Community Health Needs Assessment

2019

FINAL SUMMARY REPORT





SUBMITTED BY

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EXECUTIVE SUMMARY

Beginning in January 2019, Sturdy Memorial Hospital undertook a comprehensive Community Health Needs Assessment (CHNA) to evaluate the health needs of individuals living in the hospital service area within Bristol and Norfolk counties in Massachusetts. The aim of the assessment is to reinforce Sturdy Memorial Hospital's commitment to the health of residents and align its health prevention efforts with the community's greatest needs. The assessment examined a variety of health indicators, including chronic health conditions, access to health care and social determinants of health. Sturdy Memorial Hospital contracted with Holleran Consulting, a research firm based in Wrightsville, Pennsylvania, to execute this project.

The completion of the CHNA enabled Sturdy Memorial Hospital to take an in-depth look at its community. The findings from the assessment were utilized by Sturdy Memorial Hospital to prioritize public health issues and develop a community health implementation plan focused on meeting community needs. Sturdy Memorial Hospital is committed to the people it serves and the communities where they reside. Healthy communities lead to lower health care costs, robust community partnerships, and an overall enhanced quality of life. This CHNA Final Summary Report serves as a compilation of the overall findings of each research component.

CHNA Components

- Secondary Data Assessment
- Key Informant Interviews

Key Community Health Issues

Sturdy Memorial Hospital, in conjunction with community partners, examined the findings of the Secondary Data and Key Informant Surveys to select Key Community Health Issues. The following issues were identified (presented in alphabetical order):

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

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 plans to focus community health improvement efforts on the following health priorities over the next three-year cycle:

- 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 2013 and 2016 to evaluate the health needs of individuals living in the hospital service area within Bristol and Norfolk counties. The purpose of the assessments was to gather information about local health needs and health behaviors. The assessments helped Sturdy Memorial Hospital to identify health issues and develop community health implementation plans to improve the health of the surrounding community. The prioritized health issues in 2013 and 2016 include:

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.

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 10,136 mammograms performed fiscal year 2019 (year to date August 31, 2019).
- ▶ 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.

A full list of outcomes can be found in the Implementation Strategy Outcomes, Appendix E.



COMMUNITY HEALTH NEEDS ASSESSMENT BACKGROUND

Organization Overview

In existence since 1913, Sturdy Memorial Hospital is a locally controlled, not-for-profit 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 170,000 in the suburban communities of Boston and Providence. Attleboro is located within 45 minutes of Boston and 15 minutes of Providence.

Sturdy Memorial Hospital is a smaller community hospital that closely aligns with the community and operates approximately 132 beds. As one of Attleboro's largest employers, there are over 1,500 physicians, nurses, staff and volunteers that support the organization. Volunteers give more than 70,000 hours every year. In addition, the providers are among leaders in their fields committed to delivering safe, high-quality care. These physicians are highly qualified, and maintain their skills and knowledge of the latest medical techniques and equipment through ongoing training and education.

The hospital 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. Each year, more than 7,000 patients receive inpatient care at Sturdy Memorial Hospital, with nearly 50,000 visits annually at the Emergency Department. Sturdy Memorial Hospital continues to successfully sustain the needs of their patients and families through a combination of a dedicated leadership team and exceptional care provided to make Sturdy an outstanding health care institution.

Sturdy Memorial Hospital 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 will do what needs to be done because they expect it of themselves. This is reflective in Sturdy Memorial's mantra, "I Am Sturdy."



Mission: Provide care to the sick and injured, on both an inpatient and outpatient basis, without regard to race, creed, national origin, age, gender, disability, sexual orientation, gender identity, or ability to pay.



Community Served

For purposes of this assessment, "community" is defined as the Primary Service Area (PSA) and Secondary Service Area (SSA), which included communities located in both Bristol and Norfolk counties. This definition of community is based upon the community served by a hospital as those individuals residing within its hospital service area. A hospital service area is an analysis of the geographic area surrounding the hospital, which includes all residents, not excluding low-income or underserved individuals. Sturdy Memorial Hospital identified the community served in terms of primary and secondary geography to assess the need for both the hospital service area and the community. A map of the primary and secondary service areas within the two counties is illustrated on the following page.

As a community-based hospital, Sturdy Memorial Hospital 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. The hospital's patient population includes anyone who requires care will receive care, regardless of place of residence. Primary and Secondary Service Area information including zip codes and county is summarized below.

| Primary Service Area | | | | | | |
|--|-------------------------|---------|--|--|--|--|
| Municipalities | Zip Code | County | | | | |
| Attleboro city | 02703 | Bristol | | | | |
| Foxborough town (aka Foxboro) | 02035 | Norfolk | | | | |
| Mansfield town | 02048 | Bristol | | | | |
| North Attleborough town (aka 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 | | | | |
| Secondary S | ervice Area | | | | | |
| Municipalities | Zip Code | County | | | | |
| Norfolk town | 02056 | Norfolk | | | | |
| Sharon town | 02067 | Norfolk | | | | |
| Walpole town | 02081 | Norfolk | | | | |

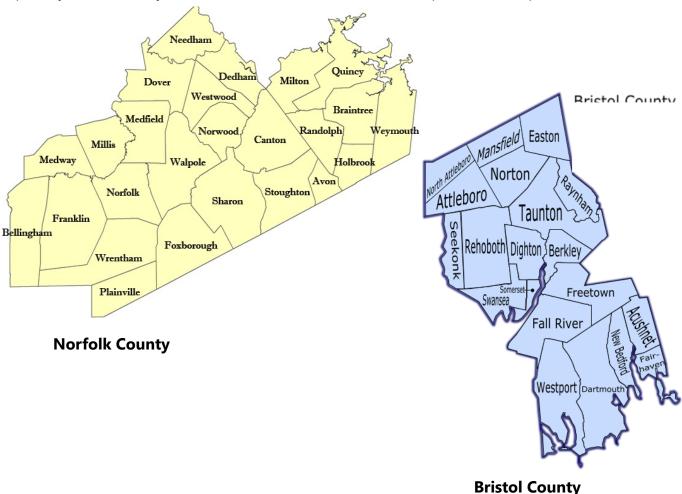


Sturdy Memorial Hospital serves two counties in Massachusetts: Bristol and Norfolk. Both of these counties are included within the assessment. The following municipalities listed are within the hospital's service area: Attleboro, Foxboro, Mansfield, North Attleboro, Norfolk, Norton, Plainville, Seekonk, 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 were grouped into two service areas:

- Primary Service Area: Attleboro, Foxboro, Mansfield, North Attleboro, Norton, Plainville, Seekonk, Rehoboth, and Wrentham
- Secondary Service Area: Norfolk, Sharon, and Walpole

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

Sturdy Memorial Hospital is located in Attleboro city within Bristol County, Massachusetts. Attleboro was formerly known as "The Jewelry Capital of the World," due to its numerous jewelry manufacturers. The population estimates for the city of Attleboro, Massachusetts was 44,590 in 2017. In terms of total land area, Attleboro ranks 14th for land area city ranks in Massachusetts with 26.8 square miles. The primary and secondary service areas total combined area encompasses 278.2 square miles.





Methodology

The CHNA was 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:

- A 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 depicting population and household statistics, education and economic measures, morbidity and mortality rates, incidence rates, and other health statistics for the primary and secondary service areas, or Bristol County and Norfolk County, were compiled and compared to state and national level data, where applicable. Demographic and health indicator statistics have been collated to portray the current health status of the service areas. 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 were also provided as benchmarks for the regional statistics. National comparisons include United States data and Healthy People 2020 (HP 2020) goals when available. For all of the statistics provided, the most recently published data at the municipality or city/town level are utilized and sources can be found in Appendix A, as well as terminology in Appendix B.
- An Online Key Informant Survey was conducted with key informants residing in Bristol County and Norfolk County from April 5 to May 6, 2019. Key informants were defined as community stakeholders with expert knowledge, including public health and health care professionals, social service providers, non-profit leaders, business leaders, faith-based organizations, and other community leaders. Holleran worked closely with Sturdy Memorial Hospital 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 67 key informants completed the survey with the largest percentage of informants being affiliated with Health Care/Public Health Organizations. 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 can be found in Appendix C and the Key Informants who completed the survey can be found in Appendix D.

Research Partner

Sturdy Memorial Hospital 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 interviews
- Prepared all reports



Community Representation

Community engagement and feedback were an integral part of the CHNA process. Sturdy Memorial Hospital sought community input through key informant interviews with community leaders and partners and inclusion of community members in the prioritization and implementation planning process. Public health and health care professionals shared knowledge and expertise about health issues, and leaders and representatives of non-profit and community-based organizations provided insight on the 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 availability of 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 at risk. A crude rate is generally presented as per populations of 1,000, 10,000 or 100,000 (which will be noted on each table). It is based on raw data and does not account for characteristics such as age, race, and gender.

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 community stakeholders. Sturdy Memorial Hospital sought to mitigate limitations by including representatives of diverse and underserved populations throughout the research components.

Prioritization of Needs

Following the completion of the CHNA research, Sturdy Memorial Hospital prioritized community health issues in collaboration with community leaders and partners, and is in the process of developing an implementation plan to address prioritized community needs.



KEY FINDINGS

While each individual research component from the CHNA reveal a unique perspective on the health status of residents living in the primary and secondary service areas. A number of overlapping health issues are worthy of attention for Sturdy Memorial Hospital and its partners; however, it is important to undertake a process that pulls key themes from each component and prioritizes the community needs. The following list outlines the key themes that stood out across the research components, as noted by the Holleran team.

Access to Care: 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.

Another element of being able to access care and services is income and housing costs. There is an enormous need for affordable housing options, as research shows that affordable housing alleviates the financial burden and makes more household resources available to pay for health care and healthy food, which leads to better health outcomes. Thirty-percent of a household's total income is considered the cut-off for housing-cost burdens and avoiding financial hardship. Approximately 56.6% of adults who rent in the secondary service area spend more than 30% of their household income on rent, which is higher than the primary service area, Massachusetts, and the nation. Additionally, nearly 28% of homeowners in the secondary service area are spending 30% or more on their mortgage and housing expenses, which is higher than the primary service area, but still lower than the state and the nation.

