# sturdy memorial hospital Community Health Needs Assessment



# **2022 FINAL SUMMARY REPORT – SUBMITTED BY HOLLERAN**



# **TABLE OF CONTENTS**

Executive Summary 1				
Community Health Needs Assessment Background	4			
Key Findings	10			
Community Health Needs Assessment Findings	21			
I. Socio-Demographic Statistics Overview	21			
II. Health Issues	28			
III. Health Risk Behaviors	32			
Key Informant Survey	36			
I. Key Health Issues	27			
II. Access to Care & Barriers	31			
III. Open-Ended Comments	44			
Identification of Community Health Needs	47			
Appendix A. Secondary Data Sources	48			
Appendix B. Secondary Data Terminology	51			
Appendix C. Key Informant Survey Tool	53			
Appendix D. Key Informant Participants	58			
Appendix E. Community Benefits Advisory Committee	59			
Appendix F. 2016 Implementation Strategy Outcomes	60			
Appendix G. Membership	74			



# **EXECUTIVE SUMMARY**

With a mission of providing high quality care in both the inpatient and outpatient settings Sturdy Memorial Hospital and Medical Associates undertook a comprehensive Community Health Needs Assessment (CHNA) in February 2022. The purpose of the CHNA is to evaluate the health needs of individuals living in the hospital service area within Bristol and Norfolk counties in Massachusetts. The assessment examined a variety of health indicators, including chronic health conditions, access to health care, and social determinants of health. Sturdy Memorial Hospital and Medical Associates contracted with Holleran Consulting, a research firm based in Wrightsville, Pennsylvania, to execute this project.

The completion of the CHNA enables Sturdy Memorial Hospital and Medical Associates to take an indepth look at its community. Healthy communities lead to lower health care costs, improved health outcomes, robust community partnerships, and an overall enhanced quality of life. Sturdy Memorial Hospital and Medical Associates is committed to the people it serves and the communities where they reside. This CHNA Final Summary Report serves as a compilation of the overall findings of two research components. These are a Secondary Data Profile and a Key Informant Survey.

# **Key Community Health Issues**

The 2022 CHNA through its components Secondary Data Profile and Key Informant Surveys, identified 5 Key Community Health Issues in the Sturdy Memorial Hospital and Medical Associates' service areas. These include the following (presented in alphabetical order):

- Access to Healthcare and Prevention Services
- > Affordable Housing and Income
- > Mental/Behavioral Health and Substance Abuse
- Mortality and Chronic Disease Management
- > Obesity and Weight Management

# **Prioritized Community Health Issues**

Based on feedback from community partners, including health care providers, public health experts, health and human service agencies, and other community representatives, Sturdy Memorial Hospital and Medical Associates planned to focus community health improvement efforts on the four (4) health and wellness focused priorities while supporting community partners in addressing Affordable Housing and Income over the next three-year cycle. The implementation plan relative to these priorities is included in Appendix E: Implementation Strategies Outcomes of this CHNA along with outcomes from the efforts during the last three years.

- Access to Care
- Behavioral Health and Substance Abuse
- Chronic Disease Management and Prevention
- Cancer Prevention Education and Screening



# **Previous CHNA and Prioritized Health Issues**

Sturdy Memorial Hospital conducted a comprehensive CHNA in 2019, 2016 and 2013 to evaluate the health needs of individuals living in the hospital service area. The prioritized health issues and associated major outcomes in each three-year cycle are as follows.

#### **Prioritized Health Issues in <u>2019</u>:**

- Access to Care
- > Behavioral Health and Substance Abuse
- > Chronic Disease Management and Prevention
- > Cancer Prevention, Education and Screening

#### Major Outcomes from the 2019 CHNA Priorities:

- Hired 9 providers, including four (4) primary care physicians, two (2) pulmonologists and two (2) obstetrician/gynecologists.
- There was a focus on access to care as related to cost of oral chemotherapy drugs. In FY 2020, 23 patients were identified to be in need of copay assistance/referral source-MD office. Nurse Navigation in conjunction with an oncology social worker were able to secure funding for these patients in the amount of \$252,398.52
- Sturdy Memorial Hospital and Associates launched Telehealth services via a HIPAA approved ZOOM platform in response to the COVID-19 mandated service restrictions. Over 20,000 telehealth visits were conducted.
- There were 556 substance abuse disorder patients directed to Column Health averaging 10.5 intakes per week. A total of 9,373 visits and 4,807 telehealth visits were provided for substance use disorder patients.
- Ladies Night- An Education Event related to Breast Cancer Awareness was held with over 125 women in attendance. A panel of 3 providers including Drs. Latif, Whitby and Saunders presented.
- The program launched a Cardio-oncology program and enhance breast imaging services through the acquisition of a Breast MRI. Offered early detection and prevention by providing breast cancer screenings – 7,210 mammograms performed fiscal year 2019 (year to date).
- 221 outpatient orders/referrals occurred from the SMA (Sturdy Memorial Associates) practices into the Diabetes Management Program.

#### Prioritized Health Issues in 2016:

- > Cancer
- Diabetes
- Mental Health/Suicide
- > Overweight/Obesity
- Substance Abuse/Alcohol Abuse



#### Major Outcomes from the 2016 CHNA Priorities:

- Offered early detection and prevention by providing breast cancer screenings 7,210 mammograms performed fiscal year 2019 (year to date).
- > Held Cancer Survivors Day Event and sponsored Relay for Life events yearly.
- In fiscal year 2019 (year to date), 221 outpatient orders/referrals occurred from the SMA (Sturdy Memorial Associates) practices into the Diabetes Management Program.
- Developed and distributed 1,500 educational brochures in April 2017 that highlights the dangers of opioid use, as well as provide education on alternatives available for managing pain. An additional 1,500 brochures were disturbed in October 2017.
- In January 2018, the hospital began to monitor opioid prescribing patterns of providers and there has been a 45% decrease in prescribing of opioids in the Emergency Care Center (ECC).
- Partnered with Column Health to provide outpatient addiction treatment to the community and opened a site in April 2019. As of May 31, 2019, the clinic had registered 52 patients.
- From year to date of fiscal year 2019, there have been a total of 184 initial patient consults and 1,598 follow-up visits with the Sturdy Wellness Weight Management Program.
- Since the Sturdy Wellness Weight Management Program's start in May 2016, a total of 39 patients have undergone bariatric surgery.

#### Prioritized Health Issues in 2013:

- > Access to Primary Care Physicians
- Cancer Prevention Education and Screening
- > Diabetes Management
- Heart Disease Prevention Education
- > Obesity/Nutrition
- Wellness and Physical Activity

#### Major Outcomes from the 2013 CHNA Priorities:

- An expansion of the Hospital's care model to include the hiring of Nurse Practitioners, Physician Assistants and Emergency Technicians to increase access to primary care in the community.
- The Radiology Department at Sturdy was named a Designated Lung Cancer Screening Center by The American College of Radiology. In addition, the Hospital acquired a 3D Mammography service line to assist with early detection of Breast Cancer.
- The strategic development of Sturdy's Wellness Weight Loss Program, a comprehensive program that offers access to specialists in obesity medicine and addresses the health needs related to not only Obesity/Nutrition, but also Wellness and Physical Activity, Diabetes Management, and Heart Disease Prevention Education.
- > The certification of the Hospital's diabetes program by the American Diabetes Association.
- A two-year initiative focused on the education of women about the signs and symptoms of heart disease.
- Continued collaboration with local community leaders on health education related to the identified priorities.
- Community education through physician written columns focused on the identified priorities published online and through local newspapers.



# **COMMUNITY HEALTH NEEDS ASSESSMENT BACKGROUND**

# **Organization Overview**

In existence since 1913, Sturdy Memorial Hospital is an independent, nonprofit acute care hospital, which is dedicated to providing a broad range of health care services to the residents of its communities. Located in Attleboro, Massachusetts, the hospital serves a population base of over 160,000 in suburban communities of Boston and Providence. Attleboro is located within 45 minutes of Boston and 15 minutes of Providence. Sturdy Memorial Associates is the medical group affiliated with the hospital and has more than 20 locations throughout the service area. Medical services provided by highly qualified physicians range from primary care, pediatrics and specialties with more than 90 physicians.

Sturdy Memorial Hospital is a community hospital that closely aligns with the community and operates 128 beds. As one of Attleboro's largest employers, there are over 2,000 employees when Sturdy Memorial Hospital and Sturdy Memorial Associates are combined. Sturdy Memorial Hospital is licensed by the state of Massachusetts to provide acute care hospital services and has earned the reputation as a quality institution that is worthy of the finest standards of care. It is nationally accredited by DNV-GL Healthcare, demonstrating that it meets or exceeds patient safety standards set forth by the U.S. Centers for Medicare and Medicaid Services (CMS). Sturdy Memorial received the American Heart Association and the American Stroke Association Bronze and Silver Plus Achievement Award, the Harvard Pilgrim Health Care Honor Roll – Sturdy Affiliated Physicians and the "A" Leapfrog Safety Grade, a score achieved by just 34% of hospitals across the country.

The organization is dedicated to providing safe, high-quality, cost-efficient health care, and the broadest range of diagnostic, inpatient, outpatient, and emergency services appropriate for a community hospital. The hospital works to ensure that ample, high-quality primary and specialty physician services are accessible to area residents. In 2020, over 7,400 patients received inpatient care at Sturdy Memorial Hospital, there were more than 42,000 visits at the Emergency Care Center and volunteers worked over 37,000 hours. The hospital provides leadership while working in cooperation with public and private health care organizations to avoid costly duplication of services and civic and business organizations to meet the healthcare needs of area communities. Finally, during the pandemic, the commitment of every employee to their patients and each other was recognized.

Sturdy Memorial Hospital and Medical Associates strives to be an organization that does not just employ but empowers its employees to hold themselves accountable for their actions, as well as a sense of ownership, or pride, in what they do each and every day. Employees who represent ownership do what needs to be done because they expect it of themselves. This is reflected in Sturdy Memorial's mantra, "I Am Sturdy."





Values:

"Every employee of Sturdy Memorial Hospital whether involved in direct patient care or working collaboratively to support patient care, is committed to providing patients with the highest Quality of Care throughout all hospital settings and to transition that level of care into the community setting through partnerships across the care continuum.

Every employee of Sturdy Memorial Hospital is dedicated to providing the highest level of **Patient Satisfaction** by embracing a "culture of ownership" that fosters active listening and timely response to patients, families, colleagues and members of the communities we serve, ensuring their needs and expectations are not only met, but exceeded.

Every employee of Sturdy Memorial Hospital will proactively identify enhancements to patient care delivery, utilizing appropriate technology, systems and processes to ensure **Patient Safety** and prevent harm from reaching the patients we serve.

Every employee of Sturdy Memorial Hospital is committed to providing exceptional clinical care to our patients in a manner that is **Efficient and Cost Effective**, so that valuable resources may be extended to all members of the communities we serve.



# **Community Served**

Sturdy Memorial Hospital and Medical Associates' patient population includes anyone who requires care and will receive care, regardless of place of residence. For purposes of this assessment, "community" is defined as the Primary Service Area (PSA) and Secondary Service Area (SSA) including communities located in both Bristol and Norfolk counties. This definition is based upon an identified community of individuals residing within its service areas and served by the hospital and physician group. The hospital service area is a geographic area surrounding the hospital, and represents all residents, including low-income and traditionally underserved individuals.

Sturdy Memorial Hospital and Medical Associates is committed to providing healthcare to individuals living in the cities/towns of Attleboro, Foxboro, Mansfield, North Attleboro, Norfolk, Norton, Plainville, Seekonk, Sharon, Rehoboth, Walpole, and Wrentham. To align with community collaborative work and to better understand and address the need across the entire region, these twelve municipalities are grouped into two service areas:

- Primary Service Area: Attleboro, Foxborough, Mansfield, North Attleboro, Norton, Plainville, Seekonk, Rehoboth, and Wrentham<sup>1</sup>
- Secondary Service Area: Norfolk, Sharon, and Walpole<sup>2</sup>

Descriptive information including zip codes and county for the two service areas is summarized in the following table.

Primary Service Area					
Municipalities	Zip Code	County			
Attleboro city	02703	Bristol			
Foxborough town (a.k.a. Foxboro)	02035	Norfolk			
Mansfield town	02048	Bristol			
North Attleborough town (a.k.a. North Attleboro)	02760 02761 02763	Bristol			
Norton town	02766	Bristol			
Plainville town	02762	Norfolk			
Rehoboth town	02769	Bristol			
Seekonk town	02771	Bristol			
Wrentham town	02093	Norfolk			

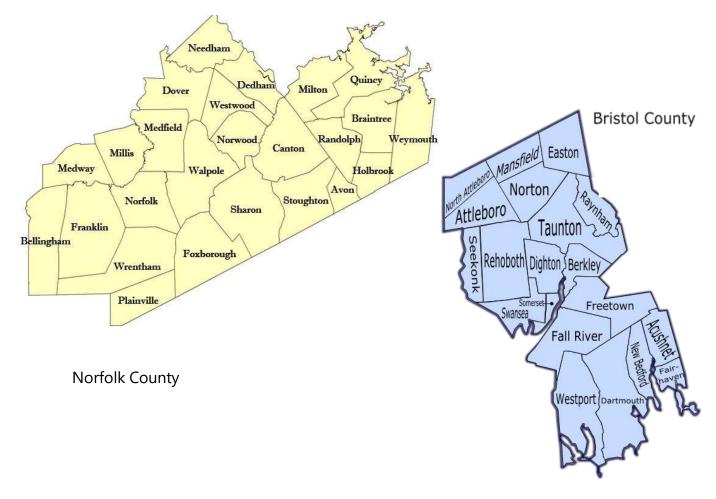
<sup>&</sup>lt;sup>1</sup> As seen in table, 6 of the 9 cities in the Primary Service Area are in Bristol County (Attleboro, North Attleboro, Mansfield, Norton, Seekonk and Rehoboth). The remainder (Foxborough, Wrentham and Plainville) are in Norfolk County. <sup>2</sup> All 3 of the cities in the Secondary Service Area are in Norfolk County.



Secondary Service Area						
Municipalities Zip Code County						
Norfolk town	02056	Norfolk				
Sharon town	02067	Norfolk				
Walpole town	02081	Norfolk				

For all demographic and health indicator statistics, data from the municipalities above were incorporated into service area level data unless otherwise noted. If service area level data were not available, county level data for Bristol County and Norfolk County were utilized.

As previously mentioned, Sturdy Memorial Hospital and Medical Associates is located in the city of Attleboro within Bristol County. Attleboro was formerly known as "The Jewelry Capital of the World," due to its numerous jewelry manufacturers. In terms of total land area, Attleboro ranks 14<sup>th</sup> for cities in Massachusetts with 26.8 square miles. Total combined area for the two service areas is 278.2 square miles. A map of the primary and secondary service areas within the two counties is illustrated below.





# Methodology

The CHNA is comprised of both quantitative and qualitative research components. A brief synopsis of the research components is included below with further details provided throughout the document:

- The Statistical Secondary Data Profile uses existing local-level data with state and national comparisons of demographic and health data, also known as "secondary data." The specific data sources depict population and household statistics, education and economic measures, morbidity and mortality rates, incidence rates, and other health indicator statistics for the primary and secondary service areas, or Bristol County and Norfolk County. It should be noted that in some cases, local-level data may be limited or dated. This is an inherent limitation with secondary data. The most recent data are used whenever possible. When available, state and national comparisons are also provided as benchmarks for the regional statistics. National comparisons include United States data, Healthy People 2030 (HP 2030) objectives and County Health Rankings with National Benchmarks when available.<sup>3</sup> Data from the U.S. Census Bureau are typically provided in 5-year period estimates (e.g., 2015 2019). These represent data collected over a period of time. The primary advantage of using multiyear estimates is the increased reliability of the data for less populated areas and small population subgroups. Data sources can be found in Appendix A, and terminology used is in Appendix B.
- An Online Key Informant Survey was conducted with key informants residing in Bristol County and Norfolk County from April 12 to April 28, 2022, and from June 8 to June 15, 2022. The survey was reopened in an attempt to allow as many participants as possible to complete the survey. Key informants are defined as community stakeholders with expert knowledge, including public health and health care professionals, social service providers, non-profit leaders, government housing and transportation representatives, business leaders, faith-based organizations, and other community leaders. Holleran worked closely with Sturdy Memorial Hospital and Medical Associates to identify the key informant participants. The survey was designed to assess pressing health issues in their community, missing resources/services, health care access, underserved populations, and community assets and opportunities. The survey took approximately 10 to 15 minutes to complete. A total of 136 individuals and/or organizations were identified and invited to participate. Thirty-four key informants completed the survey during the survey period. Of these, the largest percentage are affiliated with non-profit/social services/aging services (25.8%), followed by health care/public health organizations (19.4%), and mental/behavioral health organizations (16.4%). The purpose of the key informant survey was to gather a combination of quantitative ratings and qualitative feedback through closed and open-ended questions around health issues and barriers for individuals in the community. A copy of the survey tool is found in Appendix C and the key informants who completed the survey are in Appendix D.

In addition to summarizing the findings of the Statistical Secondary Data Profile and the Key Informant Survey in Key Findings, report cards are provided which clearly delineate key indicators and results for comparison of service area and county level data to state and national figures.

<sup>&</sup>lt;sup>3</sup> County Health Rankings measures the health of nearly all counties in each state. Rankings are based on factors that, if improved, can help make communities healthier places to live, learn, work and play.



