# **Morton Hospital**



Community Health
Needs Assessment
2021

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For more information about this report and our process, as well as our community health program, please visit our website <a href="https://www.mortonhospital.org/about-us/community-health-outreach">https://www.mortonhospital.org/about-us/community-health-outreach</a> or contact Julie Masci, Sr. Director of Marketing, Community Relations & Support Services, at <a href="Julie.masci@steward.org">Julie.masci@steward.org</a>.

# **Executive Summary**



This report is a comprehensive analysis of the health outcomes and perspectives in the Morton Hospital primary service area, which encompasses Taunton, East Taunton, Raynham, Berkley, Dighton, North Dighton, Middleborough, and Lakeville. Data was gathered by analyzing publicly available information, by reviewing community feedback gathered through focus groups and key informant interviews, by conducting an extensive review of published literature on the health of the population residing in the region and in the Commonwealth of Massachusetts, and by surveying local health professionals. This data-driven methodology allowed Morton Hospital to investigate the resource requirements of the community in order to better streamline resources and inform community-based initiatives. The information contained herein highlights some of the public health needs identified within the community and may be used to develop targeted community health improvement strategies as well 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 atrisk for experiencing health disparities, as well as organizations who work directly with these populations, and develop recommendations for Community Benefits programming that bring about improved health outcomes in high priority populations. For the purpose of this Community Health Needs Assessment (CHNA), high priority populations may be defined as, members of the community that have been historically marginalized due to racism, poverty and/or have had limited access to health care services, as well as members of the community who are at highest risk for developing the various chronic diseases and behaviors outlined in this report. 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, Morton Hospital seeks to respond to the guidance offered by the Office of the Attorney General and the health equity framework.

Social determinants of health, including social, behavioral and environmental influences, have become increasingly prevalent factors in addressing population health. The literature recommends 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 supports are areas for cross-sector collaboration with health services in the community. Multicultural communities face particularly complex issues when accessing and receiving treatment in their daily lives.

Maintaining and strengthening community engagement on health promotion, chronic disease prevention, substance abuse prevention and mental illness among other critical areas for collaboration, is key to the success of population health improvement strategies. From promoting access to affordable health care, creating a stable positive economic environment in the region, ensuring that those most at-risk have access to basic needs for better health outcomes such as stable affordable housing, low-cost nutritional food choices, and a healthy environment, Morton Hospital is well positioned to implement community benefits programs that support a healthy and thriving community. The information and recommendations herein are presented as a starting point for discussions and planning within the hospital and with community-based partners to develop truly comprehensive, actionable and measurable Community Benefits programming.

# Introduction



Morton Hospital, founded in 1889, is part of Steward Health Care System. Nearly a decade ago, Steward Health Care System emerged as a different kind of health care company designed to usher in a new era of wellness. One that provides our patients better, more proactive care at a sustainable cost, our providers unrivaled coordination of care, and our communities greater prosperity and stability.

As the country's largest physician-led, tax paying, integrated health care system, our doctors can be certain that we share their interests and those of their patients. Together we are on a mission to revolutionize the way health care is delivered - creating healthier lives, thriving communities and a better world.

Steward is among the nation's largest and most successful accountable care organizations (ACO), with more than 5,500 providers and 43,000 health care professionals who care for 12.3 million patients a year through a closely integrated network of hospitals, multispecialty medical groups, urgent care centers, skilled nursing facilities and behavioral health centers.

Based in Dallas, Steward currently operates 39 hospitals across Arizona, Arkansas, Florida, Louisiana, Massachusetts, Ohio, Pennsylvania, Texas and Utah.

Morton Hospital is a 144-bed acute care community hospital serving patients and families in southeastern Massachusetts. The hospital is a Joint Commission-accredited healthcare facility, offering state-of-the-art technology and innovative procedures in a local community setting. In addition to a compassionate and skilled team of physicians, nurses and staff who treat patients like family, we provide comprehensive health care services including emergency care, wound care, state-of-the-art imaging services, and a variety of surgical services including vascular surgery, breast surgery, general surgery, orthopedic surgery and podiatric surgery.

Through continuous assessment of unmet community health needs, participation on local committees and task forces, and funding of community health and wellness initiatives, Morton Hospital is able to respond to low-income, under or uninsured populations, providing access to comprehensive care across Southeastern Massachusetts - primarily Taunton, E. Taunton, Raynham, Berkley, Dighton, N. Dighton, Middleboro and Lakeville.

#### **Community Benefits Mission Statement**

The Morton Hospital's community benefits mission and the guiding philosophy of our community initiatives are to establish a data-driven, evidence-based Community Benefits Program that improves the status of our community and provides access to comprehensive, high quality, compassionate, and efficient health services in the community setting. We accomplish this by:

- Assessing and addressing the unmet health needs of our community
- Participating in local action committees/task forces

- Providing accessible, high-quality care and services to everyone in our community, regardless of their ability to pay
- Collaborating with staff, providers and community representatives to deliver meaningful programs that address statewide health priorities and local health issues
- Encouraging the community to engage in healthy lifestyles, be active participants in their health care, and to learn the risks associated with unhealthy behaviors and lifestyle choices

This community benefits philosophy expands upon the mission of Morton Hospital to identify and address community needs; particularly those that affect the health and wellness of residents throughout the greater Taunton area. Morton Hospital aims to provide culturally sensitive, linguistically appropriate, accessible health care services to its community. The Hospital also works to address barriers to health care access and maintains a school-based clinic in the community to provide primary health care services to under-insured or uninsured children. The Hospital fosters an internal environment that encourages involvement in community benefit activities and includes in its mission and goals the development of organization-wide cultural diversity programming, addressing the cultural needs of our community.

### Methods



The 2022 Morton Hospital Community Health Needs Assessment (CHNA) was developed in full compliance with the Commonwealth of Massachusetts Office of Attorney General-The Attorney General's Community Benefits Guidelines for Non-Profit Hospitals released in February 2018. To conduct this needs assessment, Morton Hospital engaged various community organizations and members to ensure that varying perspectives on health and social topics were considered. 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 Morton Hospital 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 (MDPH). 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 and admissions to substance abuse programs, was provided by the MDPH Office of the Commissioner and MassCHIP staff.

### **Key Informant Interviews**

In the Spring of 2021, Morton conducted 5 key informant interviews. Key informants consisted of individuals involved in community partner organizations. Key informants were interviewed virtually through zoom. Questions asked of key informants can be found in Appendix A.

## **Focus Groups**

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

#### **Taunton YMCA**

One group, containing 4 members, was conducted in partnership with the Taunton YMCA. Demographics for this group are as follows:

| Age   |   |      | Race  |   |     | Gender |   |     |
|-------|---|------|-------|---|-----|--------|---|-----|
| 35-44 | 4 | 100% | White | 3 | 75% | Male   | 1 | 25% |
|       |   |      | Black | 1 | 25% | Female | 3 | 75% |

#### **Boys and Girls Club of MetroSouth**

Another group, containing 5 members, was conducted in partnership with the Boys and Girls Club of MetroSouth. Demographics for this group are as follows:

| Age   |   |              | Race      |     |     | Gender |   |     |
|-------|---|--------------|-----------|-----|-----|--------|---|-----|
| 13-15 | 4 | 75%          | Black     | 2   | 40% | Male   | 1 | 25% |
| 25    | 1 | 25           | Dominican | 2   | 40% | Female | 4 | 75% |
|       |   | Multi-racial | 1         | 20% |     |        |   |     |

#### **Our Daily Bread Food and Resource Center**

In partnership with Our Daily Bread Meal and Resource Center, an additional focus group contained 10 homeless adults. These members were not comfortable sharing demographic information.

# **Health Professionals Survey**

A Health Professionals Survey was developed and distributed electronically to all Morton Hospital staff, affiliated medical providers, community partner organizations, and area health and human service organizations. In total, 134 individuals submitted responses to this survey. Organizations represented in this survey included:

- Community Counseling of Bristol County
- Compass Medical
- Cory's Cause, Inc.
- Department of Human Services
- Manet Community Health Center
- Morton Hospital
- Orthopedic Care Physician Network
- Our Daily Bread Food and Resource Center

- > Saperia Orthopedics and Sports Medicine
- SMG Morton Surgical
- Steward Medical Group
- > Taunton Council on Aging
- Taunton Diversity Network
- Taunton Housing Authority
- > Triumph Inc.

# **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 Morton Hospital service area was created to inform this Community Health Needs Assessment.

# **Findings**



#### **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 for anxiety (NCHS, 2020). Health professionals surveyed indicated mental health was the largest obstacle to healthy living among their consumers and many of those in focus groups listed increased counseling and mental health services as the largest community need.

#### **Substance Use Disorder**

Substance abuse remains a major problem for Morton's service area. Massachusetts had one of the higher rates of opioid overdose deaths in the nation, at 32.8 deaths per 100,000 in population (CDC, 2020). Additionally, 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). Opioid-related mortality is especially high in Berkley (6.7%), at more than twice the state rate (3.3%). Key informants and focus group participants noted that substance use disorders are often the result of untreated mental health difficulties and continue to be a major barrier to healthy living.

#### Obesity

Rates of obesity are rising faster than rates seen for any other chronic illness. While the crude prevalence of obesity in Massachusetts is lower than the national average, East Taunton (29.7%) and Taunton (31.4%) have especially high proportions of their community who are obese. Focus group members and key informants

indicated special concern about youth obesity as it can predispose younger residents to several chronic conditions.

#### **Chronic Conditions**

In 2017, approximately 49.8% of mortality in Massachusetts was due to cancer, heart disease, lower respiratory disease, and diabetes. Berkley (51.1%), Lakeville (53.0%) and Dighton (59.0%) showed higher rates of deaths due to chronic conditions than the state level. Cancer and diabetes mortality rates were especially high within Dighton. Health professionals saw diabetes, high blood pressure, and heart health as particularly concerning chronic conditions within their service area.

#### 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 disease. 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). In Bristol County, there were nearly 56,000 cases and just over 1,500 deaths from COVID-19 at the time of data capture (3/1/2021)(New York Times, 2021). The county ranked third worst among other Massachusetts counties in the COVID-19 Pandemic Vulnerability Index with a score of 0.49 out of 1 (NIEHS, 2021). This score puts Bristol County in the 40th to 60th percentile of all counties nationwide.

#### **Homelessness**

Homelessness is a growing issue in Massachusetts. From 2017 to 2018 the rate

of homelessness increased by 14.2% (Jolicouer, 2020). Massachusetts has the highest rate of Hispanic/Latinx homelessness at 107 homeless residents per 10,000 population. However, Massachusetts currently houses 95% of its homeless population, one of the highest rates of any state. Despite this rate, focus group participants emphasized housing as a primary concern in their communities, noting that lack of housing can lead to mental health issues such as stress, anxiety, and depression. Housing instability was noted as being particularly hard for parents, who are both worried about themselves and their children. Participants expressed the need for homeless shelters, transitional housing, places to do laundry, and areas that can allow for hygienic care.

#### **Access to Care**

Addressing access to care is one of the first steps that needs to be taken to address health equity. 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. 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, by far the worst ratio in the state (Robert Wood Johnson Foundation, 2021). When surveyed, health professionals saw lack of access to mental health support, cost of care, and lack of coordination services as the largest barriers to accessing care.

# **Demographics**



Morton's primary service area is within Bristol County, Massachusetts, containing Berkeley, Carver, Dighton, Middleborough, North Dighton, Norton, Raynham, Taunton, East Taunton, and Lakeville. Together, this area is comprised of approximately 565,217 people, 95.5% of whom are United States citizens. The median age in the county is 40.9 years old, and the median income is \$66,205 with the largest share of households having an income in the \$75k - \$100k range. The median income declined by 2.4% between 2017 and 2018 (US Census PEP, 2019).