Key informants expressed particular concern for the low-income/poor population group. While secondary data appears 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.

Behavioral Health & Substance Abuse: 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 top most 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. Drug overdose deaths per 100,000 are notably higher in Bristol County (36) when compared to Norfolk County (25), Massachusetts (26), and the National Benchmark of 10. 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.



Chronic Disease Management & Prevention: 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. Cancer and heart disease are the leading causes of death among chronic diseases. 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. Overall, both the primary and secondary service areas have lower death rates.

Premature death is a measure of years of potential life lost due to death occurring before the age of 75. Bristol County (6,700) has more premature deaths than the state (5,400) and the National Benchmark of 5,300, but Norfolk County (4,700) remains lower. The majority of premature deaths are due to health behaviors and preventable factors. Cancer, unintentional injury, heart disease, suicide and perinatal deaths were among the top causes of premature death in the nation. The secondary data confirms this significant burden of disease, injury, and mortality related to chronic disease, especially among Bristol County, that typically has higher rates.

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. In addition, there are a higher proportion of households with 1 or more people 60 years and over receiving food stamps in the secondary service area (66.7%), when compared to the primary service area (40.5%), the state (39.0%), and the nation (30.5%).

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. While the percentage is certainly higher in Bristol County, it is reassuring that only 21% of adults in Norfolk County are considered obese, which is much lower when compared to the state and the National Benchmark. However, the 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). Massachusetts residents



overall have a higher percentage of adults who have been diagnosed with a depressive disorder when compared to the nation.

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." Another element that impacts the burden of chronic diseases on the health care system and challenges residents trying to manage chronic diseases is the missing health care resources or services that were identified in the community. Key informants listed the following as missing resources or services in the community: mental health services, free/low cost dental care, transportation, health education/outreach, and free/low cost medical care.

Desity: Overweight/obesity was identified by key informants as the third most pressing health issue in the community. Approximately 29% of adults in Bristol County have a BMI of 30 or greater and are deemed to be obese. This is above the percentage for Norfolk County, the state, and the nation. While Norfolk County is lower than the state and the nation, there are still substantial numbers of residents in both communities who are struggling to maintain a healthy weight and are physically inactive. Notably, a quarter of the population in Bristol County reported no leisure time for physical activity, which may be a contributing factor to the high percentages of obesity.

Physical inactivity, poor nutrition habits, and lack of access to healthy foods options and exercise opportunities are all known risk factors that contribute to obesity and other chronic conditions, such as diabetes, cancer, and heart disease. Concerns were voiced regarding barriers in trying to maintain healthy lifestyles, like integrating healthy lifestyle options of exercising and eating healthy into daily routines. Specifically, key informants noted time, knowledge and education, and accessibility and affordability to healthy food options and places to exercises are often limited. Furthermore, secondary data indicates that residents in both Bristol County and Norfolk County have similar access to exercise opportunities compared to the National Benchmark.

Cancer: 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 appears 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 top most 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.



COMMUNITY HEALTH NEEDS ASSESSMENT FINDINGS

Demographic and health indicator statistics have been collated to portray the current health status of the Sturdy Memorial Hospital's primary and secondary service area. When available, the most recently published data at the service area level were utilized. For example, if 2017 data were available at the national and state levels, but only 2016 data were available at the service area level, 2016 data were utilized at all levels unless otherwise indicated. If service area level data was not available, county level data for Bristol County and Norfolk County were utilized.

For all demographic and health indicator statistics, data from the municipalities were incorporated into primary and secondary service area level data unless otherwise noted. When available, state and national comparisons are provided as benchmarks for the regional statistics. A national comparison includes United States data and Healthy People 2020 objectives when available. The primary data sources used consist of data from the U.S. Census Bureau, Centers for Disease Control and Prevention, Massachusetts Department of Public Health, Behavioral Risk Factor Surveillance System (BRFSS), Youth Risk Behavior Surveillance System (YRBSS), and County Health Rankings.

I. Socio-Demographic Statistics Overview

The population of both the primary and secondary service areas have experienced higher growth (8.2% and 8.3% respectively) between 2000 and 2017, when compared to Massachusetts (6.9%), but lower than the nation (14.1%).

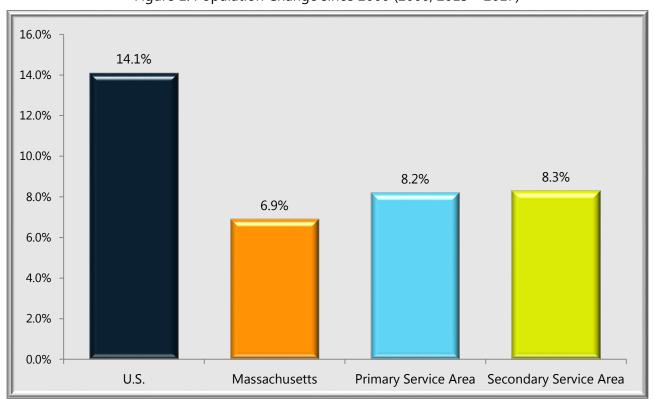


Figure 1. Population Change since 2000 (2000; 2013 – 2017)

The secondary service area has a notably larger older adult population when compared to the primary service area, Massachusetts, and the nation as evidenced by the median age (43.1 years), and the percent of resident's aged 60 years and older (21.8%).

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 (88.7%). Consequently, the secondary service area has a larger proportion of Asian population (7.3%) when compared to the primary service area, the state, and the nation. The racial breakdown provides a foundation for primary language statistics.

Table 1. Hispanic or Latino and Race Alone (2013 – 2017)

| | U.S. | Massachusetts | Primary Service Area | Secondary Service Area |
|---|-------|---------------|-------------------------|---------------------------|
| Not Hispanic or Latino | 82.4% | 88.8% | 96.0% | 95.0% |
| White | 61.5% | 72.9% | 88.7% | 82.5% |
| Black or African American | 12.3% | 6.7% | 2.4% | 3.1% |
| American Indian and Alaska Native | 0.7% | 0.1% | 0.0% | 0.1% |
| Asian | 5.3% | 6.2% | 3.1% | 7.3% |
| Native Hawaiian and Other Pacific | 0.2% | 0.0% | 0.0% | 0.0% |
| Some other race alone | 0.2% | 0.7% | 0.1% | 0.3% |
| Two or more races | 2.3% | 2.1% | 1.6% | 1.6% |
| Hispanic or Latino (of any race) ^a | 17.6% | 11.2% | 4.0% | 5.0% |

Source: U.S. Census Bureau

The percentage of people who speak a language other than English at home is lower in the primary service area (10.7%) compared to the secondary service area (16.5%) and both service areas are significantly lower than Massachusetts (23.1%) and the nation (21.3 %). Residents in the secondary service area who speak a language other than English at home are more likely to speak Asian and Pacific Islander languages and other Indo-European languages. Those in the primary service area who speak a language other than English at home are most likely to speak other Indo-European languages.

A review of U.S. Census data shows specific community needs related to 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 the financial burden and makes more household resources available to pay for health care and healthy food, which leads to better health outcomes. When looking at housing costs in the primary and secondary service areas, the percentage of homeowners spending 30% or more of their income on mortgage (26.8%) is notably lower in the primary service area when compared to the secondary service area, the state, and the nation. On the other hand, the percentage of renters spending 30% or more of their income on rent (56.6%) is higher in the secondary service area compared to the primary service area, Massachusetts, and the nation. Thirty-percent of a household's total income is considered the cut off for housing-cost burden and avoiding financial hardship.



^a Hispanic/Latino residents can be of any race, for example, White Hispanic or Black/African American Hispanic.

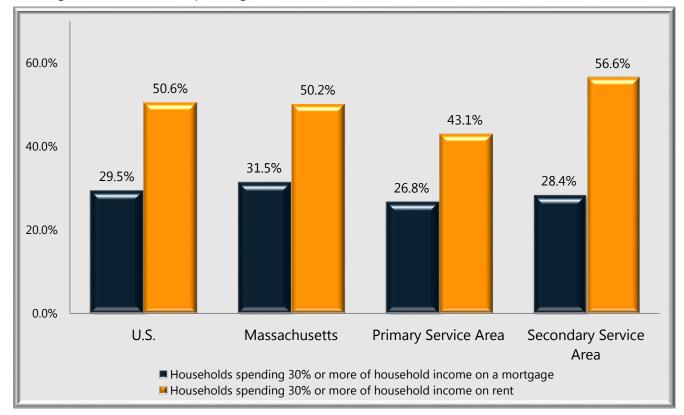


Figure 2. Households Spending More than 30% of Income on Selected Costs (2013 – 2017)

Another contributor to health outcomes is household income as it provides a foundation for determining poverty status. The median income for households and families is highest in the secondary service area (\$121,797 and \$150,513 respectively). Additionally, the median income for households and families in the secondary service area are \$30,000 to \$40,000 higher than in the primary service area, and \$40,000 to \$80,000 higher than in the state and the nation. Although not as high as median income in the secondary service area, the primary service area still has a higher median income for households and families (\$90,445 and \$108,645 respectively) compared to the state and the nation.

The population below poverty level in both the primary and secondary service areas (6.1% and 2.5% respectively) is much lower when compared to both the state (11.1%) and the nation (14.6%). 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.

A higher share of residents in the secondary service area live below poverty level and receive food stamp/SNAP (supplemental nutrition assistance program) benefits (38.4%) when compared to the primary service area (37.4%), but is still less than the state and nation. However, there is a notably higher proportion of households with one or more people 60 years and over receiving food stamps in the secondary service area (66.7%) when compared to the primary service area (40.5%), the state (39.0%), and the nation (30.5%).