## **Research Partner**

Sturdy Memorial Hospital and Medical Associates contracted with Holleran, an independent research and consulting firm located in Wrightsville, Pennsylvania, to conduct research in support of the CHNA. Holleran has over 25 years of experience in conducting public health research and community health assessments. The firm provided the following assistance:

- > Collected and interpreted data from secondary data sources
- > Collected, analyzed and interpreted data from key informant surveys
- > Prepared report cards and all reports

## **Community Representation**

Community engagement and feedback are an integral part of the CHNA process. Sturdy Memorial Hospital and Medical Associates sought community input through Key Informant Surveys and will seek input from community leaders and partners during the prioritization and implementation planning process. Public health and health care professionals shared knowledge and expertise about health issues, and leaders and representatives of nonprofit and community-based organizations provided insight about the local community, including the medically underserved, low income, and minority populations.

## **Research Limitations**

As with all research efforts, there are some limitations related to this study's research components methods that should be acknowledged. Due to the unavailability of some refined secondary data, some of the health indicator statistics represent counts or crude rates only. Crude rates are generally defined as the total number of cases or deaths divided by the total population and are generally presented as per populations of 1,000, 10,000 or 100,000 (which is noted on each table). These rates are based on raw data and do not account for characteristics such as age, race, and gender. In other instances, when more refined data are available, age-adjusted data are presented.

In some instances, key informant survey participants may over or underreport behaviors and illnesses based on fear of social stigma depending on the health outcome of interest or misunderstanding the question being asked. In addition, respondents may be prone to recall bias where they may attempt to answer accurately but remember incorrectly.

In addition, timeline and other restrictions may have impacted the ability to survey all key informants. Sturdy Memorial Hospital and Medical Associates sought to mitigate limitations by including representatives of diverse and underserved populations in the list of community members who were asked to participate in the survey. In addition, the Key Informant Survey was reopened in June 2022 to attempt to increase participation. Ten additional surveys were completed as a result of this effort (totaling 34).



# **KEY FINDINGS**

Both research components of the CHNA come together to reveal a unique perspective about the health status of residents living in the primary and secondary service areas. It is worth noting that key informants praised the community and its many organizations for providing services when needed. Several comments address the fine work that Sturdy Memorial Hospital and Medical Associates is doing.

- "Sturdy and its partners do a good job of community outreach."
- > "Sturdy does offer a lot of health screenings."
- "Sturdy has a clinic for substance abuse patients."
- "In the past collaborating with community partners has been very difficult, but I am optimistic with new leadership at Sturdy."
- "The offer by places like Sturdy Hospital to have programs for assisting individuals and families with navigators in the health care system (is appreciated)."
- "I appreciate the work "being done by Sturdy and other community leaders in addressing these problems."
- "Please keep up the good work. This community needs you!"
- "Sturdy is a great partner to the community, and I look forward to their continued success."

At times, key health issues raised within the CHNA are more prevalent in one service area or one county than the other. The key findings presented here represent themes which have been drawn from the Secondary Data Profile and the Key Informant Survey and highlight the key takeaways that are consistent across the research components, as noted by the Holleran team.

# Access to Healthcare and Prevention Services

The data demonstrate that residents of the primary and secondary service areas are almost entirely covered by health insurance. This is advantageous in terms of being able to afford doctor's visits and to seek preventative treatment rather than waiting for a medical crisis to occur. However, insurance coverage is not the only variable impacting health outcomes. The inability to navigate the health care system was selected by key informants as the most significant barrier to accessing the health care system. "Many times, navigating the health care system requires that people have access to a computer which not everyone has." Also, "Literacy levels prevent understanding as to how to access insurance. Many of the guests we serve don't even have access to a mailing address."

For key informants, access to care issues and uninsured individuals seems to have become much more important of an issue; now selected by over half in 2022 as compared to one-third in 2019. One key informant noted, "Access to proper and affordable care in this area is needed." Factors mentioned as impacting access include the limited availability of preventative care such as immunizations and screenings and outreach services, affordability and the inability to pay out of pocket expenses, lack of transportation and a heightened lack of trust in the health care system. "This area has a large immigrant population with many language and cultural issues. Many are low income and may also lack health coverage and ability to pay so they do not seek health



services." Access to education about the need for routine medical care and prevention as well as the ability to attend medical appointments by having time off from work and a means of transportation also impact access and health status. Overall, key informants called for better care coordination that looks at the needs of the whole person and improved collaboration among community organizations. "Consideration (should be given) to adding health care coordination at the local level that will help educate people on access, coordination of care, disease mitigation/prevention."

Access to providers is critical to healthy outcomes in a population. Provider density, or the provider to population ratio measures the opportunity for community members to be seen by a physician. According to County Health Rankings, Bristol County is ranked 13<sup>th</sup> of 14 counties in Clinical Care Rank where a ranking of "1" is considered the best. The Clinical Care Rank evaluates provider density as well as a community's access to health prevention programs such as vaccinations and cancer screenings. Norfolk County ranked much higher and is 2<sup>nd</sup> among Massachusetts counties. While a majority of survey respondents perceive there to be a sufficient number of primary care providers and medical specialists in the community, accessing them seems to be the issue. This is confirmed by a large majority of survey respondents who selected transportation and the availability of providers/appointments as key health barriers. Importantly, only 4.2% "agree" or "strongly agree" that there are enough bilingual providers to meet demand.

Specific provider to population ratios vary by county. The ratio of individuals to one primary care physician in Bristol County is alarmingly high (1,893:1) when compared to Massachusetts and the National Benchmark (968:1 and 1,050:1 respectively). The National Benchmark represents the 90<sup>th</sup> percentile and only 10% of counties are better. The same is true for the dentist ratio in Bristol County which is 1,457:1 while the National Benchmark is 1,260:1. Poor provider densities in Bristol County may translate into longer wait times to get a doctor's appointment and primary care doctors and dentists who do not accept new patients. It is worth noting that free or low-cost dental care was identified by key informants as "Missing." "Dental health seems to be the often-hidden source of inflammation and other problems that invite disease." By contrast, provider densities in Norfolk County for primary care physicians and dentists are an area of strength. Fortunately, mental health provider density in both counties is favorable.

Poor provider densities in a community may increase the use of urgent and emergent medical care rather than routine and preventative care. A key informant stated, "Although there are many dental places available the problem arises due to cost. Avoiding care leads to multiple medical problems that most often can then lead to emergency room visits for such things as heart failure, infections, etc." This is costly and often results in inferior health outcomes. The local emergency rooms may be inappropriately utilized according to this key informant. "They go to the ER because that's where they know they will get the care they need. Many could go to a doctor's office but don't have the money to pay." There may be a similar issue with hospitalizations. The rate of preventable hospital stays per 100,000 individuals in Bristol County is 6,068. In Massachusetts it is much lower (4,637) and the National Benchmark is lower still



(2,765). In Norfolk County, the rate of preventable hospital stays is similar to the rate in the state.

The availability of preventive healthcare and educating the community around preventative health behaviors can positively impact health outcomes. Cancer screenings and vaccinations can lower the rate of chronic and infectious diseases. The percent of Bristol County residents receiving a flu vaccination is 45%, somewhat higher than the state (41%), but lower than the National Benchmark of 52%. However, only 36% of residents in Norfolk County receive an annual flu vaccination. On a positive note, in both counties over half of woman receive mammograms each year and this is higher than the National Benchmark of 49%. Also, several infectious and sexually transmitted diseases are less prevalent in Bristol and Norfolk counties than in Massachusetts and the U.S. including HIV/AIDS, infectious syphilis, chlamydia and gonorrhea. However, the case rate of tuberculosis (per 100,000) in Norfolk County (3.8) is high when compared to Massachusetts (2.6) and the U.S. (2.7). The rate in Bristol County is much lower at 0.9.

Finally, healthy birth, growth and development of children is an important measure of the availability of and ease of access to prenatal health services for mothers and infants. Bristol and Norfolk counties compare favorably to the state and the U.S. in key indicators including live births (preterm vs. full term), teen births, and infant mortality. This may point to the adequacy of pre-natal care for mothers and children and sufficient support services around the birth. However, according to County Health Rankings, Health Outcome Rankings in 2021, infants born with low birthweight in both Bristol (8%) and Norfolk (7%) counties is slightly higher than the National Benchmark of 6%.

# > Affordable Housing and Income

Important secondary data for the primary and secondary service areas such as cost of living, poverty level and average rent and home values are key in identifying the impact that income and affordable housing have on health. For those living at or below the poverty level, finding affordable housing is difficult and when found, may be less than optimal. Poor housing conditions are associated with a wide range of health conditions including respiratory illness, asthma, lead poisoning, injuries and mental health. It is well documented that when housing is affordable, financial burdens are alleviated and more household resources are available for health care and healthy food, which lead to better health outcomes. Of the key informants, 66.7% chose low-income/poor populations as the most underserved. One respondent shared this about the lives of underserved populations, "(There is a) lack of access to care for basic needs and to secure, reliable shelter." Another stated, "The neediest do not have jobs, do not have transportation and unless linked in with social services that aggressively reach out to the community, these needs go unserved."

The median income for households and families is highest in the secondary service area and higher in the primary service area (\$133,129 and \$120,549 respectively) than both the state and the nation. While high median incomes may seem ideal, the data show that home values and median rents are also high. In both the primary and secondary service areas, far more



households own their own homes than rent as compared to the state and nation. Median home values, particularly in the secondary service area are much higher than in Massachusetts or the U.S. The median home value in the secondary service area is \$517,828. The median monthly rent is highest in the secondary service area as well (\$1,426).

Thirty percent of a household's total income is considered the cut off for housing-cost burden and avoiding financial hardship. In the secondary service area, the percent of households in which 30% or more of income is spent on rent represents nearly half (47.6%) of all renters. When spending more than 30% on rent or mortgage, tradeoffs must be made which include buying healthy food and paying for health care. This suggests that living in these services areas (particularly the secondary service area) can be costly for residents of limited means. Homeownership and even renting an adequate home may be out of reach for some. One key informant stated, "The number of homeless individuals in the area has increased over the past two years, in particular related to the pandemic. Though resources were made available, increased mental health and substance misuse contributed to the inability to maintain housing and basic needs."

On a positive note, the percent of all families below poverty level in both the primary and secondary service area is much lower when compared to the state and the nation. (Households that are below 100% of the federal poverty level have an income less than the amount deemed necessary to sustain basic needs.) Fewer households in the service areas receive food stamp/SNAP (supplemental nutrition assistance program) benefits when compared to the state and nation. However, in the secondary service area, there is a notably higher proportion of households with one or more people 60 years and over receiving food stamps (87.1%) than the primary service area (44.9%), the state (41.7%), and the nation (38.8%). Additionally, almost one-third (30.8%) of households in the secondary service area are responsible for grandchildren which may create an added financial burden for these older residents. These findings demonstrate that older adults in the secondary service area may experience financial hardship which is disproportionately greater than younger adults.

# Mental/Behavioral Health and Substance Abuse

Increasingly, mental health disorders and substance abuse have been linked to a higher risk of developing and dying from chronic diseases, such as diabetes, cardiovascular disease and infectious diseases. When not addressed, mental health issues including suicide can be a burden on population health as well as on individuals. Behavioral health encompasses traditional mental health and substance use disorders, as well as overall psychological well-being. Addressing mental/behavioral health issues involves focusing on social determinants of health through an array of social and community avenues. Consistently, the secondary data find Bristol County to have greater mental health and behavioral health needs than Norfolk County. A comment in the Key Informant Survey points to the severity of the issue. "Mental health and suicide are so much more prevalent now since the pandemic and at much younger ages. There seems to be a suicide ideation that has spread throughout our young communities."



Mental health/suicide was selected by key informants as the top key health issue and the most significant issue confronting the community. "Mental health is the utmost critical health issue in today's society. Mental health can play a role in your overall health that may trigger the other health issues selected." Despite the fact that mental health provider density is reported to be adequate, mental health services were identified by 75% as the top "Missing" community resource. This issue seems to have intensified since 2019, with fewer informants perceiving there to be sufficient mental health providers now. "Access to mental health care is limited in this area. People are waiting a long time for a first appointment." A respondent recommended that more at-home services be provided to this population, essentially meeting them where they live. Related to this issue is the top health issue of substance abuse/alcohol abuse. Services to assist those with addiction issues were mentioned by 50% of key informants as a top "Missing" resource. Unaddressed mental health and substance abuse issues have wide-spread consequences in the community in the areas of employment, homelessness, poverty, and health care costs. It also can create family disruptions and impede a child's success in school. As one respondent put it, "Mental Health is a current crisis. One issue is the lack of available counselors and inpatient beds to assist patients in need."

Self-assessed health status is a measure of how an individual perceives his or her health and can be a predictive measure for overall health outcomes in a population. County Health Rankings measures length of life and perceived physical and mental health. Norfolk County received a ranking 3 of 14 counties for Health Outcomes (with 1 being the healthiest). Bristol County is ranked much lower at 12. In Bristol County, residents experience 4.9 poor mental health days on average per month and 16% are in poor or fair health. In Norfolk County people fair somewhat better and experience 4.1 poor mental health every 30 days. Eleven percent are in poor or fair health. Both counties have a higher average number of poor mental and physical health days than the National Benchmark.

Intentional self-harm (suicide) is often the result of an untreated mental health condition. The crude death rate per 100,000 for suicide is higher in Bristol County (9.4) than in Norfolk County (7.5) or Massachusetts, but lower than the U.S. (12.4). A key informant remarked, "Mental health has become a significant issue with the pandemic, and we are trying to bring in additional supports and suicide prevention programs."

The Health Behaviors Ranking measures risk behaviors and environmental factors such as smoking, drinking, obesity, exercise, infections and teen births. Bristol County is ranked 13 for Health Behaviors while Norfolk is ranked near the top at 2 (when "1" is the best). The percent of excessive drinking in Bristol County is similar to the state, but higher than the National Benchmark. The percent of alcohol impaired deaths in Bristol County far exceeds the National Benchmark. Norfolk County is also higher than the benchmark. In addition to fatalities, overuse of alcohol and drugs can lead to mental and physical health complications, such as anxiety, depression, diabetes, liver disease, and heart disease.

The misuse of and addiction to opioids, including prescription pain relievers, heroin, and synthetic opioids such as fentanyl is a serious national crisis that affects public health on the



local, state and national levels. Addiction can lead to overdose and a rise in neonatal withdrawal syndrome. Fortunately, due to increased focus on this issue, fatal opioid deaths have been declining in recent years and this is true for the primary and secondary service areas. Likewise, the opioid prescribing rate per 100 persons declined in Bristol and Norfolk counties from 2017 to 2020. "I think the Partnership between law enforcement, the medical community and its substance abuse partners is strong. Resources are often not available, but at least for substance abuse and opioids, this community has done a lot to find a remedy besides keeping them in the ER." However, one key informant had this to say, "Substance abuse seems to be an underlying cause of mental health issues and death by suicide,"

Data from the Youth Risk Behavior Survey in 2019 provide insight into the mental and behavioral health of young people. The data (which are not available at the county level) indicate that high school students in Massachusetts who have ever been offered, sold or given drugs at school is on the rise. Current marijuana use among Massachusetts high school students (26.0) is high in comparison to the nation (21.7). Binge drinking among teenagers is also high. Massachusetts students who have ever used methamphetamine or heroin is surpassing the nation, however, the use of cocaine and ecstasy are on the decline. Also, bullying in high school, including electronic bullying has increased since 2017. Of those in high school in Massachusetts, 6.4% did not attend because of safety concerns. This is an increase from 4.5% in 2017.

## Mortality and Chronic Disease Management

Many chronic diseases such as diabetes, heart disease, respiratory disease, and stroke are caused by key risk behaviors and are among the most common causes of death and disability in the United States. These behaviors have significant health and economic costs to the community and its members. A key informant recognized the difficulty in staying healthy, "Access to information about how to maintain healthy lifestyles is a big challenge. More needs to be done on an outreach basis to offer information especially to those who do not have a regular primary care physician."

In general, the primary service area has higher crude death rates per 100,000 than the secondary service area, with the exception of diabetes and stroke. The top 2 leading causes of death in 2020 for both service areas are heart disease and all cancers, with rates higher than the state and nation for cancer. The third leading cause of death in the primary service area is chronic lower respiratory disease but is stroke in the secondary service area. Although data about smoking are not available for the services areas, a larger proportion of adults in Bristol County are smokers (19%) than in Norfolk County, the state and compared to the National Benchmark. Smoking is a common cause of chronic obstructive pulmonary disease, a type of respiratory disease and is also correlated with chronic health conditions such as lung cancer, stroke, and heart disease.

The crude death rate from diseases of the kidney (nephritis, nephrotic syndrome and nephritis) as well as from septicemia and pneumonitis (due to solids and liquids) are higher in both counties than the state and the nation. Chronic liver disease and cirrhosis is higher in Bristol County than Norfolk County, the state or nation. The hepatitis virus as well as alcohol abuse are often associated with liver disease and unhealthy lifestyle choices.



Accidents (death by unintentional injury) are also a leading cause of death. Death from unintentional injuries has implications for public health including consequences which are economic and psychological and frequently impact family stability. Accidents which result in death are caused by events such as motor vehicle accidents, gun violence, falls, and drug overdose/poisonings. The crude death rate per 100,000 by unintentional injury is high in Bristol County (45.7) compared to Norfolk County (27.8), the state (36.8) or the nation (42.8). Years of potential life lost (per 100,000) involves estimating the average time a person would have lived had they not died prematurely and gives more weight to deaths among younger people. A majority of premature deaths are due to health risk behaviors and may be preventable, thereby reducing social and economic loss. Years of potential life lost in Bristol County is very high relative to Norfolk County, the state and the National Benchmark. Fewer years of potential life lost are reported in Norfolk County than either the state or the benchmark.

