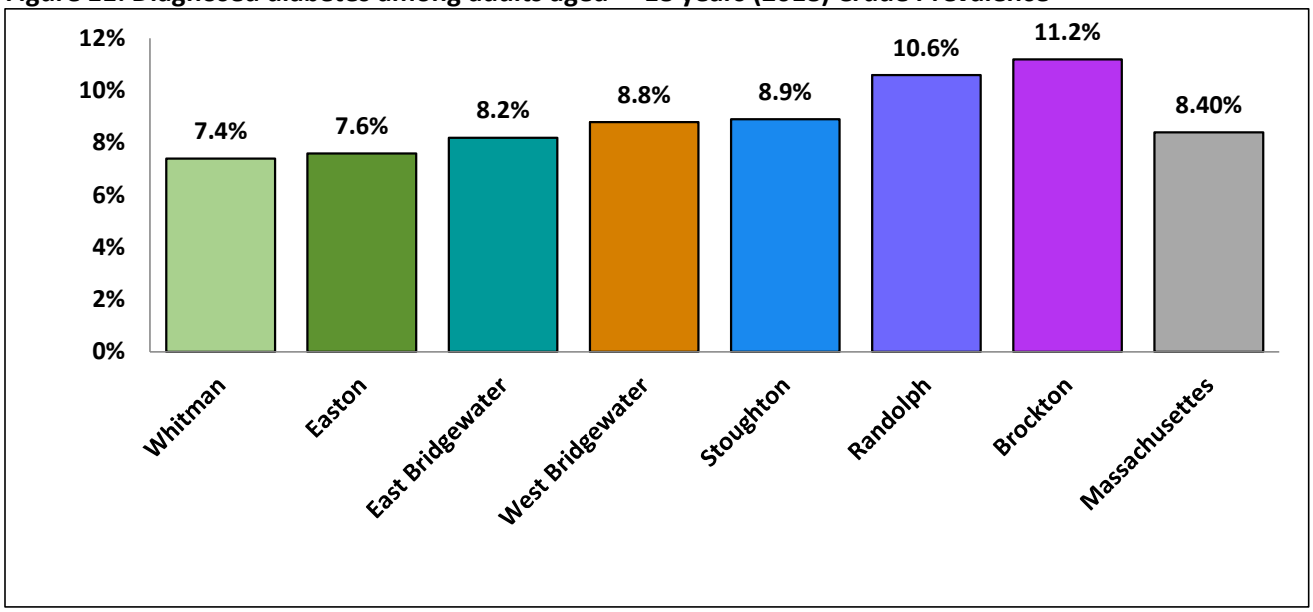
**Figure 10: Total diabetes mortality (percentage of all mortality cases)- 2017**




*Source: Massachusetts Deaths 2017, Massachusetts Department of Health*

Brockton (11.2%), Randolph (10.6%), Stoughton (8.9%), and West Bridgewater (8.8%) all had a higher prevalence of diabetes than the state (8.4%) (Figure 11).

**Figure 11: Diagnosed diabetes among adults aged >=18 years (2018) Crude Prevalence**




*Sources: Behavioral Risk Factor Surveillance System (BRFSS) - (2018)*

## Respiratory Conditions

Chronic lower respiratory diseases affect the airways and other structures of the lung. Conditions include asthma, chronic obstructive pulmonary disease (COPD), emphysema, and bronchitis. Risk factors for chronic lower respiratory diseases can include environmental exposures such as tobacco smoke, air pollution, dust, fumes, and mold (MDPH, 2017). Because of this, those in less healthy environments are at a greater risk for prevalence and severity of asthma symptoms.

### Health Professionals Survey

24.1% of health care professionals cited asthma as a major health concern of their community.

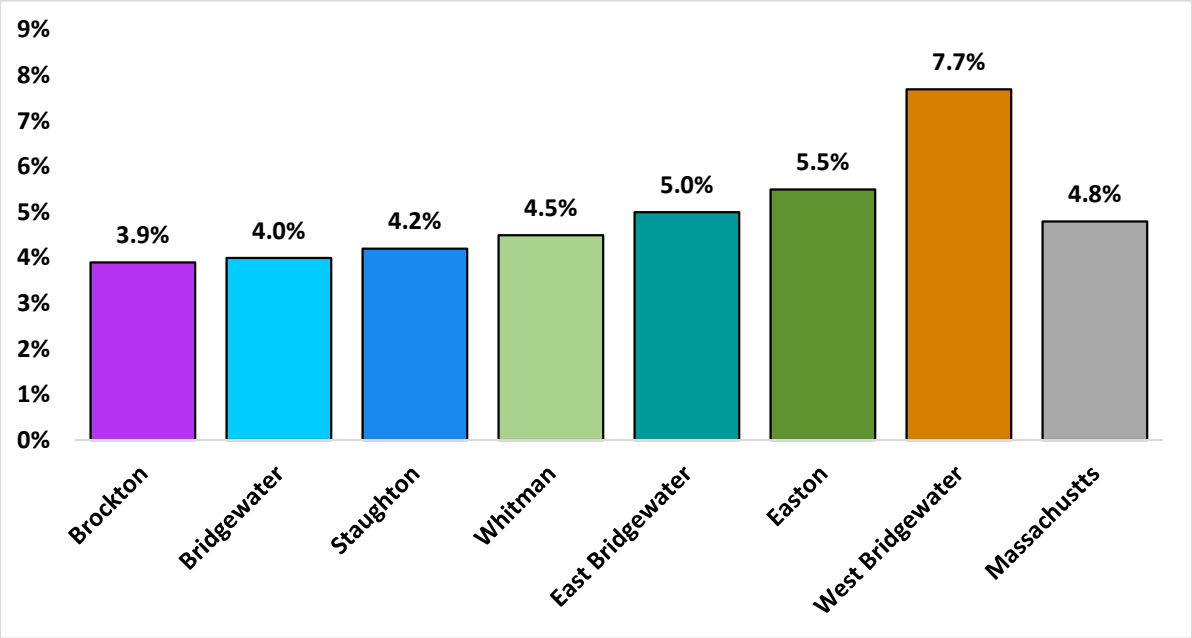
### Interviews and Focus Groups

Community members mentioned asthma as a concern brought about by the living conditions in Brockton. Members mentioned the importance of having green space to allow for more recreational activities, such as bike paths or hiking areas.

### Prevalence

West Bridgewater (7.7%), Easton (5.5%), and East Bridgewater (5.0%) reported a higher total of deaths caused by chronic lower respiratory disease when compared to the state level (4.8%) (Figure 12).

**Figure 12: Total chronic lower respiratory mortality (percentage of all mortality causes)-2017**




*Source: Massachusetts Deaths 2017, Massachusetts Department of Public Health*

# Mental and Behavioral Health

Mental health intersects with many areas of public health including addiction, cancer, cardiovascular disease, and HIV/AIDS, therefore requiring common services and resource mobilization efforts. Integrated treatment is critical for treating people with co-occurring disorders and can ultimately lead to better health outcomes and reduced costs. Increasing awareness and building capacity in service systems are important in helping identify and treat co-occurring disorders. Treatment planning should be client-centered, addressing clients' goals and using treatment strategies that are acceptable to them (MDPH, 2017).

### Health Professionals Survey

Among health professionals, 65.5% identified behavioral health as a major concern in their community, and 58.6% identified mental health. Further, 60.5% of providers felt COVID-19 caused decreased mental health in their consumers. Additionally, 48.3% rated expanded access to mental health resources as the most important support service to benefit consumers.

### Interviews and Focus Groups

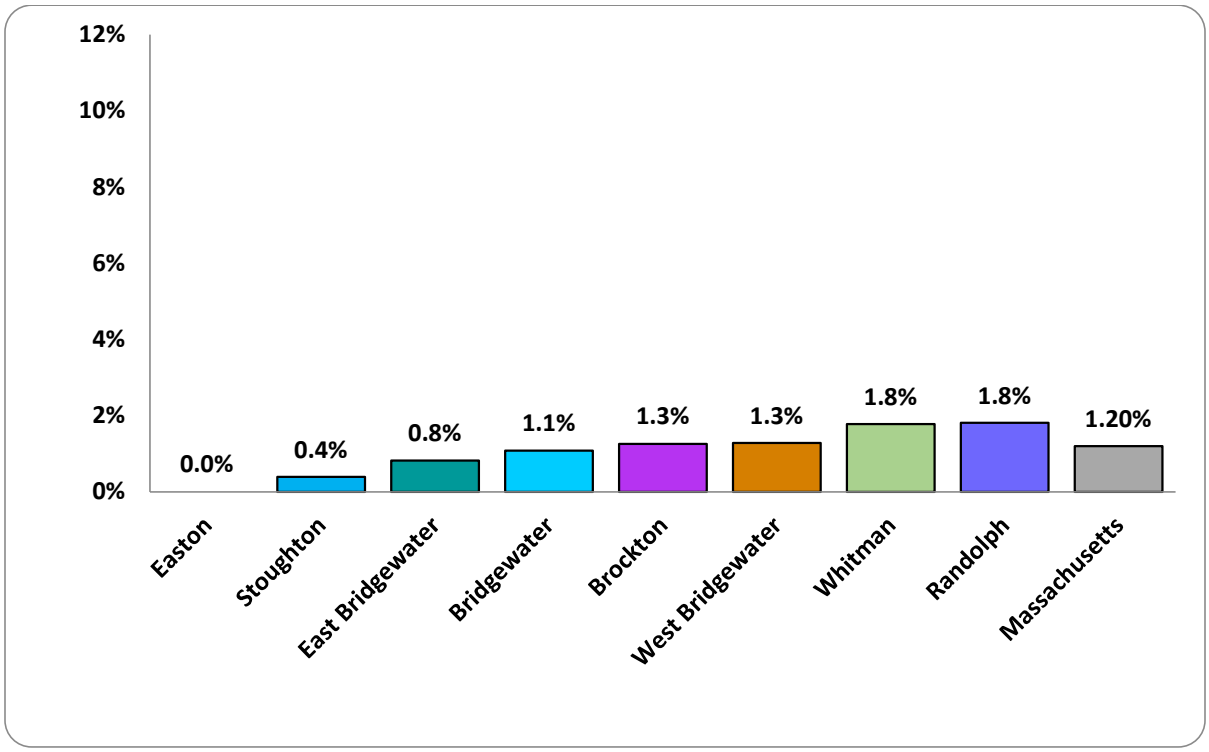
Mental health was a primary issue identified by key informants and focus group participants. Participants discussed the lack of available resources for people to get help, including crisis support lines, peer support groups, and outpatient mental health resources. Participants felt mental health was ignored as a healthcare issue in their community. Further, as the need for

mental health services grows, participants also identified the need for culturally competent and racially diverse providers.

### Prevalence

While not a broad indicator of poor mental health, suicidality is often the result of poor mental health. In 2017, most communities within GSMC's service area reported suicide rates around the state level (1.2%), with Whitman (1.8%) and Randolph (1.8%) showing slightly higher rates (Figure 13).

**Figure 13: Suicide Deaths Crude Prevalence 2017**




Source: Massachusetts Deaths 2017, Massachusetts Department of Public Health

## Substance Use Disorder

According to the National Survey on Drug Use and Health (NSDUH) in 2015, an estimated 53.2 million people in the US aged 12 and older used illicit drugs in the past year, approximately 19% of the population (SAMHSA, 2019). This rate was nearly twice as high for the 18 to 25-year-old population (39.4%). Of these, most (43.5 million) reported using marijuana, and 5.5 million misused prescription painkillers. During the same survey period, an estimated 21.2 million people needed substance use treatment (i.e., treatment for problems related to the use of alcohol or illicit drugs) in the past year. Of this population, just 11.1% received treatment (SAMHSA, 2019).

### Health Professionals Survey

41.4% of health professionals rate illicit substance use as the most pressing health concern within their community.

### Interviews and Focus Groups

Substance abuse was a key topic of concern for key informants.

## Alcohol

Alcohol is the most widely misused substance in the United States and is the third leading cause of preventable death nationally (UHF, 2019). Each year in the US, 95,000 deaths are attributed to alcohol-related causes. In 2019, the percentage of Massachusetts adults that reported binge drinking in the last 30 days was 21.3%, slightly higher than the national percentage of 18.6% (UHF, 2019). Alcohol misuse is most prevalent in younger age groups both nationally and at the state level. The most recent national data shows that about 5% of adolescents aged 12 and over and 10% of adults aged 18-25 have misused alcohol in the past year (SAMHSA, 2019).

### Health Professionals Survey

Alcohol use did not emerge as a theme in the health professionals survey.

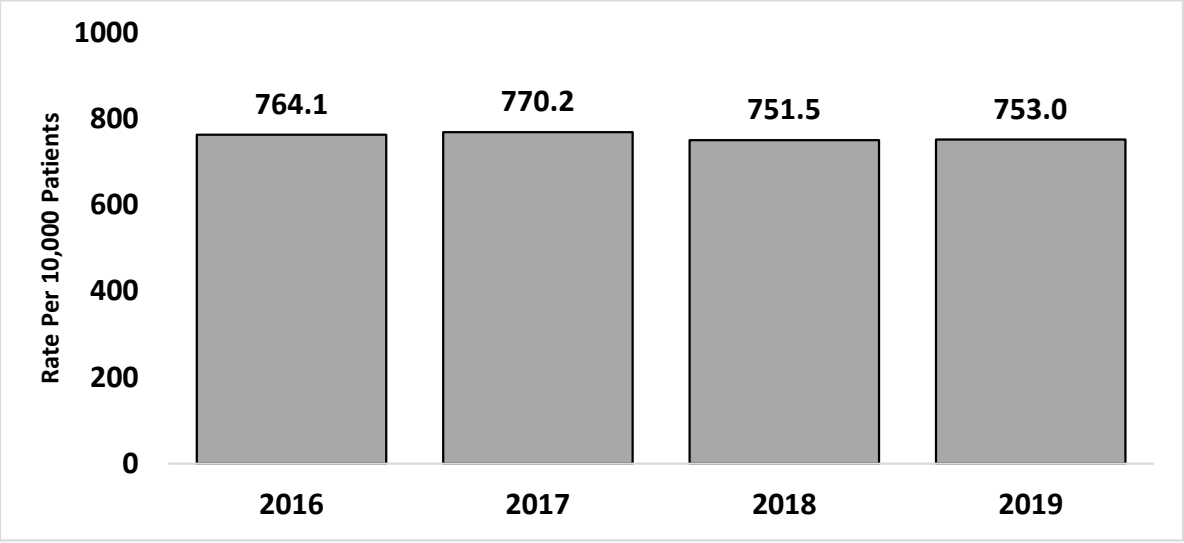
### Interviews and Focus Groups

Alcohol was not specifically discussed in interviews.