Together, the residents of Bristol County are predominantly White (Non-Hispanic) (80.5%), followed by Other (Hispanic) (4.17%), Black or African American (Non-Hispanic) (4.11%), White (Hispanic) (3.52%), and two or more races (non-Hispanic) (2.55%). The demographic characteristics and social environments of those within Morton'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

The U.S Census data from 2019 (Table 1) shows that residents of Massachusetts are primarily White (78.1%), followed by Black (7.6%), Asian (6.6%), Other Race (4.2%), Two or More Races (3.3%), American Indian (0.2%), and Native Hawaiian/Pacific Islander (0.0%). All Morton Hospital service area cities/towns had less racial diversity than the state and national levels. With the exceptions of Taunton and East Taunton, each city/town had a population that was more than 90% White.

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

|               | White | Black or<br>African<br>American | American<br>Indian and<br>Alaska<br>Native | Asian | Native<br>Hawaiian<br>and Other<br>Pacific<br>Islander | Some<br>Other<br>Race | Two or<br>More<br>Races |
|---------------|-------|---------------------------------|--|-------|--|-----------------------|-------------------------|
| Taunton       | 79.9% | 8.8%                            | 0.0%                                       | 1.9%  | 0.0%   | 5.4%                  | 4.0%                    |
| East Taunton  | 85.9% | 6.9%                            | 0.0%                                       | 1.6%  | 0.0%   | 1.5%                  | 4.1%                    |
| North Dighton | 90.4% | 3.3%                            | 0.0%                                       | 0.0%  | 0.0%   | 5.3%                  | 1.1%                    |
| Dighton       | 94.0% | 2.9%                            | 0.0%                                       | 0.0%  | 1.3%   | 0.2%                  | 1.6%                    |
| Raynham       | 94.3% | 3.3%                            | 0.0%                                       | 0.8%  | 0.0%   | 0.0%                  | 1.6%                    |
| Lakeville     | 94.5% | 2.0%                            | 0.1%                                       | 0.8%  | 0.0%   | 0.5%                  | 2.1%                    |
| Middleborough | 94.5% | 2.1%                            | 0.0%                                       | 0.0%  | 0.0%   | 1.4%                  | 2.0%                    |
| Berkley       | 96.9% | 0.1%                            | 0.0%                                       | 0.0%  | 0.0%   | 1.4%                  | 1.6%                    |
| 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 Estimates

All service area cities/towns had a lower percentage of Hispanic residents than what was seen at the state and national levels (Figure 2). Taunton had the highest percentage of Hispanic residents (9%), however this is just half of the state average of 18%.

20% 18.0% 18% 16% 14% 11.8% 12% 9.0% 10% 8% 5.3% 6% 2.8% 3.0% 4% 1.3% 0.7% 2% 0.2% 0.1%

East Taunton

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

0%

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

While the Massachusetts public school population was more racially diverse than the adult population measured by the Census, all service area school districts had lower levels of racial diversity compared to the state and country (Table 2). Taunton was the only public school that had less than 80% of its population identifying as White (63%) and had a much larger proportion of students who identified as Black (17%) or Hispanic (13%).

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

|               | White,<br>non-<br>Hispanic | Black/African-<br>American | Hispanic | Asian | Native<br>American | Native<br>Hawaiian,<br>Pacific<br>Islander | Two or<br>more<br>Races(Non-<br>Hispanic) |
|---------------|----------------------------|----------------------------|----------|-------|--------------------|--|---|
| Taunton       | 63.2%                      | 17.2%                      | 12.6%    | 1.4%  | 0.3%               | 0.2%                                       | 5.3%                                      |
| Dighton       | 89.2%                      | 1.4%                       | 4.3%     | 1.4%  | 0.1%               | 0.0%                                       | 3.6%                                      |
| Raynham       | 83.7%                      | 6.6%                       | 2.5%     | 2.3%  | 0.1%               | 0.1%                                       | 4.7%                                      |
| Lakeville     | 92.9%                      | 1.5%                       | 2.4%     | 0.8%  | 0.1%               | 0.1%                                       | 2.4%                                      |
| Middleborough | 87.7%                      | 2.6%                       | 2.9%     | 1.0%  | 0.9%               | 0.0%                                       | 4.9%                                      |
| Berkley       | 93.0%                      | 0.5%                       | 2.1%     | 0.3%  | 0.1%               | 0.1%                                       | 3.8%                                      |
| 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%                                      |

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

### Age

In 2019, Census data indicated that the populations of North Dighton (27.7%), Lakeville (28.1%), East Taunton (28.6%), and Berkley (29.7%) had smaller proportions of the population under the age of 24 than that seen at the state level (30.2%) (Table 3). Middleborough had the largest proportion of the population under the age of 24 at 32.3%. All service area cities/towns had a smaller proportion of the population over the age of 65 compared to the state average (16.1%).

Table 3: Age Distribution by City/Town - 2019

|               | 24 and under | 25 to 44 | 45 to 64 | 65 and older |
|---------------|--------------|----------|----------|--------------|
| Taunton       | 30.3%        | 26.1%    | 28.3%    | 15.1%        |
| East Taunton  | 28.6%        | 24.5%    | 34.0%    | 13.0%        |
| North Dighton | 27.7%        | 21.7%    | 34.7%    | 15.9%        |
| Dighton       | 30.6%        | 25.3%    | 32.5%    | 11.8%        |
| Raynham       | 30.6%        | 30.9%    | 26.7%    | 11.8%        |
| Lakeville     | 28.1%        | 22.7%    | 33.2%    | 15.8%        |
| Middleborough | 32.3%        | 28.6%    | 25.6%    | 13.7%        |
| Berkley       | 29.7%        | 22.3%    | 33.8%    | 14.0%        |
| 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

All cities and towns in the service area reported smaller percentages of foreign-born residents when compared to the state (16.8%) (Figure 2). Taunton (13.1%) and East Taunton (10.7%) had the highest percentage of the population born outside the U.S.

16.8% 18% 16% 13.6% 13.1% 14% 10.7% 12% 10% 7.7% 7.7% 8% 5.1% 4.1% 6% 3.5% 3.2% 4% 2% S

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

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

The citizenship status of foreign-born residents varies (Figure 3). Berkley presents the highest (57.5%) and only percentage rate for 'Not a U.S. Citizen' above the MA average of 46.4%. Meanwhile, 100% of the foreign-born population in Dighton and North Dighton were naturalized citizens.

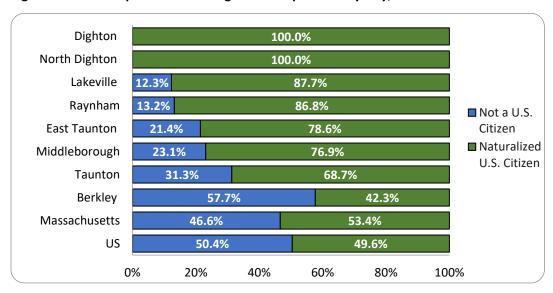


Figure: 3 Citizenship Status of Foreign-Born Population by City/Town

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

Morton Hospital's service area is made up of a larger proportion of those from European origin than what was seen at the state (20.4%) or national (10.8%) levels (Figure 4). The proportion of foreign-born residents from Asia and Latin America were notably smaller in the Morton service area compared to the state and country. While the proportion of foreign-born residents from Asia or Latin America is substantially smaller than state or national levels, rates of African-born residents are higher within the service area.

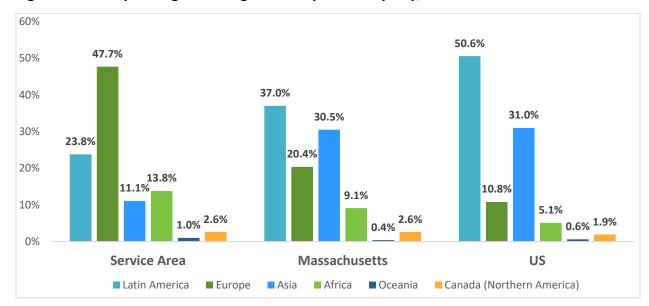


Figure 4: Country of Origin - Foreign Born Population by City/Town - 2019

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

### Language

In 2019, Taunton had the highest percentage (20.9%) of residents who spoke a language other than English of all service area cities/towns (Table 4). This percentage was lower than the state (23.8%) or national (21.6%) levels. Middleborough (15.8%) and Raynham (12.2%) also had high proportions of residents who spoke a language other than English. Taunton (7.4%) had the highest rate of residents who spoke English less than very well. However, this was still below (9.2%) or national level (8.4%).

Table 4: Distribution of Language Characteristics by Town/City –2019

|               | Speaks only English | Speaks a language other than English | Speaks English less than very well |
|---------------|---------------------|--------------------------------------|------------------------------------|
| Taunton       | 79.1%               | 20.9%                                | 7.4%                               |
| East Taunton  | 84.2%               | 15.8%                                | 3.4%                               |
| North Dighton | 92.5%               | 7.5%                                 | 1.8%                               |
| Dighton       | 87.8%               | 12.2%                                | 2.8%                               |
| Raynham       | 92.9%               | 7.1%                                 | 0.0%                               |
| Lakeville     | 95.9%               | 4.1%                                 | 1.2%                               |
| Middleborough | 94.8%               | 5.2%                                 | 2.5%                               |
| Berkley       | 96.3%               | 3.7%                                 | 1.2%                               |
| 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

Unlike the rest of the country and state of Massachusetts, Spanish was not the most common language spoken other than English in Morton's service area (Table 5). Apart from Raynham,

other Indo-European languages were most common. Rates of Asian and Pacific Islander languages were also low in comparison to the state and national averages.

Table 5: Language Distribution (Other Than English) by Town/City – 2019

|               | Spanish | Other Indo-European<br>Languages | Asian and Pacific<br>Islander Languages | Other<br>Languages |
|---------------|---------|----------------------------------|---|--------------------|
| Taunton       | 4.9%    | 14.4%                            | 0.9%                                    | 0.6%               |
| East Taunton  | 2.2%    | 12.4%                            | 0.6%                                    | 0.7%               |
| North Dighton | 0.0%    | 7.5%                             | 0.0%                                    | 0.0%               |
| Dighton       | 0.2%    | 11.3%                            | 0.0%                                    | 0.7%               |
| Raynham       | 1.6%    | 2.4%                             | 0.0%                                    | 3.1%               |
| Lakeville     | 1.3%    | 2.2%                             | 0.3%                                    | 0.2%               |
| Middleborough | 1.0%    | 4.3%                             | 0.0%                                    | 0.0%               |
| Berkley       | 0.0%    | 3.4%                             | 0.0%                                    | 0.2%               |
| 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

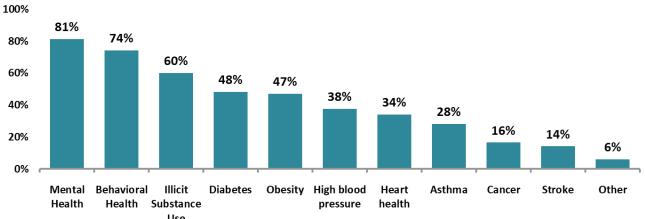


To identify the community's health needs, Morton Hospital surveyed health professionals in their service area, conducted focus groups with vulnerable citizens within the community, and interviewed key informants who serve those in the community. Issues that were most commonly brought by these groups served as the basis for Morton'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 mental health (81%), behavioral health (74%), and illicit substance use (60%). Issues related to obesity (47%) and diabetes (48%) were also moderately endorsed, followed by chronic conditions related to blood pressure (38%) and heart health (34%).

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



### Interviews and Focus Groups

When asked to give the top three health and wellness issues within the community, the most common responses from key informants were mental health and substance misuse. Obesity was also a prevalent cause of concern. More tertiary areas of concern included homelessness, poverty, and food security. Focus group participants echoed these concerns, reporting mental health and substance misuse as their largest concerns in the community, with homelessness and obesity coming up occasionally.