Age-adjusted mortality for all cancer sites is higher in Bristol County (155.6 per 100,000) than Norfolk County as well as in the state and nation. It is also much higher than the HP 2030 target of 122.7. Age-adjusted cancer incidence rates indicate that for Bristol County, lung and bronchus (67.5), pancreas, prostate (male) and uterus (female) are significant. In Norfolk County, the age-adjusted mortality rate for breast cancer (female) and melanoma of the skin is high. With preventative screenings, some cancers can be identified in their early stage, increasing the likelihood of remission and a full recovery.

Key informants selected some chronic and comorbid conditions as key health issues. These include overweight/obesity, diabetes, cancer, and heart disease. "Diabetes, heart disease, and obesity (I believe) are frequently interrelated and affect significant portions of the population. Together they represent huge costs to our healthcare systems." Significant barriers such as the inability to obtain doctor's appointments, a lack of bilingual providers, a lack of providers who accept Medicaid/Medical Assistance and limited knowledge of good health practices in the community were chosen. These issues reduce the likelihood that individuals are routinely treated for chronic and comorbid conditions. This in turn, can lead to poor health outcomes. This is summarized by a key informant, "In many cases, the need to work extra hours or multiple jobs to make ends meet doesn't leave much time for pursuit of healthy decisions. In some communities, cultural fear of seeking ROUTINE healthcare support exacerbates daily poor lifestyle decisions." Yet many chronic diseases are largely preventable. Making healthy lifestyle choices may reduce mortality, lower the risk of developing chronic diseases and improve health status overall. Addressing these barriers and improving health literacy through outreach can directly impact underserved communities.

# > Obesity and Weight Management

Eating well and exercising are important in maintaining a healthy weight and reducing community obesity rates (measured by a BMI of 30 or more). Physical inactivity, poor nutrition habits, and lack of access to healthy food and exercise opportunities are known risk factors that contribute to obesity and other chronic conditions, such as diabetes, cancer, and heart disease.



The food environment index measures the proximity of one's home to a grocery store and food insecurity which is the lack of consistent access to a reliable source of nutritious food and enough food for an active, healthy life. It may reflect a households' need to make trade-offs between important basic needs, such as housing or medical bills, and purchasing nutritionally adequate foods. In Bristol County, where adult obesity is 29%, the food environment index is 8.5. Norfolk County on the other hand, has a food environment index above the National Benchmark (9.3) and a lower percentage of adult obesity (25%). One key informant remarked, "One challenge is that jobs do not pay living wages, so people have to work more than one job. This leaves little time for meal planning and cooking, easier to just eat fast food. Working multiple jobs makes it more difficult to find time to exercise. More recently the cost of food is also a huge issue."

A community's health and overall quality of life is also affected by access to exercise opportunities which is measured by the proportion of residents who live reasonably close to a physical activity location. These may include parks or facilities identified by the NAICS code 713940 (gyms, community centers, YMCAs, pools, etc.). Despite having very reasonable access to exercise opportunities in both counties, 24% of adults over the age of 20 are inactive in Bristol County and 18% are inactive in Norfolk County. The National Benchmark for inactivity is 19%. The built environment plays a part in the health of residents as well. Norfolk County is ranked 8 and Bristol County is 10 of 14 counties for Physical Environment Rank (where 1 is the best).

Key informants selected overweight/obesity as being among the top 5 key health issues in the region and stressed the lack of healthy food, the knowledge of how to prepare it and the lack of time to exercise. One respondent stated, "Obesity has been on the rise for a long time, it needs to be addressed at a pre-natal level. Parents need to be educated of the importance of proper nutrition early on. By the time children start to make their own choices it is too late, bad habits have already been adopted. Offering nutritional programs to parents explaining the benefits and how to prepare, how to purchase will help to reduce many childhood illness due to lack of poor nutrition." Another key informant noted that some health insurance plans pay for gym memberships however, "Most of our clients are on MassHealth and don't have access to join a health club or afford healthy food." One respondent recommended, "Improve walkability of areas in communities particularly in lower economically distressed areas."





DOMAIN	INDICATOR	MEASURE	PRIMARY SERVICE AREA	SECONDARY SERVICE AREA	MASSA- CHUSETTS	U.S.
	LANGUAGE	Population 5 Years and Older who speak English less than "very well"	3.5%	4.1%	9.2%	8.4%
		Population below 100% of the poverty level	6.1%	2.4%	10.3%	13.4%
	INCOME	Households with Food Stamp/SNAP benefits	7.2%	3.4%	11.7%	11.7%
		% of unemployed civilian labor force	3.1%	2.7%	3.2%	3.4%
	EDUCATION	% of bachelor's degree or higher in adults 25 years and over	42.8%	60.5%	43.7%	32.1%
	AFFORDABLE	Renter households spending more than 30% of their income on housing	43.2%	47.6%	46.7%	46.0%
	HOUSING	Owner households spending more than 30% of their income on housing	24.5%	30.1%	30.0%	27.7%
		% of householders living alone	11.2%	6.2%	11.9%	12.5%
SOCIAL SUPPORT		Language and cultural barriers as a key health barrier selected by key informants.	54.2%			
		% of population without health insurance coverage	2.0%	0.9%	2.7%	8.8%
SOCIO- ECONOMIC			BRISTOL COUNTY	NORFOLK COUNTY	MASSA- CHUSETTS	U.S.
FACTORS		Primary care physicians to population ratio	1,893:1	787:1	968:1	1,050:1*
		Mental health providers to population ratio	197:1	159:1	153:1	310:0*
		Dentist to population ratio	1,457:1	794:1	930:1	1,260:1*
	HEALTH CARE	Top health issue identified by key informants: Mental health/suicide	91.7%			
	Recess	Most significant barrier to accessing care cited by key informants: Inability to navigate the health care system	79.2%			
		Most "missing" healthcare service in the community cited by key informants: Mental health services	75.0%			
	BUILT	Food environment index = food access and insecurity (ranking from 1 = worst to 10 = best)	8.5	9.3	9.2	8.7*
ENVIRONMENT		Access to exercise opportunities	95%	94%	94%	91%*



DOMAIN	INDICATOR	MEASURE		NORFOLK COUNTY	MASSA- CHUSETTS	U.S.
		Population reporting "fair" or "poor" overall health	16%	11%	14%	12%*
	PHYSICAL AND	Poor physical health (average within past 30 days)	4.2	3.2	3.5	3.0*
	MENTAL HEALTH	Poor mental health (average within past 30 days)	4.9	4.1	4.3	3.1*
		% of population with adult obesity (BMI $\geq$ 30)	29%	25%	25%	26%*
HEALTH	TOBACCO USE/	Adults who are current smokers	19%	13%	14%	14%*
BEHAVIORS	SUBSTANCE USE	Excessive drinking in adults	24%	22%	24%	13%*
		Mammography screening	58%	55%	54%	49%*
		Preventable hospital stays per 100,000	6,086	4,637	4,764	2,765*
	PREVENTION	Flu vaccinations	45%	36%	41%	52%*
		Tuberculosis case rate per 100,000	0.9	3.8	2.6	2.7
		Overall cancer incidence rates per 100,000 in adults	430.8	463.7	441.5	422.7
	CONDITIONS	Incidence of Chlamydia per 100,000	366.9	302.8	444.1	552.8
	AND INFECTIOUS	Incidence of Gonorrhea per 100,000	87.8	68.3	109.1	188.4
	DISEASES	Incidence of Tuberculosis per 100,000	0.9	3.8	2.6	2.7
HEALTH OUTCOMES	PREMATURE DEATH	Years of potential life lost (death before age 75) per 100,000 people	7,181	4,545	5,610	5,400*
		Overall cancer mortality rates per 100,000 in older adults (Age-adjusted)	155.6	143.3	146.9	152.4
		Deaths due to intentional self-harm (suicide) per 100,000 (Age-adjusted)	9.4	7.5	8.2	12.4
	DEATH RATES	Death by unintentional injury (accidents) per 100,000 (Age-adjusted)	45.7	33.5	36.8	42.8
		Infant mortality rate per 1,000 live births	4.4	3.0	4.2	5.7

# COMMUNITY HEALTH NEEDS ASSESSMENT FINDINGS

# SECONDARY DATA PROFILE

## I. Socio-Demographic Statistics Overview

#### A. Population and Households

The populations of both the primary and secondary service areas have experienced growth (between 2000 and 2019), and growth has been substantial in the primary service area (21.7%). The growth in the secondary service area (8.6%) is somewhat similar to Massachusetts (7.9%) but less than in the U.S. (15.4%). However, the growth in the primary service area is much higher than either the state or the nation. Both the primary and secondary service areas have a somewhat older population than Massachusetts and the U.S. with a median age of 41.4 and 41.7 respectively.

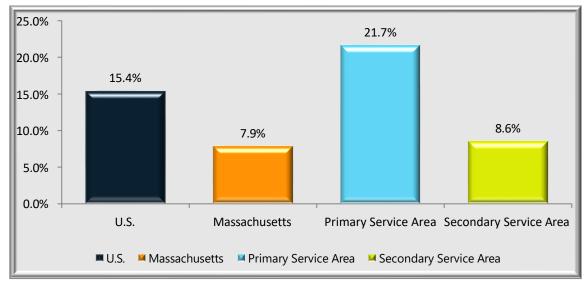


Figure 1. Population Change since 2000 (2000; 2015 – 2019)

#### Table 1. Total Population Breakdowns by Age (2015 – 2019)

	U.S.	Massachusetts	Primary Service Area	Secondary Service Area
Under 5 years	5.9%	5.2 %	5.4%	6.4%
5 to 14 years	12.5%	10.9%	12.5%	13.9%
15 to 24 years	13.0%	13.5%	12.1%	11.8%
25 to 44 years	26.7%	26.7%	24.8%	22.2%
45 to 59 years	18.9%	20.0%	23.6%	24.1%
60 to 74 years	16.0%	16.4%	15.8%	15.1%
75 to 84 years	4.9%	4.9%	3.9%	4.2%
85 years and over	1.9%	2.3%	1.6%	2.4%
Median age* (years)	38.5	39.7	41.4	41.7

#### Source: U.S. Census Bureau

\*Primary and Secondary Service Areas are weighted average calculations, to account for the fact that not all samples, or parts of the population, are created equally.



In both service areas, the percent of households that are now married is much higher than in Massachusetts and the U.S. Households headed by a female (with no husband present) are fewer in percent, suggesting that households may be more stable financially in both service areas than in the state or nation. Female headed households are more likely to live in poverty than other U.S. households. Almost one-third (30.8%) of households in the secondary service area are responsible for grandchildren. This is higher than the state, but lower than in the U.S. This responsibility is not as high in the primary service area (23.5%).

	U.S.	Massachusetts	Primary Service Area	Secondary Service Area
Total households	120,756,048	2,617,497	68,864	16,655
Average household size*	2.62	2.52	2.60	2.86
Average family size*	3.23	3.12	3.12	3.29
Married-couple families	48.2%	47.1%	56.3%	69.0%
Male householder, no wife	17.8%	17.2%	14.6%	8.1%
Female householder, no husband	27.7%	29.0%	22.2%	19.9%
Householder living alone	12.5%	11.9%	11.2%	6.2%
65 years and over living alone	3.5%	3.6%	3.5%	2.8%

#### Table 2. Households by Type (2015 – 2019)

#### Source: U.S. Census Bureau

\*Primary and Secondary Service Areas are weighted average calculations, to account for the fact that not all samples, or parts of the population, are created equally.

#### Table 3. Grandparents Responsible for Grandchildren (2015-2019)

	U.S.	Massachusetts	Primary Service Area	Secondary Service Area
Number of grandparents living with own grandchildren under 18 years	7,239,762	120,470	2,695	633
Percent of grandparents responsible for grandchildren	34.1%	25.2%	23.5%	30.8%

Source: U.S. Census Bureau

#### B. Race and Language

The population in both the primary service area and the secondary service area is primarily White, but the proportion in the primary service area is higher (90.0%). The secondary service area has a higher percentage of Hispanic or Latino population (7.3%) of any race, but far less than in Massachusetts or the U.S. Although not depicted in the graph, there is a significant Asian population in the secondary service area (8.0%).



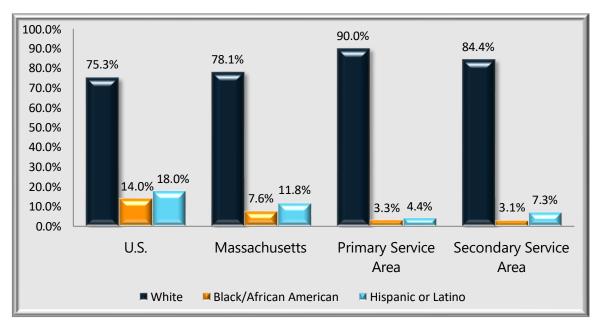
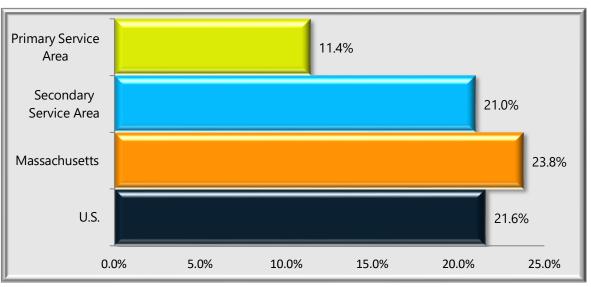


Figure 2. Hispanic or Latino and Race Characteristics of Primary Service Area (2015 – 2019)

The racial breakdown provides a foundation for primary language statistics. In the primary service area, a very large percent of residents speaks only English. However, 21.0% of individuals residing in the secondary service area speak a language other than English and 4.1% of this group speak English "less than well". Residents of both service areas who speak a language other than English at home are most likely to speak Indo-European languages.

Figure 3. Percentage of Population Speaking a Language Other than English at Home (2015 – 2019)





#### C. Housing and Income

A review of U.S. Census data shows specific community needs related to marital status, housing, education and poverty in both service areas. Housing is an important social determinant of physical and mental health. It is well documented that affordable housing alleviates financial burden and makes more household resources available to pay for health care and healthy food, which lead to better health outcomes.

In both service areas, far more households own their own homes than rent as compared to the state and nation. Home values are higher in the service areas than in Massachusetts or the U.S. Median gross rent in the secondary service area is also higher than the other areas. Consequently, households in which 30% or more of income is spent on rent or mortgage is highest in the secondary service area and this may lead to hardship in some cases. Thirty-percent of a household's total income is considered the cut off for housing-cost burden and avoiding financial hardship.

<u>- allo in the denning Characteric (2010</u>	U.S.	Massachusetts	Primary Service Area	Secondary Service Area
Owner-occupied units	77,274,381	1,632,765	50,854	14,414
Housing units with a mortgage	62.7%	69.2%	72.9%	72.4%
Housing units without a mortgage	37.3%	30.8%	27.1%	27.6%
Households spending 30% or more of household income on a mortgage	27.7%	30.0%	24.5%	30.1%
Median value*	\$217,500	\$381,600	\$360,045	\$517,828
Renter-occupied units	43,481,667	984,732	18,010	2,241
Occupied units spending 30% or more of household income on rent	46.0%	46.7%	43.2%	47.6%
Median gross rent*	\$1,062	\$1,282	\$1,174	\$1,426

#### Table 4. Housing Characteristics (2015 – 2019)

Source: U.S. Census Bureau

\*Primary and Secondary Service Areas are weighted average calculations, to account for the fact that not all samples, or parts of the population, are created equally.

The median income for households and families is highest in the secondary service area (\$133,129 and \$120,549 respectively). Additionally, the median income for households and families in the secondary service area is about \$35,000 and \$50,000 higher respectively than in the primary service area, and higher than the state and the nation as well.



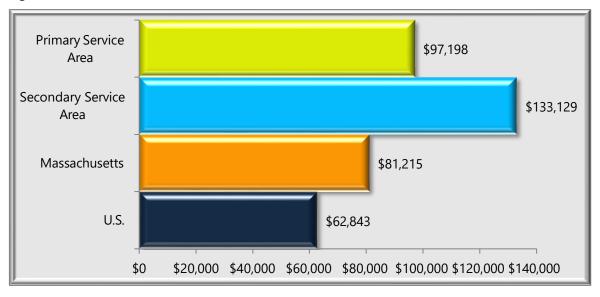


Figure 4. Median Household Income (2015 – 2019)

The percent of all families below the federal poverty level in both the primary and secondary service areas (4.2% and 1.4% respectively) is much lower than the state (7.0%) and the nation (9.5%). This is true as well for married couple families, female householders (with no husband), and older adults (65 years and over). The federal poverty level represents the dollar amount below which a household has insufficient income to meet minimal basic needs. Households that are below 100% of the poverty level have an income less than the amount deemed necessary to sustain basic needs.

	U.S.	Massachusetts	Primary Service Area	Secondary Service Area
All families	9.5%	7.0%	4.2%	1.4%
With related children under 18 years	15.1%	11.1%	7.8%	2.5%
With related children under 5 years	14.4%	10.1%	6.6%	0.0%
Married couple families	4.8%	2.9%	2.1%	1.4%
With related children under 18 years	6.6%	3.3%	2.1%	1.6%
With related children under 5 years	5.1%	2.8%	1.0%	0.0%
Female householder, no husband	26.5%	22.1%	20.4%	6.8%
With related children under 18 years	36.1%	31.5%	32.5%	11.4%
With related children under 5 years	40.5%	36.2%	35.4%	0.0% **
All people	13.4%	10.3%	6.1%	2.4%
Under 18 years	18.5%	13.2%	8.7%	3.1%
18 years to 64 years	12.6%	9.7%	6.5%	2.3%
65 years and over	9.3%	9.0%	6.6%	5.4%

#### Table 5. Families/People Whose Income in the Past 12 Months is Below the Poverty Level (2015 – 2019)

Source: U.S. Census Bureau

All Primary and Secondary Service Areas are weighted average calculations, to account for the fact that not all samples, or parts of the population, are created equally.