### Prevalence

Hospitalization rates due to alcohol have remained relatively stable from 2016-2019 (Figure 14).

**Figure 14: Alcohol-Related Disorders: Hospitalization rate**




*Source: MA Inpatient Hospital Discharge Database, Center for Health Information and Analysis (CHIA)*

## Opioids

Opioid-related poisonings show a slight downward trend from 2016 through 2019. The other primary concern is the ongoing opioid misuse epidemic. Massachusetts had one of the higher rates of opioid overdose deaths in the nation, at 32.8 deaths per 100,000 population (CDC "Drug Overdose Deaths," 2020). The CDC has stated that the country is in the third stage of the opioid epidemic which is primarily being driven by synthetic opioids such as fentanyl or tramadol (CDC "Drug Overdose Deaths," 2020).

After peaking in 2017, the number of opioid-related deaths in Massachusetts have remained relatively stable through 2019, decreasing by just about 1% between 2017 (1,993) and 2019 (1,967) (Massachusetts DPH, 2020).

### Health Professionals Survey

Opioid use did not emerge as a theme in the health professionals survey.

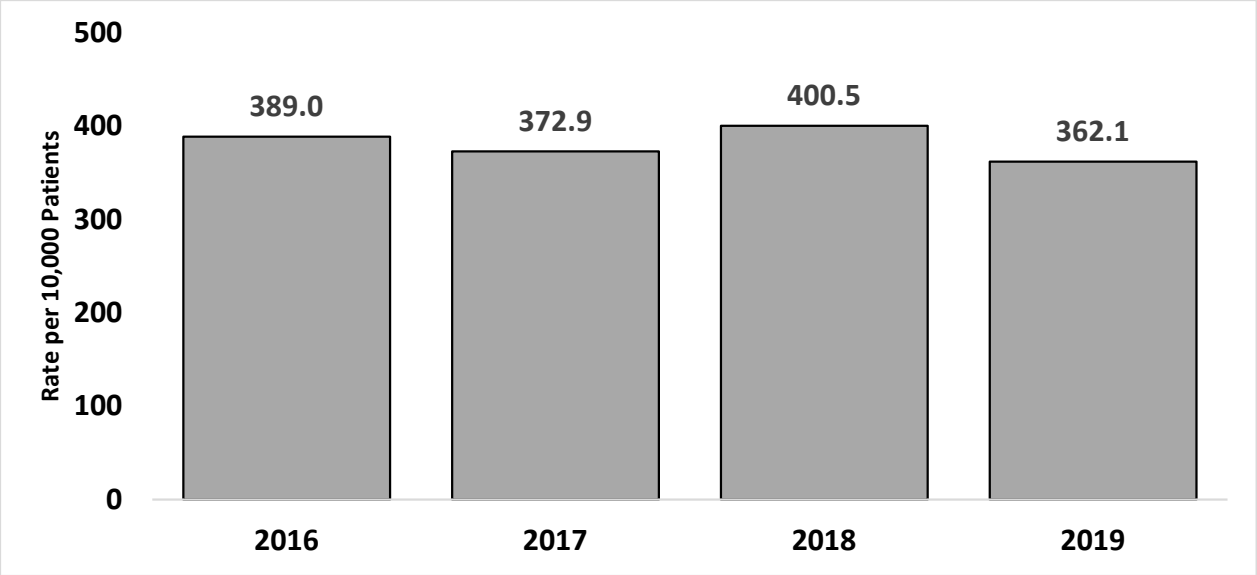
### Interviews and Focus Groups

Opioids did not emerge as a topic of conversation in interviews or focus groups.

### Prevalence

Hospitalizations for opioid-related poisonings slightly increased in 2018, with 400.5 hospitalizations per 10,000 patients, before dropping to 362.1 hospitalizations per 10,000 patients in 2019 (Figure 15).

**Figure 15: Opioid-Related Poisonings: Hospitalizations (Brockton only)**




*Source: MA Inpatient Hospital Discharge Database, Center for Health Information and Analysis (CHIA)*

## Smoking

Smoking, like other risk behaviors, is strongly influenced by one's social environment (MDPH, 2017). However, smoking is one of the leading preventable causes to a host of chronic illnesses (NCCDPHP, 2021).

### Health Professionals Survey

Smoking did not emerge as a theme in the health professionals survey.

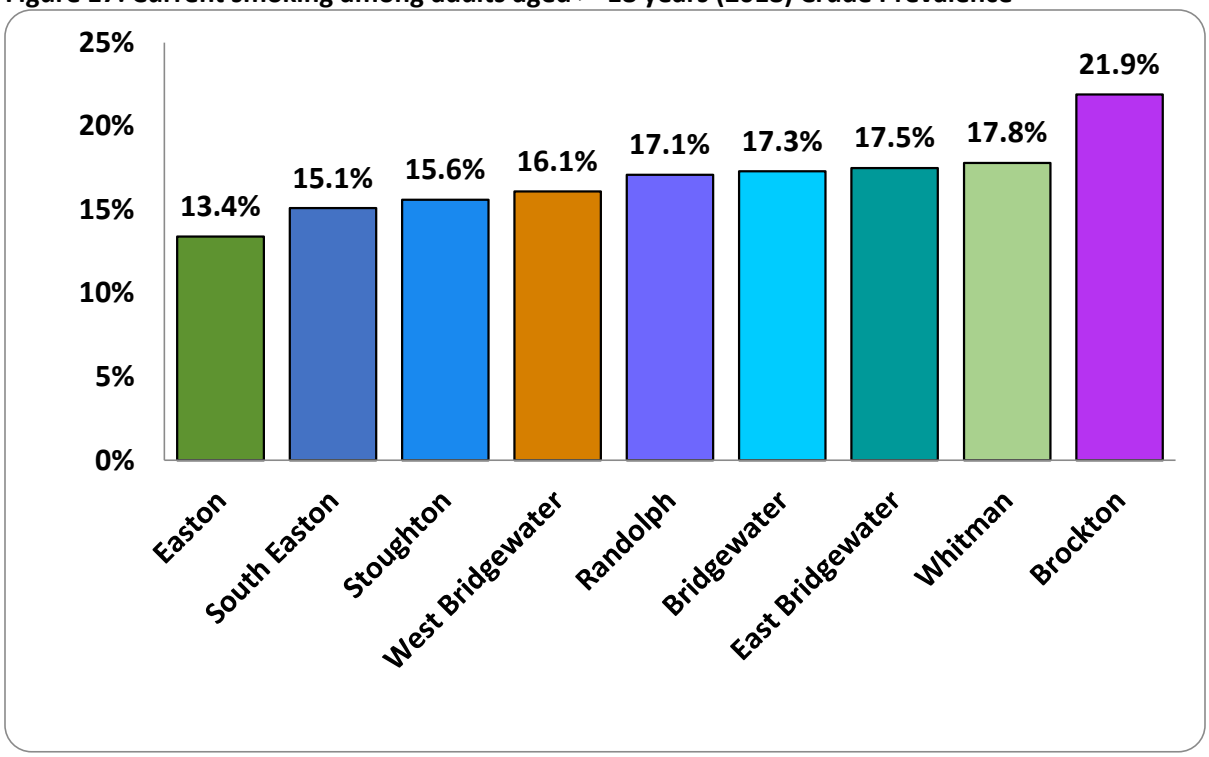
### Interviews and Focus groups

Smoking was not a topic of conversation in the interviews.

### Prevalence

Brockton (21.9%) had the largest proportion of smoking adults in the GSMC community, with Easton (13.4%) having the lowest proportion of smoking adults (Figure 17).

**Figure 17: Current smoking among adults aged >=18 years (2018) Crude Prevalence**

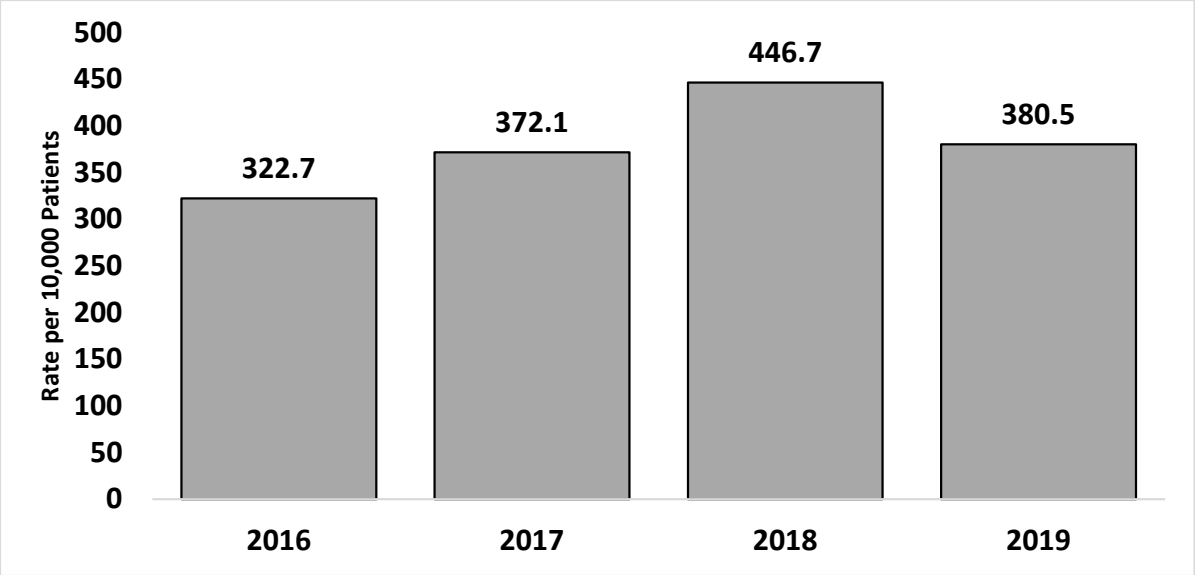



*Sources: Behavioral Risk Factor Surveillance System (BRFSS) - (2018)*

## Other Drug-related Poisonings

Other drug-related poisonings slightly increased in 2018, with 446.7 hospitalizations per 10,000 patients (Figure 18). Otherwise, hospitalizations have remained relatively stable.

**Figure 18: Other Drug-Related Poisonings: Hospitalizations**




*Source: MA Inpatient Hospital Discharge Database, Center for Health Information and Analysis (CHIA)*

## Housing and Homelessness

Massachusetts is currently dealing with two independent sets of housing crises. The first is due, in large part, to a low rate of housing production which has not kept pace with population growth and needs, leading to rising prices that have outpaced wages. As a result, there is a shortage of suitable and affordable accommodations for most young workers, growing families, and the increasing senior population. Metropolitan Boston has become one of the most expensive places in the country to buy a home, now ranking the fourth most expensive of the 25 largest metropolitan areas in the U.S. Cost burdens for renters have increased throughout Greater Boston since 2000. Nearly half of the renters in Essex, Plymouth, and Norfolk counties are now cost burdened by housing costs (Modestino et al., 2019).

While the region is becoming more diverse, racial segregation remains a persistent challenge. More than 70 percent of the region's Latino households and 66 percent of black households resided in just 10 municipalities in 2017 and Boston remains one of the most segregated of the nation's 50 largest metropolitan areas. Communities that permitted more housing units appear to have experienced greater reductions in segregation between 2000 and 2017. That relationship appears to be stronger for multifamily housing than for housing production as a whole (Robert Wood Johnson Foundation, 2021). Norfolk and Bristol Counties rank well compared to other MA counties with regard to residential segregation. The counties scored a 38 and 43 respectively (lower value indicates less segregation) compared to 48 statewide on the non-White/White residential segregation index and fared well on the Black/White segregation index with a score of 50 and 51 respectively compared to 62 at the state (Robert Wood Johnson Foundation, 2021). However, Plymouth County ranked the worst of all counties for both residential segregation measures, with scores of 79 and 68 for Black/White and non-White/White residential segregation (Robert Wood Johnson Foundation, 2021).

### Health Professionals Survey

6.9% of health professionals rated the need for expanded housing support services as a top priority in their community. Similarly, 41.1% of professionals rate decreased housing stability as having the largest impact on consumers.

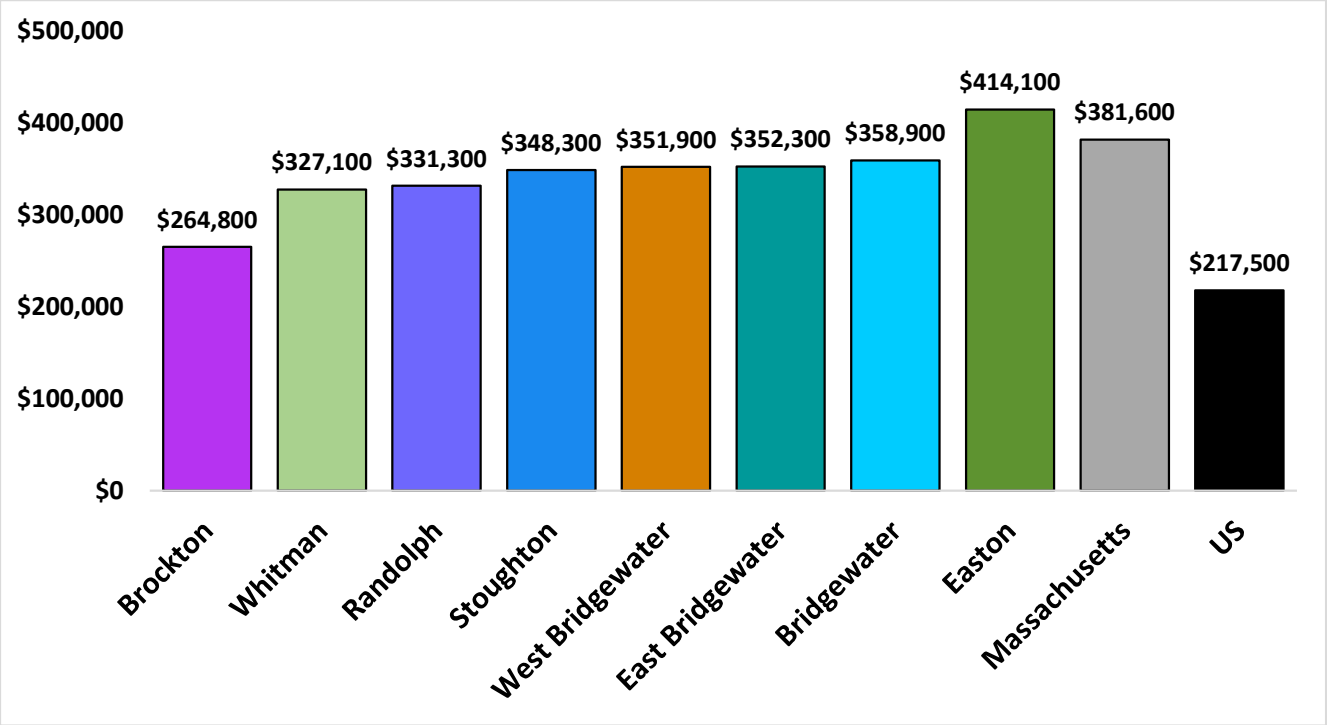
### Interviews and Focus Groups

Housing did not emerge as a prominent topic of conversation in interviews or focus groups.