#### Rankings

Based on this feedback, the top 3 prioritized needs for Morton's service area are:



# Mental and Behavioral Health



Substance Use



Obesity

# Profiles of Prioritized Community Health Needs



### Mental Health

In 2018 approximately 15% of Americans suffered from any mental illness (AMI); a smaller portion of this group (24%) also suffered from serious mental illness (SMI) (SAMHSA, 2019). These rates are expected to rise dramatically in the wake of COVID-19. Preliminary surveys, such as the National Health Interview Survey, have found that the rates of symptoms for anxiety and depression have risen between 2019 and 2020 (NCHS, 2020). Specifically in 2019, 6.6% of Americans reported having experienced symptoms of depression, and 8.2% experienced symptoms of anxiety. In the early stages of the COVID-19 pandemic, these rates already saw substantial growth, with 28.2% of Americans reporting symptoms of depression and 24.4% of Americans reporting symptoms for anxiety (NCHS, 2020). These rates are highest in the young adult population between the ages of 18 and 25, but it is worth noting that AMI and SMI occur in all age groups.

#### **Health Professionals Survey**

Among participants in the health professional survey, 81% listed mental health as a major area of concern, while 74% said the same for behavioral health. Health professionals also ranked lack of mental health support as the largest obstacle to healthy living among their constituents.

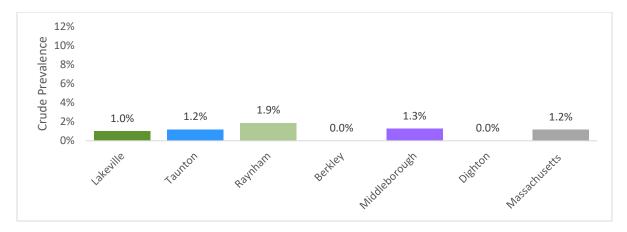
#### **Interviews and Focus groups**

Key informants mentioned that poor mental health, itself, can be an obstacle to living a healthy lifestyle, as many of those dealing with depression or addiction may not engage with services that could help. Poor mental health can also prevent those who are homeless from finding employment and opportunities. Social anxiety was also a common issue of concern, especially for children, as they have been forced to live a more isolated lifestyle because of the pandemic. Accessing care for mental health was a special concern for Taunton due to the closing of the state mental hospital, limiting access to services for many people. Focus group participants also mentioned the need for mental health services and facilities. This was an area of concern for children, as participants saw lifestyle changes brought on by the pandemic and time spent on electronic devices as having a negative impact on their mental health.

#### **Prevalence**

One indicator of poor mental health in a community is the rate of suicidality. In 2017, most communities within Morton's service area reported suicide rates at or below the state level (Figure 6). However, Raynham (1.9%) exhibited slightly higher levels than all surrounding communities and the state. Berkley and Dighton reported no deaths from suicide for 2017.

Figure 6: Suicide Deaths (percentage of all mortality causes)-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, a majority (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 percent received treatment.

#### **Health Professionals Survey**

Among participants in the health professional survey, 60% listed illicit substance use as a major area of concern.

#### **Interviews and Focus groups**

Key informants and focus group participants, alike, mentioned substance use as one of the major health and wellness issues within their community. Many noted the link between lack of mental health support and the propensity to abuse substances. Key informants also mentioned the need for a substance misuse unit within area hospitals as well as programs and services within schools, family housing, and community centers.

#### Alcohol

The most widely misused substance in the United States is alcohol. Alcohol is considered to be the third leading cause of preventable death nationally (United Health Foundation, 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%. 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 age 12 and over and 10% of adults age 18-25 have misused alcohol in the

past year (SAMHSA, 2019). According to the Massachusetts Youth Health Survey, in 2017 56.2% of high school students reported ever using alcohol, while 31.4% reported using alcohol in the past 30 days (MDPH, 2018). These values represent a 5% and 3% decrease from 2015, respectively. However, the number of BSAS clients who identified as veterans increased 12.1% from Fiscal Year 2011 (5,095 clients) to Fiscal Year 2016 (5,713 clients). In Fiscal Year 2016, 4% of the BSAS treatment population identified as veterans, and alcohol was the primary drug reported by the BSAS veteran population (48%) (MDPH, 2017). Historically, rates in Massachusetts have been higher than those seen at the national level, although 2018 data is not yet available for the state. It is important to note the rates have been declining for all age groups since 2002 (SAMHSA, 2019).

#### **Health Professionals Survey**

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

#### **Interviews and Focus groups**

Key informants and focus group participants noted that alcohol addiction, like other substance use issues, often comes as the result of poor mental health, with addiction often manifesting through poor coping mechanisms to high stress.

#### **Prevalence**

Hospitalization rates for alcohol-related disorders, while relatively stable, have exhibited a slight increase following 2017 (Figure 7).

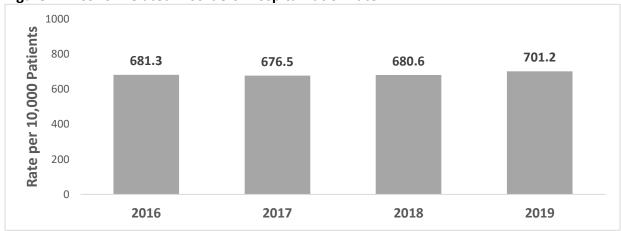


Figure 7: Alcohol-Related Disorders: Hospitalization rate

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

#### **Opioids**

Opioids were involved in 46,802 overdose deaths across the U.S. in 2018; this is nearly 70% of all drug overdose deaths in 2018 (CDC, 2020). Massachusetts had one of the higher rates of opioid overdose deaths in the nation, at 32.8 deaths per 100,000 population. Nationally, more than two-thirds of opioid-related overdose deaths involved synthetic opioids, such as fentanyl or tramadol. A Massachusetts Centers for Disease Control and Prevention (CDC) collaborative

epidemiologic investigation identified that the proportion of opioid overdose deaths in the state involving fentanyl increased from 32% during 2013–2014 to 74% in the first half of 2016 (MDPH, 2017).

After peaking in 2017, the number of opioid-related deaths in Massachusetts has remained relatively stable through 2019, decreasing by just about 1% between 2017 (1,993) and 2019 (1,967) (MDPH, 2020). There was a greater decrease in the number of opioid-related EMS incidents during a similar period. Between 2018 and 2019 the number of opioid-related EMS incidents decreased by nearly 10%, from 24,492 to 22,137 (MDPH, 2020).

#### **Health Professionals Survey**

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

#### **Interviews and Focus groups**

While key informants and focus group members did not mention opioids in particular, with the prevalence of the opioid epidemic, it is highly likely opioids were one of the main substances that came to mind when they mentioned the issue of "substance misuse".

#### **Prevalence**

Opioid related deaths reached their peak in 2017, with a proportion of 487.2 per 10,000 patients admitted to a Massachusetts' hospital (Figure 8). Since 2017, rates have remained relatively stable and on par with 2016 rates.

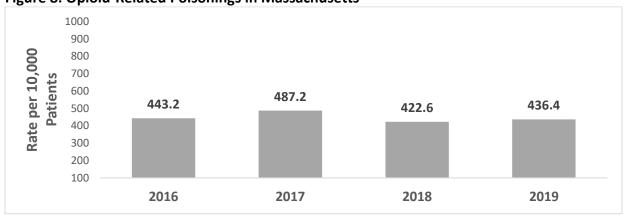


Figure 8: Opioid-Related Poisonings in Massachusetts

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

In 2017, Berkley had the highest rate of deaths due to opioids (6.7%), followed by Taunton (5.0%), and Lakeville (4.0%). These communities also had higher proportions of opioid deaths than the state level (3.3%). Berkley's rate is especially concerning, as it is more than double the state level. However, Dighton's (1.6%) opioid related death rate is much lower, at approximately half the state level.

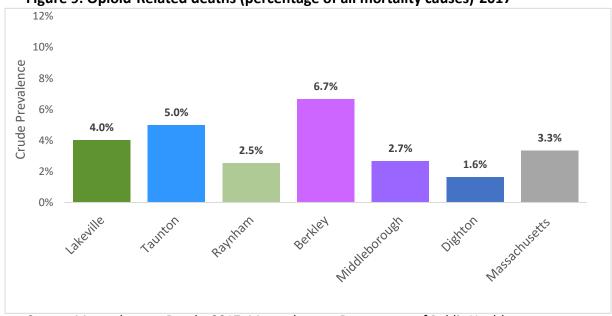


Figure 9: Opioid-Related deaths (percentage of all mortality causes)-2017

Source: Massachusetts Deaths 2017, Massachusetts Department of Public Health

#### 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 (C.NCCDPHP, 2021).

#### **Health Professionals Survey**

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

#### **Interviews and Focus groups**

Key informants mentioned smoking among one of the poor coping mechanisms they have seen residents engage in due to the high levels of stress they are experiencing.

#### **Prevalence**

The proportion of smokers in each service area community is higher than the state level (13.4%) (Figure 10). Only Lakeville (15.6%) and Raynham (15.7%) had lower proportions of smokers than the national level (16.1%). Taunton (21.7%) and East Taunton (20.7%) had particularly high proportions of current smokers.

25% 21.7% 20.7% 20% 17.5% 17.6% 16.8% 16.4% 16.1% 15.6% 15.7% Prevalence 15% 13.4% 10% 5% Taunton Massachusetts 0% North Dighton Dighton Last Taunton Ś

Figure 10: Current smoking among adults aged >=18 years

Source: Behavioral Risk Factor Surveillance System (BRFSS) - (2018)

# Other Drug-related Poisonings **Prevalence**

Other drug-related poisonings follow a similar trend as opioid poisonings, peaking in 2017 at 353.8 per 10,000 patients, bur returning to previous levels and remaining stable in 2018 and 2019 (Figure 11).

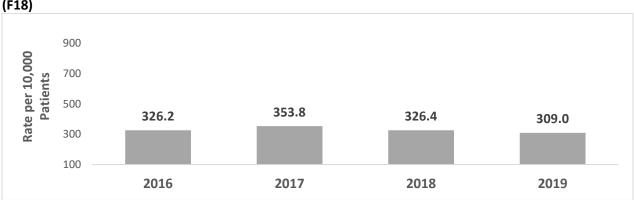


Figure 11: Other Drug-related Poisonings: Hospitalizations ICD-10-CM (F12), (F13), (F14), (F15), (F16), (F18)

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

# Obesity

Obesity is considered a key risk factor for many other chronic illnesses, including cardiovascular disease, diabetes mellitus, and certain cancers. Rates of obesity are rising faster than rates seen for any other chronic illness. In 2019, the Massachusetts rate for adults with obesity was 25%, nearly 7% less than the rate seen nationally (UHF, 2019). Independent of all other demographic factors, lower socio-economic status is strongly correlated with higher rates of obesity. In Bristol County, the obesity rate was 28.7% in 2017. And, while 26% of all adults in Bristol County were predicted to be physically inactive, Bristol County ranks well in all measures of healthy food access<sup>30</sup>. According to the Robert Wood Johnson Foundation, only 5% of the county's residents have limited access to healthy foods (Robert Wood Johnson Foundation, 2020).

#### **Health Professionals Survey**

Among participants in the health professional survey, 47% listed diabetes as a major area of concern.

#### **Interviews and Focus groups**

Many focus group members brought up concerns about access to healthy and nutritious foods, especially for children, as youth obesity can lead to chronic disease. One key informant mentioned youth obesity and poor nutrition as one of the largest wellness issues within the community. As one focus group participant said, "Food chains are too close to school, more nutritious food options are needed." Additionally, the high cost of healthy foods was mentioned as a barrier to many citizens living healthy lives. Another key informant noted the need for families to get in involved in exercise-based activities and that there should also be more knowledge of parks and green spaces available, as much of it goes unused. Many also noted that COVID has played a role in highlighting the need to work on strategies to address obesity.