\*\*Data not available for the towns of Norton and Plainville in the Primary Service Area and Sharon in the Secondary Service Area.



Fewer households in the secondary service area live below the poverty level and receive food stamp/SNAP (supplemental nutrition assistance program) benefits (24.7%) when compared to the primary service area (35.5%). Both service areas have fewer households in this category than in the state and nation. However, there is a notably higher percentage of households with one or more people 60 years and over receiving food stamps in the secondary service area (87.1%) when compared to the primary service area (44.9%), the state (41.7%), and the nation (38.8%).

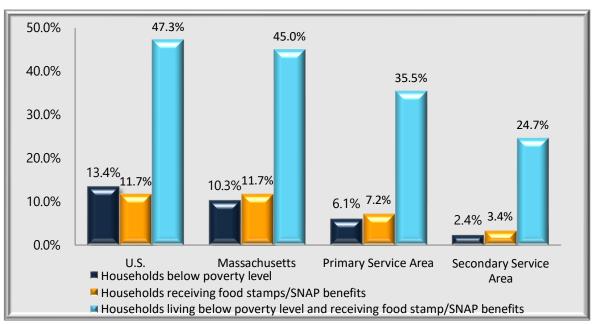


Figure 5. Households Receiving Food Stamps/SNAP with Income Below Poverty Level (2015 – 2019)

#### **D. Employment**

The majority of the population in the primary and secondary service areas are currently employed in the labor force (71.6% and 66.5%). This compares favorably to Massachusetts (67.3%) and the nation (63.4%). Unemployment in both services areas is low as well. Also, many more workers in the secondary service area are employed in management, business, science and the arts (61.5%) than in the secondary service area, the state and the nation. The mean travel time to work is longer (39.4 minutes) in the secondary service area than the primary service area, the state, and the nation.

#### Table 6. Employment Status, Population 16 Years and Over (2015 – 2019)

	U.S.	Massachusetts	Primary Service Area	Secondary Service Area
Population 16 years and older in labor force	164,629,492	3,800,931	106,827	25,775
% of population in labor force	63.4%	67.3%	71.6%	66.5%
Civilian labor force	63.0%	67.2%	71.6%	66.5%
Armed Forces	0.4%	0.1%	0.1%	0.0%
% of population not in labor force	36.6%	32.7%	28.4%	33.0%
Unemployed civilian labor force	3.4%	3.2%	3.1%	2.7%

Source: U.S. Census Bureau



	U.S.	Massachusetts	Primary Service Area	Secondary Service Area
Management, business, science, and arts	38.5%	46.8%	46.4%	61.5%
Service	17.8%	17.3%	13.8%	9.8%
Sales and office	21.6%	19.9%	22.9%	19.1%
Natural resources, construction, and maintenance	8.9%	6.7%	7.8%	4.2%
Production, transportation, and material moving	13.2%	9.3%	9.1%	5.3%

Table 7. Estimated Major Occupational Groups: Civilian Population 16 years and older (2015 – 2019)

Source: U.S. Census Bureau

#### E. Education

Education is an important social determinant of health as individuals who are less educated tend to have poorer health outcomes due in part to income and access issues. Both service areas are highly educated. The secondary service area has a very high percentage of residents with a bachelor's degree or higher (60.5%) when compared to the primary service area (42.8%) and the state (43.7%) and nation (32.1%).

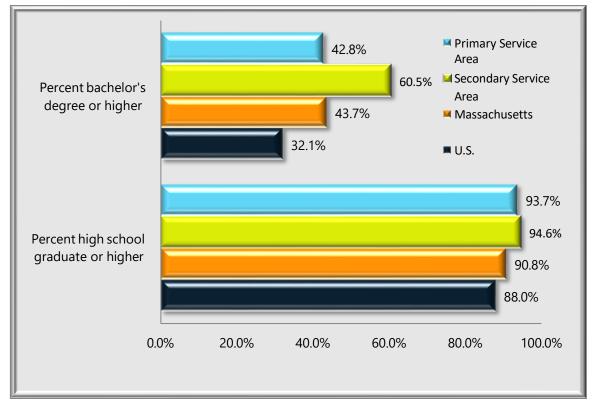


Figure 6. Percentage of Population with Select Educational Attainment (2015 – 2019)



## II. Health Issues

#### A. Access to Health care

Ready access to health care and medical services is important to the health of a community. Issues of unavailability of services and providers, difficulty navigating the health system or lack of health care insurance may impede individuals from receiving needed care in a timely and preventative manner. Health care coverage in the primary and secondary service areas is exceptional (98.0% and 99.1%) and is slightly higher than in Massachusetts (97.3%) and higher than the nation (91.2%). Many more individuals have private insurance than public insurance perhaps reflecting the high percent of the population in the labor force (and low unemployment rate) in both service areas.

	U.S.	Massachusetts	Primary Service Area	Secondary Service Area
With health insurance coverage	319,706,872	6,777,468	182,976	47,754
% population with health insurance	91.2%	97.3%	98.0%	99.1%
With private health insurance	67.9%	74.2%	82.9%	87.7%
With public coverage	35.1%	36.3%	28.4%	24.8%
% population without health insurance	8.8%	2.7%	2.0%	0.9%

#### Table 8. Health Insurance Coverage (2015 – 2019)

Source: U.S. Census Bureau

According to County Health Rankings, Norfolk County far exceeds the National Benchmark for primary care physician, dentist and mental health provider density. In Bristol County the availability of mental health providers exceeds the benchmark. Notably though, primary care and dentist provider density is far worse in Bristol County than in Norfolk County, the state and the nation. Both counties exceed the benchmark in terms of mammography screenings which is favorable but fall below the benchmark for flu vaccinations. The counties and the state are much higher than the National Benchmark for the number of preventable hospital stays per 100,000.

#### Table 9. Clinical Care Rankings<sup>a</sup> (2021)

	National Benchmark <sup>b</sup>	Massachusetts	Bristol County	Norfolk County
Clinical Care Rank			13	2
Uninsured (Population <65 years)	6%	3%	4%	2%
Primary care physician density	1,050:1	968:1	1,893:1	787:1
Dentist density	1,260:1	930:1	1,457:1	794:1
Mental health provider density	310:1	153:1	197:1	159:1
Preventable hospital stays per 100,000	2,765	4,764	6,086	4,637
Flu Vaccinations	52%	41%	45%	36%
Mammography screening	49%	54%	58%	55%

Source: County Health Rankings & Roadmaps

<sup>a</sup> Rank is based on all 14 counties within the state of Massachusetts. A ranking of "1" is considered to be the healthiest.

<sup>b</sup> National benchmark represents the 90<sup>th</sup> percentile, i.e., only 10% are better.



#### B. Mortality & Leading Causes of Death

The crude death rates per 100,000 in the primary and secondary service area are 700.3 and 520.0 respectively. The secondary service area rate is much lower than the state (675.7) and the nation (731.9). The top 2 leading causes of death in 2020 for both service areas are all cancers and heart disease with rates higher than the state and nation for cancer. The third leading cause of death in the primary service area is chronic lower respiratory disease but is stroke in the secondary service area. Several causes of death are markedly higher in the primary service area than in the secondary service area. These include chronic lower respiratory disease, influenza and pneumonia, motor vehicle accidents and opioid-related deaths. The crude death rate for stroke is notably higher in the secondary service area than the primary service area.

#### Table 10. Number of Deaths and Death Rates per 100,000 (2017)

	U.S.	Massachusetts	Primary Service Area <sup>1</sup>	Secondary Service Area <sup>1</sup>
Number of deaths	2,813,503	58,844	1,469	353
Death rates*	731.9	675.7	700.3	520.0

Sources: Centers for Disease Control and Prevention – CDC WONDER and Massachusetts Department of Public Health

<sup>1</sup> No data available for the service area towns/cities on CDC WONDER, so Massachusetts Deaths 2016 Report used.

\*Primary and Secondary Service Areas are weighted average calculations, to account for the fact that not all samples, or parts of the population, are created equally.

	Primary Service Area <sup>1</sup>	Secondary Service Area <sup>1</sup>
Total cancer	185.9	175.0
Heart disease	166.8	160.9
Stroke	22.3	32.2
CLRD <sup>a</sup>	44.0	28.2
Diabetes	23.9	26.1
Influenza & pneumonia	17.4	6.0
Motor vehicle	7.1	2.0
Homicide	0.0	0.0
Suicide	10.3	8.0
Opioid-related <sup>b</sup>	34.8	12.1

#### Table 11. Crude Death Rates per 100,000 for Selected Causes of Death (2017)

Source: Massachusetts Department of Public Health

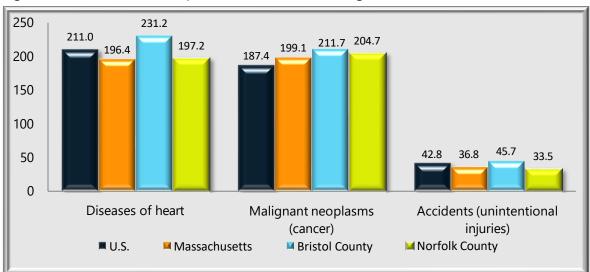
<sup>1</sup> All Primary and Secondary Service Areas causes of death are weighted average calculations, to account for the fact that not all samples, or parts of the population, are created equally.

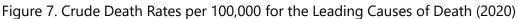
<sup>a</sup> Chronic lower respiratory disease

<sup>b</sup> Opioid-related death rates combines all opioid overdoses since classification of specific drugs can be difficult. The term opioid defines a class of drugs derived naturally from the opium poppy (opium, morphine, codeine), synthesized, or derived from a natural opiate (heroin, oxycodone, hydrocodone), or manufactured synthetically with a chemical structure similar to opium (fentanyl, methadone).



The Centers for Disease Control reports crude death rates for counties for 2020. Heart disease and cancers are reported to have the highest crude death rates, similar to 2017 data from the Massachusetts Department of Health. The CDC also includes death by unintentional injury (accidents) which is relatively high in Bristol County (45.7) compared to Norfolk County (27.8), the state (36.8) or the nation (42.8).





## C. Cancer

Age-adjusted mortality for all cancer sites is higher in Bristol County (155.6 per 100,000) than Norfolk County as well as in the state and nation. It is also much higher than the HP 2030 target of 122.7. Age-adjusted cancer incidence rates indicate that for Bristol County, lung and bronchus (67.5), pancreas, prostate (male) and uterus (female) are significant. In Norfolk County, the age-adjusted mortality rate for breast cancer (female) and melanoma of the skin is high.

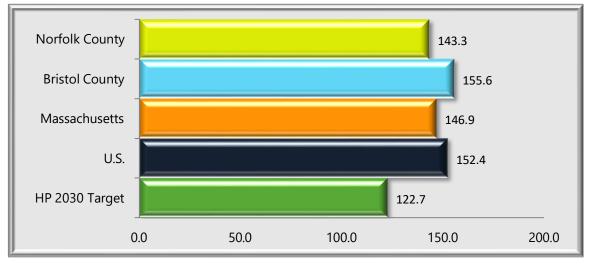


Figure 8. Age-Adjusted Cancer Mortality for All Sites per 100,000 (2014–2018)



	U.S.	Massachusetts	Bristol County	Norfolk County
Breast (female)	126.8	137.4	125.0	150.5
Bladder	19.7	22.2	22.7	20.8
Colon & Rectum	38.0	34.5	35.4	35.1
Lung & bronchus	57.3	60.7	67.5	67.2
Pancreas	13.1	13.5	14.6	13.1
Melanoma of the skin	22.6	21.7	15.9	28.3
Prostate (male)	106.2	107.9	128.7	112.8
Cervix (female)	7.7	5.5	4.9	4.1
Uterus (female)	27.4	29.2	29.9	29.9
All sites	422.7	441.5	430.8	463.7

#### Table 12. Age-Adjusted Cancer Incidence Rates by Site, per 100,000 (2014 – 2018)

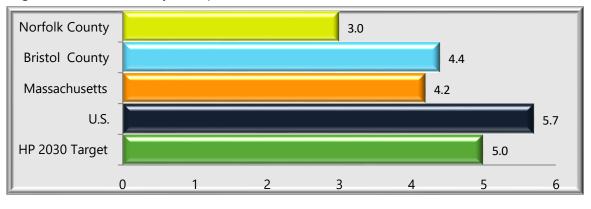
Source: National Cancer Institute

#### D. Maternal and Child Health

Healthy birth, growth and development of children is an important measure of the availability of health services to mothers and infants. Bristol and Norfolk counties compare favorably to the state and the U.S. in key areas including live births, teen births, and infant mortality.

The percentages of live births that were pre-term (6.9% and 7.6% for the primary and secondary service areas) are below the target set by Healthy People 2030 (9.4%) which is positive. Also, there were very few teen births in either the primary or secondary service areas in 2020, however the teen birth rate (age 15 to 19) is higher in Bristol County than in Norfolk in 2021 according to County Health Rankings. Infant mortality which is measured as the rate of infant death per 1,000 live births in both services areas is below the HP 2030 target rate (5.0) and the U.S. (5.7).

Most of these indicators are positive and point to readily available pre-natal care for mothers and children and sufficient support services around the birth. However, according to County Health Rankings, Health Outcome Rankings in 2021, infants born with low birthweight in both Bristol (8%) and Norfolk (7%) counties is higher than the National Benchmark of 6%.



#### Figure 9. Infant Mortality Rate per 1,000 Live Births (2018)



#### E. Infectious Disease

The identification and surveillance of infectious diseases are key to public health measures which aim to reduce illness, hospitalization and death. Several infectious diseases are less prevalent in Bristol and Norfolk counties than in Massachusetts and the U.S. These include HIV/AIDS, infectious syphilis, chlamydia and gonorrhea. However, the tuberculosis incidence rate in Norfolk County is higher than in Bristol County, Massachusetts and the nation.

	U.S.	Massachusetts	Bristol County	Norfolk County
Number of tuberculosis cases	8,916	178	5	27
Tuberculosis case rate	2.7	2.6	0.9	3.8

#### Table 13. Cases of Tuberculosis (TB) Disease and Incidence Rates per 100,000 (2019)

Sources: Centers for Disease Control and Prevention – NCHH AtlasPlus and Massachusetts Department of Public Health

# III. Health Risk Behaviors

#### A. Mental/Behavioral Health and Substance Abuse

Occurrence rates related to intentional self-harm (suicide), drug poisoning, excessive drinking and opioid deaths can shed light on the extent of drug use and significant mental health issues in a community. The reporting of depression and poor mental health days by adults and an escalation of risk behaviors by high school students also help to assess mental health issues in a community.

County Health Rankings ranks Norfolk County 3 of 14 counties for Health Outcomes (with 1 being the healthiest). Bristol County however received a ranking of 12. In Bristol County, residents report 4.9 poor mental health days on average per month and 16% are in poor or fair health. In Norfolk County 4.1 poor mental health days are reported and 11% are in poor or fair health.

Years of potential life lost (YPLL) per 100,000 (or premature death) is also a measure of health outcomes and estimates the years that a person would have lived if they had not died prematurely. The measure gives more weight to deaths that occur among younger people. YPLL in Bristol County is very high relative to Norfolk County, the state and the National Benchmark. In Norfolk County, fewer years of potential life lost are found than in either the state or the National Benchmark.



#### Table 14. Health Outcome Rankings<sup>a</sup> (2021)

	National Benchmark <sup>b</sup>	Massachusetts	Bristol County	Norfolk County
Health Outcomes			12	3
Length of Life			12	3
Premature death	5,400	5,610	7,181	4,545
Quality of Life			13	1
Poor or fair health	12%	14%	16%	11%
Poor physical health days	3.0	3.5	4.2	3.2
Poor mental health days	3.1	4.3	4.9	4.1
Low birthweight	6%	8%	8%	7%

Source: County Health Rankings & Roadmaps

<sup>a</sup> Rank is based on all 14 counties within the state of Massachusetts. A ranking of "1" is considered to be the healthiest.

<sup>b</sup> National benchmark represents the 90<sup>th</sup> percentile, i.e., only 10% are better.

Intentional self-harm (suicide) crude death rate per 100,000 in 2020 was higher in Bristol County than in Norfolk County (7.5) or Massachusetts, but lower than the U.S. (12.4). In Massachusetts 17.9% are reported to have a depressive disorder as compared to 19.6% in the U.S.

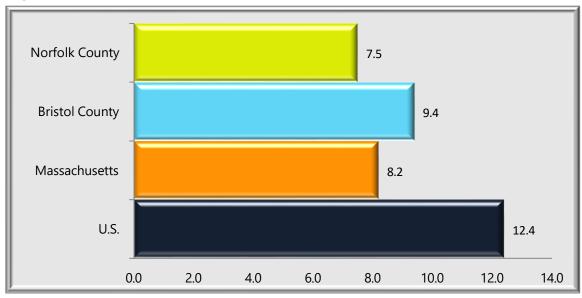


Figure 10. Crude Suicide Rates per 100,000 (2020)

The misuse of and addiction to opioids, including prescription pain relievers, heroin, and synthetic opioids such as fentanyl is a serious crisis that affects public health at the local, state and national levels. Fatal opioid deaths in 2020 were higher in Bristol County (233) than Norfolk (156) and both service areas. The opioid prescribing rate per 100 persons declined steadily in both counties from 2006 to 2020.