### Prevalence

While most communities within GSMC's service area had housing prices slightly below the state level ($381,600), Easton ($414,100) had exceptionally high prices, whereas Brockton ($264,000) had particularly low prices (Figure 19).

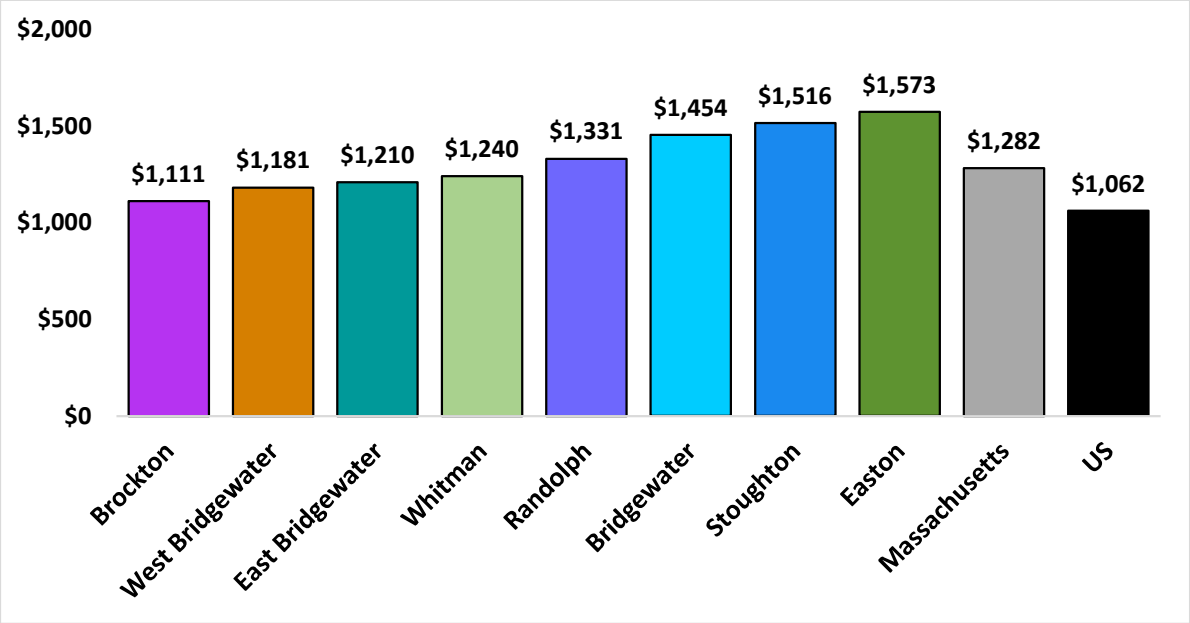
**Figure 19: Median Housing Price (Owner-occupied units)-2019**




Source: US Census - 2019: ACS 5-Year Estimates

All of GSMC's service area communities have median rent prices well above the national level ($1,062). Additionally, Bridgewater ($1,454), Stoughton ($1,516), and Easton ($1,573) had median rent prices well above the state level ($1,282) (Figure 20).

**Figure 20: Median Gross Rent-2019**




*Source: US Census - 2019: ACS 5-Year Estimates*

# Additional Community Health Needs

## Obesity

Rates of obesity are rising faster than any other chronic illness. The latest data from the CDC estimated that 31.9% of American adults and 18.5% of American adolescents/children are obese. In Massachusetts, the state rate has never exceeded the national rate (CDC "Overweight & Obesity," 2019). In 2019, the Massachusetts rate for adults was 25%, nearly 7% less than the rate seen nationally. These rates are significantly higher for demographic groups such as women, middle-aged to older adults, and Black (non-Hispanic) adults (UHF, 2019). Bristol County had the highest obesity rate in the service area at 28.7%, followed by Plymouth County at 27.7% and Norfolk County at 22.6% (Centers for Disease Control and Prevention, 2021). Also measured was physical inactivity, approximately 26% of all adults in Bristol County were predicted to be physically inactive, this was the highest percentage in the service area (Centers for Disease Control and Prevention, 2021). The lowest physical inactivity rates were seen in Norfolk County at 19.1%, suggesting an association between this rate and the lower rate of obesity in the county (Centers for Disease Control and Prevention, 2021).

Independent of all other demographic factors, lower socio-economic status is strongly correlated with higher rates of obesity (UHF, 2019). This is often believed to be due to unfavorable environmental conditions (both physical and societal) such as the presence of food deserts and a lack of opportunity to engage in physical activity.

### Health Professionals Survey

65.5% of health professionals noted obesity as a pressing health concern within their community.

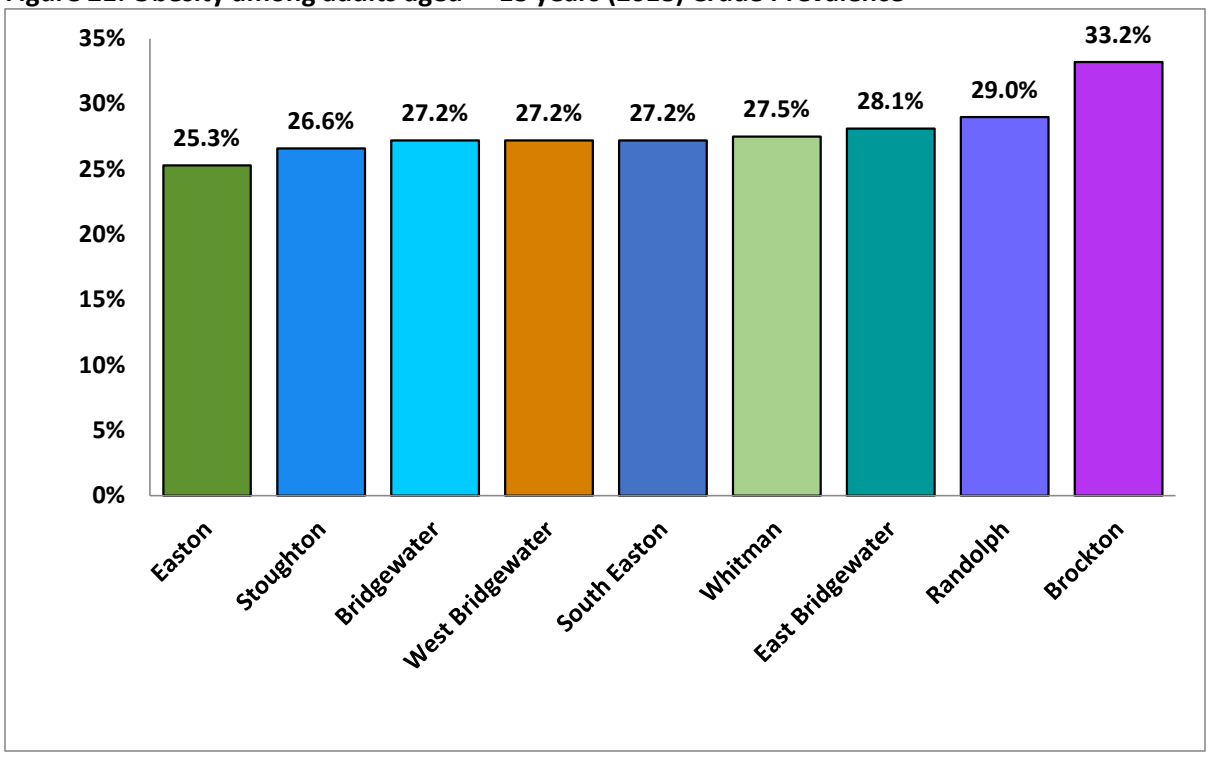
### Interviews and Focus Groups

Interview and focus group participants did not discuss obesity specifically but did raise concerns around access to healthy food and food insecurity. Residents face issues of food insecurity and a lack of affordable healthy options. Focus groups also revealed stigma around cultural food. For example, one participant discussed foods such as rice being a significant component of a person's culture and doctors telling people to limit their rice intake. Related to this, participants emphasized doctors should be well versed in the diversity of the area they serve.

### Prevalence

Whereas Easton (25.3%) had the lowest prevalence of obesity, affecting just over a quarter of its citizens, Brockton (33.2%) had the highest prevalence, with nearly 1 in 3 residents affected (Figure 21).

**Figure 21: Obesity among adults aged >=18 years (2018) Crude Prevalence**

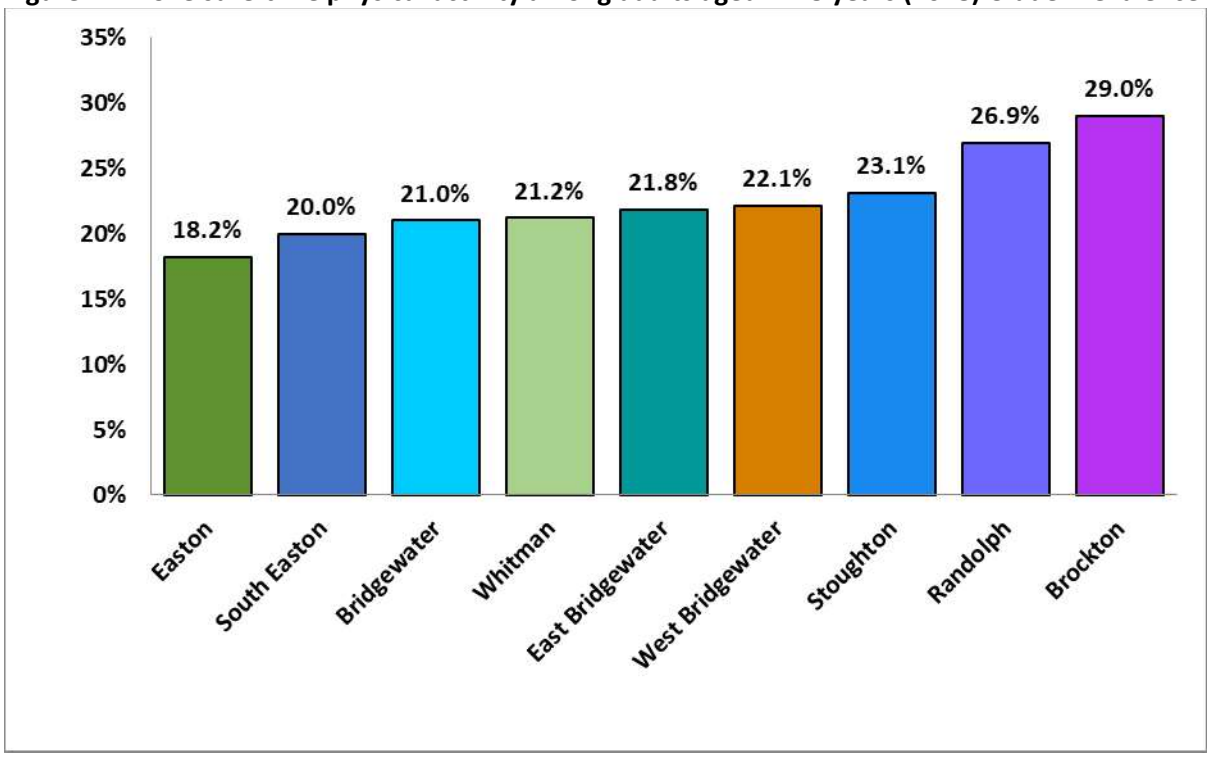



*Sources: Behavioral Risk Factor Surveillance System (BRFSS) - (2018)*

Easton (18.2%) and South Easton (20.0%) had the lowest prevalence of adults reporting no leisure time focused on physical activity (Figure 22). Randolph (26.9%) and Brockton (29.0%)

had the highest proportion of adults indicating they have no leisure time focused on physical activity.

**Figure 22: No leisure-time physical activity among adults aged >=18 years (2018) Crude Prevalence**




*Sources: Behavioral Risk Factor Surveillance System (BRFSS) - (2018)*

# Social Determinants of Health

## Education

Educational engagement often helps individuals have access to resources that promote good health, such as physical activity breaks, school lunches, after-school programs, and health-based resources such as screenings and management of chronic conditions. These programs have been shown to improve health outcomes, like childhood obesity, and mental health as well as school performance and learning outcomes (MDPH, 2017). Not all school systems have the resources to provide these vital programs. As students spend a significant portion of their day in school, schools also provide necessities such as shelter, sanitary facilities, food and water, and opportunities for socialization. All of these school resources are directly associated with better health and learning outcomes (MDPH, 2017).

Even after leaving the education system, educational attainment continues to impact individuals' health. Education is associated with better jobs, higher incomes, and economic stability. Education can also provide a greater sense of control over one's life and stronger social networks, which again are linked to the ability to engage in healthy behaviors and better overall health (MDPH, 2017). Unfortunately, educational attainment in Massachusetts is not

equitable. Students from low-income communities and communities of color may face challenges in getting to school, differential public-school resources, inequitable discipline practices, resources, and afterschool programming (MDPH, 2017).