#### **Prevalence**

In 2018, the crude prevalence for obesity in Massachusetts was 25.7%, which was 5.2% below the median national prevalence (Figure 12). While every city/town within Morton's service area aside from Taunton were below the national rate, they were all above the Massachusetts' level. Those in East Taunton (29.7%) and Taunton (31.4%) have especially high proportions of their community who are obese.

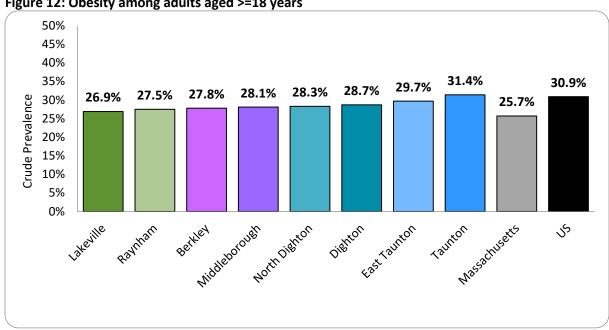


Figure 12: Obesity among adults aged >=18 years

Source: Behavioral Risk Factor Surveillance System (BRFSS) - (2018)

Taunton (27.4%) and East Taunton (24.1%) also had the largest prevalence of adults reporting no leisure time focused on physical activity, with Berkley having the lowest proportion of adults indicating they have no leisure time (19.7%) (Figure 13).

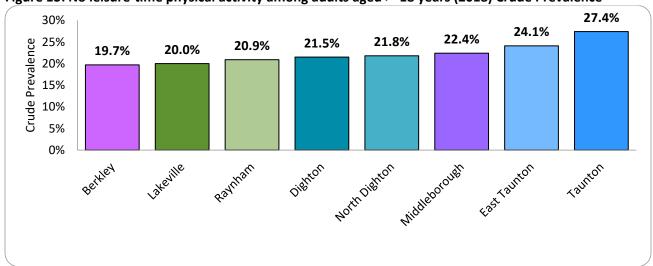


Figure 13: No leisure-time physical activity among adults aged >=18 years (2018) Crude Prevalence

Source: Behavioral Risk Factor Surveillance System (BRFSS) - (2018)

# Profiles of Additional Community Health Needs



### **Chronic Conditions**

According to the Massachusetts Department of Public Health (MDPH), prevention and treatment of chronic illnesses are public health priorities (MDPH, 2017). 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 Wonder, 2021). The CDC estimates that chronic illness, including heart disease, cancer, and diabetes, combined with mental illness, accounts for 90% of the nations \$3.8 trillion in annual healthcare expenditures. 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 preventable if the underlying lifestyle behaviors behind so many of them are addressed.

One year before the onset of the COVID-19 pandemic (2019), there were approximately 2.8 million deaths in the United States (869.7 per 100,000 population) overall (CDC Wonder, 2021). Of these deaths, 58,630 occurred in Massachusetts (at a rate of 850.6 deaths per 100,000 population. Mortality from four of the top causes declined in 2019; these included cancer, unintentional injuries, chronic respiratory diseases, and heart disease (Kochanek, Xu, & Arias, 2019). The cumulative decrease in mortality from these causes led to a modest increase in life expectancy to 78.8 years.

#### **Health Professionals Survey**

Chronic diseases represent a great area of concern among Morton Hospital's health professionals. When asked what they perceive as major health concerns among their constituents (other than COVID-19), diabetes (48.2%), high blood pressure (37.7%), heart health (34.1%), asthma (28.2%), cancer (16.5%), and stroke (14.1%) emerged as major areas of concern.

#### **Interviews and Focus Groups**

While focus group participants or key personnel did not mention chronic conditions, as a whole, many spoke to the unhealthy living conditions that could put one at an increased risk for or exacerbate chronic conditions, such as homelessness, unhygienic living conditions, access to multicultural healthcare, and access to green spaces.

#### **Prevalence**

In 2017, approximately 49.8% of mortality in Massachusetts was due to cancer, heart disease, lower respiratory disease, and diabetes (Figure 14). While Raynham (45.9%), Middleborough (46.9%), and Taunton (47.3%) had lower mortality rates due to these chronic conditions than the state of Massachusetts, Berkley (51.1%), Lakeville (53.0%) and Dighton (59.0%) showed higher rates. Dighton especially had a large mortality rate due to chronic conditions, with cancer and diabetes being especially high compared to other city/towns within Morton's service area.

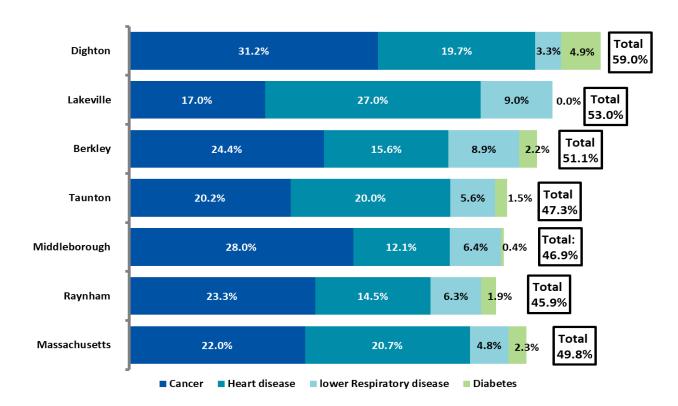


Figure 14: Chronic Disease Mortality 2017 (percentage of all causes)

Source: Massachusetts Deaths 2017, Massachusetts Department of Public Health

#### Cancer

Since 2006, cancer has been the leading cause of death in Massachusetts over heart disease (CDC Wonder, 2021). Nationally, the rate of cancer diagnosis has risen each year since 2016; in 2019 the national rate was 7.3% while the Massachusetts rate was 7.5% (UHF, 2019). Data from the American Cancer Society indicated that there would be an estimated 1.89 million new cases of cancer and 608,570 deaths from cancer in the United States in 2020 (ACS, 2019). In Massachusetts, there were 42,750 estimated diagnoses and 12,540 estimated deaths (ACS, 2020).

The incidence rate for all types of cancer in Massachusetts was 456.9 per 100,000 population with men having a higher cancer incidence rate than women (470.8 versus 439.5 per 100,000 population) (ACS, 2019). The mortality rate for males was also higher than that seen for females (183.3 vs. 132.5 per 100,000 population) (ACS, 2019). In Bristol County, the rate of new cancer cases (of any type) was 442.2 per 100,000 population (CDC, 2020). The cancer death rate in the county was 161.9 per 100,000 population. 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 (ACS, 2020)

#### **Health Professionals Survey**

16.4% of respondents identified cancer as a pressing health concern within the community.

#### **Interviews and Focus Groups**

Cancer was not mentioned by participants, however several of the socioeconomic factors that contribute to a prevalence of cancer were identified by respondents. Respondents highlighted a lack of access to healthy foods, limited access to physical activity, and tobacco usage as dominant community health concerns. These all represent leading risk factors in cancer or latestage cancer diagnoses.

#### **Prevalence**

In 2017, only Lakeville (17.0%) and Taunton (20.2%) had cancer mortality rates at or below the state level (22.0%) (Figure 15). Dighton (31.2%) had the highest proportion of cancer mortality rates. Additionally, Middleborough (28.0%), Berkley (24.4%) and Raynham (23.3%) all showed cancer mortality rates higher than the state level.

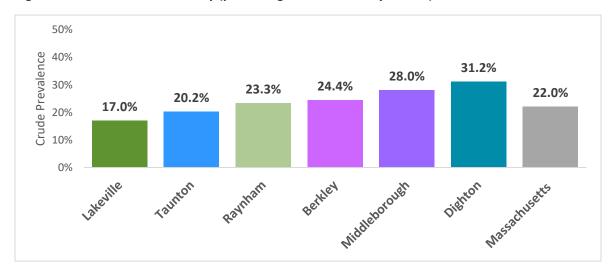


Figure 15: Total Cancer Mortality (percentage of all mortality causes) -- 2017

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 (Table 6).

Table 6: Total Cancer Counts by Diagnosis (observed and expected case counts)

|               | Breast | Lung | Cervix | Colorectal | Melanoma | Oral |
|---------------|--------|------|--------|------------|----------|------|
| Taunton       | 7      | 26   | 0      | 8          | 1        | 4    |
| East Taunton  | 0      | 5    | 0      | 2          | 0        | 0    |
| Dighton       | 0      | 3    | 0      | 0          | 0        | 0    |
| Raynham       | 2      | 12   | 0      | 5          | 0        | 0    |
| Lakeville     | 0      | 1    | 0      | 2          | 0        | 1    |
| Middleborough | 6      | 21   | 0      | 7          | 4        | 2    |
| Berkley       | 1      | 1    | 0      | 1          | 0        | 0    |

Source: MDPH (small numbers)

#### Cardiovascular disease

Cardiovascular disease is a broad term used to refer to congestive heart failure, myocardial infarction, and stroke. After cancer, heart disease is the leading cause of death in Massachusetts. 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, 2021). Research also suggests that heart disease will become an even more pressing concern in the coming years because of COVID-19. This is due to the impact that the virus has on the cardiovascular system and lifestyle behaviors during and following the pandemic (AHA, 2021). 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) individuals compared to White (Non-Hispanic) individuals was also observed in Massachusetts. However, the difference in mortality rate between these two races in Massachusetts is not significant. In Bristol County, there were 191.6 deaths from cardiovascular disease per 100,000 population (CDC, 2021).

#### **Health Professionals Survey**

34.1% of health professionals cited heart health, and another 37.7% cited high blood pressure as major health concerns within their communities.

#### **Interviews and Focus Groups**

Focus groups noted that less access to healthy meals is leading to a host of health concerns. Among these concerns is earlier onset of high blood pressure and cardiac problems, with many dealing with these issues in their early 40's. Additionally, one key informant interviewed mentioned that many of those with heart issues can't afford the necessary prescriptions.

#### **Prevalence**

In 2017, the morality rate due to heart disease was at 20.7% in the state of Massachusetts (Figure 16). All towns/cities in the service area reported lower mortality rates than the state aside from Lakeville (27.0%).

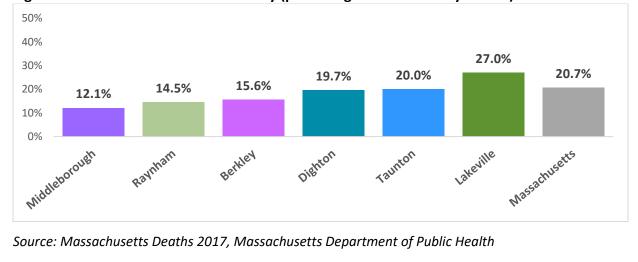


Figure 16: Total Heart Disease mortality (percentage of all mortality causes)-2017

However, rates of coronary heart disease were higher in Taunton (7.1%) and Middleborough (6.4%) compared to all other towns/cities in the service area, whereas Berkley has a lower rate (4.7%) (Figure 17).

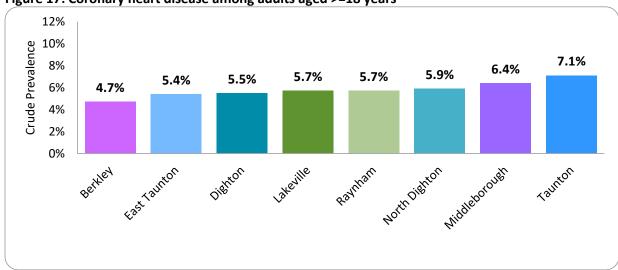


Figure 17: Coronary heart disease among adults aged >=18 years

Source: Behavioral Risk Factor Surveillance System (BRFSS) - (2018)

#### **Respiratory Disease**

Chronic lower respiratory diseases are diseases of the airways and other structures of the lung. Chronic lower respiratory diseases include asthma, chronic obstructive pulmonary disease (COPD), emphysema, and bronchitis. Risk factors for such 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**

28% of health care professionals cited asthma as major health concern of their community.