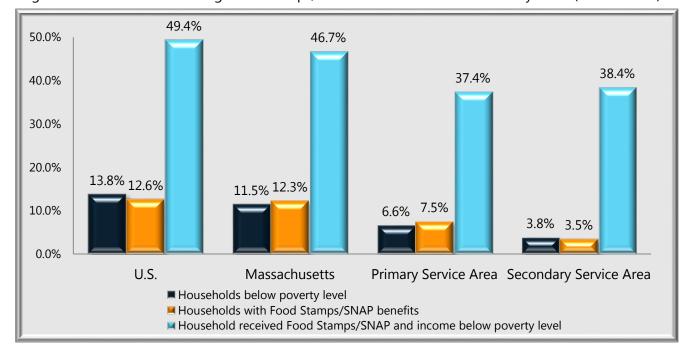


Figure 3. Households Receiving Food Stamps/SNAP with Income Below Poverty Level (2013 – 2017)

The majority of the population in the primary service area is currently employed in the labor force (72.7%). Unfortunately, the unemployment rate in the primary service (4.7%) is much higher as well when compared to the secondary service area (3.3%), Massachusetts (3.7%) and the nation (4.4%). The mean travel time to work is remarkably higher in the secondary service area than the primary service area, the state, and the nation.

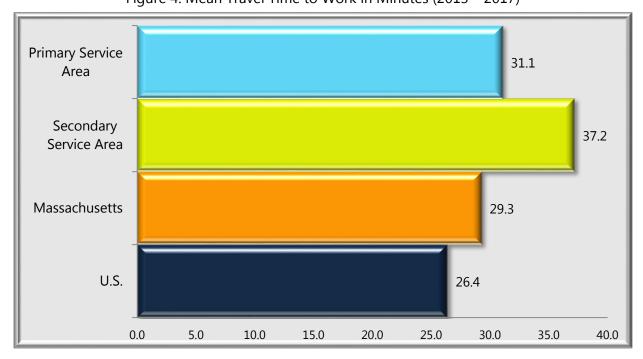


Figure 4. Mean Travel Time to Work in Minutes (2013 – 2017)

Education is also an important social determinant of health. Evidence indicates that individuals who are less educated tend to have poorer health outcomes. The primary service area has a lower percentage of residents with a bachelor's degree or higher (40.8%) when compared to the secondary service area (58.9%) and the state (42.1%), but it is still higher than the nation (30.9%).

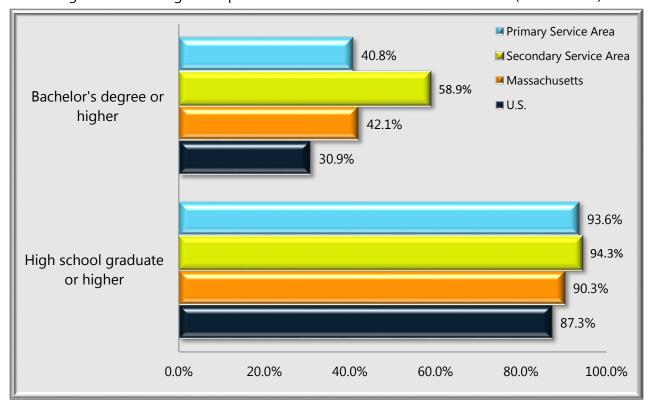


Figure 5. Percentage of Population with Select Educational Attainment (2013 – 2017)

II. Key Health Issues

Based on a review of the secondary data, as well as the key informant and community survey findings, the following section identifies the health issues that appear to be areas of concern for the primary and secondary service areas.

Mortality & Leading Causes of Death

The top three leading causes of death in 2016 for the primary service area are all types of cancer, heart disease, and chronic lower respiratory disease. The top three in the secondary service area are heart disease, all types of cancer, and chronic lower respiratory disease. This is similar to the state and the nation, however the top cause of death in the nation is heart disease, while in the state the top cause of death is cancer. Additionally, the crude death rates for the top three causes of death are are all higher in the primary service area when compared to the secondary service area. The crude death rate for opioid-related deaths per 100,000 is higher in the primary service area (31.9) than in the secondary service area (20.0).

The overall crude death rate per 100,000 is notably higher in the primary service area (768.4) when compared to the secondary service area (676.1), but is still less than Massachusetts (836.2) and the nation (849.3).

Table 2. Crude Death Rates per 100,000 by the Leading Causes of Death (2017)

| dole 2. Crade Death Hates per 100,000 by | U.S. | Massachusetts | Bristol County* | Norfolk County* |
|---|-------|---------------|--------------------|--------------------|
| Diseases of heart | 198.8 | 177.0 | 204.1 | 178.6 |
| Malignant neoplasms (cancer) | 183.9 | 188.5 | 207.5 | 192.9 |
| Accidents (unintentional injuries) | 52.2 | 55.7 | 75.0 | 47.0 |
| Chronic lower respiratory disease | 49.2 | 41.4 | 58.2 | 35.3 |
| Cerebrovascular diseases (stroke) | 44.9 | 34.5 | 36.3 | 36.0 |
| Alzheimer's disease | 37.3 | 26.8 | 35.8 | 23.4 |
| Diabetes mellitus | 25.7 | 19.3 | 24.4 | 16.1 |
| Influenza and pneumonia | 17.1 | 20.9 | 28.7 | 19.0 |
| Nephritis, nephrotic syndrome and nephrosis | 15.5 | 17.4 | 20.7 | 16.4 |
| Intentional self-harm (suicide) | 14.5 | 9.9 | 12.6 | 8.0 |
| Chronic liver disease and cirrhosis | 12.8 | 11.2 | 17.1 | 11.3 |
| Septicemia | 12.6 | 12.6 | 15.7 | 14.3 |
| Essential hypertension and hypertensive renal disease | 10.8 | 9.0 | 11.0 | 8.4 |
| Parkinson's disease | 9.8 | 9.1 | 6.6 | 9.0 |
| Pneumonitis due to solids and liquids | 6.2 | 8.5 | 15.3 | 8.1 |

Source: Centers for Disease Control and Prevention – CDC WONDER



^{*} Service area level data was not available, so county level data for Bristol County and Norfolk County were utilized.

Note: The crude death rate data displayed above represents the county level data, which was utilized for data at all levels. No data available for the service area towns/cities on CDC WONDER, however primary and secondary service area weighted calculations are presented in the Secondary Data Profile, Table G2.

Community Perspective

Key informant survey participants were asked to identify the top five most pressing health issues from a list of 14 focus areas in their community. Mental health was selected as the top health issue by 84.8% of respondents. The other top health issues also identified include Substance abuse/alcohol abuse, Overweight/obesity, Opioid crisis/drug overdoses, and Cancer.

Mental health (36.4%) was selected as the most significant health issue facing the community, closely followed by Access to care/uninsured. Nearly 42% of respondents from Norfolk County and 36% of respondents from Bristol County select Mental health as the most significant issue. The following table summarizes the top five health issues facing the community, as well as the most significant health issue perceived by key informants.

Table 3. Ranking of the Most Pressing Health Issues Identified in the Community

| Table 3. Ranking of the Wost Fressing I | Selected as an Issue* | Selected as Most Significant |
|---|-----------------------|---------------------------------|
| Mental health | 84.8% | 36.4% |
| Substance abuse/alcohol abuse | 65.2% | 6.1% |
| Overweight/obesity | 63.6% | 12.1% |
| Opioid crisis/drug overdoses | 60.6% | 13.6% |
| Cancer | 37.9% | 6.1% |
| Access to care/uninsured | 34.8% | 13.6% |
| Diabetes | 34.8% | 3.0% |
| Heart disease | 25.8% | 1.5% |
| Suicide | 22.7% | 0.0% |
| Dental health | 18.2% | 1.5% |
| Tobacco | 12.1% | 0.0% |
| Other (specify): | 10.6% | 4.5% |
| Stroke | 7.6% | 0.0% |
| Maternal/infant health | 1.5% | 1.5% |
| Sexually transmitted diseases | 0.0% | 0.0% |

^{*} Respondents could select more than one option, therefore the percentages may sum to more than 100.0%.

The following section provides a more detailed discussion of health issues in the service area.

Behavioral/Mental Health

Based on both the primary and secondary data analysis, mental health issues emerged as a significant health concern. These findings are important because mental health issues can be significant confounding factors for broader health issues and overall unhealthy lifestyle behaviors. Unfortunately,



mental health and substance use disorders affect individuals from all walks of life and age groups. In addition to the fears behavioral health patients have with regard to seeking treatment and stigma often associated with mental illness, the range of behavioral health conditions is wide and diverse. Anxiety disorders are the most common mental illness in the nation, followed closely by depression. Key informants agree with these statements by ranking Mental health as the most significant pressing health issue in the local community.

The crude death rate due to suicide or intentional self-harm per 100,000 is higher in Bristol County

(12.6) than in Norfolk County (8.0) and Massachusetts (9.9), but still have lower rates than the nation (14.5). According to the Youth Risk Behavior Surveillance System (YRBSS), that monitors health-related behaviors that contribute to the leading causes of death and disability among youth and adults, less Massachusetts high school students in 2017 compared to 2015 report seriously considering suicide (12.4% and 14.9% respectively). However, Massachusetts

"Behavioral/mental health issues continue to be on the rise and without appropriate treatment and supports these children will not be successful or healthy."

(18.7%) has a higher percentage of adults ever been told by a doctor they have a depressive disorder compared to the nation (17.3%), according to the Behavioral Risk Factor Surveillance System (BRFSS). In addition, the County Health Rankings data, in the table below, shows that Bristol County has more poor mental health days, which is the average number of mentally unhealthy days reported in the past 30 days.