	U.S. <sup>1</sup>	Massachusetts <sup>2</sup>	Bristol County <sup>2</sup>	Norfolk County <sup>2</sup>	Primary Service Area <sup>2</sup>	Secondary Service Area <sup>2</sup>
2020	69,586	2,035	233	156	48	4
2019	49,860	2,002	260	129	50	7
2018	46,802	2,005	218	170	33	12
2017ª	47,600	1,999	240	166	64	6
2016	42,249	2,099	243	213	60	11
2015	33,091	1,710	172	164	29	7
2014	28,647	1,362	145	125	32	5
2013	25,052	961	86	82	28	6

#### Table 15. Fatal Opioid-Related Overdose Deaths, All Intents, by Year (2013 – 2020)

#### Sources: Centers for Disease Control and Massachusetts Department of Public Health

<sup>a</sup> Massachusetts started reporting opioid-related deaths all intents, including unintentional/undetermined and suicide.

<sup>1</sup> U.S. data not available on the Massachusetts Department of Public Health, so data compiled from the Kaiser Family

Foundation (analysis of Centers for Disease Control and Prevention, National Center for Health Statistics data).

<sup>2</sup> Data for 2020 deaths are preliminary and subject to updates. *Massachusetts\*\* 2020 data include confirmed and estimated data*, while the county level data are only estimates. Service area data are only the confirmed deaths by city/town of residence.

#### Table 16. Opioid Prescribing Rates per 100 Persons (2006; 2017; 2020)

	U.S.	Massachusetts	Bristol County	Norfolk County
2020	43.3	33.3	41.8	24.7
2017	58.7	40.1	62.1	35.6
2006	72.4	66.0	87.5	58.8

Overuse of alcohol and drugs can lead to mental and physical health issues such as anxiety, depression, diabetes, liver disease, and heart disease. In both counties, the percent of excessive drinking and alcohol-impaired driving deaths are similar to Massachusetts, however much higher than the National Benchmark.

#### Table 17. Alcohol Use/Abuse and Consumption among Adults (2021)

	National Benchmark	Massachusetts	Bristol County	Norfolk County
Excessive drinking	13%	24%	24%	22%
Alcohol-impaired driving deaths	13%	30%	30%	29%

Source: Robert Wood Johnson Foundation - County Health Rankings & Roadmaps

\* Additional factors not displayed above that contribute to the ranking for Health Behaviors. Rank is based on all 14 counties within the state of Massachusetts. A ranking of "1" is considered to be the healthiest.

 $^{\rm b}$  National benchmark represents the 90th percentile, i.e., only 10% are better.

Data from the Youth Risk Behavior Survey in 2019 (which are not available at the county level) indicate that high school students who have ever been offered, sold or given drugs at school is now similar to the nation and slightly higher than in previous years. Current marijuana use among



Massachusetts high school students (26.0) is high in comparison to the nation (21.7) as is binge drinking. The number of students who have ever used methamphetamine or heroin is also on the rise and surpassing the nation. However, the use of cocaine and ecstasy are on the decline. Unfortunately, bullying in high school, including electronic bullying has increased since 2017. Of those in high school in Massachusetts, 6.4% did not attend because of safety concerns. This is an increase from 4.5% in 2017.

#### **B.** Other Health Risk Behaviors and Issues

Additional risk behaviors that contribute to poor physical and mental health include tobacco use, physical inactivity, inadequate nutrition and obesity. Smoking is detrimental to nearly every organ in the body and is often correlated with poorer health outcomes and chronic health conditions such as lung cancer, stroke, and heart disease. The percentage of adult smoking in Bristol County is high (19%). This finding is consistent with the finding that lung cancer incidence rates are high in the county. According to the YRBSS<sup>1</sup>, a larger percentage of Massachusetts high school students in 2019 than in 2017 now use vaping products, similar to the nation as a whole.

Healthy eating coupled with regular physical activity is widely supported as the best way to prevent certain health concerns, such as diabetes, heart disease, stroke and cancer among others. In fact, being overweight/obese can be a contributing factor to many of these chronic diseases. County Health Rankings data show that Bristol County has a higher percentage of residents who are obese compared to Norfolk County, the state, and the National Benchmark.

The food environment index measures the proximity of one's home to a grocery store as well as food insecurity (not having access to a reliable source of food). Access (or lack of) to healthy food may contribute to obesity. In Bristol County, where adult obesity is 29%, the food environment index (8.5) is lower than the National Benchmark (8.7). Norfolk County on the other hand, has a food environment index above the benchmark (9.3) and a lower percentage of adult obesity (25%). Physical inactivity or lack of access to exercise opportunities may contribute to obesity. The percent of physical inactivity is high in Bristol County (24%) while in Norfolk County it is lower at 18%. In both counties, access to exercise opportunities is high.

Finally, the physical and built environment plays a part in and may negatively impact the health of residents. Norfolk County is ranked 8 and Bristol County is 10 of 14 counties for Physical Environment Rank. In Norfolk County, air pollution and particulate matter is 7.4 and Bristol County is 5.5. The National Benchmark is 6.1. Importantly, severe housing problems are more prevalent in the counties and the state than in the nation.



<sup>&</sup>lt;sup>1</sup> Youth Risk Behavioral Surveillance System

	National Benchmark <sup>b</sup>	Massachusetts	Bristol County	Norfolk County
Health Factors Rank			13	1
Health Behaviors Rank			13	2
Adult smoking	14%	14%	19%	13%
Adult obesity (BMI $\geq$ 30)	26%	25%	29%	25%
Food environment index	8.7	9.2	8.5	9.3
Physical inactivity (Adults 20 years+)	19%	20%	24%	18%
Access to exercise opportunities	91%	94%	95%	94%
Physical Environment Rank			10	8
Air pollution – particulate matter	6.1	6.0	5.5	7.4
Severe housing problems	9%	17%	17%	15%

### Table 18. Health Factors and Behaviors Rankings<sup>a</sup> (2021)

Source: County Health Rankings & Roadmaps

<sup>a</sup> Rank is based on all 14 counties within the state of Massachusetts. A ranking of "1" is considered to be the healthiest.

<sup>b</sup> National benchmark represents the 90<sup>th</sup> percentile, i.e., only 10% are better.

# **KEY INFORMANT SURVEY**

### I. Key Health Issues

### A. Top 5 Health Issues

Key informants were asked to determine the top 5 health issues in their community from a list of 13 focus areas identified in the survey. A large majority of respondents stated that mental health/suicide (91.7%) is the top health issue. This was also selected as the top issue in 2019. This is followed by access to care/uninsured (58.3%), overweight/obesity (58.3%) and substance abuse/alcohol abuse (58.3%). Diabetes and cancer are also among the top 5 key health issues in 2022.

Access to care issues and uninsured individuals seems to have become much more important of an issue; now selected by over half of respondents in 2022 as compared to one-third of respondents in 2019. Diabetes, heart disease and stroke are also more important key health issues according to informants. When asked to determine which health issue is the most significant, the highest percentage of key informants selected mental health (50.0%). This issue was selected far more often than the issues that followed including overweight/obesity (12.5%) and cancer (8.3%). Three individuals (12.5%) selected "other" as most significant. One individual reasoned "I chose other because interpersonal violence is often a primary cause of mental health issues/suicide, substance use and homelessness." Another mentioned school health services (immunizations and physicals) as a significant health issue. Table 19 summarizes the number of times a key health issue is mentioned and the percentage of respondents that rate the issue as being one of the top 5 health issues in their community in 2022 and 2019. Figure 11 depicts the percentage of respondents who selected the health issue as most significant.

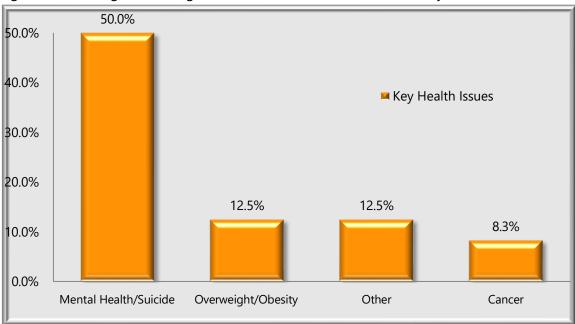


Table 19. Comparison ranking of health issu	2022		2019	
Key Health Issue	Count	Percent of respondents who selected the issue*	Count	Percent of respondents who selected the issue*
Mental Health/Suicide	22	91.7%	56	84.8%
Access to Care/Uninsured	14	58.3%	23	34.8%
Overweight/Obesity	14	58.3%	42	63.6%
Substance Abuse/Alcohol Abuse	14	58.3%	43	65.2%
Diabetes	12	50.0%	23	34.8%
Cancer	10	41.7%	25	37.9%
Heart Disease	9	37.5%	17	25.8%
Dental Health	5	20.8%	17	25.8%
Stroke	5	20.8%	5	7.6%
Other	4	16.7%	7	10.6%
Tobacco	3	12.5%	8	12.1%
Maternal/Infant Health	2	8.3%	1	1.5%
Sexually Transmitted Diseases	0	0.0%	0	0.0%

### Table 19: Comparison ranking of health Issues (2022 and 2019)

\*Respondents could select more than one option therefore the percentages may sum to more than 100.0%.

\*\*Mental health and suicide were asked separately in 2019, and 15 individuals (22.7%) listed suicide in their top 5 health issues.





Respondents were also asked to share information regarding what resources are available in the community to address the health issues identified. A summary of responses is listed below. Although some respondents described the services their organizations provide, the comments also represent the need for additional services.



### Select Comments Regarding Resources Available:

- "Although there are many dental places available the problem arises due to cost. Avoiding care leads to multiple medical problems that most often can then lead to emergency room visits for such things as heart failure, infections, etc."
- "Most challenging (is) rehab/sober homes for recovery. No state/local guidelines and lack of continuity for sober homes."
- "Effective emergency/urgent care"
- "Minimal resources blood pressure clinics have started twice a week at the health department and at clinics at senior center/elderly housing."
- "Access to mental health care is limited in this area. People are waiting a long time for a first appointment."
- "School based mental health but that creates a gap once the school day ends. Wait lists for programs and services are astronomically long. YMCA is trying to create new opportunities."
- "Very limited especially for seniors in the community. There are some private counselors but due to need, they have wait lists."
- "School health issues- immunizations and physicals Attleboro Health Department is recovering from a suspended immunization practice and a slow return to running up to the community's needs."
- "Fuller Hospital has private counselors, but more is needed."

Respondents were asked to share information regarding these key health issues and their reasons for ranking them as they did. Issues of mental health, substance abuse, poverty, and chronic disease such as diabetes, heart disease and cancer were mentioned most frequently. A summary of responses is listed below.

### Select Comments Regarding the Ranking of Key Health Issues:

- "The Town of Foxborough has a higher incidence level of certain types of cancers than the State average."
- "Mental health and suicide are so much more prevalent now since the pandemic and at much younger ages. There seems to be a suicide ideation that has spread throughout our young communities."
- "Access to proper and affordable care in this area is needed."
- "Mental health issues have increased considerably in particular related to the pandemic because of isolation and lack of in person supports and services.
- "The pandemic also highlighted the need for high quality spiritual care. Providing culturally responsive care includes assessment of spiritual needs which are often of great importance in diverse communities. (Source: HealthCare Chaplaincy Network)."
- "Mental health has become a significant issue with the pandemic, and we are trying to bring in additional supports and suicide prevention programs."
- > "The emergency/urgent care treatment options in the Attleboro area seem to be substandard."
- "Since COVID-19, we have seen an increase in mental health issues with the elders we serve."
- "Diabetes remains dependent on education and compliance as does overweight/obesity. Heart disease is impacted by overweight/obesity and diabetes. Mental health/suicide has long been neglected and impacts the outcomes for illnesses. Progressive neurological illnesses such as



Alzheimer's and related dementias impact treatment at all levels and the aging population will only exacerbate the increase of incidences."

- "All of these health issues are very important. Mental health issues range across the entire age spectrum. COVID has had major impact."
- "We have many students and families that are undocumented and uninsured and in need of medical resources. As a school system - we support all needs of students - school health is an opportunity for minimal care for students."
- "Mental Health is a current crisis. One issue is the lack of available counselors and inpatient beds to assist patients in need."
- "The number of homeless individuals in the area has increased over the past two years, in particular related to the pandemic. Though resources were made available, increased mental health and substance misuse contributed to the inability to maintain housing and basic needs."
- "As a school superintendent, I see teen vaping as a top concern. It is pervasive among teens, and they are so addicted that it's impacting their lives. Cessation programs need to be created by health care professionals. Schools need these resources."

## II. Access to Care & Barriers

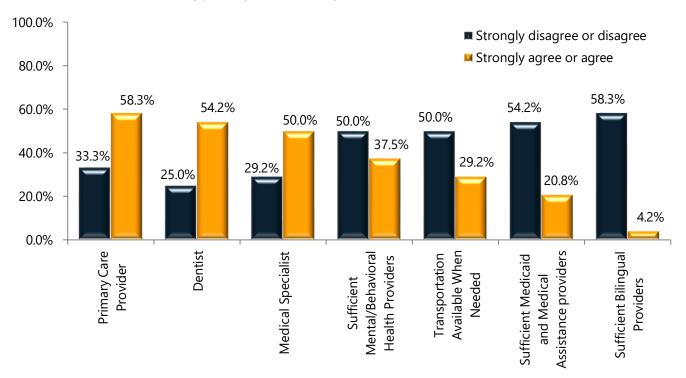
### A. Issues of Access

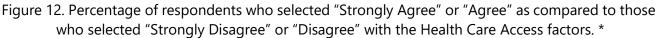
The next set of questions relate to health care access. Key informants were asked to rate specific statements regarding access to care on a scale of strongly disagree to strongly agree. Over half (58%) of respondents "agree" or "strongly agree" that the residents in the area are able to access a primary care provider when needed. Access to a primary care physician lessens the burden on emergency and urgent care providers and allows for appropriate referrals to specialists and monitoring of patient health and well-being over time. An almost similar percentage of respondents perceive that community residents have access to dentists (54.2%). Fifty percent (50%) agree or strongly agree that access to medical specialists is sufficient.

However, 58.3% of survey participants chose either "disagree" or "strongly disagree" that there is a sufficient number of bilingual providers. Only 4.2% "agree" or "strongly agree" that there are enough bilingual providers to meet demand. Half of key informants perceive transportation to medical appointments to be unavailable when needed. Other health care access factors that respondents perceive are not sufficient in the community include mental and behavioral health providers and providers who accept Medicaid and Medical Assistance.

Overall, it seems key informants feel that there are sufficient primary health care providers in the community, but transportation services, and mental health, bilingual, and Medicaid and Medical Assistance providers are lacking. These results are similar to those in 2019 with the exception of mental/behavioral health provider availability. In 2019 a higher percentage of respondents agreed and strongly agreed that the number of mental health providers was sufficient (54.5%). In contrast, just 37.5% responding positively in 2022.







\*See Appendix A: Key Informant Survey Tool for full factor phrasing.

The barrier that informants selected most often is the inability to navigate the health care system (79.2%). This was also selected as the most significant barrier by 26.1% of respondents. This is followed by the inability to pay out of pocket expenses. Lack of transportation was chosen as a barrier by 70.8% of respondents. Another barrier, available providers/appointments is viewed as the second most significant barrier by 62.5%. This somewhat contradicts secondary data findings that there are sufficient primary care providers and medical specialists. Respondents may perceive that although there are a significant number of providers, certain populations may have trouble accessing them, including not being able to get an appointment.

The inability to navigate the health care system, inability to pay out of pocket and the lack of transportation, providers and available appointments paints a picture of a community which may delay seeking routine, preventative care. This may lead to the inappropriate use of emergency care, worsened medical conditions and more costly care in the long run. Interestingly, lack of trust was not identified as a significant barrier in 2019, however in 2022, it was selected by 8.7% of respondents. The pandemic may have heightened a lack of trust among select populations.

If community members cannot afford to see a doctor or one is not available, they will seek out other methods of getting their needs met. Consequently, 69.6% of key informants report that they think most uninsured and underinsured individuals go to the hospital emergency department when they are in need of medical care. Additionally, 17.4% believe an urgent care

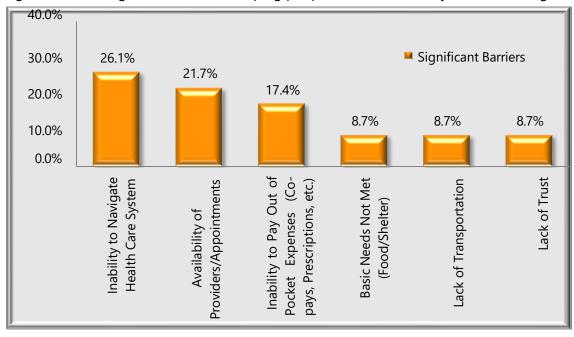


center is visited. It is possible that many of these visits are unnecessary and could be handled by a primary care physician. This may cause undue staffing and financial strain on the Emergency Department and the community health system. Individuals may also choose to self-medicate which may lead to substance abuse.