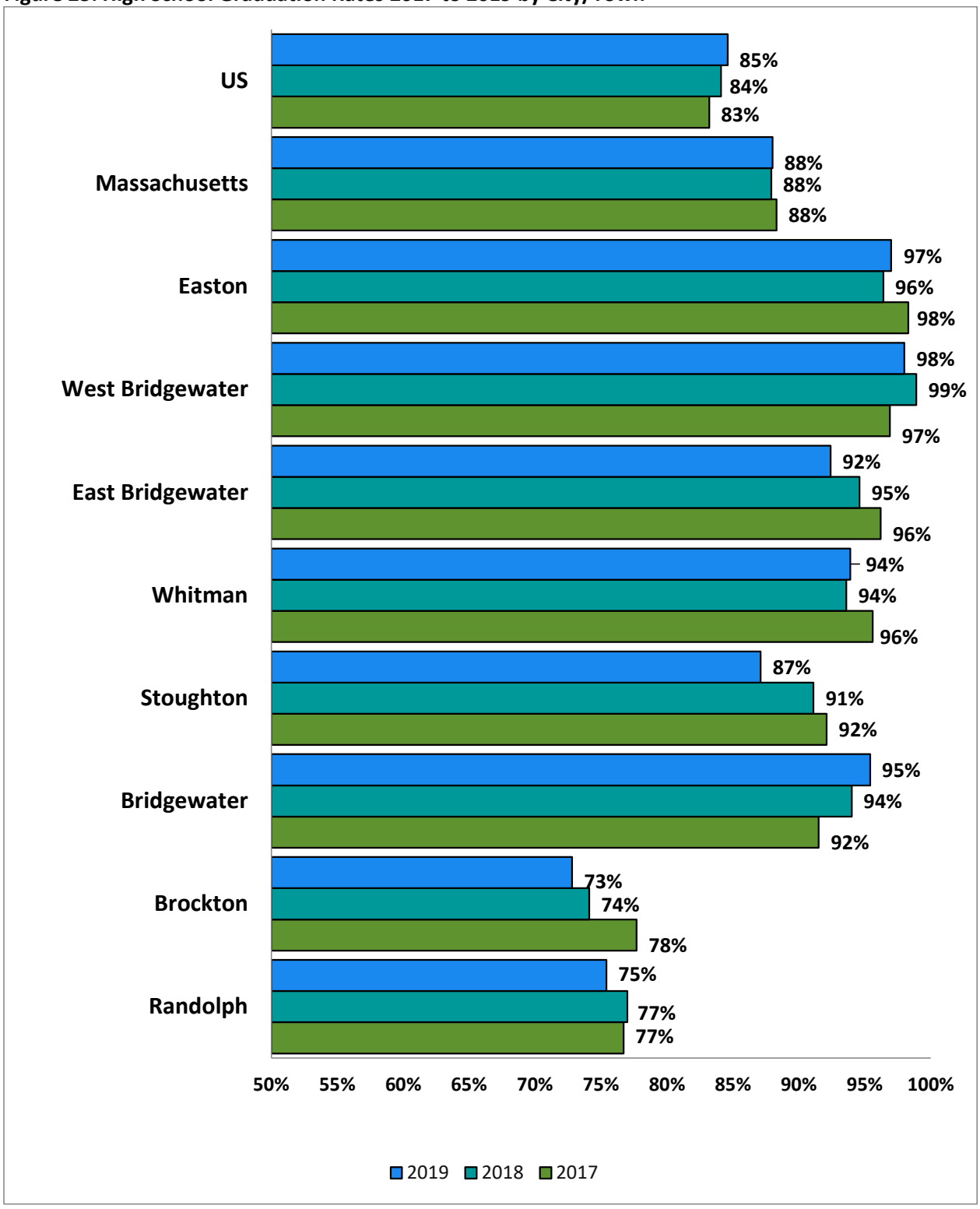
### Interviews and Focus Groups

Community members cited education as one of the most important services needed in the community, especially as it relates to teaching health and finances. Lack of health education was cited as one of the biggest challenges to health living in the community. As participants in the focus groups discussed, improving educational attainment and health education among children can be a substantial way to ensuring health among the community at large. Other participants discussed the difficulty in affording an advanced degree. Participants suggested improving educational outreach "in the right settings," including in churches, community associations, and outreach organizations. Finally, participants noted that COVID had a significant impact on schools, and that children needed to be monitored for mental health as a result.

### Prevalence

High school graduation rates have remained fairly consistent across service areas over time. Except for Randolph and Brockton, high school graduation rates have exceeded the state and national averages each year from 2017 to 2019 (Figure 23).

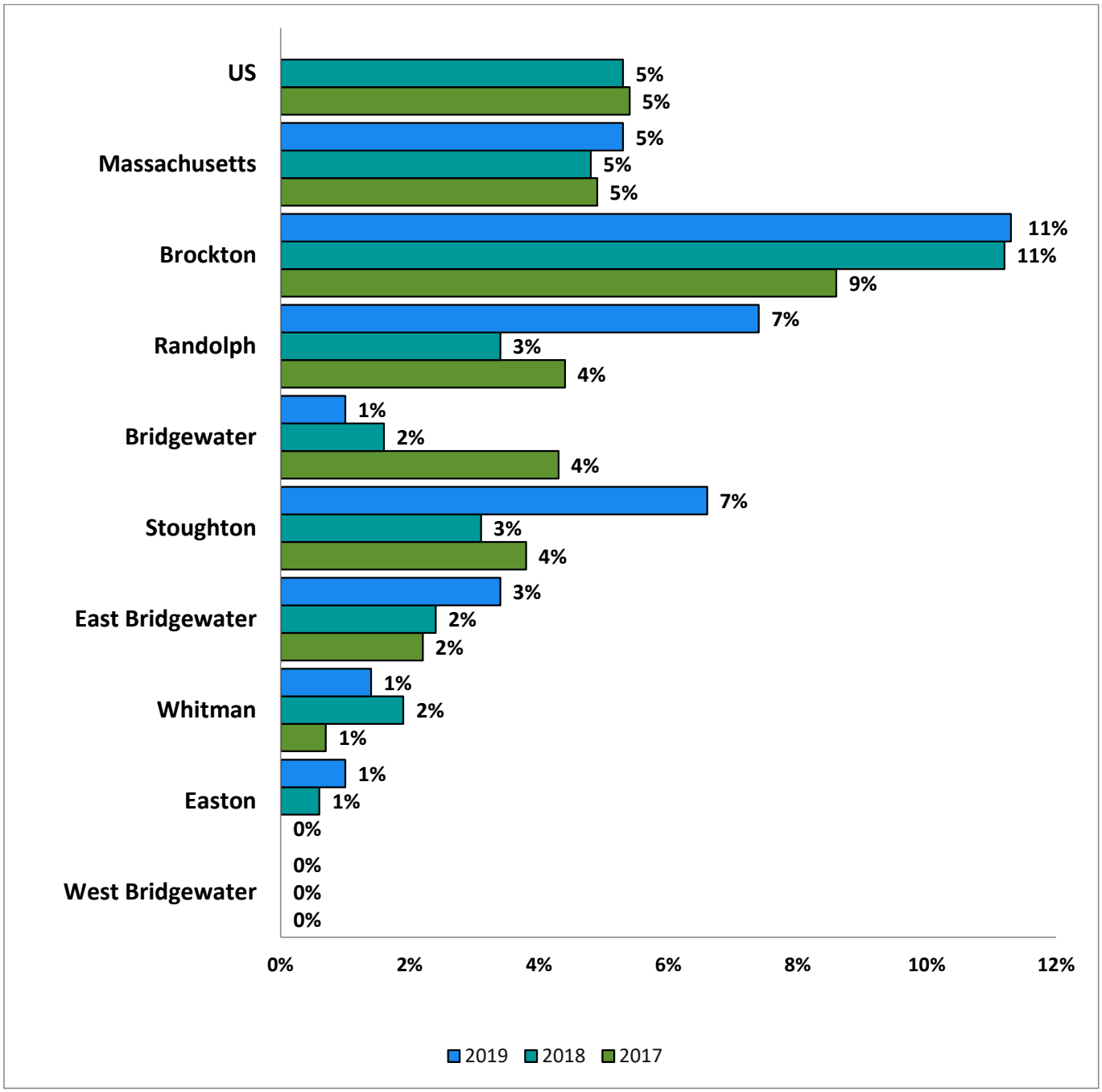
**Figure 23: High School Graduation Rates 2017 to 2019 by City/Town**




*Source: MA Dept. of Elementary and Secondary Education, 2019-2020, School and District Profiles*

In 2019, Stoughton (7%), Randolph (7%), and Brockton (11%) had higher dropout rates than state (5%) and country (5%). Easton (1%) and Whitman (1.4%) had the lowest dropout rates in 2019 (Figure 24). West Bridgewater reported no dropouts between 2017 and 2019.

**Figure 24: High School Drop-out Rates Over Time by City/Town**




*Source: MA Dept. of Elementary and Secondary Education, 2019-2020, School and District Profiles*

In 2019, the proportion of those with less than a high school education in Randolph (14.3%) and Brockton (19.5%) was higher than the state (9.3%) level. All service areas had larger proportions of those with high school graduate or equivalent degrees compared to the state (24.0%), except for Easton (21.0%). Easton showed the highest percentage of residents with bachelor's degrees (28.9%) or graduate or professional degrees (20.2%) (Table 7).

**Table 7: Highest Educational Attainment (age 25 years and over) by City/Town**

| | Less than high school | High school graduate or equivalent | Some college or Associate's Degree | Bachelor's Degree | Graduate or Professional Degree |
|---|---|---|---|---|---|
| Randolph | 14.3% | 29.8% | 28.9% | 18.5% | 8.6% |
| Stoughton | 8.9% | 26.1% | 27.4% | 23.2% | 14.3% |
| Bridgewater | 4.1% | 26.0% | 32.8% | 23.3% | 13.8% |
| East Bridgewater | 4.1% | 31.4% | 34.1% | 18.6% | 12.0% |
| Easton | 4.0% | 21.0% | 25.9% | 28.9% | 20.2% |
| Whitman | 5.9% | 33.3% | 31.7% | 20.9% | 8.1% |
| West Bridgewater | 3.8% | 31.2% | 29.6% | 23.4% | 12.1% |
| Brockton | 19.5% | 33.6% | 28.2% | 13.4% | 5.2% |
| Massachusetts | 9.3% | 24.0% | 23.0% | 24.1% | 19.6% |
| US | 12.0% | 27.0% | 28.9% | 19.8% | 12.4% |

*Source: US Census Bureau, 2015-2019 American Community Survey 5-Year Estimates*

## Employment

While being employed is important for economic stability, employment affects health through more than economic drivers alone. Physical workspace, employer policies, and employee benefits all directly impact an individual's health. The physical workplace can influence health through workplace hazards and unsafe working conditions which lead to injuries, illness, stress, and death. Long work hours and jobs with poor stability can negatively impact health by increasing stress, contributing to poor eating habits, leading to repetitive injuries, and limiting sleep and leisure time. Job benefits such as health insurance, sick and personal leave, child and elder services, and wellness programs can impact the ability of both the worker and their family to achieve good health (MDPH, 2017).

The proportion of unemployed Massachusetts residents declined from 5.8% in 2015 to 2.8% in 2019, reflecting a 70% decrease over this period (MA DUA, 2021). From 2015 to 2019, the percentage of Massachusetts residents who were unemployed was lower than the national average of 3.7% (MA DUA, 2021). With the economic slowdown associated with COVID-19, unemployment rates increased dramatically. In Massachusetts, unemployment peaked at 17.7% in June 2020 and was above 16% from April to July (MA DUA, 2021). From March 2020

through the end of the year, Massachusetts had a higher unemployment rate than the national average.

Underemployment is linked to chronic disease, lower positive self-concept, and depression. Workers with incomes below the poverty line are part of the working poor, who are more likely to have low paying, unstable jobs, have health constraints, and lack health insurance. Discriminatory hiring practices have limited the ability of people of color to secure employment. Those who have been arrested, have a conviction, felony, or have been incarcerated are severely limited in their ability to find employment due to policies placing limitations on individuals who have interacted with the criminal justice system (MDPH, 2017).

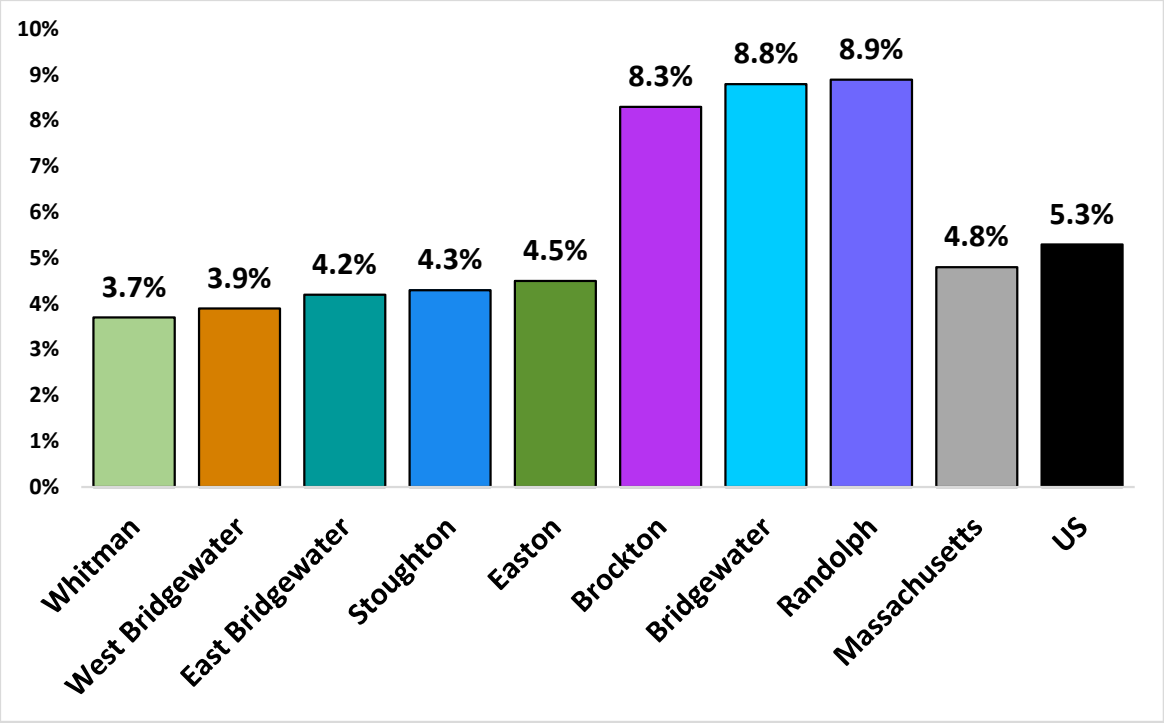
### Interviews and Focus Groups

Community members did not raise concerns around employment, although many discussed the effects of low-income on access to preventive measures of care.