Table 4. Health Outcome Rankings (2018)

| | National Benchmark | Massachusetts | Bristol County | Norfolk County |
|--------------------------------|--------------------|---------------|-------------------|-------------------|
| Health Outcomes - Overall Rank | | | 13 | 4 |
| Length of Life | | | 11 | 4 |
| Premature death | 5,300 | 5,400 | 6,700 | 4,700 |
| Quality of Life* | | | 12 | 2 |
| Poor or fair health | 12% | 14% | 15% | 10% |
| Poor mental health days | 3.1 | 4.0 | 4.7 | 3.7 |

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

Substance Use and Opioid Crisis

Excessive use of alcohol and drugs can lead to mental and physical health issues, some of which consist of anxiety, depression, diabetes, liver disease, and heart disease. In terms of substance abuse, the community is already suffering the devastating consequences of the opioid epidemic, shortage of mental health providers, and the growing demand and need for addiction treatment. Drug overdose deaths per 100,000 are notably higher in Bristol County (36) when compared to Norfolk County (25), Massachusetts (26), and the National Benchmark of 10. Specifically, the crude death rate weighted calculations for opioid-related deaths is higher in the primary service area (31.9 per 100,000) than in



^{*} Additional factors not displayed above that contribute to the ranking for Quality of Life. Rank is based on all 14 counties within the state of Massachusetts. A ranking of "1" is considered to be the healthiest.

the secondary service area (20.0 per 100,000). Supportive to these findings is premature deaths, years of potential life lost before age 75 per 100,000 population, which is far worse in Bristol County and displayed above, in Table 4.

The overall national opioid prescribing rate has been on the decline since 2012; however, prescribing rates continue to remain very high in certain areas across the nation. The retail opioid prescriptions dispensed per 100 persons in 2017 remains high in Bristol County (62.1) when compared to Norfolk County, the state, and the nation. In the early 2000's, opioid–related overdose deaths began to increase substantially, while in parallel with the increase of prescribing opioids. 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. Beyond changing patterns of prescribing, communities need a multifaceted, comprehensive public health approach to address the social norms and stigma around opioids.

Table 5. Opioid Prescribing Rates per 100 Persons (2006; 2017)

| | U.S. | Massachusetts | Bristol County | Norfolk County |
|------|------|---------------|-----------------------|----------------|
| 2017 | 58.7 | 40.1 | 62.1 | 35.6 |
| 2006 | 72.4 | 66.0 | 87.5 | 58.8 |

Source: Centers for Disease Control and Prevention (Opioid Prescribing Rate Maps)

According to the YRBSS, a larger percentage of Massachusetts high school students in 2017 compared to the nation report being offered, sold, or given drugs at school (20.1% and 19.8% respectively). High school students in Massachusetts also reported being more likely to currently use alcohol, binge drink, and ever used and currently use marijuana when compared to the nation. Nearly, 24% of high school students and 2% of middle school students reported using marijuana in the month prior to the survey in Massachusetts. Research shows that the majority of adults who meet the criteria for having a substance use disorder started using substances during their teen and young adult years.

Excessive drinking results in approximately 1,542 deaths and 41,926 years of potential life lost each year in Massachusetts. In Massachusetts, 17.8% of adults and 15.9% of high school students reported binge drinking in 2017. Binge drinking is defined as the consumption of five or more drinks for men or four or more drinks for women, on any one occasion in the past month. Among Massachusetts high school students, approximately 56% reported ever drinking alcohol and 14% reported they rode with a driver who had been drinking alcohol. Adults who report driving after drinking too much is slightly higher in Massachusetts (4.5%) than in the nation (4.0%). In addition, the table below shows the County Health Rankings data for excessive drinking and alcohol-impaired driving deaths.

Table 6. Alcohol Use/Abuse and Consumption among Adults (2018)

| | National Benchmark | Massachusetts | Bristol County | Norfolk County |
|---------------------------------|-----------------------|---------------|-------------------|-------------------|
| Health Behaviors Rank* | | | 13 | 3 |
| Excessive drinking | 13% | 20% | 20% | 21% |
| Alcohol-impaired driving deaths | 13% | 29% | 30% | 33% |



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.

Furthermore, Substance abuse/alcohol abuse and Opioid crisis/drug overdoses were both among the top health issues and Opioid crisis/drug overdoses tied as the second most significant issue facing the community. One key informant voiced the effects of mental health and substance abuse issues: "One problem I have observed with Mental Health, and abuse issues are that there aren't enough resources in the area. People are on waiting lists to be treated at rehab and counseling centers."

Overweight/Obesity

Overweight/obesity is another important health issue identified through the primary and secondary data analysis. Being overweight/obese is a concern as it can be a contributing factor to a variety of other chronic health conditions, such as Diabetes and Heart Disease. County Health Rankings data showed that Bristol County has a higher percentage of residents that are obese compared to Norfolk County, the state, and the National Benchmark. Additionally, key informants ranked Overweight/obesity as the third most pressing health issue in the community. The majority of key informants felt obesity was one of the top health issues in the community as it often leads to many other health conditions. One key informant stated about the effects of overweight/obesity: "I think that being overweight pre-disposes folks to other morbidities like diabetes, heart disease, depression, substance abuse, and the resultant inactivity compounds those problems and leads to more problems."

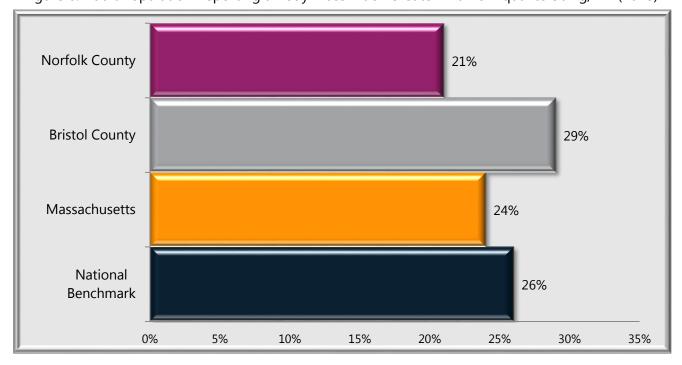


Figure 6. Adult Population Reporting a Body Mass Index Greater Than or Equal to 30 kg/m2 (2018)

Cancer



Cancer was also noted as one of the top health concerns through primary and secondary data analysis. Based on data from the Centers for Disease Control and Prevention (CDC) and the Massachusetts Department of Public Health, Cancer is the leading cause of death in the primary service area, as well as Bristol County, Norfolk County, and Massachusetts. Cancer is the second leading cause of death in the nation after Heart Disease. Furthermore, the crude death rate due to Cancer per 100,000 in the primary service area (169.1) is higher than the secondary service area (147.6). Key informants also ranked Cancer as one of the top five most pressing health issues in the community.

The overall mortality rate for cancer in Bristol County far exceeds the other rates. Specifically, incidence and mortality rates for lung and bronchus cancer and incidence rates for bladder cancer, and pancreas cancer are higher. 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. Females in Norfolk County are more likely to be diagnosed with breast cancer (151.4 per age-adjusted 100,000) than females across Bristol County, Massachusetts, and the nation. Conversely, residents of Bristol County are more likely to diagnosed, as well as die with Lung and bronchus cancer compared to residents in Norfolk County, the state, and the nation.

Table 7. Age-Adjusted Cancer Incidence Rates by Site, per 100,000 (2011 – 2015)

| | U.S. | Massachusetts | Bristol County | Norfolk County |
|----------------------|-------|---------------|-------------------|-------------------|
| Breast (female) | 124.7 | 137.6 | 126.4 | 151.4 |
| Bladder | 20.3 | 23.6 | 24.7 | 21.4 |
| Colon & Rectum | 39.2 | 37.0 | 38.9 | 37.0 |
| Lung & bronchus | 60.2 | 63.8 | 69.5 | 61.7 |
| Pancreas | 12.6 | 12.9 | 13.8 | 12.8 |
| Melanoma of the skin | 21.3 | 20.0 | 15.4 | 25.0 |
| Prostate (male) | 109.0 | 106.4 | 111.4 | 112.5 |
| Cervix (female) | 7.5 | 5.1 | 4.5 | 4.5 |
| Uterus (female) | 26.2 | 29.4 | 27.8 | 30.3 |
| All sites | 441.2 | 459.1 | 457.9 | 474.6 |

Source: National Cancer Institute - State Cancer Profiles

Table 8. Average Annual Cancer Mortality by Site, per Age-Adjusted 100,000 (2011 – 2015)

| | HP 2020 Target | U.S. | Massachusetts | Bristol County | Norfolk County |
|----------------------|-------------------|------|---------------|-------------------|-------------------|
| Breast (female) | 20.7 | 20.9 | 18.5 | 19.4 | 19.4 |
| Bladder | N/A | 4.4 | 4.7 | 4.7 | 4.1 |
| Colon & Rectum | 14.5 | 14.5 | 12.7 | 14.4 | 11.8 |
| Lung & bronchus | 45.5 | 43.4 | 42.1 | 47.2 | 40.2 |
| Pancreas | N/A | 10.9 | 11.2 | 11.8 | 11.4 |
| Melanoma of the skin | 2.4 | 2.6 | 2.7 | 2.5 | 2.7 |
| Prostate (male) | 21.8 | 19.5 | 18.8 | 17.5 | 16.9 |
| Cervix (female) | 2.2 | 2.3 | 1.2 | 1.6 | 1.1 |



| Uterus (female) | N/A | 4.6 | 4.7 | 4.8 | 4.4 |
|-----------------|-------|-------|-------|-------|-------|
| All sites | 161.4 | 163.5 | 159.6 | 169.8 | 153.3 |

Sources: National Cancer Institute – State Cancer Profiles and Healthy People 2020

III. Health Risk Behaviors

This section illustrates the health risk behaviors that contribute to poor health as identified by the secondary data analysis, as well as the key informant survey findings. Tobacco use, physical inactivity, inadequate nutrition, unsafe sex, heavy alcohol consumption, and low rates of immunizations and screenings are all risky behaviors that can lead to poor health outcomes.