#### **Interviews and Focus Groups**

Participants in focus groups mentioned a healthy community having clean air. Some members mentioned the importance of having more green space. Access to more recreational areas also encourage higher levels of activity which can improve respiratory health.

#### **Prevalence**

All cities/towns in the service area of Morton Hospital aside from Dighton (3.3%) have higher mortality rates due to lower respiratory infection than the state level (4.8%) (Figure 18). This is especially high among Berkley (8.9%) and Lakeville (9.0%).

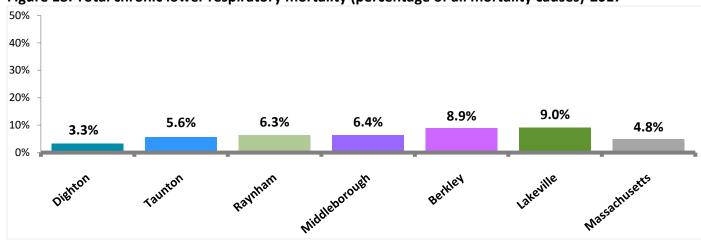


Figure 18: Total chronic lower respiratory mortality (percentage of all mortality causes)-2017

Source: Massachusetts Deaths 2017, Massachusetts Department of Public Health

#### Diabetes

Diabetes was the seventh leading cause of death in the United States in 2018, accounting for more than 79,000 deaths annually. In 2016, 14.0 percent of Americans were estimated to have diabetes, 69.3 percent of which were diagnosed, and another 30.7 percent undiagnosed (UHF, 2019). According to recent data from the CDC, around 8.4% of Massachusetts residents had diabetes in 2019, 2.4% less than the national rate (UHF, 2019). In Massachusetts, Black non-Hispanics (13.1%) and Hispanics (10.6%) had higher rates of diabetes compared to White non-Hispanics (7.8%), and similar trends were seen at the national level. In Bristol County, the CDC estimates that 9.2% of the population has diabetes (CDC, 2021). 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%) have more than two times the prevalence of diabetes as compared to those with an annual household income of more than \$75,000 (5.8%) (UHF, 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.

#### **Health Professionals Survey**

48.2% of participants in the health professional survey listed diabetes as a major area of concern.

#### **Interviews and Focus Groups**

While not a significant topic of discussion in focus groups or interviews, diabetes was occasionally discussed. One interview participant specifically discussed the need for diabetes prevention services to assist patients in identifying warning signs. Participants noted that many adults have diabetes and other conditions related to weight. Lack of community involvement and social isolation brought on by the pandemic were brought up as potential factors that exacerbated this issue.

#### **Prevalence**

All cities/towns in the service area of Morton Hospital aside from Dighton (4.9%) have mortality rates due to diabetes below the level for the State of Massachusetts (2.3%) (Figure 19). Dighton's rate is especially concerning as it is over twice the Massachusetts rate.

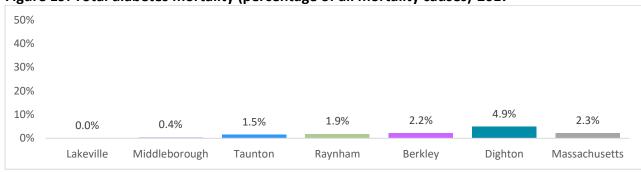


Figure 19: Total diabetes mortality (percentage of all mortality causes)-2017

Source: Massachusetts Deaths 2017, Massachusetts Department of Public Health

However, when it comes to prevalence of diabetes, Taunton (9.7%) and Middleborough (8.5%) have the highest rates, while Berkley (6.8%) has the lowest (Figure 20).

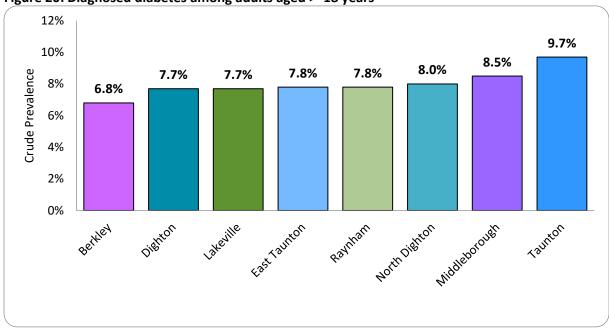


Figure 20: Diagnosed diabetes among adults aged >=18 years

Source: Behavioral Risk Factor Surveillance System (BRFSS) - (2018)

### 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 disease. 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). COVID-19 further exacerbated gaps in the healthcare system, as the chronic conditions that increase mortality from COVID-19 were more prevalent among those who identify as Black or Hispanic.

In Bristol County, there were nearly 56,000 cases and just over 1,500 deaths from COVID-19 at the time of data capture (3/1/2021) (The New York Times, 2020). The county ranked third worst among other Massachusetts counties in the COVID-19 Pandemic Vulnerability Index with a score of 0.49 out of 1 (NIEHS, 2021). This score puts Bristol County in the 40th to 60th percentile of all counties nationwide.

#### **Health Professionals Survey**

When asked what impact the COVID-19 pandemic had on their consumers, most health professionals within Morton's service area noted the stress brought on by the pandemic with increased stress (83%), increased financial distress (69%), and decreased mental health (68%)

being the most endorsed responses (Figure 20). However, a large proportion of health professionals also noted the physical, financial, and dietary toll the pandemic has brought on.

100% 83% 80% 69% 68% 59% 58% 60% 47% 43% 40% 20% 12.6% 0% Increased Increased Decreased Increased Decreased Decreased Decreased Other financial stress mental Unemployment physical housing access distress health health stability to food

Figure 20: Health Professional's perceived impact of COVID-19 on consumers

#### **Interviews and Focus groups**

Focus group participants mentioned COVID-19 as exacerbating several issues that were already prevalent in the community. Those dealing with mental health, inactivity, and isolation were placed at greater risk once the pandemic started. Additionally, the pandemic led to greater layoffs and increased unemployment, and increased property rates, which created greater difficulty attaining resources. Other members noted a lack of hygiene surrounding COVID, with community members not wearing masks or taking proper precautions to protect themselves or others. For some community members affording masks or accessing free ones was difficult. Key informants also mentioned that for the most vulnerable, being hygienic was very difficult during the pandemic, with several homeless individuals not being able to wash hands properly, find clean masks, or shower. COVID created several economic hardships for residents with many fearing evictions or turned off services in their home. COVID-19 also illuminated the need for greater dissemination of health information for all, as many individuals were unaware of policies or best practices.

# 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 healthbased 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). 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 lowincome communities and communities of color may face challenges in getting to school, differential public-school resources, inequitable discipline practices, resources, and afterschool programming. The median tuition costs in Bristol County, MA are \$45,910 for private four-year colleges, and \$13,166 and \$27,880 respectively, for public four-year colleges for in-state students and out-of-state students (Data USA, 2019). In 2017, universities in Bristol County, MA awarded 5,475 degrees. The student population of Bristol County, MA is skewed towards women, with 9,014 male students and 11,823 female students. Most students graduating from Universities in Bristol County, MA are White (3,835 and 73.6%), followed by Hispanic or Latino (428 and 8.21%), Black or African American (397 and 7.62%), and Unknown (203 and 3.9%).

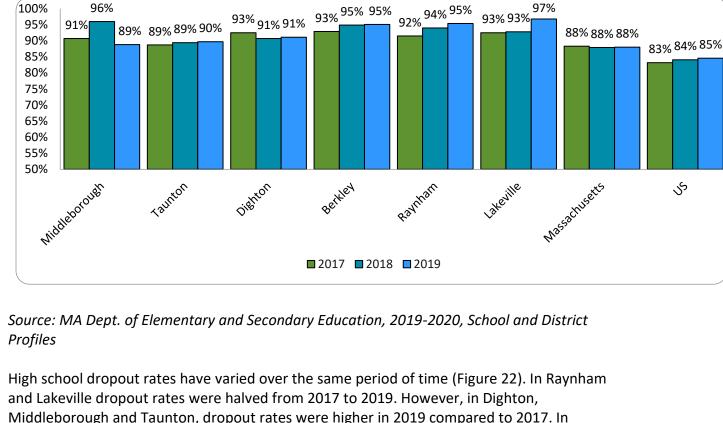
In Bristol County, approximately 88% of 9th graders graduate from high school in four years, this is equal to the state average (Robert Wood Johnson Foundation, 2020). CDC data indicates that 15.1% of the adult population in Bristol County has less than a high school education, and 72% has less than a college education (CDC, 2021). These values are high compared to other Massachusetts counties.

#### **Interviews and Focus groups**

Key informants mentioned that lack of education was a leading cause of poor health. While not completing high school was a concern, this lack of education also encompassed lack of understanding when it came to health. High quality education was a major priority for many focus group participants, with many calling for greater support of both students and teachers.

#### **Prevalence**

High school graduation rates have improved or remained fairly constant in all service areas over time, with the exceptions of Middleborough and Dighton (Figure 21). However, overall, high school graduation rates have exceeded the state and national averages each year from 2017 through 2019.



92% 94% 95%

93% 93%

Figure 21: High School Graduation Rates 2017 to 2019 by City/Town

96%

91%

100%

95%

Middleborough and Taunton, dropout rates were higher in 2019 compared to 2017. In Middleborough and Taunton, dropout rates were higher in 2019 than the rates seen at the state level.

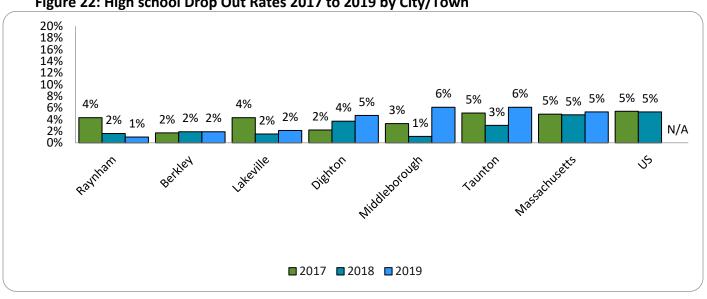


Figure 22: High school Drop Out Rates 2017 to 2019 by City/Town

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 Taunton (15.4%) and East Taunton (19.0%) was larger than both the state (9.3%) and national (12.0%) levels (Table 7). All service areas/towns had a smaller proportion of those with a graduate or professional degree compared to the State. Taunton (6.8%) and East Taunton (7.3%) were also the areas that had the lowest proportion of individuals with a graduate or professional degree. Overall, the population served by Morton Hospital skews towards lower levels of educational attainment.

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

|               | Less than<br>high school | High school<br>graduate or<br>equivalent | Some college or<br>Associate's<br>Degree | Bachelor's<br>Degree | Graduate or<br>Professional<br>Degree |
|---------------|--------------------------|--|--|----------------------|---------------------------------------|
| Taunton       | 15.4%                    | 32.4%                                    | 29.6%                                    | 15.8%                | 6.8%                                  |
| East Taunton  | 19.0%                    | 23.4%                                    | 27.8%                                    | 22.5%                | 7.3%                                  |
| North Dighton | 6.9%                     | 28.4%                                    | 36.8%                                    | 11.1%                | 16.8%                                 |
| Dighton       | 3.6%                     | 39.0%                                    | 25.8%                                    | 17.4%                | 14.1%                                 |
| Raynham       | 4.5%                     | 26.4%                                    | 27.7%                                    | 22.7%                | 18.7%                                 |
| Lakeville     | 4.7%                     | 26.8%                                    | 29.4%                                    | 24.2%                | 14.8%                                 |
| Middleborough | 6.7%                     | 38.1%                                    | 30.1%                                    | 17.3%                | 7.9%                                  |
| Berkley       | 4.9%                     | 29.7%                                    | 29.6%                                    | 24.1%                | 11.6%                                 |
| 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 through the stress and working conditions they create. 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 Department of Unemployment Assistance, 2021). From 2015 to 2019, the percentage of Massachusetts residents who were unemployed was lower than the national average of 3.7% (MA Department of Unemployment Assistance, 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. 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**

Focus group participants mentioned that job training was one of the biggest needs in the community, especially for youth. They also noted that lack of transportation can also make it difficult to get to jobs, even if they are available. Key informants mentioned that employment is an especially high concern after many individuals lost their jobs as a result of the pandemic. Additionally, many disadvantaged individuals have a difficult time being considered for a job due to poor hygiene or resources.