Key Health Barrier	Count	Percent of respondents who selected the issue*	Percent of respondents who selected the issue as the most significant
Inability to Navigate Health Care System	19	79.2%	26.1%
Inability to Pay Out of Pocket Expenses (Co-pays, Prescriptions, etc.)	18	75.%	17.4%
Lack of Transportation	17	70.8%	8.7%
Availability of Providers/Appointments	15	62.5%	21.7%
Basic Needs Not Met (Food/Shelter)	13	54.2%	8.7%
Lack of Health Insurance Coverage	13	54.2%	0.0%
Language/Cultural Barriers	13	54.2%	0.0%
Time Limitations (Long Wait Times, Limited Office Hours, Time Off Work)	6	25.0%	4.3%
Lack of Child Care	5	20.8%	0.0%
Lack of Trust	5	20.8%	8.7%
Other	1	4.2%	4.3%
None/No Barriers	0	0.0%	0.0%

### Table 20. Most significant barriers

\*Respondents could select more than one option therefore the percentages may sum to more than 100.0%.



### Figure 13. Most significant barriers keeping people in the community from accessing healthcare



Respondents were asked to share comments regarding these barriers to health care. A summary of responses is found below. Specific issues related to technology, funding, lack of insurance and the cost of medications were also mentioned.

### Select Comments Regarding Most Significant Barriers:

- "There are limited providers for mental health and substance abuse."
- > "Transportation is a major issue with the elders we serve."
- "It would be nice if the SHINE program could be replicated so that those under 65 could receive informed information on navigating how to receive appropriate care."
- "Many times, navigating the health care system requires that people have access to a computer which not everyone has."
- "I think lack of insurance, providers, language barriers and funding are just as serious."
- "Our prescription cost for many medications in the US system is way too high compared to other countries."

### **B. Underserved Populations**

Key informants were asked a series of questions related to underserved populations. Almost 82% stated that there are specific underserved populations in the community, much higher than in 2019 when it was 64%. Of this subset, the majority stated that low-income/poor (66.7%) and the homeless (55.6%) are underserved. Seniors and the uninsured were also selected by a high percentage (44.4%).

Table 21. Onderserved populations fanked by ke	<i>y</i> miorinants that c	inswered res
Community Affiliation	Count	Percentage of respondents*
Low-income/Poor	12	66.7%
Homeless	10	55.6%
Seniors/Aging/Elderly	8	44.4%
Uninsured/Underinsured	8	44.4%
Black/African American	5	27.8%
Immigrant/Refugee	5	27.8%
Children/Youth	4	22.2%
Disabled	3	16.7%
Hispanic/Latino	3	16.7%
Adults	2	11.1%
Other	2	11.1%
None	0	0.0%

Table 21. Underserved populations ranked by key informants that answered "Yes"

\*Respondents could select more than one option therefore the percentages may sum to more than 100.0%.

Furthermore, respondents were asked to share additional information regarding underserved populations. In many cases, respondents cite a lack of understanding of the system, limited knowledge of good health practices and of available resources as issues. A summary of responses is listed below.



### Select Comments Regarding Uninsured/underinsured Individuals and Underserved Populations:

- "This population will wait till the last minute to go for care and by that time the general cost to the public under the Health Safety net increases. Ways must be found to provide ongoing assistance rather than last minute type of care. "
- "Literacy levels prevent understanding as to how to access insurance. Access to technology is also a challenge. Many of the guests we serve don't even have access to a mailing address."
- "They go to the ER because that's where they know they will get the care they need. Many could go to a Drs. Office but don't have the money to pay."
- "Not understanding what a healthy lifestyle; access to good healthy foods."
- "The community is not aware of the low-cost options that are available to them, such as the YMCA. The YMCA offers a number of chronic disease preventions programs, as well as financial assistance for membership fees."
- "Underserved populations along Route 1 have no walkable access to parks, groceries, and other health related services."
- > "Lack of access to care for basic needs and secure reliable shelter."
- > "High prices of healthy food. Coordination of care issues. Weather."

### C. Missing Resources/Services

Respondents were asked to identify key health care services "Missing" in the community. Threequarters of respondents identified mental health services as the top resource/service "Missing" in the community. Fifty percent or more also selected free/low-cost dental care, health education/outreach, transportation, and substance abuse services as "Missing" services in the community. These results are somewhat similar to those in 2019.

The missing resources reflect the top health issues determined by key informants including mental health and substance abuse. Although dental health does not appear in the top 5 health issues, free or low-cost dental care is clearly cited by key informants as an important missing resource. Transportation (an issue of access) and health education/information/outreach continue to be a theme throughout the data. Only a small percentage of respondents (16.7%) chose primary care services, confirming the finding that respondents agree or strongly agree that there is sufficient access to primary care providers in the community.



Community Affiliation	Count	Percentage of respondents*
Mental Health Services	18	75.0%
Free/Low-Cost Dental Care	13	54.2%
Health Education/Information/Outreach	13	54.2%
Transportation	13	54.2%
Substance Abuse Services	12	50.0%
Free/Low-Cost Medical Care	11	45.8%
Health Screenings	10	41.7%
Bilingual Services	8	33.3%
Prescription Assistance	7	29.2%
Primary Care Providers	4	16.7%
Medical Specialists	2	8.3%
Other	1	4.2%
None	0	0.0%

Table 22. Top Healthcare Resource/Services "Missing" in the community

\*Respondents could select more than one option therefore the percentages may sum to more than 100.0%.

## **III. Open-Ended Comments**

Finally, key informants were given the opportunity to provide additional feedback in the form of open-ended comment fields. Many respondents took this chance to voice their concerns, while also providing valuable information and insights into the community they serve.

Key informants were first asked, "What challenges do people in the community face in trying to maintain healthy lifestyles like exercising and eating healthy and/or trying to manage chronic conditions like diabetes or heart disease?" Key informants feel there is a lack of healthy, accessible, and affordable food options, and a way to get exercise. They recommend increased community outreach and a return to a focus on health and wellness initiatives.

### Select Comments regarding Challenges for People in the Community Trying to Maintain a Healthy Lifestyles:

- "One challenge is that jobs do not pay living wages, so people have to work more than one job. This leaves little time for meal planning and cooking, easier to just eat fast food. Working multiple jobs make it more difficult to find time to exercise. More recently the cost of food is also a huge issue."
- "Lack of accessible opportunities for healthy food in the local community, particularly if you don't have transportation. Sometimes it is just hard for individuals with health conditions to get started and even a phone call to connect with them to address areas of concern might be helpful. Some private health insurances offer this service but most of our clients are on MassHealth and don't have access to join a health club or afford healthy food."
- "Food pantries are unable to purchase (funding)/store healthy alternatives."
- > "Paying to join a gym or the YMCA."



- "Outreach to populations that do not have access to good health care does seem to be happening sometimes...more needs to be done."
- "Currently, there does not seem to be the same energy focused on health and quality of life. It seems survival during the pandemic became the focus and we need to get back to a focus on health and wellness initiatives by the hospital, YMCA, clinics, etc."

Next, key informants were asked, "In your opinion, what is being done well in the community in terms of health and quality of life?" Many innovative programs related to outreach, health navigation, diversity, reestablishing community connections, and meeting basic needs in the community were lauded.

### Select Comments Regarding What is Being Done Well in the Community:

- "The community does well in providing services when needed. The Council on Aging offers many programs for seniors, has social workers, and provides transportation to the needy. The Fire Department works with the public health nurses to provide mobile vaccinations and health screenings."
- "Attleboro has a lot of green space and a lot of community resources, if people know about them. The Attleboro School system is doing a lot of work around diversity. Sturdy does offer a lot of health screenings, but not sure how people find out about them if they don't read the local paper."
- "For the Medicare recipient the offer of SHINE offices to assist in guidance for health care coverage. The increase in ASAP offices to intercede prior to possible hospitalization and after care from hospital care. The offer by places like Sturdy Hospital and Fuller Hospital, and Morton Hospital to have programs for assisting individuals and families with navigators in the health care system."
- "The Community Access to Rides (CAR) program is essential to help meet the needs of the demographic addressed in this survey response. Many of the local organizations address health and quality of life concerns and could use more support. Examples: Attleboro Area Interfaith Collaborative and The Literacy Center."
- "Sturdy has clinic for Substance abuse patients. Elder Dental Program sponsored by Hope Health. Walkabout event promotes educational opportunities for community."
- "We have a public health nurse in town who is trying to reach out to the public. I am aware that all towns do not have this to offer their residents. We try to offer speakers to come to give talks on things pertinent to seniors in area."
- "We have a relatively new Attleboro Health Department- a complete turnover in the last 3 years, they are reestablishing connections, and this takes time."
- "Since the pandemic began, our Food n' Friends program has provided well over 80,000 emergency meals."

Key informants were then asked, "What recommendations or suggestions do you have to improve health and quality of life in the community?" Most importantly, respondents suggested that coordination of care and community partnerships should be enhanced. By bridging gaps in services, these efforts could lead to increased health literacy, access to resources and improved



health outcomes. Recommendations also included more free and low-cost basic health services, access to healthy foods including how to prepare them and a focus on healthy lifestyles.

### Select Comments regarding Recommendations and Suggestions:

- "Better coordination of care; better transportation for access to care; physician focus on healthy lifestyles vs. prescription drugs as the solution."
- "I think Sturdy could do a better job collaborating with community partners. In the past that has been very difficult, but I am optimistic with new leadership."
- "Care Coordination programs that look at the whole person's needs in some cases mental health, substance use, and medical issues need to all be treated at once."
- "Improve walkability of areas in communities particularly in lower economically distressed areas; food stamps specifically dedicated to healthy foods (fresh fruit, vegetables, fish/chicken) and programs to learn how to prepare healthy meals; mental health services locally; support groups; more oversight on sober homes."
- "Bring in access to mental health services, let the health department do the types of things it normally does and start all these programs again."
- "Increased at home services for mental health patients."
- "Consideration to adding health care coordination at the local level that will help educate people on access, coordination of care, disease mitigation/prevention."
- "More free clinics for physicals and immunizations linking to health insurance and area physicians."
- > "Have health care workers attend the Food N Friends sites on a regular basis...monthly, weekly."
- "Organizations like the YMCA, who are trusted, respected, and credible need to have full support of the larger agencies in the community to be able to improve community health outcomes."
- "Collaborations and outreach opportunities could help bridge many of the identified gaps. This would also help to build trust among the identified underserved communities."

Lastly, key informants were asked to provide additional feedback to help inform Sturdy Memorial Hospital and Medical Associates' health improvement activities.

### Select General Feedback for Sturdy Memorial Hospital:

- > "Thank you for engaging the community in this process. I look forward to the results."
- "Thanks for providing this opportunity for feedback. Attleboro Area Interfaith Collaborative has been an active partner with Sturdy Memorial Hospital since 1948. We would welcome the opportunity to help enhance Sturdy Memorial Hospital's Spiritual Care Department. We would also welcome the opportunity for health outreach at our daily FREE meal sites."
- "Glad to help as it is important to get feedback from all sectors of the community."
- "Sturdy and its partners do a good job of community outreach."



## **Prioritization Session**

Individuals representing Sturdy Memorial Hospital, local health and human service agencies, area nonprofit organizations, health providers, and public health representatives identified the top four priority areas during the 2019 CHNA prioritization session. After reviewing the 2019 CHNA key findings, Sturdy Memorial Hospital has decided to continue their focus on the prioritized community health needs and bring measurable impact in these areas of need over the next three-year cycle. The prioritized needs will be:

- Access to Care
- Behavioral Health and Substance Abuse
- Chronic Disease Management and Prevention
- Cancer Prevention Education and Screening

#### Process

Per the AGO's recommendation in the guidelines for this year, the Community Health Needs Assessment Committee changed its' title to the Community Benefits Leadership Team (CBLT). Additionally, the Community Benefits Advisory Council Committee (CBAC) was formally established. On August 2, 2019, members of the CBAC were invited to the Hospital to discuss the findings and provide their community input on the areas of priority for the community and the Hospital. On August 5, 2019, a CBLT meeting was held on August 5, 2019, where information from the CBAC and the senior leadership team with regards to health priorities was provided. The prioritized needs were determined based upon this feedback as well as the Hospital's ability to impact in these particular areas.

#### **Key Community Health Issues**

- Access to Care
- Behavioral Health and Substance Abuse
- Cancer
- Chronic Disease Management and Prevention
- Obesity

#### **Identified Health Priorities**

- Access to Care
- Behavioral Health and Substance Abuse
- Chronic Disease Management and Prevention
- Cancer Prevention Education and Screening



The Hospital felt that while Obesity is an important health priority, it could be addressed through the initiatives of the Hospital to address Chronic Disease Management and Prevention rather than be segmented out as its own priority.

## References

BroadStreet. (2019, Mar 5). Mapping Room. Retrieved from https://www.broadstreet.io

- Center for Applied Research and Engagement Systems (CARES) Engagement Network. *Map Room*. Retrieved from https://engagementnetwork.org/map-room/
- Centers for Disease Control and Prevention (2011 2015). *Alcohol-Related Disease Impact (ARDI) Application*. Retrieved from https://nccd.cdc.gov/DPH\_ARDI/default/default.aspx
- Centers for Disease Control and Prevention. (2018 2020). *Behavioral Risk Factor Surveillance System*. Retrieved from http://www.cdc.gov/brfss/brfssprevalence/index.html
- Centers for Disease Control and Prevention. CDC WONDER Online Database. Retrieved from http://wonder.cdc.gov/
- Centers for Disease Control and Prevention. *HIV Surveillance Reports 2019*. Retrieved from https://www.cdc.gov/hiv/library/reports/hiv-surveillance.html
- Centers for Disease Control and Prevention. (2018). *National Center for Health Statistics Data Brief* -. *Mortality in the United States, 2017*. Retrieved from <u>https://www.cdc.gov/nchs/data/databriefs/d</u>b328-h.pdf
- Centers for Disease Control and Prevention. (2018). *National Center for Health Statistics Data Brief Infant Mortality by Age at Death in the United States, 2017*. Retrieved from https://www.cdc.gov/nchs/data/databriefs/db326-h.pdf
- Centers for Disease Control and Prevention. *National Vital Statistics Reports*. Retrieved from http://www.cdc.gov/nchs/nvss.htm
- Centers for Disease Control and Prevention. (2020). *National Vital Statistics Reports Births: Final Data*. Retrieved from http://www.cdc.gov/nchs/nvss.htm
- Centers for Disease Control and Prevention. NCHHSTP AtlasPlus. Retrieved from http://www.cdc.gov/NCHHSTP/Atlas/
- Centers for Disease Control and Prevention. *Opioid Overdose U.S. Opioid Prescribing Rate Maps*. Retrieved from https://www.cdc.gov/drugoverdose/rxrate-maps/state2020.html
- Centers for Disease Control and Prevention. (2019). Youth Risk Behavior Surveillance System Youth Online. Retrieved from https://www.cdc.gov/healthyyouth/data/yrbs/index.htm

Community Commons. Map Room. Retrieved from https://www.communitycommons.org/map\_\_\_\_



Federal Bureau of Investigation. (2020). Uniform Crime Reporting (UCR) Program. Crime in the United States Report 2019.

Retrieved from https://crime-data-explorer.app.cloud.gov/pages/explorer/crime/crime-trend

- Health Resources & Services Administration. *Medically Underserved Areas (MUA) Find*. Retrieved from https://data.hrsa.gov/tools/shortage-area/mua-find
- Kaiser Family Foundation analysis of Centers for Disease Control and Prevention (CDC), National Center for Health Statistics. *Multiple Cause of Death 1999-2020 on CDC WONDER Online Database*. Retrieved from https://www.kff.org/state-category/health-status/opioids/
- Massachusetts Department of Public Health (2019 2020). *Behavioral Risk Factor Surveillance System*. Retrieved from <u>https://www.mass.gov/behavioral-risk-factor-surveillance</u>
- Massachusetts Department of Public Health. (2015 2020). *Number of Opioid-Related Deaths, All Intents by City/Town 2015 - 2020*. Retrieved from <u>https://www.mass.gov/doc/opioid-related-overdose-</u> <u>deaths-by-citytown-may-2021/download</u>
- Massachusetts Department of Public Health. (May 2021). *Data Brief: Opioid-Related Deaths among Massachusetts Residents*. Retrieved from https://www.mass.gov/doc/opioid-related-overdose-deaths-among-ma-residents-may-2021/download
- Massachusetts Department of Public Health. (2017). *Massachusetts Birth Data*. Retrieved from http://www.mass.gov/eohhs/gov/departments/dph/programs/admin/dmoa/repi/birth-data.html

Massachusetts Department of Public Health. (2017). *Massachusetts Death Data*. Retrieved from <u>https://www.mass.gov/lists/death-data</u>

- Massachusetts Department of Public Health. Bureau of Infectious Disease and Laboratory Sciences (2020). 2019 Integrated HIV/AIDS, STD and Viral Hepatitis Surveillance Report. Retrieved from https://www.mass.gov/doc/2019-integrated-hivaids-std-and-viral-hepatitis-report/download
- Massachusetts Department of Public Health. (2020). *Massachusetts HIV/AIDS Epidemiologic Profiles*. Retrieved from <u>https://www.mass.gov/lists/hivaids-epidemiologic-profiles</u>
- Massachusetts Department of Public Health. (2013 2020). *Current Opioid Statistics*. Retrieved from https://www.mass.gov/lists/current-opioid-statistics
- Massachusetts Department of Public Health. (2019). *Incidence of Tuberculosis Disease Massachusetts Counties, The Commonwealth of Massachusetts and the United States*. Retrieved from https://www.mass.gov/doc/2019-incidence-rate-by-county/download
- National Cancer Institute. (2015 2019). *State Cancer Profiles*. Retrieved from https://statecancerprofiles.cancer.gov



- Robert Wood Johnson Foundation. (2021). *County Health Rankings & Roadmaps*. Retrieved from http://www.countyhealthrankings.org
- UMASS Donahue Institute. *Massachusetts Population Estimates Program*. Retrieved from http://www.donahue.umassp.edu/business-groups/economic-public-policyresearch/massachusetts-population-estimates-program/population-estimates-by-Massachusetts-geography/by-city-and-town
- U.S. Census Bureau. (2015 2019). American Fact Finder. Retrieved from https://data.census.gov
- U.S. Department of Health and Human Services. *Healthy People 2030*. Retrieved from https://health.gov/healthypeople
- U.S. Department of Health and Human Services. (2021). *HHS Poverty Guidelines*. Retrieved https://aspe.hhs.gov/poverty-guidelines



# **Appendix B. Secondary Data Terminology**

## Definitions

- **Age-Adjusted Rate:** Age-adjustment is a statistical process applied to rates of disease, death, injuries or other health outcomes, which allows populations with different age structures to be compared.
- **Behavioral Risk Factor Surveillance System (BRFSS):** Ongoing surveillance system with the objective to collect uniform, state-specific data from surveys on adults' health-related risk behaviors, chronic health conditions, and use of preventive services.
- **Crude Rate:** Expresses the frequency in which a disease or condition occurs in a defined population in a specified period of time, without regard to age or sex.
- **Determinants of Health:** The personal, social, cultural, economic and environmental factors that influence the health status of individuals or populations.
- **Family:** Defined as a householder and one or more other people living in the same household who are related to the householder by birth, marriage, or adoption.
- **Frequency:** Often denoted by the symbol "n," and referred to the number of occurrences of an event.
- **Health:** A state of complete physical, mental, and social well-being and not just the absence of disease or infirmity.
- **Health Disparities:** Indicate the difference in the incidence, prevalence, mortality, and burden of diseases and other adverse health conditions that exists among specific population groups.
- **Health Outcomes:** A medical condition or health status that directly affects the length or quality of a person's life. These are indicators of health status, risk reduction, and quality of life enhancement.
- **Housing Unit:** A house, an apartment, a mobile home, a group of rooms, or a single room occupied (or if vacant, intended for occupancy) as separate living quarters.
- **Household**: All the people who occupy a housing unit, including related family members and all the unrelated people who may be residing there. Examples include college students sharing an apartment or a single male living alone.
- **Householder:** One person in each household is designated as the householder. In most cases, the householder is the person, or one of the people, in whose name the housing unit is owned or rented (maintained). The two major categories of householders are "family" and "nonfamily."
- **Incidence:** Refers to the number of individuals who develop a specific disease or experience a specific health-related event during a particular time period.
- **Infant Mortality Rate:** Number of live-born infants who die before their first birthday per 1,000 live births in a given year.
- Low Birth Weight (LBW): A birthweight less than 2,500 grams (5 pounds, 8 ounces).