Table 9. Health Factors and Behaviors Rankings (2018)

| | National Benchmark | Massachusetts | Bristol County | Norfolk County |
|--|-----------------------|---------------|-------------------|-------------------|
| Health Factors Rank | | | 13 | 1 |
| Health Behaviors Rank | | | 13 | 3 |
| Adult smoking | 14% | 14% | 18% | 12% |
| Adult obesity (BMI ≥ 30) | 26% | 24% | 29% | 21% |
| Food environment index | 8.6 | 9.2 | 8.3 | 8.9 |
| Physical inactivity (Adults 20 years+) | 20% | 22% | 27% | 20% |
| Access to exercise opportunities | 91% | 94% | 91% | 92% |
| Excessive drinking | 13% | 20% | 20% | 21% |
| Alcohol-impaired driving deaths | 13% | 29% | 30% | 33% |
| New chlamydia cases per 100,000 | 145.1 | 357.3 | 241.8 | 434.1 |
| Teen birth rate per 1,000 (Aged 15–19) | 15 | 12 | 17 | 4 |

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

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

Tobacco Use

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. Among Massachusetts high school students, 41% reported ever having used an electronic vapor product, while only 20% reported doing so in the past 30 days; however, this is notably higher than current use in the nation of 13%. In addition, 18% of adults smoke in Bristol County compared to only 12% in Norfolk County, 14% in Massachusetts, and the National Benchmark of 14%, according to the County Health Rankings. The County Health Rankings ranks the health of nearly every county in the nation. The ranks for Bristol and Norfolk Counties are based on all 14 counties in Massachusetts. A ranking of "1" is considered to be the healthiest. According to this data, Bristol County received a Health Behaviors rank of 13 out of 14 counties in Massachusetts, while Norfolk County received a Health Behaviors rank of 3 out of 14. One of the factors that contributed to this ranking is adult smoking status.

Dietary and Exercise Behaviors



Healthy eating coupled with regular physical activity is widely supported as the best way to prevent certain health concerns, such as Obesity, Diabetes, Heart Disease and many others. Based on data from County Health Rankings, a notably higher percentage of adults in Bristol County report no leisure time for physical activity (27%) when compared to Norfolk County (20%), Massachusetts (22%) and the National Benchmark (20%). However, the populations in both Bristol County and Norfolk County have similar access to exercise opportunities (91% and 92%) compared to the National Benchmark (91%). Additionally, the food environment index is worse in Bristol County (8.3) than in Norfolk County (8.9), the state (9.2), and the nation (8.6).

Key informants were asked what challenges people in the community face in trying to maintain healthy lifestyles like exercising and eating healthy. The underlying theme surrounds access to healthy lifestyle options. The majority of key informants felt factors, such as access to affordable healthy food options, as well as lack of time and cost were some of the biggest challenges for community members. Specifically, one key informant commented, "Healthy eating is expensive. Knowledge of healthy, low cost easily prepared foods can impact people's ability to eat healthy. Time constraints due to work, child care, elder care impact the amount of time available to exercise." Another key informant stated, "I believe many people eat incorrectly and are overweight which leads to many health problems. I think the socio-economic status of many people in Norton dictates what they can afford to buy for food. I also think many people have come to accept their overweight status as the norm."



IV. Access to Care

This section illustrates the health coverage status of residents and highlights the barriers related to access to health care that can contribute to poor health, as identified by the secondary data analysis and key informants.

Health Insurance Coverage

Health insurance coverage can have a significant influence on health outcomes. According to U.S. Census Bureau (2013 – 2017) estimates, the health insurance coverage rates in both the primary and secondary service areas (97.8% and 99.3% respectively) is slightly higher than Massachusetts (97.0%) and much higher when compared to the nation (89.5%).

Health Care Provider Access

According to County Health Rankings data, the ratio of primary care physicians and dentists is much worse in Bristol County than in Norfolk County, Massachusetts, and the National Benchmark. While the ratio of mental health providers to residents is also worse in Bristol County compared to Norfolk County and Massachusetts, it is lower than the National Benchmark. The National Benchmark represents the 90th percentile (i.e., only 10% of locations are better) across the nation.

Table 10. Health Care Provider Density (2018)

| | National Benchmark | Massachusetts | Bristol County | Norfolk County |
|---------------------------------|--------------------|---------------|-------------------|-------------------|
| Clinical Care Rank ^a | | | 11 | 2 |
| Primary care physician density | 1,030:1 | 950:1 | 1,830:1 | 790:1 |
| Dentist density | 1,280:1 | 1,010:1 | 1,570:1 | 840:1 |
| Mental health provider density | 330:1 | 180:1 | 230:1 | 190:1 |

Source: County Health Rankings & Roadmaps

The table below illustrates the ability of individuals to access health care when needed, according to BRFSS. Approximately 8.8% of residents in Massachusetts are less likely to consider cost as a barrier to see a doctor when compared to the nation (12.1%). Additionally, residents in Massachusetts are more likely to receive a routine checkup in the past year when compared to the nation. The key informants support these findings by identifying that almost 70% of respondents either "Agree" or "Strongly agree" that the residents in the area are able to access a primary care provider when needed.

Table 11. Health Care Access/Coverage – Behavioral Risk Factor Surveillance System, BRFSS (2016)

| | U.S. | Massachusetts |
|---|-------|---------------|
| Could not see a doctor in the past year due to cost | 12.1% | 8.8% |
| Visited a doctor for a routine checkup within the past year | 70.8% | 78.7% |
| Any type of health care coverage | 89.8% | 96.2% |

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

^a BRFSS data only available for the nation and Massachusetts, no county level data.



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

Barriers to Accessing Health Services

Key informants were asked to identify the most significant barriers that keep individuals in the community from accessing health care when they need it. It is important to know the barriers community members face in accessing health services, as this can help providers understand why people avoid or delay seeking health care. By far, the most commonly selected barrier that key informants felt the community faced in accessing services was the Inability to pay out of pocket expenses (co-pays, prescriptions, etc.), followed by the Inability to navigate health care system and Lack of transportation. The Inability to pay out of pocket expenses (co-pays, prescriptions, etc.) and Availability of providers/appointments was identified as tied as the most significant barrier to accessing healthcare.

Table 12. Ranking of the Most Significant Barriers to Accessing Health Care by Key Informants

| | Selected as a Barrier* | Selected as Most Significant |
|---|---------------------------|---------------------------------|
| Inability to pay out of pocket expenses (copays, prescriptions, etc.) | 77.6% | 26.2% |
| Inability to navigate health care system | 67.2% | 18.5% |
| Lack of transportation | 56.7% | 6.2% |
| Availability of providers/appointments | 53.7% | 26.2% |
| Language/cultural barriers | 41.8% | 1.5% |
| Lack of health insurance coverage | 38.8% | 6.2% |
| Basic needs not met (food/shelter) | 34.3% | 9.2% |
| Time limitations (long wait times, limited office hours, time off work) | 23.9% | 4.6% |
| Lack of trust | 19.4% | 0.0% |
| Lack of child care | 14.9% | 0.0% |
| Other (specify): | 4.5% | 1.5% |
| None/no barriers | 0.0% | 0.0% |

^{*} Respondents could select more than one option, therefore the percentages may sum to more than 100.0%.

Key informants were asked to rate Health Care Access for specific statements on a scale of "Strongly disagree" to "Strongly agree". While over half of key informants indicated that residents in the area are able to access a primary care provider, medical specialist, and mental/behavioral health providers when needed, they felt that residents may have more difficulty accessing other health care services, including Medicaid/Medical Assistance providers, bilingual providers, as well as transportation to medical appointments. Almost 70% of respondents "Agree" or "Strongly agree" that the residents in the area are able to access a primary care provider when needed. Despite this, the majority of key informants emphasized that, even if there is a sufficient amount of health care providers in the community, individuals tend to have difficulty accessing care due to the availability of providers and appointments. In addition, key informants were torn on if there was a sufficient need for the current mental/behavioral health providers in the community, even though Mental health was selected as the most significant health issue in the community.



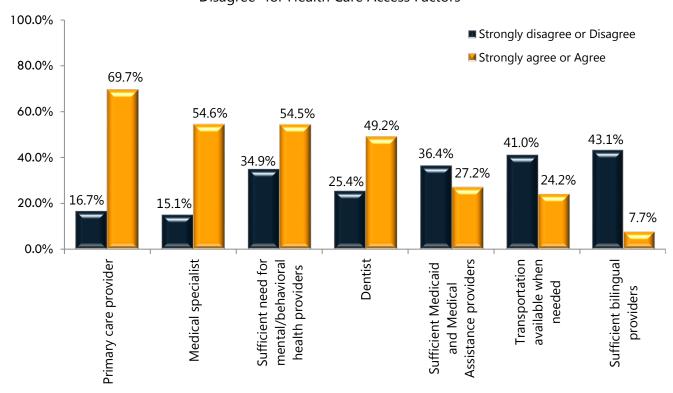


Figure 7. Respondents Who Selected "Strongly agree" or "Agree" Compared to "Strongly disagree" or "Disagree" for Health Care Access Factors*

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

Underserved Populations

Key informants were asked whether they thought there are specific populations who are not being adequately served by local health services. The majority of respondents felt there are specific underserved populations in the community (64.1%). Of those key informants who feel there are underserved populations in the community, the majority ranked Low-income/poor (61.0%), Uninsured/underinsured (53.7%), and Seniors/elderly (46.3%) as the top three population groups that are underserved. In addition, nearly 67% of key informants indicated the Hospital emergency department as a primary place where uninsured or underinsured individuals go when they are in need of medical care.

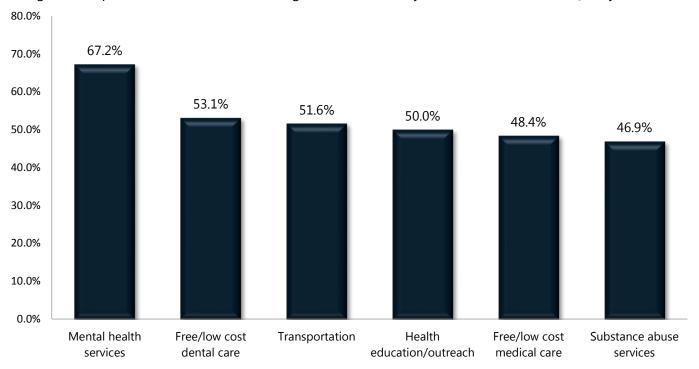
Resources Needed to Improve Access

Respondents were asked to identify missing resources or services that were needed to improve access to health care for residents in the community. Mental health services topped the list receiving 67% of responses. Free/low cost dental care, Transportation, Health education/outreach, and Free/low cost medical care were also identified as missing resources or services in the community. If there are adequate mental health services within the community, then the key health issues identified could be accessed more easily. Interestingly, 79.2% of key informants that selected "Mental health" as the most



significant health issue facing the community also selected the response "Mental health services", as a resource or service missing in the community.