#### **Prevalence**

In 2019, the state unemployment rate was 4.8%. Only Taunton (6.5%) and East Taunton (5.9%) had rates higher than the state average (4.8%) (Figure 23). These areas also had unemployment rates higher than the national average. However, Berkley (2.0%) and North Dighton (2.4%) had unemployment rates that were under half of the state average.

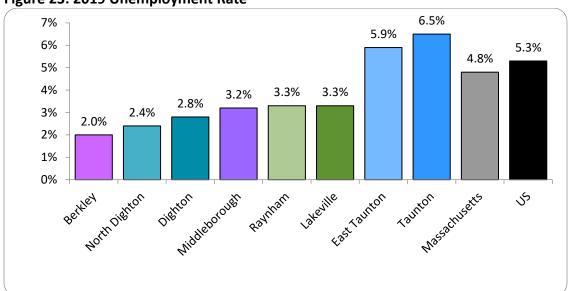


Figure 23: 2019 Unemployment Rate

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; as of 2020 this rate has dropped to 11.3%. Massachusetts ranks among the work 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. 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. 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 less than one in 10 (6.5%) White non-Hispanic and one in ten (10.6%) Asian non-Hispanic residents with incomes below the federal poverty level.

#### **Interviews and Focus groups**

Key informants listed poverty as the single largest obstacle to good health, as it is the underlying cause for insufficient housing, lack of transportation, lack of benefit-eligible employment, and poor nutrition. Additionally, many essential services such as childcare are largely unaffordable to impoverished individuals, creating another gap in their ability to find employment or access resources. Those dealing with low-incomes or poverty are often unable to afford the necessary medications to address their health needs.

#### **Prevalence**

Three service area communities, Taunton, Middleborough, and North Dighton had lower median household incomes than the Massachusetts average of about \$81,000 per year (Figure 24). Three communities, Dighton, Berkley, and Lakeville had median household incomes of more than \$100,000 which is about 25% higher than the state average. However, every community was at or above the national average.

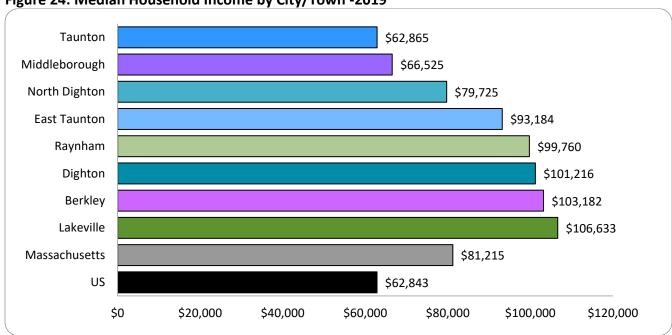


Figure 24: Median Household Income by City/Town -2019

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

The proportion of families below the poverty level varied substantially (Figure 25). Both Dighton and North Dighton reported no families below poverty level. Only two communities, Taunton (10.8%) and Middleborough (18.2%) had rates higher than the state (7%) or national level (10%) of 7%. Middleborough was substantially higher at approximately 2.5 times the state average.

20% 18.2% 18% 16% 14% 10.8% 12% 10% 10% 7.0% 6.9% 8% 6% 3.3% 2.3% 4% 2.2% 2% 0.0% 0.0% 0% unton Massachusetts Ś

Figure 25: Families Below Poverty Level (percentage) by City/Town 2019

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

Individual poverty rates followed a trend similar to that seen when examining families below poverty level (Figure 26). Communities such as Dighton (0.5%) or Berkey (2.5%) had rates that were a fraction of the state average (10.8%) while Taunton (14.2%) and Middleborough (18.3%) exceeded this rate.

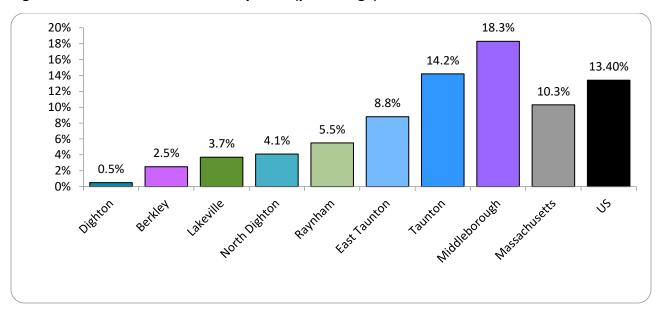


Figure 26: Individuals below Poverty Level (percentage) - 2019

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

Compared to Massachusetts, Bristol County has a larger proportion of all types of households below the poverty level (Figure 27). Households headed by women are of special concern, as they are most vulnerable to falling below the poverty level. Over a quarter (25.8%) of households headed by women in Bristol County are below the poverty line, and nearly half (47.9%) of households headed by women with young children are also below this line.

47.9% Households headed by women with young children 34.5% 38.3% Households headed by women with children 28.5% 25.8% Households headed by women 19.7% Bristol County ■ Massachusetts 14.0% Families with children under 18 9.5% 8.6% All families 6.0% 20% 0% 40% 60%

Figure 27: Households Below the Poverty Line (percentage) - 2019

Source: Talk Poverty, "Massachusetts 2020 Report," 2020

### **Food Insecurity**

For those dealing with low household incomes or below the poverty level, access to healthy food is a major area of concern. Bristol County ranks well in measures of healthy food access. According to the Robert Wood Johnson Foundation, only 5% of the county's residents have limited access to healthy foods (Robert Wood Johnson Foundation, 2021). Additionally, RWJF calculated a food environment index, on which Bristol County scored an 8.4 out of 10 (higher value is better); the Massachusetts value for this index was 9.3.

#### **Interviews and Focus groups**

Focus group members mentioned that access to healthy foods along with education about nutrition is needed in their communities. Many advocated for food distribution services and food security initiatives in partnership with Morton and community-based organizations. Key informants also noted food security as a major need in the community. Many mentioned organizations and churches who have aided through food pantries to address this need. Some mentioned that afterschool meal programs for children had the unintended consequence of children sharing these meals with family members who had difficulty accessing food, illustrating the need for food security for all.

#### **Prevalence**

The counties that make up the Morton Hospital service area have had lower rates of food insecurity compared to the national averages from 2017 to 2019 (Figure 28). Compared to the state average, Bristol County experienced higher rates of food insecurity while rates in Plymouth County were lower than average. As a whole, rates of food insecurity have declined from 2017 to 2019.

20% 12.9% 12.50% 11.5% 15% 10.3% 10.1% 9.9% 9.6% 9.0% 8.9% 8.5% 10% 8.1% 7.0% 5% 0% **Bristol County Plymouth County** Massachusetts US **2016 2017 2018** 

**Figure 28: Food Insecurity Rates** 

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

In 2019, 11.7% of all households in Massachusetts participated in SNAP (Figure 29). East Taunton, Middleborough and Taunton exceeded this rate with the highest rate being seen in Taunton at 20.3%. North Dighton, Dighton and Berkley had rates less than half of the state average.

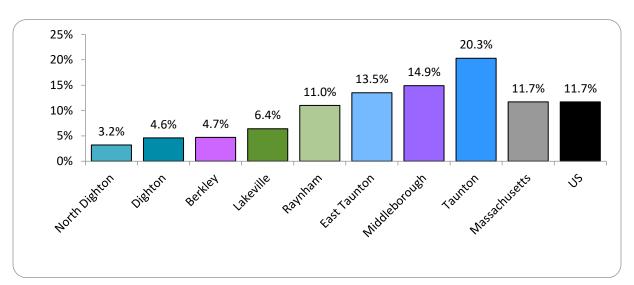


Figure 29: Households Participating in SNAP

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

# **Housing and Transportation**



#### Housing costs

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. 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 The second set of housing crises is linked to the economic slowdown associated with COVID-19. In the summer of 2020, more than 654,000 Massachusetts residents either missed their July rent or mortgage payment or feared they wouldn't pay August, according to the U.S. Census Bureau (Healy & Rios, 2020).

#### **Prevalence**

Over the three-year period between 2017 and 2019, housing prices have risen in nearly all service area communities (Table 8). The cost of owning a home in Massachusetts is substantially more expensive than the national level, with median prices being over \$150,000 more than the national median price. However, the median housing price for each service area community is below the state level, with Taunton offering the cheapest housing (\$271,800).

**Table 8: Median Housing Price (Owner Occupied Units)** 

|               | 2017      | 2018      | 2019      |
|---------------|-----------|-----------|-----------|
| Taunton       | \$246,500 | \$260,700 | \$271,800 |
| East Taunton  | \$263,900 | \$273,100 | \$286,600 |
| North Dighton | \$315,300 | \$339,900 | \$343,400 |
| Dighton       | \$336,300 | \$352,500 | \$363,500 |
| Raynham       | \$338,800 | \$338,900 | \$348,900 |
| Lakeville     | \$356,200 | \$367,700 | \$371,000 |
| Middleborough | \$280,000 | \$291,900 | \$294,800 |
| Berkley       | \$343,700 | \$357,300 | \$347,500 |
| Massachusetts | \$352,600 | \$366,800 | \$381,600 |
| US            | \$193,500 | \$204,900 | \$217,500 |

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

Like housing, the median gross rent is also higher in the state of Massachusetts compared to the national level (Figure 29). Raynham (\$1,750) and Lakeville (\$1,540) have especially expensive levels of

rent. All other service area communities are below the state level, with East Taunton (\$858) and North Dighton (\$639) offering particularly lower costs of rent

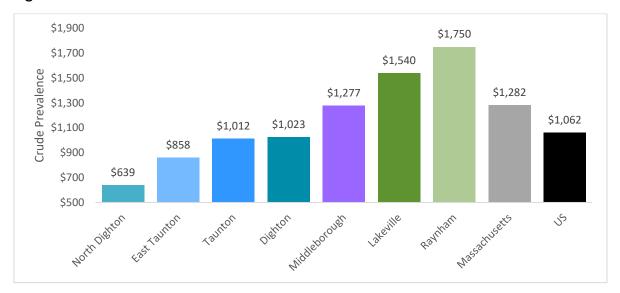


Figure 29: Median Gross Rent

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

### Homelessness

Homelessness is a growing issue in Massachusetts. From 2017 to 2018 the rate of homelessness increased by 14.2% (Jolicoeur, 2020). It is estimated that during this time, more than 3,400 families were homeless; additionally, in Boston public schools alone more than 3,500 students were reported as homeless. Homelessness is yet another issue that affects certain races more dramatically than others. Massachusetts has the highest rate of Hispanic/Latinx homelessness at 107 homeless residents per 10,000 population. Over the past decade, the number of homeless families in Greater Boston increased by 27 percent and the number of homeless individuals by 45 percent, with a spike in 2018 driven by an influx of displaced residents of Puerto Rico (Modestino et al., 2019). However, Massachusetts currently houses 95% of its homeless population, one of the highest rates of any state (Jolicoeur, 2020).

#### **Interviews and Focus groups**

Focus group participants emphasized housing as a primary concern in their communities, noting that lack of housing can lead to mental health issues such as stress, anxiety, and depression. Housing instability was noted as being particularly hard for parents, who are both worried about themselves and their children. Participants also expressed the need for homeless shelters, transitional housing, places to do laundry, and areas that can allow for hygienic care. Participants also mentioned that stigma towards the homeless, both at a personal and institutional level, created additional barriers to receiving care, with some mentioning that no loitering laws and police targeting are major issues. Key informants also noted the problems caused by lack of housing, such as the inability to prepare meals, have a place to discard waste, and shelter from the heat and cold. As such, those who are homeless often face the most health inequities.