### Prevalence

Three service areas, Brockton (8.3%), Bridgewater (8.8%), and Randolph (8.9%), had higher unemployment rates than the state (4.8%) and national (5.3%) levels (Figure 25). All other service areas fell below the state and national levels.

**Figure 25: Unemployment Rate by City/Town**




*Source: US Census Bureau, 2015-2019 American Community Survey 5-Year Estimates*

# Poverty

Income influences where people choose to live, purchase healthy foods, participate in physical and leisure activities, and access health care and screening services. Having a job and job-related income provides individuals the opportunities to make healthy choices, engage in healthy behaviors, access necessary health care services, and enjoy a long life (MDPH, 2017). In Massachusetts, 9.4% of the population lives below the Federal Poverty Line, this is the 8th lowest poverty rate in the nation and is approximately 2% lower than the national rate for 2020 ("Talk Poverty", 2020). Before 2015, a greater percentage of children lived in poverty in Massachusetts as compared to the United States as a whole. However, this rate has dropped to 11.3%, as of 2020 ("Talk Poverty", 2020). Massachusetts ranks among the worst states when it comes to income inequality. In 2020 Massachusetts had an income inequality ratio of 18.2 out of 20, the 47th poorest ratio of all states ("Talk Poverty", 2020). Stark racial disparities exist in poverty rates across Massachusetts. In 2020 nearly one-third of all Native American Massachusetts residents had incomes below the poverty line ("Talk Poverty", 2020). This was followed by approximately one in five (19.6%) Hispanic residents and 17.6% of Black non-Hispanic residents ("Talk Poverty", 2020). These rates stand in dramatic contrast to the less than one in ten (6.5%) White non-Hispanic and one in ten (10.6%) Asian non-Hispanic residents with incomes below the federal poverty level ("Talk Poverty", 2020).

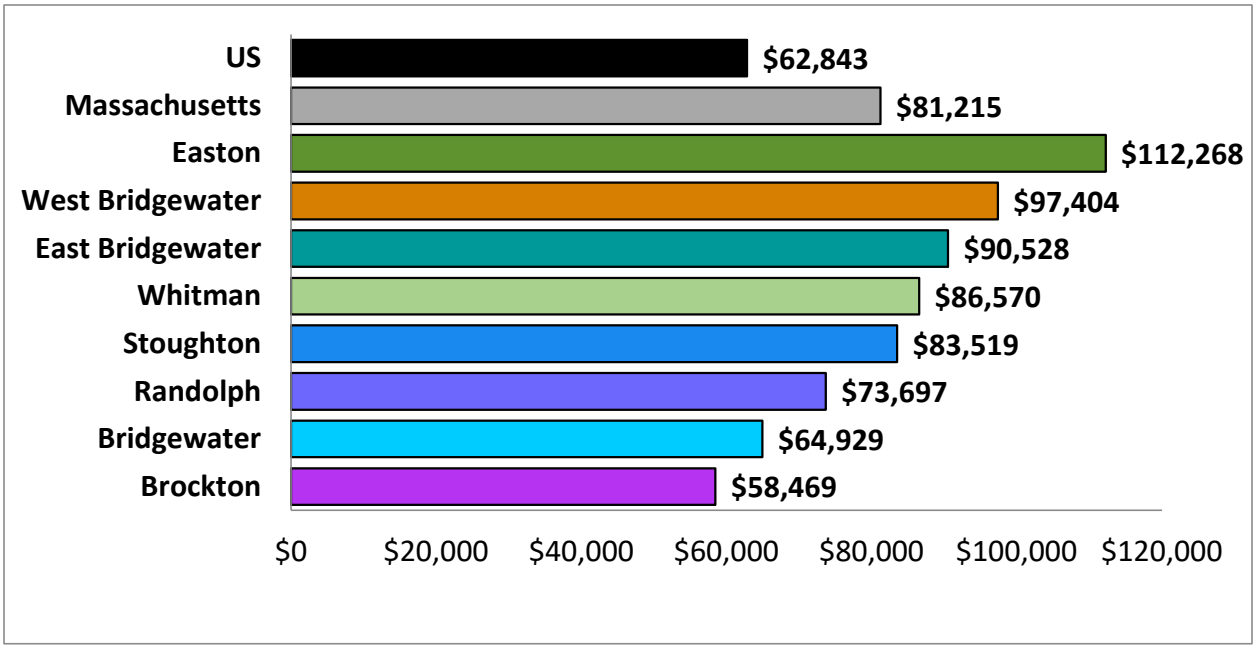
### Interviews and Focus Groups

Focus group participants highlighted how low-income populations are at higher risk for poor health as they have less access to preventative measures, such as the ability to go the gym or purchase health insurance. These groups experience more chronic medical problems. Participants noted that lower-income populations and communities of color are often living close to harmful developments, such as power plants or casinos.

### Prevalence

Three service area communities, Randolph ($73,697), Bridgewater ($64,929), and Brockton ($58,469) had lower median household incomes than Massachusetts ($81,215). Brockton's median household income was also just under the U.S. median household income ($62, 843). Easton ($112,268), West Bridgewater ($97,404), and East Bridgewater ($90,528) had especially higher median household incomes than the state and country (Figure 26).

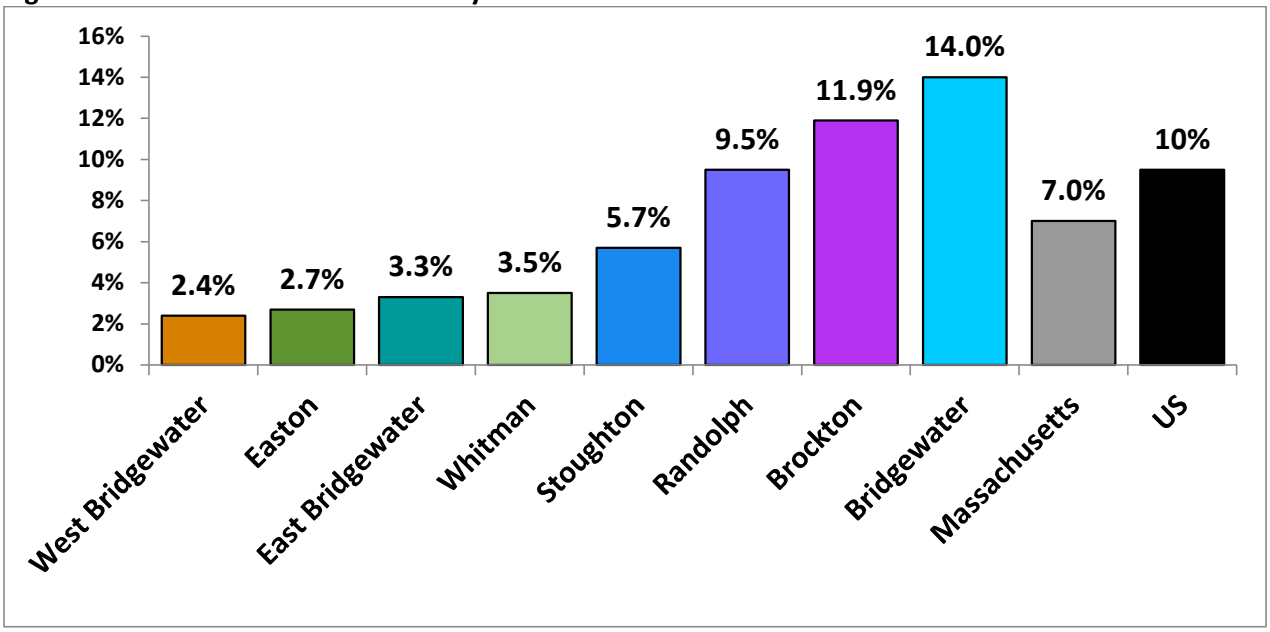
**Figure 26: Median Household Income by City/Town**




*Source: US Census - 2019: ACS 5-Year Estimates*

Only two communities, Brockton (11.9%) and Bridgewater (14.0%), had higher percentages of families living below the poverty line than the state (10%) and national (7.0%) levels (Figure 27). Five communities, West Bridgewater (2.4%), Easton (2.7%), East Bridgewater (3.3%), Whitman, (3.5%), and Stoughton (5.7%), all had lower percentages of families living below the poverty line than the state and national levels.

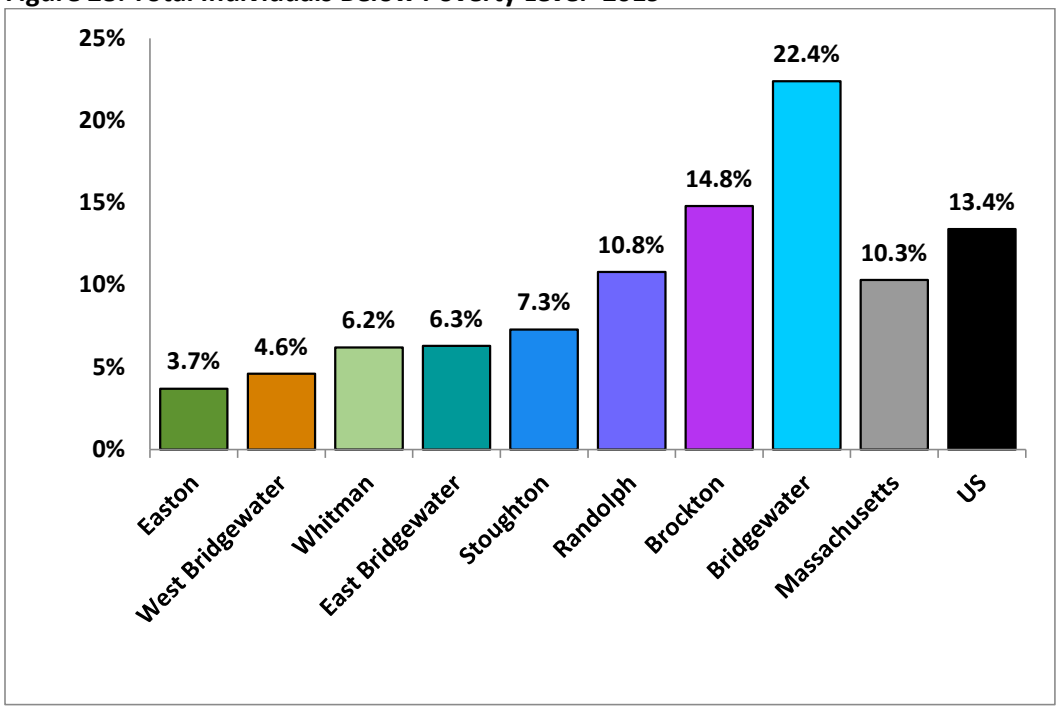
**Figure 27: Total Families Below Poverty Level-2019**




*Source: US Census - 2019: ACS 5-Year Estimates*

Bridgewater (22.4%) had the highest percentage of total individuals below poverty level, at approximately double the state (10.30%) levels (Figure 28). Brockton (14.8%) also had an individual poverty rate above the state and national levels. Easton (3.7%), on the other hand, was approximately a third of the state level and about a half of the national level.

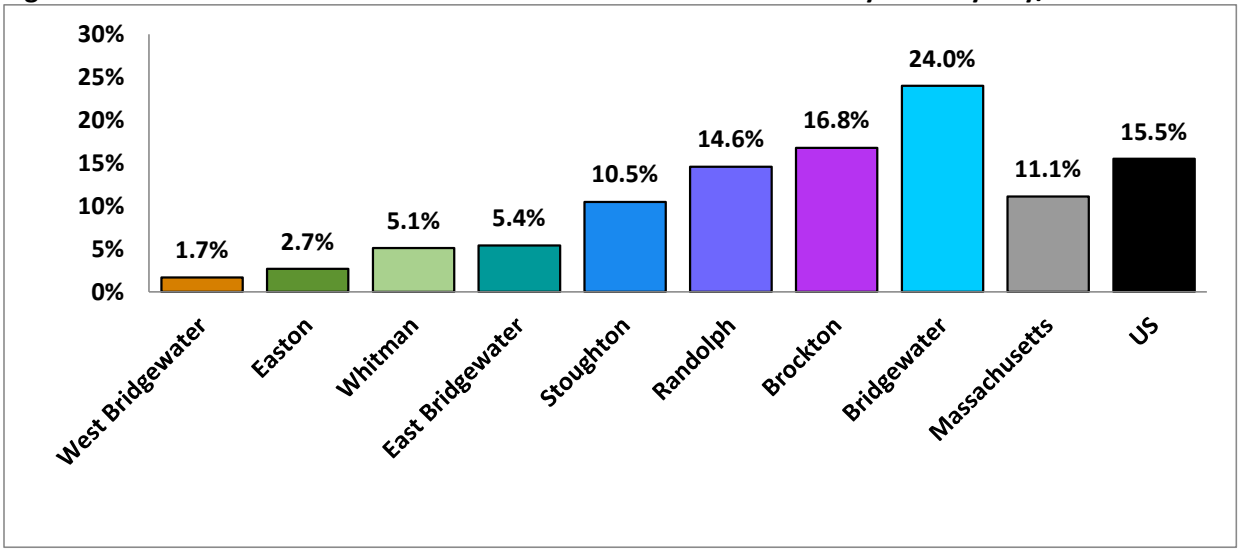
**Figure 28: Total Individuals Below Poverty Level -2019**




*Source: US Census - 2019: ACS 5-Year Estimates*

Bridgewater (22.4%), Brockton (14.8%), and Randolph (10.8%) all had higher poverty rates among families with children than the state (11.1%) and national (15.5%) levels. West Bridgewater (1.7%) and Easton (2.7%) had considerably lower levels than the state or national levels (Figure 29).