Figure 8. Top Resource or Services Missing in the Community Related to Health and Quality of Life



^{*}Respondents could select more than one option, therefore the percentages may sum to more than 100.0%.

V. Challenges and Solutions

Key informants were asked to identify challenges people in the community face in trying to maintain healthy lifestyles. The most prominent themes that emerged in participants' responses include comments surrounding access to healthy lifestyle options including lack of time, lack of knowledge and education, accessibility and affordability of healthy food choices, and lack of affordable places to exercises. The vast majority of key informants noted the lack of healthy, affordable food options, as well as knowledge and education as the biggest challenges facing the community in trying to live a healthy lifestyle. As one key informant stated: "Healthy eating is expensive. Knowledge of healthy, low cost easily prepared foods can impact people's ability to eat healthy. Time constraints due to work, child care, and elder care impact the amount of time available to exercise."

Next, key informants were asked, "In your opinion, what is being done well in the community in terms of health and quality of life? (Community Assets/Strengths/Successes)." Overall, they feel there are many, high-quality programs available in the community. Key informants were also asked, "Overall, what do you consider the most critical health and quality of life issues in the community?" Again, respondents pinpointed the need for increased mental health and substance abuse services. Some key informants even mentioned the needs of the youth in the community and the coordination of care for residents of all ages.

To round out the feedback from key informants, respondents were asked to provide suggestions and recommendations that they felt would be helpful to improve health and quality of life in the

community. Most participants expressed the need for affordable mental health services to be more widely available in the community, as well as improved education. Several respondents offered valuable insights into how the community could be educated and how they feel ideas or programs could be implemented. Increased collaboration and coordination among organizations around prevention efforts was also voiced.

"I believe the most critical issues include addressing the high number of overdoses and those struggling with addiction. The need for rehabilitation and recovery support programs is critical to make long term change. Detox is not enough. Once someone receives the support of a hospital whatever the health issue may be, there needs to be follow up by a Community Health Worker to assure the individual is following healthy recommendations."

Based on data from both the secondary data profile and the key informant survey, the service area overall has many assets that position the community to have socio-demographic and health outcomes that are often better than the state and nation. However, the data show that, like many communities across the nation, the service area continues to struggle with health issues related to behavioral/mental health, substance abuse, and chronic conditions such as overweight/obesity. Additionally, in terms of access to care, many key informants felt that low-income/poor populations are more likely than others to be underserved in the community. Sturdy Memorial and their partners will now use this data to identify the most pertinent community health issues and determine strategies to best address them.



IDENTIFICATION OF COMMUNITY HEALTH NEEDS

Prioritization Session

Individuals representing Sturdy Memorial Hospital, local health and human service agencies, area non-profit 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 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. It should be noted that prior to moving forward to Board approval, the Hospital held an open meeting to the public on September 19, 2019, for which information was published in local newspapers. Unfortunately, there was no attendance. The Board of Managers approved the 2019 CHNA and the identified priorities at their meeting held on Monday, September 23, 2019.

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.

Appendix A. Secondary Data Sources

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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 Informant Online Questionnaire

INTRODUCTION: As part of its ongoing commitment to improving the health of the communities it serves, Sturdy Memorial Hospital is 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, including Attleboro, Foxboro, Mansfield, North Attleboro, Norfolk, Norton, Plainville, Rehoboth, Seekonk, Sharon, Walpole and Wrentham.

KEY HEALTH ISSUES

| - | \ \ /II | | 1 1.1 • | • .1 | •. ^ | <i>-</i> | - \ |
|---|---------------------------|----------|-----------------|------------------|-------------|----------|------------|
| | What are th | ha tan 🤊 | health issues | Valicaa in tha | COMMUNITY | I haasa | ^1 |
| | YYIIGI GI C II | | 11601111 133063 | 300 3CC III IIIC | COMMINIONNY | CHOOSE | JI |

| Access to care/uninsured | Overweight/obesity |
|------------------------------|-------------------------------|
| Cancer | Sexually transmitted diseases |
| Dental health | Stroke |
| ☐ Diabetes | Substance abuse/alcohol abuse |
| Heart disease | Suicide |
| Maternal/infant health | Tobacco |
| Mental health | Other (specify): |
| Opioid crisis/drug overdoses | |

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 | Suicide |
| Maternal/infant health | ☐ Tobacco |
| Mental health | Other (specify): |
| Opioid crisis/drug overdoses | |



| 3. ' | What resources are available in the community to ac | dress the | top heal | th issues y | ou ident | ified? |
|------|---|------------|------------|---------------|-----------|------------|
| | Please share any additional information regarding them this way in the box below: | iese healt | h issues a | nd your r | easons f | or ranking |
| 5. (| CESS TO CARE On a scale of 1 (strongly disagree) through 5 (strong statements about Health Care Access in the area. 1 = strongly disagree; 2 = disagree; 3 = neither agre | e nor disa | gree; 4 = | agree; 5 | = strongl | y agree |
| | | Strong | ly disagr | <u>ee ← →</u> | Strongly | agree |
| | Residents in the area are able to access a primary care provider when needed. (Family Doctor, Pediatrician, General Practitioner) | l | <u>2</u> | 3 | <u></u> 4 | <u></u> 5 |
| | Residents in the area are able to access a medical specialist when needed. (Cardiologist, Dermatologist, Neurologist, etc.) | <u></u> 1 | <u>2</u> | _3 | <u></u> 4 | <u></u> 5 |
| | Residents in the area are able to access a dentist when needed. | <u></u> 1 | <u>2</u> | 3 | <u>4</u> | <u></u> 5 |
| | There are a sufficient number of providers accepting Medicaid and Medical Assistance in the area. | 1 | <u>2</u> | <u></u> 3 | <u></u> 4 | <u></u> 5 |
| | There are a sufficient number of bilingual providers in the area. | 1 | <u>2</u> | 3 | <u>4</u> | <u></u> 5 |
| | There is a sufficient need for mental/behavioral health providers in the area. | <u></u> 1 | <u>2</u> | 3 | <u></u> 4 | <u></u> 5 |
| | Transportation for medical appointments is available to area residents when needed. | <u></u> 1 | <u>2</u> | 3 | <u></u> 4 | <u></u> 5 |

| 6. What are the MOST significant barriers that keep people in the community from accessing health | | | | | | | | | | |
|---|---|-----------------------------------|--|--|--|--|--|--|--|--|
| | care | e wh | en 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 | e 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) | | | | | | | |
| | | \Box | None/no barriers | | | | | | | |
| | | | Other (specify): | | | | | | | |
| 8. | Pled | ase s | hare any additional information regarding barriers to health care in the box below: | | | | | | | |
| | | | | | | | | | | |
| 9. | | | re specific populations in this community that you think are not being adequately served by | | | | | | | |
| | locc | ıl he | alth services? | | | | | | | |
| | | _ Y | es | | | | | | | |
| | |] N | o | | | | | | | |
| 10 | CIII | D\/E | VIOCIC > If was which as an electron was undersooned 2 (Salact all that sounds) | | | | | | | |
| 10 | . 30 | | Y LOGIC → If yes, which populations are underserved? (Select all that apply) ck/African-American □ Low-income/poor | | | | | | | |
| ŀ | \forall | | | | | | | | | |
| ŀ | \overline{H} | | dren/youth Seniors/elderly abled Uninsured/underinsured | | | | | | | |
| ŀ | + | | | | | | | | | |
| ŀ | + | | panic or Latino Voung adults None | | | | | | | |
| | + | | igrant/refugee | | | | | | | |
| | <u> </u> | 111111 | igram/ rerogee Omer (specify): | | | | | | | |



| 11.In genera | ıl, where do | you think MOS | T uninsure | d and unde | erinsured in | ndividuals li | ving in the | area go |
|--------------|--------------|------------------|-------------------|------------|--------------|---------------|-------------|---------|
| when the | y are in nee | ed of medical co | are? (Choo | ose 1) | | | | |

| Doctor's office |
|--|
| Hospital emergency department |
| Public health clinic/community health center |
| Urgent care center |
| Don't know |
| Other (specify): |

| 12. Please share any | additional information | n regarding | uninsured, | /underinsured | individuals | and |
|----------------------|--------------------------|-------------|------------|---------------|-------------|-----|
| underserved pop | oulations in the box bel | ow: | • | | | |

13. 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/outreach |
| Health screenings |
| Medical specialists |
| Mental health services |
| Prescription assistance |
| Primary care providers |
| Substance abuse services |
| Transportation |
| None |
| Other (specify): |

OPEN-ENDED

- 14. 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?
- 15. In your opinion, what is being done **well** in the community in terms of health and quality of life? (Community Assets/Strengths/Successes)
- 16. Overall, what do you consider the most critical health and quality of life issues in the community?
- 17. What recommendations or suggestions do you have to improve health and quality of life in the community?



DEMOGRAPHICS

| 18. Which one of these cate | egories would you say BEST represents your commu | nity 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): | |
| 19. What is the primary cou Bristol County Norfolk County Other (specify): CLOSING | unty your organization serves? (Choose 1) | |
| | nd its partners will use the information gathered the | |
| below: | | |
| | | |
| | | |
| | | |
| | | |

Thank you! That concludes the survey.