### **Transportation**

Transportation barriers are often cited as barriers 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 in order 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 barrier to healthcare access, particularly for those with lower incomes or the under/uninsured (Syed, Gerber, & Sharp, 2013).

#### **Interviews and Focus groups**

Focus group participants listed transportation as one of the biggest challenges to healthy living, as many are unable to afford a car or uber rides. One participant noted that if someone found a job, they likely wouldn't be able to get to it, due to lack of buses. Additionally, focus group members mentioned that transportation is also needed in order to help community members access COVID vaccinations.

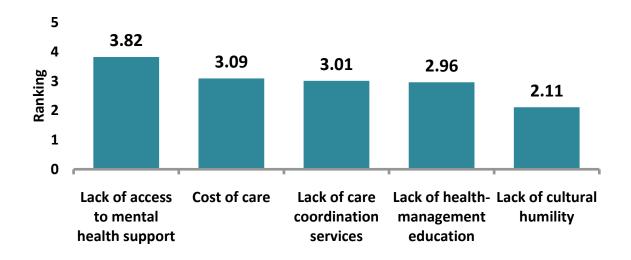


Access to healthcare is one of the most important issues facing high-risk communities and vulnerable populations. Addressing access to care is one of the first steps that need to be taken to address health equity. Inequity and inequality in the United States healthcare system have been widespread since its inception. Due to current societal issues including the COVID-19 pandemic, these broad inequities have been largely exposed while also highlighting how granular and targeted certain equity issues can be. Patients from underserved minority populations find it a challenge to access quality health care. 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, however there is only one primary care physician per 1,880 residents in Bristol County, by far the worst ratio in the state (Robert Wood Johnson Foundation, 2020).

#### **Health Professionals Survey**

When asked to rank the largest obstacles to healthy living among their consumers, health professionals saw lack of access to mental health support, cost of care, and lack of coordination services as the largest barriers (Figure 30). This indicates a great need to address mental health services, as it is also a large and prevalent need in the community.

Figure 30: Health Professionals Perceived Obstacles to Healthy Living among Consumers



### **Insurance Coverage**

Cost was the main reason for not receiving healthcare coverage. In 2016, 45% of uninsured adults did not have access to adequate healthcare due to its 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% (Robert Wood Johnson Foundation, 2020).

#### **Interviews and Focus groups**

Focus group participants mentioned that many members of the community need help navigating insurance and finding a primary care doctor. Particularly, greater awareness was needed for seniors about Medicaid Part B. Several participants mentioned feeling left out for not being able to afford insurance. Key informant interviews revealed that insurance loss due to lost jobs was a major concern as a result of COVID-19, with many individuals lacking insurance or being underinsured. Key informants also expressed the need for homeless individuals to sign up for insurance, such as Mass Health. However, elderly homeless individuals who receive Medicaid may not have enough coverage to meet their needs.

#### **Prevalence**

The percentage of those in Massachusetts who are uninsured is less than a third of the national average, indicating a high prevalence of insured residents across the state (Figure 31). Furthermore, all of the communities within Morton's service area reported uninsured rates at or below the state level, aside from North Dighton (3.5%). Berkley (0.1%) had an especially low proportion of uninsured residents.

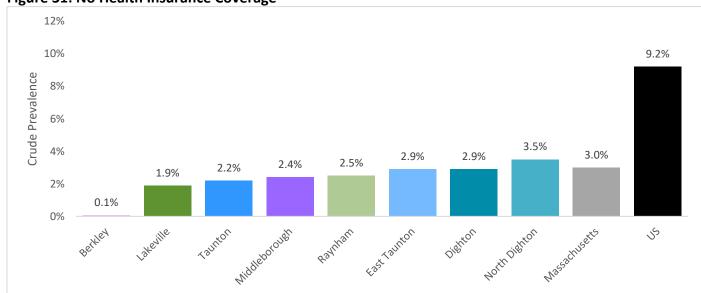


Figure 31: No Health Insurance Coverage

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

### <u>Culturally Competent Care</u>

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 percent — 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 Latinos and Asian Americans. Lower quality patient-physician interactions are associated with lower overall satisfaction with health care

#### **Interviews and Focus groups**

Many focus group participants suggested that a referral network that works to get in touch with hard-to-reach individuals is imperative and that overall, there is a disconnect between hospitals and other resources. Some participants suggested that resources need to be interconnected and that more work needs to be done to establish a community-wide referral network. They also noted the need for culturally competent care, primarily in the form of providers of color. Key informants mentioned that residents of color, such as those who identify as Latinx, Haitian, Black/African American, or LGBTQIA have difficulty trusting healthcare providers. Undocumented residents also were mentioned as enduring many health inequities due to fear of meeting with healthcare providers. Many residents who feel a cultural barrier to care also have a language barrier, exacerbating the difficulty they face communicating their needs.

### Recommendations



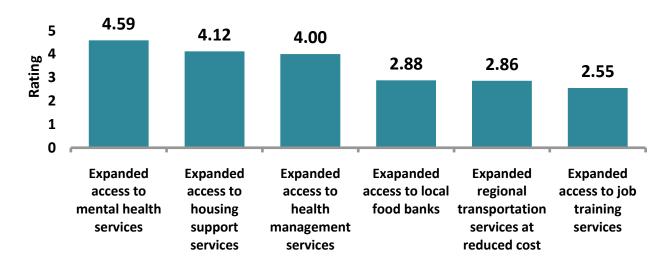
Many of the risk factors that lead to poor health in the communities are modifiable, as such many cases of chronic illnesses are considered preventable. Prevention requires a comprehensive approach that not only treats the symptoms but also addresses the underlying lifestyle behaviors behind so many of these chronic conditions. These approaches must also address access to healthcare at different levels of the socio-economic model to 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 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 (MDPH, 2017).

Morton Hospital continues to serve alongside several community-based organizations who share the mission of addressing the health needs of those in their communities. It is through working together with partners devoted to the same cause that Morton can have the greatest impact, especially within underserved populations. When considering priorities, Morton will look to ways projects will improve the built environment, social environment, housing, violence, education, and employment.

### **Health Professional Perspectives**

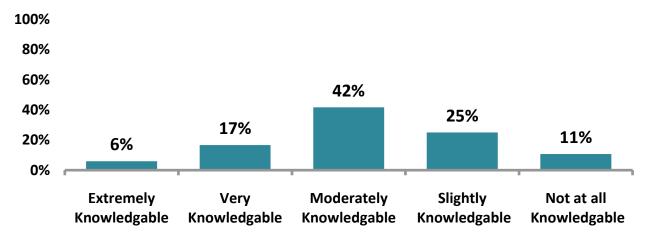
When asked what they believed would most benefit consumers, the three largest areas of need according to health professionals within Morton's service area were expanded access to mental health, housing, and health management services (Figure 32). As mental health and homelessness are large areas of concern within the community, it follows programs addressing these needs are also seen as most necessary in the community. As such, many Health professionals see a need in the community for Morton to be involved in expanding care in these areas.

Figure 32: Health Support Services Believed by Health Professions to Most Benefit Consumers



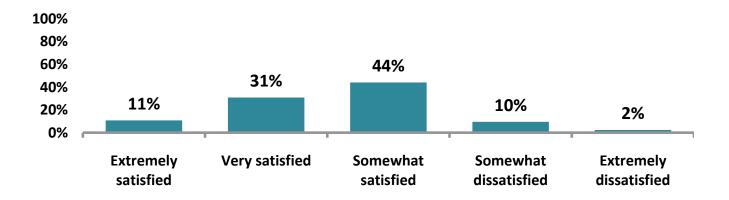
Of the health professionals surveyed, 23% felt as if they were extremely or very knowledgeable of the community health services Morton provides their community (Figure 33). One health professional suggested that Morton "better inform the employees of the hospital as to what services we offer in the community. We spend a lot of time with patients and could reinforce what is available".

Figure 33: Health Professional's Knowledge of the Services Morton Provides their Community



Community health professionals also indicate moderate levels of satisfaction with Morton's role in addressing community health, with the majority indicating they are somewhat satisfied (44%) and nearly a third indicating they are very satisfied (31%) (Figure 34).

Figure 34: Health Professionals Satisfaction with how Morton Hospital is Addressing Community Health



### **Mental Health**

Mental health intersects with many areas of public health, such as addiction, cancer, cardiovascular disease, and HIV/AIDS. Integrated treatment is critical for treating people with co-occurring disorders and can ultimately achieve better health outcomes and reduce costs. Increasing awareness and building capacity in service systems are important in helping identify

and treat co-occurring disorders. Such treatment should be client-centered, integrating client's goals and desired treatment strategies (MDPH, 2017). Many residents noted that mental health needs, especially those of youth, have been exacerbated by COVID. While many praised the efforts Morton has taken so far, especially in devoting its third floor to mental health and substance use, members of the community had suggestions for how Morton could further expand its mental health services.

#### **Community wide recommendations**

- Provide support groups in the community to help individuals, such as bereavement groups.
- Expand access to mental health support through providing multiple avenues to engage with mental health professionals.
- Partner with community organizations such as the Boys and Girls Club to help address mental health needs from schools.
- Increase efforts to reach populations with the highest propensities for mental health needs, such as homeless individuals.
- Provide more therapy options to youth at schools.

#### **Health system recommendations**

- > Support community organizations that are addressing mental health needs through materials, curriculum, and speakers.
- Support mental health clinicians working in after-school programs by providing resources and partnering with them.
- Offer support groups in communities to reach residents uncomfortable going to the hospital.
- Provide greater access to mental health services to those who are experiencing distress from the pandemic.
- Engage with community-based service providers to learn of and promote services that are most needed.
- ➤ Host events in the community, especially in Taunton, to bring mental health awareness to 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). As previously stated only 11.1% of those with substance use disorders are believed to be receiving treatment. Because of this, there is a great need for outreach in the community. However, many key informants noted that Morton has been serving the community well in this aspect. As

one key informant said, "Morton does well with substance abuse care and outreach". Many also noted that they felt Morton was doing a great job to address this need with the construction of its third floor to address substance use and mental health. However, members of the community still had recommendations of ways substance use could be addressed.

#### **Community wide recommendations**

- Create more treatment facilities for substance misuse in the area.
- Partner with local schools to create curriculum and programs centering around substance use prevention.
- ➤ Partner with family housing and community centers to create programs aimed at addressing substance use and encouraging healthy coping mechanisms.

#### **Health system recommendations**

- Expand pain management services, enabling residents to address pain without turning to addictive substances.
- Make it easier to access addiction services by decreasing wait times and providing multiple avenues of interaction.
- Collaborate with local schools, community centers, housing units, and clinics to provide resources to stay abreast of evolving needs.

### 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. As COVID-19 has both impacted individual's ability to be active in the community and increased financial troubles, addressing obesity is of critical importance.

#### **Community wide recommendations**

- Support events to get families involved in exercise-based activities.
- ➤ Hold exercise classes and activities when safe to gather.
- Increase opportunities for healthy living in the community, such as bike paths and sidewalks.
- Increase public knowledge of parks and green spaces available.
- Supplement access to affordable, healthy food for those experiencing poverty or joblessness due to COVID-19.
- Support food security initiatives, such as Fair Foods, to provide produce to the community.
- Provide better options for food and groceries within the Taunton and Brockton communities.

#### **Health system recommendations**

- Partner with community organizations that are working to help residents live active and healthy lives, such as the Y's HEPA program and Mass in Motion.
- Increase hospital involvement in the community through talks, seminars, and wellness activities.
- Sponsor talks to the community about the importance of staying active and healthy.
- Collaborate with food security initiatives to help residents access healthy foods.