**Morbidity:** Refers to the state of being diseased or unhealthy within a population.

- Mortality: Number of deaths occurring in a given period in a specified population.
- **Neonatal Mortality Rate:** Defined as the number of infant deaths from birth up to but not including 28 days of age per 1,000 live births per year.
- **Post-Neonatal Mortality Rate:** Defined as the number of infant deaths occurring from 28 days up to but not including 1 years of age per 1,000 live births per year.
- **Poverty:** When a person or group of individuals lack human needs because they cannot afford them. Human needs include clean water, nutrition, health care, education, clothing, and shelter.
- **Preterm:** Births delivered less than 37 completed weeks of gestation based on obstetric estimate of gestation.
- **Prevalence:** The total number of individuals in a population who have a disease or health condition at a specific period of time, usually expressed as a percentage of the population.
- **Quality of Life:** Degree to which individuals perceive themselves as able to function physically, emotionally, and socially.
- **Rate:** A measure of the intensity of the occurrence or frequency with which an event occurs in a defined population. Rates are generally expressed using a standard denominator such as per populations of 1,000, 10,000 or 100,000.
- **Size of Household:** Includes all the people occupying a housing unit.
- **Size of Family:** Includes the family householder and all other people in the living quarters that are related to the householder by birth, marriage, or adoption.
- **Socioeconomic Status (SES):** A composite measure that typically incorporates economic, social, and work status. Examinations of socioeconomic status often reveal inequalities in access to resources.
- Very Low Birth Weight (VLBW): Indicates a birth weight less than 1,500 grams (3 pounds, 5 ounces).
- **Vital Statistics:** Systematically tabulated data derived from certificates and reports of births, deaths, fetal deaths, marriages, and divorces, based on the registration of these vital events.
- **Years of Potential Life Lost (YPLL):** A measure of premature mortality or death on a population, calculated as deaths that occur before some predetermined minimum or desired life span (usually age 75, which is the average life span).
- **Youth Risk Behavior Surveillance System (YRBSS):** A national school-based survey that provides ongoing surveillance to monitor health-related behaviors that contributes to the leading causes of death and disability among youth.



# **Appendix C. Key Informant Survey Tool**



### Key Stakeholder Online Questionnaire

**INTRODUCTION:** As part of its ongoing commitment to improving the health of the communities it serves, Sturdy Memorial Hospital and Medical Associates are spearheading a comprehensive Community Health Needs Assessment.

You have been identified as an individual with valuable knowledge and opinions regarding community health needs, and we appreciate your willingness to participate in this survey.

The survey should take about 10-15 minutes to complete. Please be assured that all of your responses will go directly to our research consultant, Holleran Consulting, and will be kept strictly confidential. Please note that while your responses, including specific quotations, may be included in a report of this study, your identity will not be directly associated with any quotations.

When answering the questions, please consider the community and area of interest to be the communities surrounding Sturdy Memorial Hospital and Medical Associates' including Attleboro, Foxboro, Mansfield, North Attleboro, Norfolk, Norton, Plainville, Rehoboth, Seekonk, Sharon, Walpole, Wrentham, and nearby Rhode Island communities.

#### **KEY HEALTH ISSUES**

1. What are the top 5 health issues you see in the community? (CHOOSE 5)

//	
Access to Care/Uninsured	Overweight/Obesity
Cancer	Sexually Transmitted Diseases
Dental Health	Stroke
Diabetes	Substance Abuse/Alcohol Abuse
Heart Disease	Tobacco
Maternal/Infant Health	Other (specify):
Mental Health/Suicide	

2. Of those health issues mentioned, which 1 is the most significant? (CHOOSE 1)

Access to Care/Uninsured	Overweight/Obesity
Cancer	Sexually Transmitted Diseases
Dental Health	Stroke
Diabetes	Substance Abuse/Alcohol Abuse
Heart Disease	Tobacco
Maternal/Infant Health	Other (specify):
Mental Health/Suicide	



- 3. What resources are available in the community to address the top health issues you identified?
- 4. Please share any additional information regarding these health issues and your reasons for ranking them this way in the box below:

### ACCESS TO CARE

5. On a scale of 1 (strongly disagree) through 5 (strongly agree), please rate each of the following statements about **Health Care Access** in the area.

Strongly disagree  $\leftarrow \rightarrow$  Strongly agree

Residents in the area are able to access a primary care provider when needed. (Family Doctor, Pediatrician, General	
Practitioner)	
Residents in the area are able to access a medical specialist when needed. (Cardiologist, Dermatologist, Neurologist, etc.)	
Residents in the area are able to access a dentist when needed.	
There are a sufficient number of providers accepting Medicaid and Medical Assistance in the area.	
There are a sufficient number of bilingual providers in the area.	
There is a sufficient number of mental/behavioral health providers in the area.	
Transportation for medical appointments is available to area residents when needed.	

6. What are the most significant barriers that keep people in the community from accessing health care when they need it? (Select all that apply)

Availability of Providers/Appointments
Basic Needs Not Met (Food/Shelter)
Inability to Navigate Health Care System
Inability to Pay Out of Pocket Expenses (Co-pays, Prescriptions, etc.)
Lack of Child Care
Lack of Health Insurance Coverage



Lack of Transportation	
Lack of Trust	
Language/Cultural Barriers	
Time Limitations (Long Wait Times, Limited Office Hours, Time off Work)	
None/No Barriers	
Other (specify):	

#### 7. Of those barriers mentioned, which 1 is the most significant? (CHOOSE 1)

Availability of Providers/Appointments
Basic Needs Not Met (Food/Shelter)
Inability to Navigate Health Care System
Inability to Pay Out of Pocket Expenses (Co-pays, Prescriptions, etc.)
Lack of Child Care
Lack of Health Insurance Coverage
Lack of Transportation
Lack of Trust
Language/Cultural Barriers
Time Limitations (Long Wait Times, Limited Office Hours, Time off Work)
None/No Barriers
Other (specify):

- 8. Please share any additional information regarding barriers to health care in the box below:
- 9. Are there specific populations in this community that you think are not being adequately served by local health services?

\_\_Yes \_\_ No

If yes, which populations are underserved? (Select all that apply)

Black/African American
Children/Youth
Disabled
Hispanic/Latino
Homeless
Immigrant/Refugee
Low-income/Poor
Seniors/Aging/Elderly
Uninsured/Underinsured
Young Adults
None
Other (specify):



10. In general, where do you think MOST uninsured and underinsured individuals living in the area go when they are in need of medical care? (CHOOSE 1)

Doctor's Office
Health Clinic/FQHC
Hospital Emergency Department
Walk-in/Urgent Care Center
Don't Know
Other (specify):

- 11. Please share any additional information regarding Uninsured/Underinsured Individuals & Underserved Populations in the box below:
- 12. Related to health and quality of life, what resources or services do you think are missing in the community? (Select all that apply)

Bilingual Services
Free/Low Cost Dental Care
Free/Low Cost Medical Care
Health Education/Information/Outreach
Health Screenings
Medical Specialists
Mental Health Services
Prescription Assistance
Primary Care Providers
Substance Abuse Services
Transportation
None
Other (specify):

#### **CHALLENGES & SOLUTIONS**

- 13. What challenges do people in the community face in trying to maintain healthy lifestyles like exercising and eating healthy and/or trying to manage chronic conditions like diabetes or heart disease?
- 14. In your opinion, what is being done **well** in the community in terms of health and quality of life? (Community Assets/Strengths/Successes)
- 15. What recommendations or suggestions do you have to improve health and quality of life in the community?



16. Which one of these categories would you say <u>BEST</u> represents your community affiliation? (CHOOSE 1)

Business Sector
Community Member
Education/Youth Services
Faith-Based/Cultural Organization
Government/Housing/Transportation Sector
Health Care/Public Health Organization
Mental/Behavioral Health Organization
Non-Profit/Social Services/Aging Services
Other (specify):

17. Sturdy Memorial Hospital and Medical Associates' and its partners will use the information gathered through this survey in guiding their community health improvement activities. Please share any other feedback you may have for them below:

Thank you! That concludes the survey.



# **Appendix D. Key Informant Participants**

Name	Agency		
Matthew Brennan	City of Foxboro		
Ellen Bruder-Moore	Community Counseling of Bristol County		
Taryn Degon	Innovo Benefits Group		
Karl Drown	Town of Rehoboth		
Deb Ebert	Attleboro Public Schools		
Anne Marie Fleming	Town of North Attleboro		
Caitlin Gibbs	Hockomock YMCA		
Peter Ham	Associates In Behavioral Health, LLC		
Courtney Harrness	Attleboro YMCA		
Lauren Hewitt	Town of Wrentham		
Pamela Hunt	Town of North Attleboro Council on Aging		
Michael Kelleher	Town of Foxborough Fire Department		
Josephine Madrazo	Mansfield Council on Aging		
Bradley Marshall	Rehoboth Council on Aging		
Courtney Matto	Community Counseling of Bristol County		
Leandra McLean	Town of Sharon Health Department		
Kevin Medeiros	Community Counseling of Bristol County		
Kathleen Medeiros	Town of Sharon Council on Aging		
Joseph Padykula	Town of Wrentham		
Dr. Donald Pierce	Attleboro Falls Dentistry		
Lisa Piscatelli	Attleboro Area Interfaith Collaborative		
Janet Richardi	South Coast Regional Network to End Homelessness		
Anne Sandland	North Attleborough High School		
Marcia Szymanski	New Hope		



## Appendix E. Community Benefits Advisory Committee

Name	Agency/Organization and Position		
Amie McCarthy	Attleboro Interfaith Collaborative		
Anne Sandland	North Attleboro Public Schools		
Brian Patel, MD	Chief of Emergency Services, Sturdy Memorial Hospital		
Caitlin Gibbs/ Marykate Bergen	Hockomock Area YMCA, Director of Health Innovation		
Carrie Ballou Fuller Hospital, Community Relations Managers			
Chief Kyle Heagney	Attleboro Police, Chief		
Cyndee Goodinson-Lindsey	Attleboro YMCA, Director		
Ellen Bruder-Moore	Community Counseling of Bristol County (CCBAC), Vice President		
	of Housing and Community Initiatives		
Madelein McNealy	Council of Aging- Attleboro, Director		
Marcia Szymanski	New Hope, Director		
Marie McCarthy	Sturdy Memorial Hospital, Controller		
Marlene Roberti/Reynold Spadoni	Community VNA		
Paul Schleirarcher	Norton Fire Chief		



# Appendix F. 2019 Implementation Strategy Outcomes



# Sturdy Memorial Hospital Implementation Strategy Outcomes

The Hospital believes that all four identified needs warrant efforts to assist in developing a community with greater population health; however, the Hospital understands its limitations and looks forward to collaboration with additional community partners to address those needs that do not have specific programs within the Hospital. Below is the list of identified priority needs. Each Identified need is represented by identified goals, contributing factors, and our strategies to address each of the identified needs.

This document serves as an update on the Community Health Needs Assessment (CHNA) Implementation Plan. Listed below are the issues that were chosen as Sturdy's CHNA priorities in 2019, along with outcomes related to implementation.

## **Priority Area #1: Access to Care**

## **Priority: Access to Care**

**Rationale:** Access to care is an issue of massive proportion across the nation. Provider density, or the provider to population ratio, is one measure to evaluate the opportunity for community members to be seen by a physician. Provider to population ratios varied by location across the service area. Norfolk County ranked as the second-best county in Massachusetts in the Clinical Care Rank from the County Health Rankings. Bristol County on the other hand ranked 11th out of 14.

It is important to note that the sheer number of providers does not always give the full picture of access. Even when communities have strong provider numbers, residents can still experience barriers such as lack of transportation, inability to afford the health care visit or simply be challenged in attempting to navigate the health care system. Key informants confirmed this to be the case as they selected the two most significant barriers of Accessing Health Care to be the Inability to pay out of pocket expenses, as well as Availability of providers/appointments. Other challenges in the



community were succinctly identified by a key informant, "Lack of coordination of care by providers and the number of providers and specialists to help educate about access to care is still a silo mentality, as well as limited access from insurance coverage and providers incentives for coordination of care." These barriers to accessing care can be difficult and overwhelming and can even pose particular challenges, such as unmet health needs, delays in receiving appropriate care, and even preventable hospitalizations.

Key informants also expressed particular concern for the low-income/poor population group. While secondary data appear to be favorable as evidenced though overall health insurance coverage, key informants still noted cost of health care to be the most significant barrier. When speaking specifically of health care resources or services that are missing in the community, cost-related services including free/low cost dental care and free/low cost medical care topped the list. Approximately 53% and 48% of key informants selected these services, respectively. Other health care resources or services identified as missing or insufficient in the community were mental health services, transportation, health education/outreach, and substance abuse services.

**Objective:** Address barriers and challenges that residents face in Sturdy Memorial's service area in accessing and navigating health care needs and services

ACCESS TO CARE Strategies	Metrics and Progress
Sturdy will Increase access to SMH and SMA providers through recruitment and retention of providers, both primary and specialty care providers	<ul> <li>9 Providers were hired in FY 2020 including 4 primary care physicians, 2 pulmonologists, 2 obstetrician/gynecologists, and 1 rheumatologist</li> </ul>
Sturdy Memorial Hospital will research and identify possible telemedicine opportunities.	• Sturdy Memorial Hospital and Associates launched Telehealth services via a HIPAA approved ZOOM platform on March 25, 2020, in response to the mandated service restrictions. Over 20,000 telehealth visits have been conducted.



June 2022

Sturdy Memorial Hospital will explore opportunities to reduce transportation barriers for patients.	• November 2019- October 2020 ridership in the CAR program for SMH accounted for 43.1% of all total CAR rides. 95% of the rides were for medical and health services with 22% for physically challenged individuals and 14% homeless. A total of 316 rides were provided for SMH.			
Sturdy Memorial will explore "off-hour" clinic opportunities for patients with little daytime flexibility	<ul> <li>This initiative had little exploration this in FY 2020 due to the COVID response.</li> <li>An internal medicine provider was hired in FY 2021 who will be offering evening clinic hours.</li> </ul>			
Sturdy Memorial will continue to explore opportunities to support our aging population including supportive care.	<ul> <li>The Hospital's inpatient palliative program partner, Hope Health continues to provide service to inpatients. During FY 2020, there were 851 referrals and 753 admissions into palliative care</li> <li>Sturdy continues NICHE program certification</li> </ul>			
Sturdy Memorial will explore ways to improve the process of connecting ED patients to a PCP as appropriate	• To assist patients receiving care in the Urgent Care setting, permissions were granted to allow UC physicians to book follow up appointments with a primary care provider- thus connecting a patient with a PCP when they did not have one in place. This same process is being looked into for ED patients. At this time, data are not available for the number of patients successfully connected from UC care to a PCP.			
Sturdy Memorial will continue to connect uninsured or underinsured patients to financial counselors	<ul> <li>Sturdy financial counselors provided assistance to 4,230 patients in FY 20. The monthly break d is included below:</li> </ul>			he monthly break down
		Month	Number of Applicants	
			assisted by SMH Financial Counselors	
		Oct-19	379	
		Nov-19	346	
		Dec-19	353	
		Jan-20	412	



		Feb-20	296	
	-	Mar-20	252	
	-	Apr-20	306	
	-	May-20	403	
	-	Jun-20	467	
	-	Jul-20	492	
	-	Aug-20	380	
	-	Sep-20	420	
Sturdy Memorial will explore the opportunity to partner with local dentist offices for screening services	This initiative had preliminary discussions in FY 2020 and will continue throughout the implementation timeline.			