Appendix D. Key Informant Participants

| Name | Agency/Organization |
|--------------------------|--|
| Joan B. Badger | Town of North Attleboro Board of Health |
| Jeff Begin | Brewster Ambulance |
| Doreen Browne | Norton High School |
| Ellen Bruder-Moore | Community Counseling of Bristol County |
| Coleman Bushnell | Norfolk Fire |
| Maureen Cardarelli | Cities of Plainville, Mansfield, Seekonk, Easton and Foxboro |
| Ashley Cartwright | Seekonk Council on Aging |
| Jeffrey Cateon | Willett Elementary School |
| Donna Charron | Children's Advocacy Center of Bristol County |
| Brian Clark | Town of Norton Police |
| Beth Collins | Chest Clinic of Dighton |
| Jaime Conlon | Town of Rehoboth |
| | Justice Resource Institute- The Attleboro Area Center |
| Christin Cranshaw | Community-based Acute Treatment |
| Dawn Dailey-Begin | Dighton-Rehoboth Regional High School |
| David Denenno | Sturdy Memorial Hospital/ Massachusetts Emergency Nurses |
| Amy Donovan Palmer | Town of Mansfield |
| Karl Drown | Town of Rehoboth |
| Kevin Dumas | Town of Mansfied |
| Deb Ebert | Attleboro Public Schools |
| Danielle W. Fish | The Sage School |
| June Fleischmann | City of Attleboro |
| Anne Marie Fleming | Town of North Attleboro |
| Peg Flocco | Sturdy Memorial Hospital |
| Caitlin Gibbs | Hockomock YMCA |
| Cyndee Goodinson-Lindsey | Attleboro YMCA |
| Dr. John Gould | Dighton-Rehoboth Regional High School |
| Peter Ham | Associates In Behavioral Health, LLC |
| Sarah Harris | South Bay Community Services Attleboro Mental Health Clinic |
| James Hawkins | State of Massachusetts |
| Chief Kyle Heagney | Attleboro Police Department |
| Lauren Hewitt | Town of Wrentham |
| Susan Higgins | Sturdy Memorial Hospital |
| Rev. Bernard Hinckley | Trinitarian Congregational Church- Norton |
| Courtney Keleher | Kennedy Donovan Center |
| Dr. Brian Kelly | Sturdy Memorial Hospital |
| Olympia Kovich | North Attleboro Medical Center |
| Sheila Malacaria | Sturdy Memorial Hospital |
| Jonathan Marcus | Community Counseling of Bristol County |

| Name | Agency/Organization |
|------------------------|---|
| Bradley Marshall | Rehoboth Council on Aging |
| Danielle Mason | Sturdy Memorial Hospital |
| Courtney Matto | CCBC |
| Amie McCarthy | Attleboro Area Interfaith Collaborative |
| Madeleine McNealy | Attleboro Council on Aging |
| Linda Mealey | Foxborough School Health Services |
| Kevin Medeiros | Community Counseling of Bristol County |
| Kathleen Medeiros | Town of Sharon Council on Aging |
| Sheila Miller | Town of Sharon Health Department |
| Charlie Oliver | Attleboro Area Interfaith Collaborative |
| Courtney Pacheco | L.G. Nourse Elementary |
| Joseph Padykula | Town of Wrentham |
| Donna Palmer | Town of Norton |
| Lisa Piscatelli | Attleboro Area Interfaith Collaborative |
| Stacey Powell | Plainville Council on Aging |
| Janet Richardi | Attleboro Area Interfaith Collaborative |
| Patricia Rok | Seekonk High School |
| Anne Sandland | North Attleborough High School |
| Missie Saulsby | Norton Housing Authority |
| Paul Schliecher | Norton Fire Department |
| Donna Sears | Sturdy Memorial Hospital |
| Linda Sherman | Rehoboth Council on Aging |
| Beth Slater | Citizens For Citizens |
| Reynold Spadoni | Community VNA |
| Marcia Szymanski | New Hope |
| Elizabeth Taylor Rossi | Council on Aging/Norton Senior Center |
| Valerie Tobia | Wheaton College |
| Lisa Yorra | Town of Norfolk Council on Aging |
| Christian Zahner | Town of Norton |

Appendix E. Community Benefits Advisory Committee

| 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 | |

Appendix F. 2016 Implementation Strategy Outcomes



Sturdy Memorial Hospital Implementation Strategy Outcomes

The Hospital believes that all five 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. The needs of Mental Health/Suicide and Substance abuse were merged together as the strategies to address these needs are similar. 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. This is the second update of the Hospital's three year plan. Listed below are the issues that were chosen as Sturdy's CHNA priorities in 2016, along with notations of progress made to date on implementation.

Priority Area #1: Cancer

Goals:

- > Increase the importance of decreasing cancer risk through the reduction of risk behaviors.
- > Increase awareness of the importance of screening and early detection.
- Increase community awareness of the Hospital's Comprehensive Cancer Care Program.
- Minimize treatment impact and improve outcomes.
- Continue to evaluate and expand services offered as needed.

Contributing Factors: Cancer is the leading cause of death in the Hospital's primary service area. Data findings show that females in Norfolk County are more likely to die from breast cancer than females in Bristol County. However, residents of Bristol County are more likely to die from lung and bronchus cancer compared to both Norfolk County and the state and nation as a whole. Contributing to this is the risk behaviors of those in Bristol County where pineteen parcent of adults use tobacco.

| | CANCER STRATEGIES AND IMPLEMENTATION | | | | | | |
|---|--------------------------------------|--|---|---|--|--|--|
| Identified Strategy | Department | Details on Implementation | When was Strategy Implemented* | Outcome Measures (if quantifiable) | | | |
| Offer early detection and prevention through various screenings, | Oncology | Lung Cancer Risk Assessment Screening | Held on May 10, 2017 at Spring Health Fair | 50 individuals attended Of this, 16 individuals took information and spoke to the RNs and of these individuals, approximately half were never smokers and half were ex-smokers. One was a moderate risk and did not meet criteria for screening | | | |
| education and support | | | Held on May 30, 2018 at Spring Health Fair | | | | |
| programs | | Skin Cancer Education at Attleboro High School | Held on May 10, 2017 at Attleboro High School | 455 students attended and viewed a PowerPoint presentation and Sun AWARE materials | | | |
| | | Promote breast cancer screenings through annual event and publications | Ongoing | FY 2017: 7,400 mammogram screenings FY 2018: 10,124 mammogram screenings FY 2019-YTD: 7,210 mammogram screenings | | | |
| Continue to assess smoking habits of inpatients and offer smoking cessation class and/or educational materials to tobacco users | Oncology/ Pulmonary | A report of current smokers admitted to the hospital prints out in the Respiratory Department daily reflexed off of the nursing assessment. Respiratory therapists visit these patients to educate on smoking effects and offer smoking cessation help/referral. Educational materials are offered. | March of 2012: Quitworks training was provided for Respiratory staff here at the hospital April of 2012: standardized handling of smoking cessation counseling began in the Respiratory Department and continues today | FY 2017: 628 interventions performed FY 2018: 619 interventions performed FY 2019 (April-YTD): 248 interventions performed | | | |
| Promote Comprehensiv e Cancer Care | Oncology PR/Marketing | Cancer Support Groups Collaboration for Look Good | Ongoing, monthly (published) Ongoing, quarterly | | | | |
| through educational | | Feel Better Program with ACS Cancer Survivor's Day Event | Held on June 3, 2017 | 329 guests attended | | | |
| columns, | | | Held on June 2, 2018 Held on June 1, 2019 | 328 guests attended 300 guests RSVP'd as of May 21, 2019 | | | |



| community | Sponsored Relay for Life | Both events in June 2017 for | |
|----------------|----------------------------|--|---|
| events with | events for Attleboro and | Mansfield and Attleboro | |
| oncologists | Mansfield | Both events in June 2018 for | |
| and | | Mansfield and Attleboro | |
| community | | Both events in June 2019 for | |
| collaboration. | | Mansfield and Attleboro | |
| | Gloria Gemma Bus onsite | Friday, June 09, 2017 | |
| | | Wednesday, June 20, 2018 | |
| | | Scheduled for June 19, 2019 | |
| | Mammogram in the | October 23, 2016 from 5-8pm | 18 slots provided, 18 slots filled |
| | moonlight event offered at | October 3, 2017 from 5-8pm | 18 slots provided, 18 slots filled |
| | Hospital | Every Thursday in October | 28 women registered for the event, a total of |
| | | 2018 (10/4, 10/11, 10/18, | 24/28 females participated in the event |
| | | 10/25) | · |
| | | | This was the first mammogram for three of |
| | | The program was expanded to | the participants. Of the remaining 21 |
| | | every Thursday during the | participants, 14 patients were overdue by at |
| | | month of October. | least one year according to the ACR/NCCN |
| | | | guidelines. One patient had an abnormal |
| | | Nurse Navigator and | mammogram; subsequent imaging |
| | | Registered Dietician provided | indicated a benign mass. |
| | | education on cancer | |
| | | prevention for both breast and | |
| | | additional cancers. | |
| | Women's Health Event | On October 27, 2016 we held | 3 registered, 2 attended |
| | | an educational session for | |
| | | women in which Karen Messier, | |
| | | Kathy Martin and Dr. Latif | |
| | | presented on breast cancer | |
| | | prevention, screening, | |
| | | treatments as well as the | |
| | | programs and services offered | |
| | | at Sturdy. This event was 2 hours long | |
| | | and included refreshments. | |
| | | and included refreshinelits. | |



| | | Columns written for oncologists | Prevention and Screening by Dr. Latif in October 2016 Published in Sun Chronicle Screening and Prevention Guidelines for Women by Dr. Latif in October 2017 Published in Sun Chronicle Cancer Prevention Tips by Dr. Bishop in January 2018 | Readership of 90,000 Readership of 90,000 |
|---|----------|--|---|--|
| | | Cable Access Interview | Published in Rehoboth Reporter Dr. Latif did an interview on Mansfield Cable Access October 24, 2017 about Breast cancer- risks, prevention, and | |
| | | | screening. | |
| Provide medical navigation for patients through a continuum of care including early screening, intervention | Oncology | NCCN Distress thermometer, problem list, and Oncology rehab screening tools used to assess the needs of each patient. Each screening is reviewed by the Nurse Navigator to determine need for intervention and/or referral. | Ongoing | Tracking began in January 2017. As of November 2018, 587 NCCN Distress Thermometer and problem list and oncology rehab screening tools have been completed. |
| and if diagnosed, continue navigation through pre- | | Transportation barrier: As identified by the CHNA and cancer committee, all patients who identify transportation as a barrier to care, are | Transportation barrier addressed in 2017 | Total number of assessments that triggered a transportation barrier=25 out of 280 assessments Total number of transportation barrier interventions=25 |
| habilitation, treatment, and post-treatment rehabilitation. | | identified. Patients are assisted with resources to address this need. Resources could | | Number of patients requiring PT-1 form completion=12 Number of patients whose PT-1 forms were approved=12 |