### **Chronic Conditions**

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 health. For example, a history of policies rooted in structural racism has resulted in environments in which there are inequities in access to healthy foods, safe spaces for physical activities, walkable communities, quality education, housing, employment, and healthcare services (MDPH, 2017). 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 related deaths and high acute care service utilization. Healthy people cannot exist in unhealthy environments. Because of this MDPH frames its chronic disease prevention and wellness efforts around addressing the social determinants of health and focuses on policies that ensure that all individuals can make healthy choices.

#### **Community wide recommendations**

- Offer community classes on chronic conditions, to expand public awareness of signs and symptoms.
- Provide pain management services for those whose chronic conditions cause daily pain.

#### **Health system recommendations**

- Provide more diagnostic services for early detection of chronic conditions.
- Offer clinics within service area communities to address chronic needs, such as diabetes foot checks.
- Offer more patient education programs on disease management.

### COVID-19

Aside from being responsible for over 100,000 deaths in Massachusetts in 2020 (National Center for Health Statistics, 2021), COVID-19 is also responsible for lower quality of life and limited access to care for many residents. COVID-19 has had a stark impact on mental health, obesity, substance use, cardiovascular health, and economic wellbeing. COVID-19 presents a unique challenge, as it both poses a major threat to public health and has exacerbated several other threats.

In the midst of the pandemic, health professionals have been largely satisfied with Morton's efforts to educate the community about COVID-19, with 87.1% of health professionals indicating being moderately satisfied or higher. However, despite these positive ratings, health professionals also indicated the pandemic had a negative impact on their mental health. When

asked to rate the impact of COVID on their mental health, 60.0% of health professionals indicated it had moderately negative impact, or worse.

#### **Community wide recommendations**

- Distribute free masks to those who need them.
- Distribute the vaccines to vulnerable areas.
- Aid those who have encountered financial difficulties as a result of the pandemic.
- > Provide educational assistance for children who are unable to attend school.
- Disseminate knowledge about COVID into the community through multiple platforms.
- Provide hygiene supplies to those who are homeless or low income to provide further protection.
- Provide online social gatherings for individuals who are feeling isolated.
- Offer transportation services for those unable to use public transport due to health concerns.

#### **Health system recommendations**

- Offer mobile clinics in the community that offer COVID testing and vaccines.
- Partner with community organizations to increase access to mental health services online.
- Partner with community organizations to ensure united messaging is sent to the community.
- Partner with community organizations that provide pandemic assistance to vulnerable populations.
- Provide safe transportation options to Morton for those unable to use public transport due to health concerns.

### 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. However, health professionals were largely positive about Morton's engagement with homeless communities, with one saying, "To our mainly homeless population, Morton has provided the utmost of care, concern, and compassion." As such, Morton needs to continue to work with the community to serve this population that is in great need of a variety of services.

#### **Community wide recommendations**

- Provide affordable housing options.
- Provide temporary housing.
- Offer access to basic hygiene needs such as laundry, showers, and bathrooms.
- Offer more public areas to dispose of trash.
- Provide resources that protect homeless individuals from extreme heat or cold.

- Provide resources for homeless individuals to cook meals.
- Offering care packages containing healthy foods, vitamins, and hygiene products.
- Provide mental health counseling for homeless individuals.

#### **Health system recommendations**

- Offer mobile clinics to homeless communities.
- Encourage homeless individuals to sign up for insurance, such as Mass Health.
- Offer referral services at Morton that connect homeless individuals with services to meet their needs.
- Offer programs and services to homeless organizations to get them more comfortable with Morton.

### Access and Involvement

Access to healthcare is one of the most important issues facing high-risk communities and vulnerable populations. Addressing access to care is one of the first steps that needs to be taken to address health equity. Inequity and inequality in the United States healthcare system have been widespread since its inception. Due to current societal issues including the COVID-19 pandemic, these broad inequities have been largely exposed while also highlighting how granular and targeted certain equity issues can be. Overall, focus group participants noted that they had not had much interaction with Morton Hospital as part of their community. Some mentioned having difficult times at the emergency room and that their treatment varied. Broad suggestions from focus group participants included having more open communication with all community members about the availability of various services available.

#### **Community wide recommendations**

- Increase partnerships between community organizations to create or enhance the referral network.
- Disseminate information in the community using different platforms, languages, and reading levels.
- Increase public transportation options.
- Offer access to tools needed for telehealth appointments.
- Increase community events focused on health education.

#### **Health system recommendations**

- Provide more community education and outreach
- Offer health fairs for those who are homeless and most vulnerable.
- Host events, such as coffee hours, at facilities that provide services for seniors and disabled citizens.
- Offer homecare services.
- > Expand services in all languages.
- Offer remote healthcare options that don't require a personal phone or computer.
- Offer services to help the elderly navigate the healthcare system.
- Educate hospital staff about all the services Morton has to offer outside the hospital.

Make lists of area PCP's accepting new patients and offer quick opportunities to receive care.

### **Other Suggestions**

#### **Community wide recommendations**

- Offer affordable options for high quality daycare.
- Offer community-wide initiatives to address educational disparities.
- > Provide greater access to feminine hygiene products.
- Educate community, especially youth, about healthy sex and safe sex practices.

#### **Health system recommendations**

- Offer certified babysitting program.
- Expand to more homecare services
- Provide more community education and outreach help build connection between social determinants of health and poor health outcomes.
- Partner with community leadership boards, such as the school board, to have a greater understanding of community needs and ways the hospital can help.

### Limitations



Data collected for analysis were derived from publicly accessible, governmental sources. Some data sources lacked information on certain towns. Data gathered for this report is the most recently available at the time of data was gathered 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.

Researchers 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 groups and key informant interviews provide 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 reflect 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.

Though the intent of this project was to capture the views and opinions of all or most health and human service providers within the Morton Hospital service area, there were also limitations to the survey distribution. The survey was distributed via email by Morton Hospital staff and community partner organizations that encompass cities and towns in the Morton Hospital service area, to be circulated to its local affiliates. 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 Morton Hospital staff and the respective community organization leadership.

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# **Appendix A: Key Informant Interview Questions**

- 1. In your view, 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 Morton serving the community well?
- 10. In what ways could Morton serve the community better?

# Appendix C: Health Professionals Survey

### Morton Community Health Needs Assessment Health Professional Survey

| 1. In what county(ies) does your organization primarily provide services?                           |
|---|
| ○ Bristol County  |
| O Plymouth County   |
| ○ Norfolk County  |
| Other (please specify)  |
|   |
| 2. In what community does your organization provide the majority of its services?                   |
| Berkley   |
| Dighton   |
| Lakeville   |
| Raynham   |
| Middleborough   |
| ☐ Taunton   |
| . What kind of services does your organization primarily provide?                                   |
| ○ Medical   |
| ○ Mental Health   |
| Substance Use Rehabilitation  |
| Community Building  |
| C Educational Services  |
| ○ Violence Prevention   |
| ○ Social Services   |
| Other/Comment (provide detail)  |
| . Name of the organization you work for?  |
|   |
| . To the best of your knowledge, from what county(ies) do the majority of your consumers come from? |
| O Bristol County  |
| O Plymouth County   |
| ○ Norfolk County  |
| Other (please specify)  |

| 6. To the best of your knowledge, in what community do the majority of your consumers reside? |
|---|
| ○ Berkley   |
| Obighton  |
| ○ Lakeville   |
| Raynham   |
| ○ Middleborough   |
| ○ Taunton   |
| Other (please specify)  |
| 7. In general, what are the social demographics of consumers served by your organization?     |
| O Infants (1-5 years)   |
| ○ School-aged Youth (6-18 years)  |
| O Young adults (19-30 years)  |
| Older adults (31-64)  |
| O Seniors (65+)   |
| Mix but mostly infants  |
| Mix but mostly youth  |
| Mix but mostly young adults   |
| Mix but mostly older adults   |
| Mix but mostly seniors  |
| ○ Unsure  |
| 8. In general, what are the social demographics of consumers served by your organization?     |
| ○ Male  |
| ○ Female  |
| ○ Transgender   |
| Mix but mostly male   |
| Mix but mostly female   |
| Mix but mostly transgender  |
| ○ Mix   |
| ○ Unsure  |

| 9. In general, what are the social demographics of consumers served by your organization?  |
|--|
| ○ 0-19k  |
| ○ 20-39k   |
| ○ 40-59k   |
| ○ 60-79k   |
| ○ 80k and above  |
| ○ Mix  |
| ○ Unsure   |
| 10. In general, what are the social demographics of consumers served by your organization?   |
| ○ White  |
| ○ Black  |
| Hispanic   |
| Asian  |
| Middleeastern  |
| Native American  |
| ○ Mix  |
| ○ Unsure   |
| 11. 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 your consumers? |
| O Decreased Housing Stability  |
| O Decreased Access to Food   |
| O Increased Unemployment   |
| ○ Increased Stress   |
| O Decreased Physical Health  |
| O Decreased Mental Health  |
| ○ Increased Financial Distress   |
| Other (please specify)   |
|  |

|                        | also like to learn about health issues (other than COVID-19) that are impacting the u serve. What do you perceive as major health concerns of your consumers?  |
|------------------------|--|
| ○ Asthma               |  |
| O Behavioral           | Health   |
| O Cancer               |  |
| O Diabetes             |  |
| O Heart Hea            | lth  |
| O High Blood           | l Pressure   |
| O Mental He            | alth   |
| Obesity                |  |
| O Stroke               |  |
| O Illicit Subs         | tance Use  |
| Other (ple             | ase specify)   |
| 13. Based on t         | the options provided, please rank the obstacles to healthy living among your consumers.  |
| ■                      | Cost of Care   |
| ■                      | Lack of health-management education  |
| <b>■</b> •             | Lack of care coordination services   |
| ■ •                    | Lack of access to mental health support  |
| ■                      | Lack of cultural humility  |
|                        | the options provided, please rank what health support services would most benefit your being of greatest benefit).   |
| ■ ◆                    | Expanded access to health management services  |
| <b>■</b> •             | Expanded access to mental health services  |
| <b>■</b> •             | Expanded access to job training programs   |
| ■                      | Expanded access to local food banks  |
| ■                      | Expanded regional transportation services at reduced cost  |
| ■                      | Expanded access to housing support services  |
|                        | e regulatory mandates governing Morton's response to the COVID-19 pandemic, how ou with how Morton has engaged with the community to offer COVID-19 education? |
| Extremely              | satisfied  |
| O Very satisf          | ied  |
| ○ Moderately satisfied |  |
| ○ Slightly sa          | tisfied  |
| O Not at all s         | satisfied  |

| 6. Since the start of the COVID-19 pandemic, how would you rate its impact on your mental health?                    |
|--|
| Extremely negatively impacted  |
| O Very negatively impacted   |
| Moderately negatively impacted   |
| Slightly negatively impacted   |
| O Not at all negatively impacted   |
| 7. How knowledgeable are you of the community health services Morton Hospital provides in your community?            |
| C Extremely knowledgeable  |
| ○ Very knowledgeable   |
| Moderately knowledgeable   |
| Slightly knowledgeable   |
| O Not at all knowledgeable   |
| 8. Overall, how satisfied are you with the way Morton Hospital is addressing community health in your community?     |
| ○ Extremely satisfied  |
| O Very satisfied   |
| O Somewhat satisfied   |
| O Somewhat dissatisfied  |
| O Very dissatisfied  |
| Extremely Dissatisfied   |
| 9. Please provide any suggestions you may have as to how Morton Hospital could best address community health issues. |
|  |
| Done   |

# Appendix D: Note on Data Accuracy

We reported the data as it appears in the report provided by Morton Hospital. This report is accurate insofar as the data provided was accurate. In one case, we noticed a discrepancy in the percentage of individuals who "Spoke English less than very well" for Taunton and corrected it with the 2019 census data (Table 4).