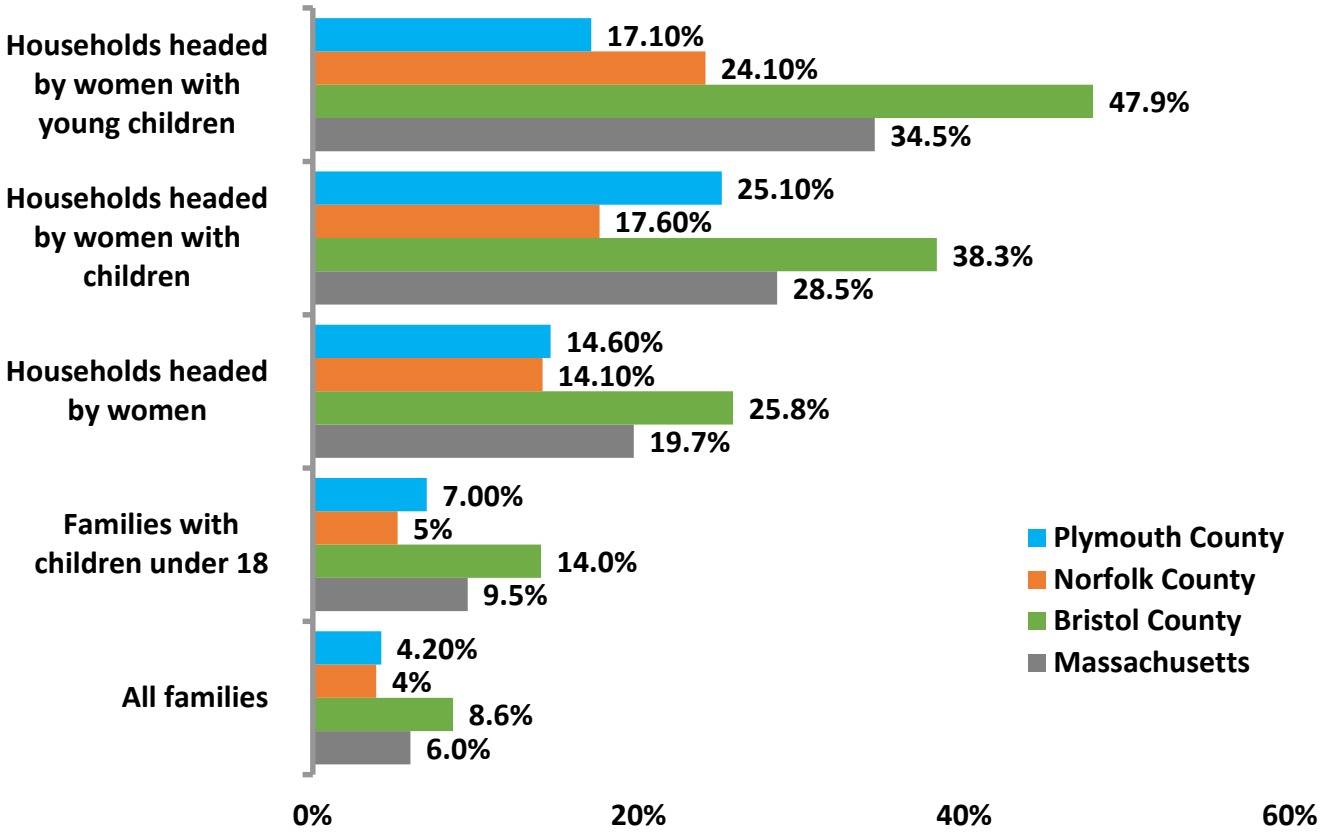
**Figure 29: Families with Related Children Under 18 Years Below Poverty Level by City/Town**




*Source: US Census - 2019: ACS 5-Year Estimates*

Compared to Massachusetts, Bristol County has a larger proportion of all types of households below the poverty level (Figure 30). Norfolk and Plymouth counties displayed poverty rates below the state level for all household types.

**Figure 30: Households Below the Poverty Line (percentage) - 2019**




*Source: US Census Bureau, 2019 American Community Survey 1-Year Estimates*

# Food Insecurity

Access to healthy food is a major area of concern for those dealing with low household incomes or below the poverty level. The three counties in the service area—Bristol County, Plymouth County, and Norfolk County—all rank well in measures of healthy food access. According to the Robert Wood Johnson Foundation, only 3-6% of the counties' residents have limited access to food. Additionally, RWJF calculated a food environment index, Plymouth and Bristol County scored an 8.7 and 8.4 out of 10 (higher value is better) respectively, the Massachusetts value for this index was 9.3 (measure was unavailable for Norfolk County).

### Interviews and Focus groups

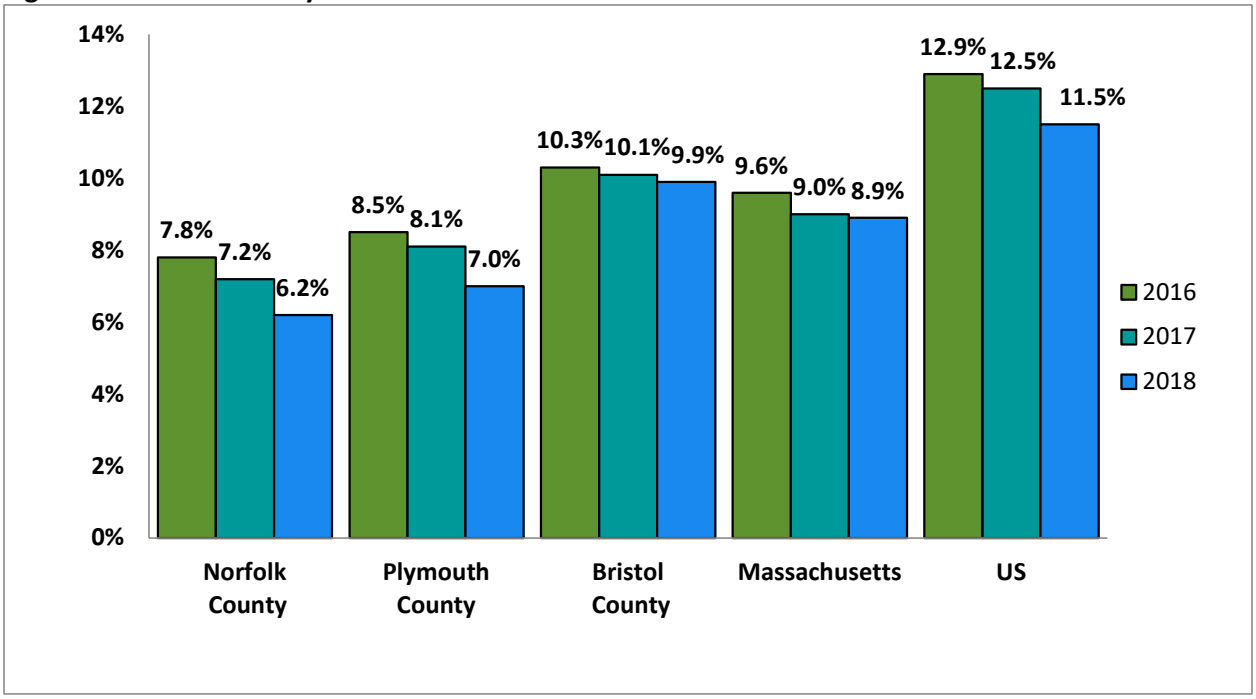
Focus group members mentioned having limited access to healthy foods in their communities. One participant mentioned the need for advocates who can champion the need for more easily accessible and affordable healthy food options for low-income individuals. Focus group participants also discussed the need for improved cultural competence when health providers

are discussing certain foods. As one participant noted, there should be more effort to keep cultures intact while maintaining healthy eating lifestyles. Participants also mentioned the need for increased information and knowledge sharing when discussing healthy lifestyles, including things like workshops and community events.

## Prevalence

While Norfolk and Plymouth counties show low levels of food insecurity that have consistently declined from 2017 to 2019, Bristol County displays rates above the state level for each year (Figure 31).

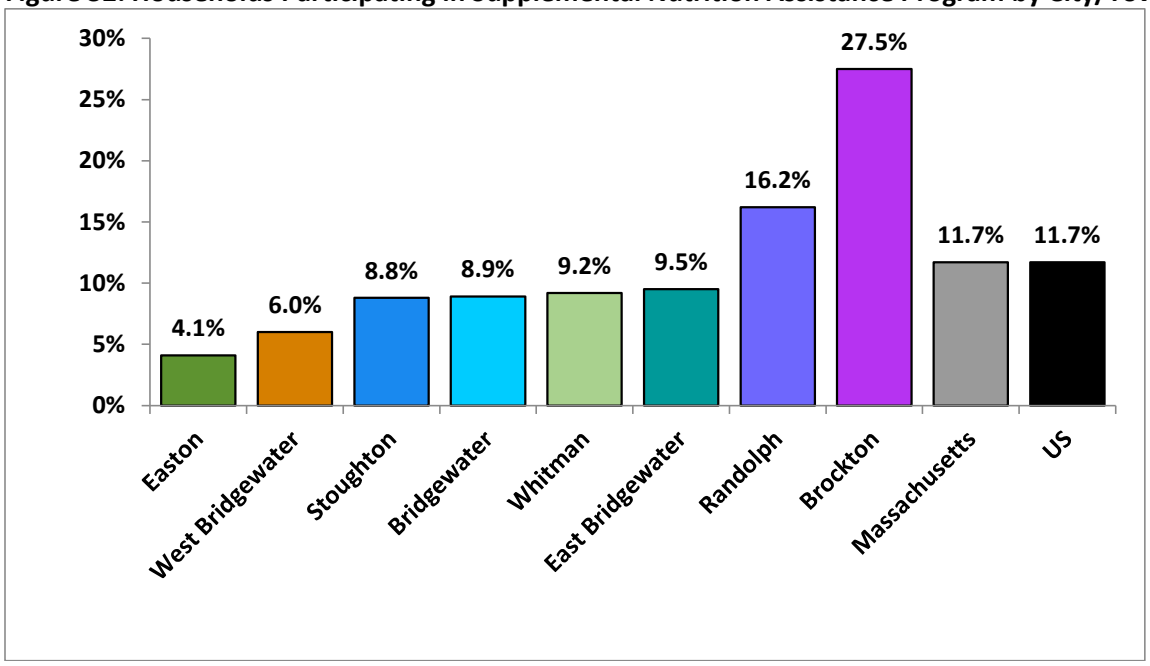
**Figure 31: Food insecurity rates**




*Source: FeedingAmerica.org*

Randolph (16.2%) and Brockton (27.5%) had higher rates of households participating in SNAP than the state (11.7%) and national (11.7%) levels (Figure 32). Easton (4.1%) had the lowest level of households participating in SNAP.

**Figure 32: Households Participating in Supplemental Nutrition Assistance Program by City/Town**




*Source: US Census Bureau, 2015-2019 American Community Survey 5-Year Estimates*

# Transportation

Transportation barriers are roadblocks to healthcare access. Transportation barriers lead to rescheduled or missed appointments, delayed care, and missed or delayed medication use. These consequences may lead to poorer management of chronic illness and thus poorer health outcomes. Chronic disease care requires clinician visits, medication access, and changes to treatment plans to provide evidence-based care. However, without transportation, delays in clinical interventions result. Such delays in care may lead to a lack of appropriate medical treatment, chronic disease exacerbations or unmet health care needs, which can accumulate and worsen health outcomes. A review of studies conducted in 2013 found that evidence supports that transportation barriers are an important roadblock to healthcare access, particularly for those with lower incomes or the under/uninsured (Syed, Gerber, & Sharp, 2013).

### Interviews and Focus Groups

Transportation was not discussed as a prevalent topic in focus groups.

# Access to Care

In 2016, 45% of uninsured adults did not have access to adequate healthcare due to the cost. While the Affordable Care Act (ACA) has provided millions of Americans with affordable health care services, there are still 27.6 million more without coverage nationwide. This issue is not nearly as widespread in Massachusetts which has one of the highest health insurance coverage rates in the nation at about 97%. Although Massachusetts is a leader in healthcare services and

access to care, there are still barriers of cost, transportation, childcare, language interpreters, etc. that may impact individuals' ability to access healthcare. Additionally, healthcare professionals are not equally distributed throughout the state, for example, in Massachusetts, there are 970 residents for every one primary care physician (there is only one primary care physician per 1,880 residents in Bristol County, and one primary care physician per 1,590 population in Plymouth County, by far the worst ratios in the state) (RWJF, 2021).

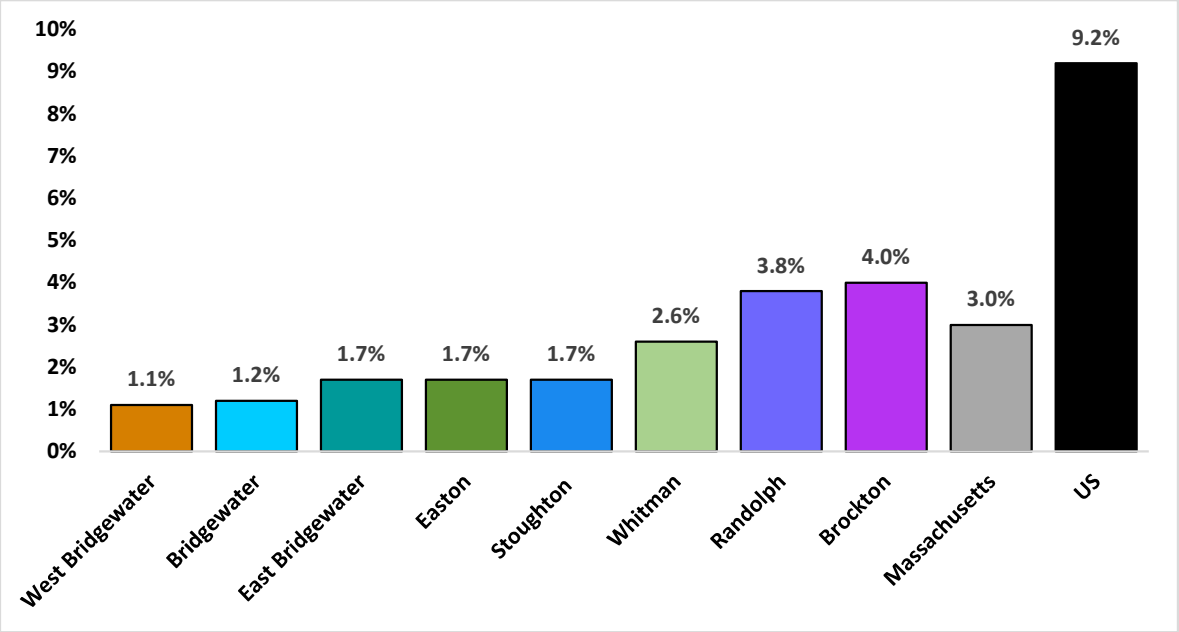
### Interviews and Focus Groups

Many focus group participants brought up access to care as a major concern. Focus group participants advocated for increased access to healthcare planning, in addition to health providers. Some noted that income disparities greatly reduce an individual's access to preventative care services. Non-English-speaking families are also at a disadvantage, as they must rely on interpretive services that are not always accurate. The elderly may not have access to telehealth, computers, or other virtual health services.