## **Priority Area #2: Behavioral Health and Substance Abuse**

# **Priority: Behavioral Health and Substance Abuse**

**Rationale:** The issue of mental health and substance abuse were shared as a health concern among key informants and was apparent through the secondary data analysis. Participants identified mental health, substance abuse/alcohol abuse, and opioid crisis/drug overdoses among the top five most pressing health issues in the community with mental health ranking as the topmost pressing need.

The suicide rate in Bristol County is 12.6, as compared to 8.0 in Norfolk County, 9.9 in Massachusetts and 14.5 in the nation. In addition, YRBSS (Youth Risk Behavioral Surveillance System) data show that more than 12% of Massachusetts



high school students have seriously considered suicide. Another element in understanding the mental health of the community is reflected through the BRFSS (Behavioral Risk Factor Surveillance System) secondary data of self-reporting poor mental health days in the past 30 days. A higher number of community members report average poor mental health days in Bristol County (4.7) when compared to Norfolk County (3.7), Massachusetts (4.0), and the National Benchmark of 3.1.

Similar to many other states in the United States, Massachusetts is facing a public health epidemic in opioid addiction. Unfortunately, the substance abuse, specifically opioid-related deaths, is much higher in both of the service areas. Key Informants identified the need for increased mental health and substance abuse services. Both mental health services (ranked 1st) and substance abuse services (ranked 6th) topped the list of missing resources or services in the community. Substance use disorders involving the overuse and abuse of alcohol and/or drugs not only affect the individual and their families, but also influences the community at large. Despite the overall observed reductions in opioid prescribing, opioid-involved overdose death rates have continued to increase and is driven largely by the use of illicit drugs. Notably, 20.1% of high school students report being offered, sold, or given drugs at school in Massachusetts, which is slightly higher than the nation (19.8%). High school students in Massachusetts also report being more likely to currently use alcohol, ever used marijuana, and currently use marijuana when compared to the nation. Binge drinking among both adults and high school students is worse in Massachusetts than the nation. Even alcohol impaired driving deaths in both Bristol County (30%) and Norfolk County (33%) are higher than the state (29%) and the nation (13%). Furthermore, Substance abuse/alcohol abuse and Opioid crisis/drug overdoses were both among the top health issues. Opioid crisis/drug overdoses tied as the second most significant issue facing the community.

**Objective:** Improve access and integration/coordination of mental health and substance use disorder services in the area.



June 2022

BEHAVIORAL HEALTH & SUBSTANCE ABUSE Strategies	Metrics/What are we measuring	Potential Partnering/External Organizations
Continue to provide individual, group, medication assisted treatment and other mental health services including support through partnership with Column Health	<ul> <li>There were 170 patients referred to the program from Sturdy</li> <li>There were 556 intakes for FY averaging 10.5 intakes per week. There were a total of 9,373 visits and 4,807 telehealth visits.</li> </ul>	<ul><li>Column Health</li><li>SMA Practices</li></ul>
Continue screening for behavioral health and substance use disorders, explore further opportunities for education and screening tools.	<ul> <li>All practices are utilizing the PHQ-9 screening tool at this time for patient.</li> <li>Discussions began regarding Trauma Training for providers to help identify potential trauma in patients and further provide necessary assistance and interventions. This will be scheduled in the upcoming FY.</li> </ul>	• New Hope for training
Increase the number of primary care practices and specialty practices within SMA that have integrated behavioral health services available	<ul> <li>At this time, the relationship provides us with 3 FTE behavioral health providers.</li> </ul>	McLean Hospital
	<ul> <li>Pediatrics: 240 patients/ 561 visits</li> <li>Sturdy Memorial Associates: at Plainville 233 patients/593 visits</li> <li>North Attleboro Medical Center: 159 patients/394 visits</li> <li>Mansfield Health Center:</li> </ul>	



Sturdy Memorial Hospital and Medical Associates – Final Summary Report
--

June 2022

Sturdy will explore opportunities to collaborate with local organizations to address the high percentage of youth in our service area who report thoughts of self-harm and engage in high-risk behaviors such as binge drinking, and drug use.	<ul> <li>Discussions are underway to host a Hidden in Plain Sight Event, however due to the current state of affairs, this is currently on hold.</li> </ul>	<ul> <li>Attleboro area public schools</li> <li>Area YMCAs</li> </ul>
Sturdy will work with community organizations to identify a comprehensive list of current mental health providers within the service area	• The compilation of this list is underway and expected to be available in FY 21	Fuller Hospital
Explore telemedicine opportunities for behavioral health patients.		

## **Priority Area #3: Chronic Disease Prevention and Management**

# **Priority: Chronic Disease Prevention and Management**

**Rationale:** While chronic diseases are the most common causes of death and disability in the United States, chronic diseases are among the most costly, yet are largely preventable conditions. In the primary and secondary service areas, cancer is the primary cause of death, followed by heart disease, and then chronic lower respiratory disease. Mortality rates for heart disease, cancer, chronic lower respiratory disease, and essential hypertension and hypertensive renal disease in Bristol County far exceed the rates in Norfolk County, the state, and nation.

Key informants note that chronic disease management challenges faced by individuals in the community are due to the lack of knowledge and education, lack of access to providers, financial challenges, and limited in-home services. Managing a chronic disease can be challenging and costly, particularly when not managed appropriately. It is undeniable that poverty and cost is a critical factor in managing a chronic disease, and a severe problem for many older adults. Notably, both the primary and secondary service areas have a larger older adult population.



Health behaviors, such as tobacco use, alcohol consumption, diet and exercise, and obesity are often correlated with certain chronic health conditions. The percentage of adults smoking is higher in Bristol County (18%) when compared to 12% in Norfolk County, 14% in both Massachusetts and the nation. Nearly 29% of adults in Bristol County are considered obese. Key informants identified that individuals across the service area are struggling to maintain a healthy weight and lifestyle. While smoking and other health behaviors are impacting individuals in both Bristol County and Norfolk County, these factors are manifesting themselves differently in the types of chronic conditions affecting each area. In Norfolk County, residents are more likely to be burdened by all sites of cancer, breast cancer, melanoma of the skin, and prostate cancer. However, residents in Bristol County are more likely to suffer from lung and bronchus cancer, as well as heart disease, obesity, and chronic lower respiratory disease (COPD).

Like health behaviors, the types of chronic conditions affecting individuals vary by the service area. While specific chronic diseases may vary by location, the impact and burden on residents trying to manage chronic conditions remains the same. One key informant emphasized, "Obesity seems to be correlated to many other conditions and seems to be a large drain on the health care system."

CHRONIC DISEASE PREVENTION & MANAGEMENT Strategies	Metrics/What are we measuring	Potential Partnering/External Organizations
Sturdy will continue to participate/host health fairs for screening, health literacy, and community education.	<ul> <li>Ladies Night- An Education Event related to Breast Health was held in October of FY 2020. Over 125 women attended. A panel of 3 providers including Drs. Latif, Whitby and Saunders presented.</li> </ul>	<ul> <li>Area Schools</li> <li>YMCAs</li> <li>Health Departments</li> <li>Councils on Aging</li> </ul>

**Objective:** Prevent, detect, and manage chronic illnesses prevalent in SMH's service area



	<ul> <li>The Heart Health Fair was held in February 2020</li> <li>Discussions have been held with a schedule set for monthly virtual health informational programs.</li> </ul>	
Sturdy will continue to support current programs that increase opportunities for physical activity for those most at risk.	<ul> <li>The number of referrals to each program</li> <li>The number of patients enrolled</li> <li>The number of provider meetings held to bring awareness to the programs</li> </ul>	SMA Practices
Sturdy will explore opportunities and programs that increase access to health foods and support nutritional education	<ul> <li>Cooking demonstrations were put on hold due to the pandemic. There is hope to have virtual cooking programs in FY 21.</li> <li>Discussions with the YMCA about potential support for food scarcity programs is underway and ongoing.</li> </ul>	
Sturdy will continue to improve care coordination for diabetic/pre-diabetic patients	<ul> <li>Planning for presentation to providers in Grand Rounds FY 2021</li> <li>Pilot program at SMA was set to launch on March 23, 2020, and was postponed due to COVID-19,</li> </ul>	<ul><li>SMA Practices</li><li>YMCA</li></ul>



Sturdy will Increase screening for pre-diabetic patients and refer to appropriate resources	<ul> <li>The Hospital and the Practices have been referring to the Hockmock YMCA pre-diabetes program for those that meet program criteria. Numbers to be provided at next update.</li> </ul>	
Sturdy will collaborate with community partners as part of the Healthy Living Consortium to increase education and awareness in the community.	<ul> <li>This is ongoing. Current initiatives focus on education related to vaccination.</li> </ul>	• YMCA
Sturdy will evaluate and identify if a new smoking cessation program should be implemented.	<ul> <li>Preliminary discussion was had regarding new programs; however, it was deemed that Quitworks will remain the program used.</li> </ul>	

## **Priority Area #4: Cancer Prevention Education and Screening**

# **Priority: Cancer Prevention Education and Screening**

**Rationale:** Cancer is one of the greatest health concerns for residents in the community. The leading cause of death is cancer among the primary service area, Bristol County, Norfolk County, and Massachusetts. Mortality rates for cancer in both Bristol County and Norfolk County exceed the state and national rates. Specifically, Bristol County has higher mortality and incidence rates for lung and bronchus cancer and incidence rates for bladder cancer, pancreas cancer, and prostate cancer. Norfolk County has a higher overall cancer incidence rate for all sites when compared to Bristol County, the state, and the nation. Particularly, incidence rates for breast cancer, melanoma of the skin, and prostate cancer are higher in Norfolk County. Additionally, key informants ranked cancer as one of the top five most pressing health issues in the community.



Health behaviors, such as alcohol and tobacco use are often correlated with certain chronic health conditions. While secondary data appear to be favorable to support cigarette smoking as a risk factor that may increase your chances of lung cancer, key informants do not rank tobacco among the topmost pressing health issues. Remarkably, nearly 18% of adults in Bristol County reported smoking, which may be a contributing factor to the higher incidence and mortality rates for lung and bronchus cancer. Alcohol abuse was selected by key informants as a top health issue in the community and is supported by the secondary data. Binge drinking among both adults and high school students is worse in Massachusetts than the nation. Excessive drinking results in approximately 1,542 deaths and 41,926 years of potential life lost each year in Massachusetts, which may be a contributing factor to the higher death rates for chronic liver disease and cirrhosis in Bristol County.

**Objective:** Provide services to decrease cancer mortality rate

CANCER CARE Action Steps	Metrics/What are we measuring	Potential Partnering/External Organizations
Sturdy will continue to offer early detection and prevention through various screenings, education and support programs.	<ul> <li>Ladies Night was held in October 2019 with 125 participants.</li> <li>A total of 11,821 mammograms for screening and diagnostics were conducted in FY 20</li> </ul>	<ul> <li>American Cancer Society</li> <li>Area YMCAs</li> </ul>
Provide early navigation for men and women with abnormal findings on breast imaging	<ul> <li>An early navigation program was launched in FY 2020 however the program structure is going to be revisited based on patient feedback.</li> <li>Nurse Navigation worked with 14 patients in early navigation before the program was halted for further review.</li> </ul>	
Sturdy will continue to provide navigation for patients at the first touch point of early screening and intervention and continue navigation through pre-habilitation, treatment, and palliative care	• The number of screenings completed- Total-1,157	



<ul> <li>381 patients were screened at pivotal vists with the NCCN distress thermometer and problem list and Oncology rehab screening tools.</li> <li>381 patients were screened at pivotal vists with the NCCN distress thermometer and the physical impairment and functional assessment screening tool (one patient) with both tools</li> <li>The barriers identified and addressed-categorized as practical, family, emotional, spiritual and physical. Nurse mavigator provided in person or phone f// for each screening to address any patient concerns or barriers to care.</li> <li>There was a focus on access to care as related to cost of oral chemotherapy drugs. In FY 2020, 23 patients were identified to be in need of copay assistance/referral source-/ND office. Nurse Navigation in conjunction with an oncology social worker were able to secure funding for these patients in the amount of \$252,398.52</li> <li>PT referrais reflect pandemic period. Total number of patient's navigator referret 1PT=4, OT=4, \$LP=3, *RD=7. This number does not reflect all Oncology patients referred to rehab services. These numbers will be available soon. Referrais to a registered dietician</li> </ul>	
registered dietician	<ul> <li>visits with the NCCN distress thermometer and the physical impairment and functional assessment screening tool (one patient did not do the PIFAST). 198 patients were screened at routine visits with both tools</li> <li>The barriers identified and addressed- categorized as practical, family, emotional, spiritual and physical. Nurse navigator provided in person or phone f/u for each screening to address any patient concerns or barriers to care.</li> <li>There was a focus on access to care as related to cost of oral chemotherapy drugs. In FY 2020, 23 patients were identified to be in need of copay assistance/referral source-MD office. Nurse Navigation in conjunction with an oncology social worker were able to secure funding for these patients in the amount of \$252,398.52</li> <li>PT referrals reflect pandemic period. Total number of patient's navigator referred: PT=4, OT=4, SLP=3, *RD=7. This number does not reflect all Oncology patients referred to rehab services. These numbers will be available soon. Referrals to a</li> </ul>
	registered dietician



	totaled 74, this is an increase of 393% in
	nutrition referrals for oncology patients
Nurse Navigation will identify transportation barriers for patients and ways to alleviate them	<ul> <li>Total of 33 patients identified transportation barriers= 33 patients were assisted as follows:</li> <li>10 patients=PT1 applications</li> <li>5 patients=ACS transportation assistance</li> <li>1 patient=MBTA Charlie Card</li> <li>2 Patients=Med Wheels</li> <li>4 patients=GATRA</li> <li>6 patients=Handicap placard</li> <li>2 patients=BES for transportation assist</li> <li>1 patient=Leukemia/Lymphoma society (LLS) transportation grant</li> <li>1 patient=Ellie fund grant for gas cards</li> </ul>
Nurse Navigation will identify uninsured or underinsured patients	<ul> <li>In FY 2020, 31 patients identified concerns about medical insurance. Of this, 17 were identified by NCCN screening; 14 were referred to ONN.</li> <li>Referrals: 4 patients were referred to the SHINE program, 16 patients were referred to the financial counselors at SMH. Of the 16 patients referred to the financial counselors at SMH. 10 patients received a MassHealth product and obtained richer coverage</li> </ul>
Sturdy Memorial Hospital will enhance its current community oncology program through development of additional services	The program launched a Cardio- oncology program and enhance breast imaging services through the acquisition of a Breast MRI.



	Additionally, a relationship with Lifespan was developed to provide a continuum of care related to reconstruction for breast patients.
Sturdy Memorial will enhance relationships between primary care providers and oncologists to facilitate care coordination across all settings	<ul> <li>Due to the conversion of medical records, data are unavailable at this time. There is anticipation that the number of patient referrals to screenings and appropriate programs will be able to be identified.</li> </ul>

## Appendix G. Membership

Communit	y Benefits	Advisory	Committee	Members
----------	------------	----------	-----------	---------

Name	Agency/Organization & Position
Amie McCarthy	Attleboro Interfaith Collaborative
Anne Sandland	North Attleboro Public Schools, RN
Brian Patel, MD	Chief of Emergency Services, Sturdy Memorial Hospital
Caitlin Gibbs/ Marykate Bergen	Hockomock Area YMCA, Director of Health Innovation
Carrie Ballou	Fuller Hospital, Community Relations Managers
Chief Kyle Heagney	Attleboro Police, Chief
Cyndee Goodinson-Lindsey	Attleboro YMCA, Director
Ellen Bruder-Moore	Community Counseling of Bristol County (CCBAC), Vice President of Housing and Community Initiatives
Madelein McNealy	Council of Aging- Attleboro, Director
Marcia Szymanski	New Hope, Director
Marie McCarthy	Sturdy Memorial Hospital, Controller
Marlene Roberti/Reynold Spadoni	Community VNA
Paul Schleirarcher	Norton Fire Chief

# 2019 Community Benefits Leadership Team

Name	Position	
Alicia Banks	Pulmonary Clinic Coordinator	
Amy Pfeffer	CFO	
Brian Patel, MD	Chief of Emergency Services	
David Denneno	Director, Emergency Care Center	
David Reilly	Director, Respiratory Services	
Elizabeth Moore	Director, Case Management	
Evelyn Vasconcelos	Senior Director of Inpatient Services	
Jennifer Galindo	Administrative Assistant for Wellness Center	
Joe Casey	President and CEO	
Karen Messier	Oncology Program Manager	
Kathy Martin	Nurse Navigator	
Marie McCarthy	Controller	
Michael Delmonico	Chief Operating Officer, Sturdy Memorial Associates	
Peg Flocco	Diabetes Program Coordinator	
Rose Antonino	Senior Director for Outpatient and Perioperative Services	
Sheila Malacaria	Tumor Registrar	
William Florentino	Chief Marketing and Development Officer	
Chelsey Boyle	Marketing Manager, (CHNA Project Lead)	
Kathi Hague	Public Relation and Community Events Manager, (Community	
	Benefits Project Lead)	