### Prevalence

All towns and cities in GSMC's service area have lower rates of uninsured residents when compared to the national level (9.2%) (Figure 33). However, Randolph (3.8%) and Brockton (4.0%) have higher rates of uninsured residents when compared to the state level (3.0%).

**Figure 33: Uninsured Residents – 2019**




*Source: US Census - 2019: ACS 5-Year Estimates*

## Culturally Competent Care

Cultural competence is defined as the ability of providers and organizations to effectively deliver health care services that meet the social, cultural, and linguistic needs of patients. A

culturally competent health care system can help improve health outcomes and quality of care and can contribute to the elimination of racial and ethnic health disparities. Of the more than 37 million adults in the U.S. who speak a language other than English, some 18 million people (48%) report that they speak English less than "very well." Language and communication barriers can affect the amount and quality of health care received. For example, Spanish-speaking Latinos are less likely than Whites to visit a physician or mental health provider or receive preventive care (Georgetown University Health Policy Institute, 2021). If the providers, organizations, and systems are not working together to provide culturally competent care, patients are at higher risk of having negative health consequences, receiving poor quality care, or being dissatisfied with their care. African Americans and other ethnic minorities report less partnership with physicians, less participation in medical decisions, and lower levels of satisfaction with care. The quality of patient-physician interactions is lower among non-White patients, particularly Latino/as and Asian Americans. Lower quality patient-physician interactions are associated with lower overall satisfaction with health care

### Interviews and Focus Groups

Culturally competent care was a prevalent topic of discussion within focus groups. One participant described a "divide and conquer mentality" within Brockton that pits people of color and ethnic populations against each other, thus preventing them from working together. Another participant discussed stigmas that perpetuate cultural norms. Multiple participants suggested creating community events that bring people together to create change within the system. Many agreed that colorism is prevalent within Brockton and prevents coalition building among minority groups. Culturally competent care also emerges as a primary concern in provider-patient interactions. There is widespread distrust in the community of providers, with participants believing that white providers do not have "Black interests at heart." Participants suggested providers undergo "cultural prosperity" training and that leadership should champion coalition building.

# Recommendations

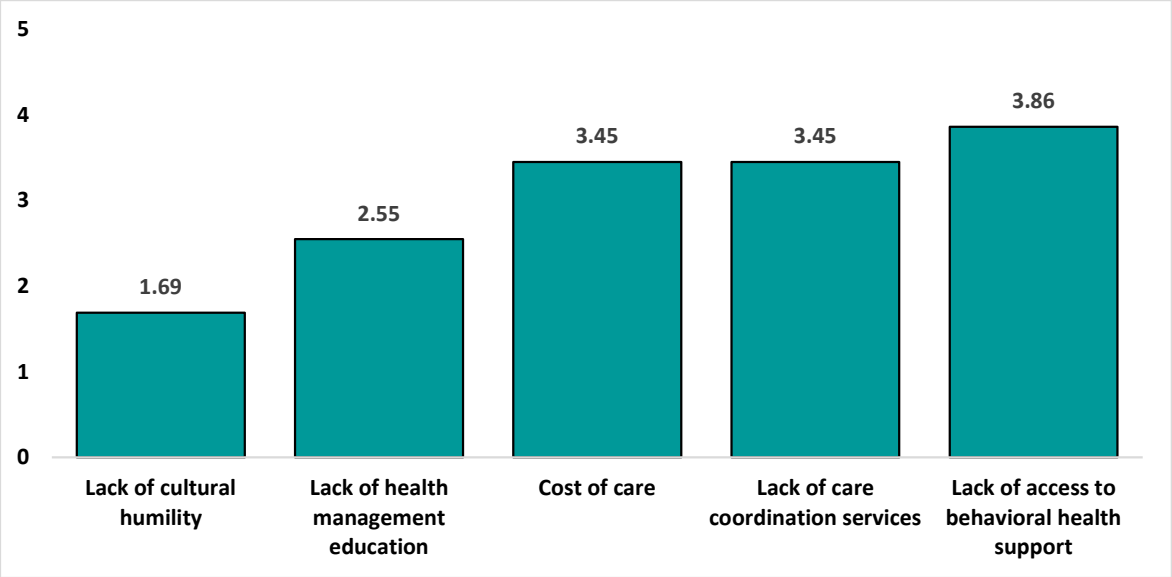
Many of the risk factors that lead to poor health in the communities are modifiable, as such many cases of chronic illnesses are considered preventable. Prevention requires a comprehensive approach that not only treats the symptoms of illness, but also addresses the underlying lifestyle behaviors behind many chronic conditions. These approaches must also address access to healthcare at different levels of the socio-economic model to best generate the largest impact. Various studies have shown that, although the three leading risk factors are modifiable, the conditions in which people live, learn, work, and play do not offer equal access or opportunity to make this possible. For example, a history of policies rooted in structural

racism has resulted in the creation of environments in which there are inequities in access to healthy foods, safe spaces for physical activity, walkable communities, quality education, housing, employment, and health care services. The health implications of this are evident in the fact that Black and Hispanic residents of Massachusetts are consistently and disproportionately impacted by the high prevalence of all chronic diseases, as well as the related deaths and high acute care service utilization. Healthy people cannot exist in unhealthy environments (MDPH, 2017).

## Health Professionals Perspective

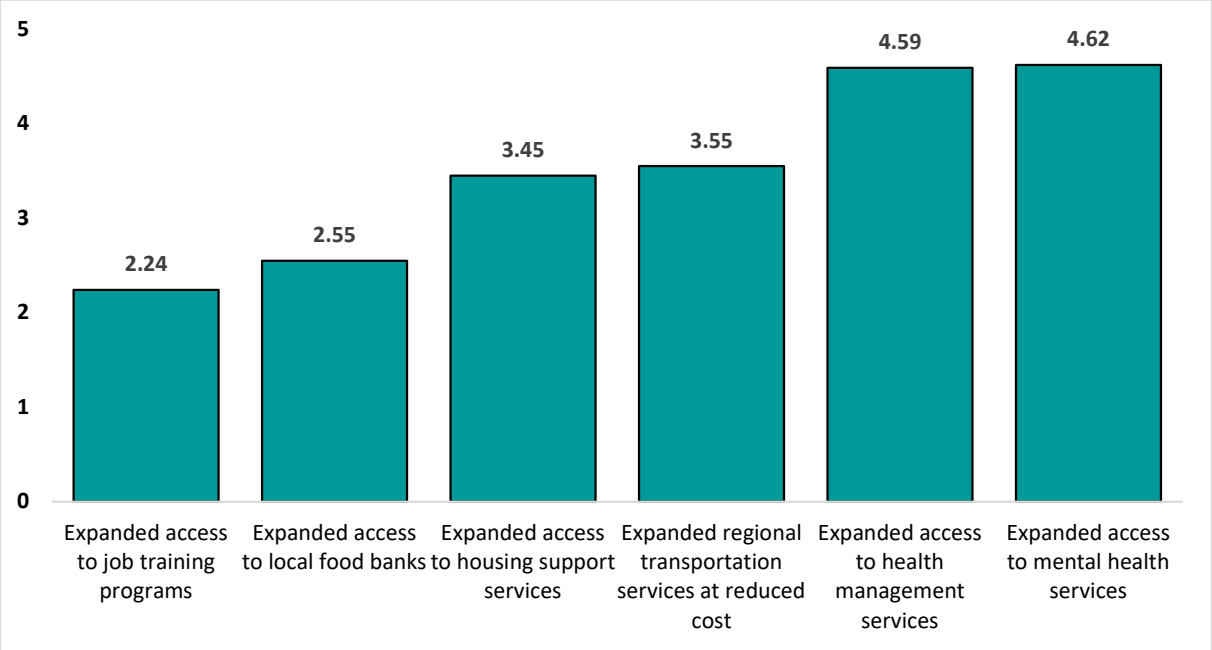
Health professionals in GSMC's service area rated lack of behavioral health support as the largest obstacle to healthy living among their constituents, followed by lack of care coordination and the cost of care (Figure 34).

**Figure 34: Obstacles to Healthy Living Believed by Health Professionals to be Most Pressing**



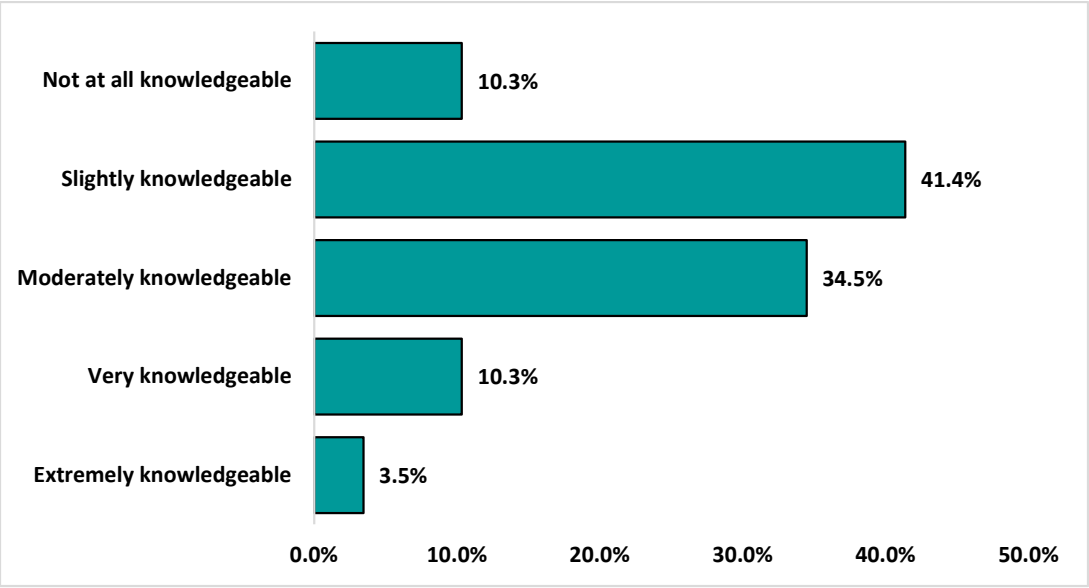

Similarly, when asked what they believed would most benefit consumers, the largest areas of need according to health professionals within GSMC's service area were expanded access to mental health services and health management services (Figure 35). As such, many health professionals see a need in the community for GSMC to be involved in expanding services in these areas.

**Figure 35: Health Support Services Believed by Health Professionals to Most Benefit Consumers**



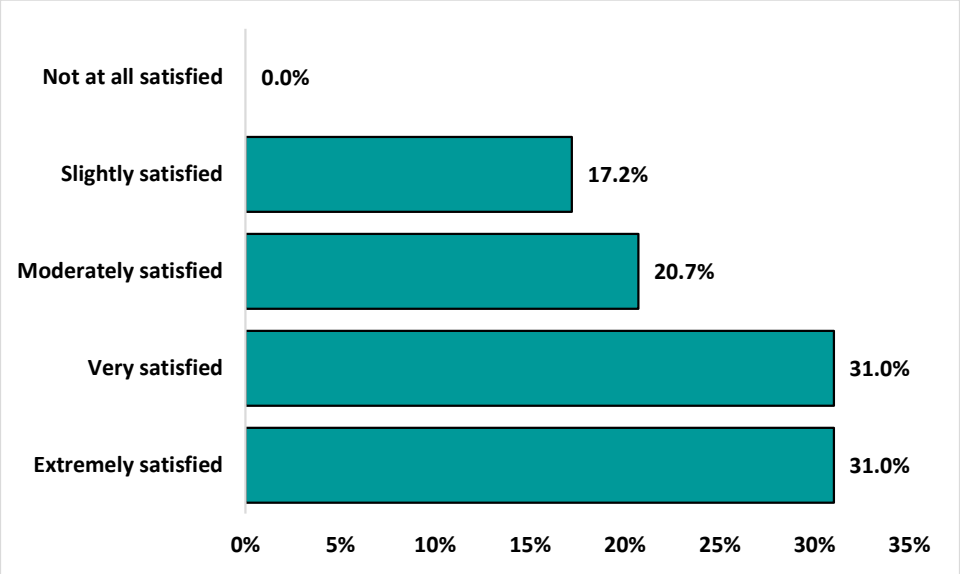

Over half (51.7%) of health professionals in GSMC's service area indicated they were slightly knowledgeable or less when it came to GSMC's health services (Figure 36). Additionally, 13.8% of health professionals indicated they were either very or extremely knowledgeable.

**Figure 36: Health Professionals Knowledge of GSMC Health Services**




62% of health professionals indicated they were very or extremely satisfied with GSMC's services, and none indicated being completely dissatisfied.

**Figure 37: Health Professionals Satisfaction with GSMC's Services**




# Chronic Conditions

Prevention of chronic conditions requires a comprehensive approach that not only treats a patient's symptoms but also addresses the underlying lifestyle behaviors behind the symptoms. This type of approach must also address access to healthcare at different levels of the socio-economic model to best generate the largest impact. The CDC has estimated that up to 80% of heart disease, stroke, and type 2 diabetes, as well as 40% of cancer, is likely preventable (Fight Chronic Disease, 2006). Additionally, the CDC and other sources have found evidence showing that efforts at all levels from policymaking to individual interventions can have a positive impact on preventing chronic illness in communities (NCCDPHP, 2021).

### Community wide recommendations

- Provide programs that encourage residents to be proactive in their health.
- Promote resources to help residents learn their options for medical care and to rely less on emergency services.
- Create resources and a system of support for low-income and elderly individuals to navigate telehealth and other virtual health services.

### Health system recommendations

- Offer patient education programs and resources on disease management.
- Create more training and resources for health providers to improve cultural competence.
- Give patients resources and opportunities to speak with their providers about any concerns they have related to their ability to care for themselves.

# Mental Health

Because mental health is intertwined in both the circumstances and preexisting conditions patients face, integrated treatment is crucial for addressing mental health needs in the community. Increasing awareness and building capacity in service systems are important in helping identify and treat co-occurring disorders. GSMC should adopt patient-centered services, integrating patient's goals and desired treatment strategies (MDPH, 2017).

### Community wide recommendations

- Provide programs that help bring residents of ethnic and cultural diversity together and establish a cohesive sense of community.
- Focus on bringing mental health services to youth by developing school check-ins for mental wellness. This is especially important as focus group participants are concerned with the increase in youth suicide in Brockton.
- Promote all available resources (e.g., crisis line, peer groups, outpatient services, postpartum resources), so that residents know where to get help.
- Improve domestic violence prevention initiatives and resources for those affected by abuse.

### Health system recommendations

- Increase the diversity of available mental health providers, including providers who are more racially and culturally diverse.
- Train providers to be culturally competent and prioritize hiring diverse providers that can relate to the struggles and lived experiences in the community.

# Substance Use Disorder

People with mental health disorders are more likely to experience a substance use disorder, as the two are cooccurring disorders. Often, people receive treatment for one disorder while the other disorder remains untreated. Undiagnosed, untreated, or undertreated co-occurring disorders can lead to a higher likelihood of experiencing negative outcomes, such as homelessness, incarceration, medical illnesses, suicide, or even early death (SAMHSA, 2020).

### Community wide recommendations

- Consider those with a substance use disorder as an at-risk population group that should be thought of when providing community outreach.
- Offer programs in the community where those with substance disorders can feel comfortable talking about their struggles and receive treatment.

### Health system recommendations

- Ensure that providers do not impose their own views on those with substance use disorders but are a nonjudgmental source of care.

- Sponsor programs geared toward substance abuse disorders and provide resources to patients.

# Obesity

Obesity is a largely preventable chronic illness defined as having a body mass index over 30. Obesity is considered a key risk factor for cardiovascular disease, diabetes mellitus, and certain cancers. The main risk factors for obesity are physical inactivity and poor diet. Independent of all other demographic factors, lower socio-economic status is strongly correlated with higher rates of obesity (UHF, 2019). This is often believed to be due to unfavorable environmental conditions (both physical and societal) such as the presence of food deserts and a lack of opportunity to engage in physical activity.

### Community wide recommendations

- Improve access to fresh and healthy and nutritious foods.
- Increase opportunities for healthy living in the community, such as walking and biking paths.
- Host a health fair to bring new and healthy food samples to various cultural groups.
- Bring nutrition programs to schools, helping kids to become more educated in health.

### Health system recommendations

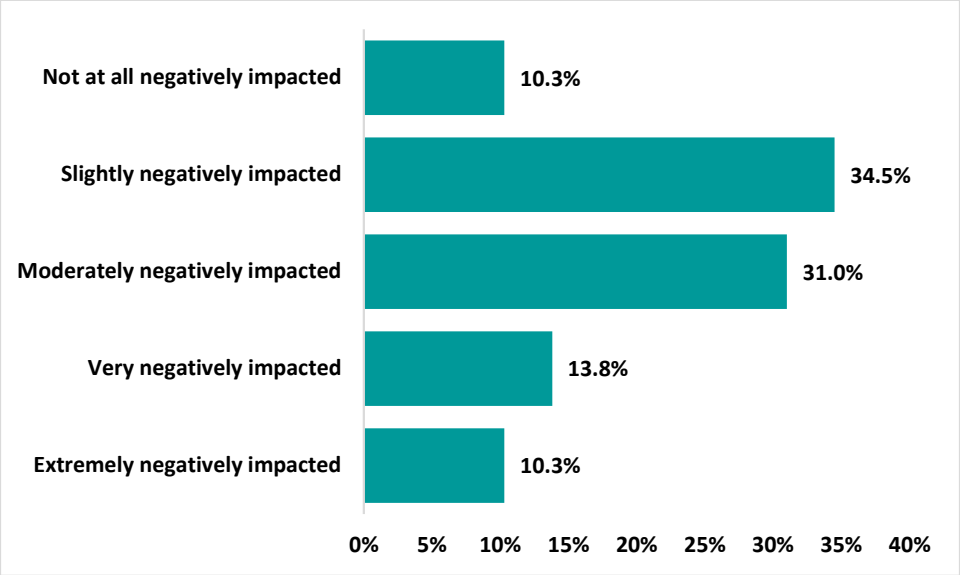
- Share advertisements and resources that teach residents about healthy lifestyles and nutrition.

# COVID-19

COVID-19 was responsible for more than 300,000 deaths in the US and more than 10,000 deaths in Massachusetts in 2020 (National Center for Health Statistics, 2021). Certain racial and age groups were more susceptible to both having COVID-19 and dying from the virus. Despite accounting for 14.4% of cases, adults over the age of 65 accounted for 81% of all deaths (National Center for Health Statistics, 2021). While these trends were not as drastic when examined by race, it is still important to note that when including all age groups, Asian, Black and White individuals had higher rates of death compared to rates of cases (National Center for Health Statistics, 2021). However, when looking at individuals under the age of 65 the rates of death for Black and Hispanic/Latino individuals far exceed the rate of cases (National Center for Health Statistics, 2021).

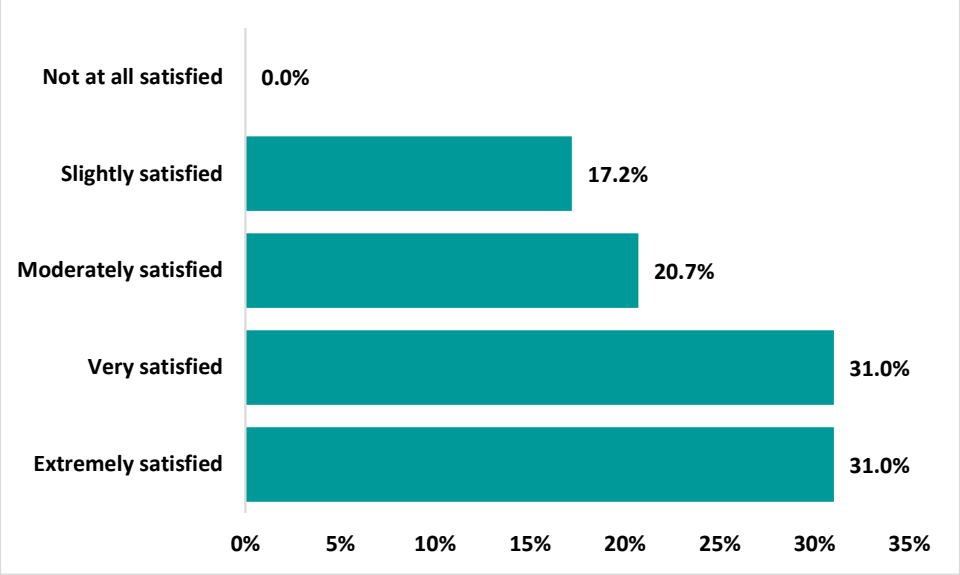
Of health professionals surveyed, 24.1% indicated their mental health was very or extremely negatively impacted by COVID-19, 31% indicated their mental health was moderately negatively impacted, and 44.8% indicate either no negative impacts or only a slight negative impact (Figure 38).

**Figure 38: Impact of COVID-19 on Mental Health of Health Professionals**




With regards to GSMC's response to COVID-19, over half (62%) of health professionals surveyed were very or extremely satisfied with GSMC's engagement with the community to provide COVID education (Figure 39). 1 in 5 (20.7%) were moderately satisfied, and the remainder were slightly satisfied (17.2%).

**Figure 39: Health Professionals Satisfaction with GSMC COVID-19 Education**




## Community wide recommendations

- Distribute the vaccines to vulnerable areas.
- Provide social gatherings for individuals, especially young adults, who feel isolated.

## Health system recommendations

- Coordinate mobile clinics in the community that offer COVID-19 testing and vaccines.
- Partner with community organizations to increase access to mental health services.

## Access and Involvement

Several social obstacles stand in the way of community members achieving better health outcomes. Within focus groups, the most frequently discussed need was centralized and coordinated services. For example, participants discussed the need to have a hub where residents could look for health resources. GSMC could serve as a central hub for connecting community resources. Additionally, those in at-risk groups, such as immigrants, the elderly, minority populations, and low-income individuals encounter several barriers to care. For many of these populations, culture, language, and transportation make it difficult to receive care in a timely manner. For example, participants discussed how many immigrants may be afraid to seek medical care because they fear cultural discrimination. GSMC should take concerted effort to improve cultural competence in all realms of care. Whenever possible, informational and/or educational materials should be translated.

### Community wide recommendations

- Publicize community programs and resources.
- Provide a centralized location where residents can learn about health resources and get connected with community programs.

### Health system recommendations

- Engage with underserved residents, such as low-income individuals, immigrants, and minorities to identify needs and priorities for improved health outreach.
- Provide aid to residents seeking to apply for public health insurance.
- Provide assistance to residents seeking a primary care provider.

## Other Suggestions

### Community wide recommendations

- Develop financial literacy programs to help residents improve their understanding of budgeting and personal financing.
- Provide more opportunities for affordable housing, helping connect residents with information needed to apply for section 8 vouchers.

# Limitations

Data collected for analysis was derived from publicly accessible, governmental sources. Some data sources lacked information on certain towns. Data presented in this report is the most recently available at the time of the creation of this report. As such, some of the relative changes, though classified as increases or decreases, are qualitative valuations relative to state values. Though it would have been preferable to have more recent data with statistical evaluation for significance (p value) and correlation (r value), we were limited to currently available datasets. In previous versions of this CHNA, data had been collected through use of the Massachusetts Community Health Information Profile (MassCHIP). However, at the time of data collection, this resource was unavailable to researchers. Researchers instead relied on datasets provided by the Accreditation Coordinator/Director MassCHIP, Office of the Commissioner, Massachusetts Department of Public Health and guidance provided by the same in order to collect data used to compile this CHNA.

Although the community focus group provides valuable information, serving as important tools for data collection and community engagement, there are some limitations to consider. Focus group data is qualitative in nature and reflects only the views and opinions of a small sample. Focus groups are limited to the views and opinions of the participants and are not all-inclusive of the various perspectives of the larger populations: they do not constitute complete data for the communities in which focus groups were held. Furthermore, all focus groups were conducted within the same community. It would have been advantageous to have conducted focus groups in different communities to engage a larger segment of the population within the hospital service area, as this may have garnered more diversified data unique to other communities.

Though the intent of this project was to capture the views and opinions of a broad range of health and human service providers within the GSMC service area, there were also limitations to the survey distribution methodology. The survey was distributed via email and some providers may have been excluded due to a lack of access to computer-based technology. It is reasonable to assume that some providers had a longer period of time to access and respond to the survey as the survey distribution was ultimately at the control and discretion of the GSMC staff. Furthermore, the survey was distributed to service providers within the GSMC email database. In total, 44 health service providers responded to the Health Provider Survey, this number is likely not to provide a representative sample of service providers in the service area.

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# Appendices

## Appendix A: Key Informant Interview Questions

1. In your opinion, what are the top three health and wellness issues within the community?
2. What are some strategies that could address these issues and how could the hospital partner in these strategies
3. What kinds of health and community services do you feel are missing and would be beneficial in the community?
4. What segments of the population endure the most health inequities or are more likely to have the worse health outcomes?
5. What do you feel are the biggest obstacles to good health in general? (e.g., housing, transportation, employment/workforce, poverty)
6. What do you believe to be the cause of poor health that you see in your community?
7. The COVID-19 pandemic has had profound impacts on community health. What needs do you see in the community that must be met for successful COVID recovery and resiliency?

## Appendix B: Focus Group Questions

1. Is there a sense of community where you live?  Why or why not?
2. What do you envision when you think of a healthy community?
3. In your view, are there specific health concerns within your community?
4. What are some strategies that could address concerns, if any?
5. What groups of people would you consider have less access to services and support in your community?
6. What do you believe to be the biggest challenges to healthy living in your community?
7. What services do you see as being most needed in your community?
8. The COVID-19 pandemic has had a huge impact on community health & wellness. What support do you view as necessary for your community to recover from the impact of the pandemic?
9. In what ways is GSMC serving the community well?
10. In what ways could GSMC serve the community better?

# Appendix C: Health Professionals Survey

Q1 In what county (or counties) does your organization primarily provide services?

Q2 In what city does your organization provide the majority of services?

Q3 What kind of services does your organization primarily provide?

Q4 Name of the organization you work for?

Q5 To the best of your knowledge, from what county (or counties) do the majority of your consumers come from?

Q6 To the best of your knowledge, what are the general social demographics of consumers served by your organization?

Q7 In what city or town(s) do the majority of your consumers reside?

Q8 The COVID-19 Pandemic has been one of the most prevalent health concerns in both 2020 and 2021. What impact has the COVID-19 Pandemic had on the residents you care for?

Q9 What has been the biggest challenge during the COVID-19 pandemic?

**Q10** We would also like to learn about other health concerns (other than COVID-19) impacting the community you serve. What do you perceive as the major health concerns of your consumers?

Q11 In your opinion, what are the major health concerns in the community where you provide services?

Q12 Please rank what you believe to be the biggest obstacles to healthy living among your consumers (1 being the greatest obstacle).

1. Cost of care
2. Shortage of services
3. Distance to services
4. Lack of health-management support
5. Lack of transportation
6. Lack of care coordination
7. Lack of access to a primary care provider
8. Lack of focus on social determinants of Health
9. Lack of access to covid-19 vaccination and information

Q13 Please rank what health and wellness services would most benefit your consumers (1 being of greatest benefit).

1. Access to Primary Care Provider
2. Access to health management education
3. Access to Community Health Worker
4. Care coordination
5. Substance abuse treatment
6. Behavioral health
7. Chronic disease prevention information
8. Obesity prevention education
9. More information on social services available
10. Access to job training programs
11. Expanded availability to local food banks
12. Expanded regional transportation services at reduced cost
13. Expanded access to housing support services

Q14 Given state regulatory mandates governing Good Samaritan Medical Center response to the COVID-19 pandemic, how satisfied are you with how Good Samaritan Medical Center has engaged with the community to offer COVID-19 education?

Q15 Since the start of the COVID-19 (coronavirus) pandemic, how would you rate its impact on your mental health?

Q16 How knowledgeable are you of the community health services Good Samaritan Medical Center provides in your community?

Q17 Overall, how satisfied are you with the way Good Samaritan Medical Center is addressing community health in your community?

Q18 Please provide any suggestions you may have as to how Good Samaritan Medical Center could best address community health issues.

# Appendix D: Note on Data Accuracy

We reported the data as it appears in the resources provided by GSMC. This report is accurate insofar as the data provided was accurate. In one case, data provided from the Health Data Analysis came only from Steward and does not represent the region as a whole.