| - | | | | N. I. C. C. C. L. C. C. |
|-----------------|----------|---------------------------------|--------------------------------|--|
| In some cases, | | include using local volunteers, | | Number of patients identifying |
| continue | | coordinating assistance with | | family/friends to provide transportation=6 |
| navigation | | the ACS, cab vouchers, | | Number of patients registered with the |
| through the | | insurance applications (PT-1) | | American Cancer Society (Road to |
| palliative care | | or other | | Recovery)=6 |
| process to | | | | Number of patients with Dial A Ride |
| remove | | | | coordinated=1 |
| barriers and | | | | Other/including grant applications |
| provide the | | | | approved for patient transportation=3 |
| needed | | | | Number of patients provided with SMH |
| support. | | | | taxi voucher=2 |
| Increase | Oncology | Track the number of referrals | Tracking began in January 2017 | Total # of referrals to Oncology Rehab from |
| appropriate | | to the Oncology Rehab | Information updated up to June | January 2017 until June 2018=57 |
| referrals to | | Program from the following: | 2018 | |
| levels of care, | | PT/OT/SLP/Wellness/Cardiac | | Total # of SW referrals from January 2017 |
| identify and | | Rehab/Pulmonary Rehab | | until May 2019=98 |
| collaborate | | j | | , |
| with | | | | |
| appropriate | | | | |
| resources both | | | | |
| internally and | | | | |
| externally. | | | | |
| Provide | Oncology | Breast Cancer Wellness | Started in February 2017 | 82 packets distributed to breast cancer |
| education on | 3, | packets were developed to | Information updated to | patients |
| the | | provide patients with | November 2018 | · |
| importance of | | information about programs | | 115 referrals made (26%) |
| healthy | | within the hospital and within | | , |
| lifestyle | | the community that can help | | |
| behaviors and | | them achieve a greater health. | | |
| available | | 9 | | |
| programs to | | | | |
| ensure | | | | |
| appropriate | | | | |
| referrals. | | | | |
| Teleffais. | | | | |

^{*} Dates required, if ongoing then please indicate.



⁽⁻⁻⁾ Outcome measures are not quantifiable or no data is available.

Priority Area #2: Diabetes

Goals:

- > Increase diabetes self-management education (DSME) for those living with diabetes.
- > Increase the number of people to become aware of their risk.
- Improve education around strong glucose monitoring to keep HbA1c at a safe level.
- Educate public around insulin resistance as a cause of Type 2 diabetes and work to remove the stigma around the diagnosis.

Contributing Factors: Being overweight or obese is a major concern as it is one contributing factor toward the development of diabetes, as well as, other health conditions. County Health Rankings data showed that Bristol County has a higher percentage of residents that are obese (28 percent) compared to Norfolk County (20 percent) and the state (24 percent). As the American public ages, Type 2 diabetes can develop as a result of metabolic changes in the body such as the development of insulin resistance.

| DIABETES STRATEGY AND IMPLEMENTATION | | | | | |
|--|-------------------------|--|---|--|--|
| Identified Strategy | Department | Details on Implementation | When was Strategy Implemented* | Outcome Measures (if quantifiable) | |
| Continue inpatient glycemic control protocol with nursing, internal medicine, hospitalist, and pharmacy staff to improve | Diabetes Management | Diabetes Champions classes In-service diabetes meetings for staff | Ongoing, annual There are monthly diabetes inservices by Diabetes Management champions on | Two DM Champion classes were held in April 2017 Two DM Champion Update classes were held in | |
| health outcomes. Continue with Diabetes Champions to increase staff awareness of | | | each of the Hospital's Med- Surgical units | November 2017 Two DM Champion classes were held in October 2018 | |
| diabetes and our DSME program. | | | | | |
| Continue to offer diabetes support group free of | Diabetes Management | Support Group | Ongoing, annual | | |
| charge as a community benefit. | and Wellness Program | | Groups held every 4 th Wednesday of the month and | | |



| | | | 3 rd Wednesday in November. There are no sessions in June, July, or December. | |
|---|--|---|---|--|
| Develop a formal process to identify patients discharged from Sturdy Memorial Hospital who have an A1C> 6.5 percent and notify their PCP that they are a candidate for our DSME outpatient program. | Diabetes Management and Nursing Administration | All SMH patients discharged with A1c > 6.5% would have letter sent to their PCP to alert them their patient was recently discharged and their glucose was not in range. Information about our DSME program and Free Support group flyer was sent. | Formal process was completed and implemented September 2016, but it was stopped May 2017 after Dr. Tucker spoke to DSME committee and stated it was not beneficial. | |
| | | A new POM order for a nurse initiated referral to our SMH Diabetes Outpatient program was developed in collaboration with the informatics nurse. On a daily basis referrals come in, and we follow up with these patients in person or via the phone. Our secretary will contact their PCP for the order that is needed for insurance. | August 2018 | |
| Increase referrals from SMA practices to the Diabetes Management Program at the hospital for patients who would benefit from the program. | SMA Practices, Diabetes Management, Nursing Administration | DSME Program was presented at the Department of Family Practice and the Department of Medical Business meetings. Some MDs thought having the program at the SMA practice sites would help, however the ADA program is at SMH only and discussed looking into this. | 8/9/17 and 8/23/17 | |



| | | Referral process was an issue. | | |
|--|---|---|--|---|
| | | Education provided to the practices by the Diabetes Management Program Coordinator. | Met with Norton Medical Center on 3/20/18 Met with Rehoboth Seekonk Medical CTR on 3/21/18 Met with North Attleboro Medical CTR on 3/28/18 Met with Mansfield Medical Center on 3/28 and 3/29 | FY 2017 (only 5 months of data): 95 outpatient orders received FY 2018 (data from May is not included): 211 outpatient orders into the diabetes management program from SMA practices FY 2019 (YTD, 8 months): 221 outpatient orders into the |
| | | | Met with Plainville Practice on 4/5/18 | diabetes management program from SMA practices |
| Work with local organizations on efforts to refer pre-diabetic patients to the Centers for Disease Control developed Diabetes Prevention Program in conjunction with the nations YMCA's. | Diabetes Management, Associate Practices | Sturdy will sit on the Healthy Living Task Force in the Community | Ongoing Began in FY 2018 | |
| Increase screening for prediabetic patients and refer to appropriate resources. | Diabetes Management | Provide Risk Test for individuals during Diabetes Awareness Week Attend Heart Healthy fair with Risk test for people to take | Week of 11/14/16 Week of 11/13/17 Week of 11/12/18 2/3/17 2/2/18 2/1/19 | |
| Continue to remove barriers to care through scholarship efforts for the | Foundation | Make appropriate Referrals for patients who may be appropriate for the program | Ongoing | |

| Diabetes Prevention Program at the YMCA. | | | | |
|---|--|--|---|--|
| Sturdy's professional staff to serve on local area committees that address diabetes as a health crisis. | Senior Management | Bill Florentino sits on Diabetes Committee held by the YMCA | Ongoing Held quarterly for an hour at the YMCA | |
| Collaborate with community partners as part a leader of the Healthy Living Consortium to increase education and awareness in the community. | Senior Management, Sturdy Employees | Senior management sits on Healthy Living Consortium Diabetes Educator (Peg Flocco) to sit on Healthy Living Task Force spearheaded by the YMCA that will focus primarily on diabetes, youth obesity, and falls prevention | Ongoing Healthy Living Consortium started January 2017 Healthy Living Task Force meets quarterly and our diabetes educator involvement started in January 2018 | |

^{*} Dates required, if ongoing then please indicate.

⁽⁻⁻⁾ Outcome measures are not quantifiable or no data is available.

Priority Area #3: Mental Health/Suicide and Substance Abuse

Goals:

- Increase proper identification of mental health issues and refer to appropriate, quality mental health services.
- Work to reduce suicide rate by ensuring high risk patients are obtaining proper mental health care.
- Increase patient and community education on opioid prescriptions, their addictive nature and alternative therapies.

Contributing Factors: Mental Health and Substance Abuse almost always result in broader health issues and overall unhealthy lifestyle behaviors. While the suicide rate is lower in the Hospitals' service area, key informants identified Mental Health/Suicide as high priority. With regard to opioid related deaths, the primary service area had a higher crude death rate than the state.

| MENTAL HEALTH/SUICIDE AND SUBSTANCE ABUSE STRATEGIES AND IMPLEMENTATION | | | | | | |
|---|--|---|---|--|--|--|
| Identified Strategy | Department | Details on Implementation | When was Strategy Implemented* | Outcome Measures (if quantifiable) | | |
| Develop educational brochures for Associates Practices and waiting areas to highlight the dangers of opioid use as well as provide education on alternatives available for managing pain. | PR/Marketing with ECC, Nursing Administration | Developed by PR/Marketing in collaboration with pharmacy, CNO, and ECC to provide education to patients and community members | Developed in April 2017 Ordered in May and October 2017 to distribute at practices, hospital departments and community organizations | Distributed 1,500 pieces of information out into community An additional quantity of 1,500 brochures were ordered and distributed in October 2017 | | |
| Develop a comprehensive pain stewardship program to ensure proper internal controls to appropriately manage our patient | Nursing Administration, ECC | A formal Pain Stewardship policy and team was developed and approved through Pharmacy and Therapeutics. In January 2018, the Hospital | 1st meeting held 10/4/16 Meets quarterly Ongoing | Since January 2018, there has | | |
| populations. | | began monitoring opioid prescribing patterns of | Implemented in January 2018 | been a 45% decrease in | | |



| | | providers. Through this, providers are provided with information pertaining to their percentage of opioid prescriptions each month in comparison to their peers in the Emergency Care Center. All providers are provided with the departmental average with a goal for all providers to be at or below that average. Prescribers identified as significantly excessive or inappropriately prescribing are provided individualized education | | prescribing of opioids in the Emergency Care Center |
|-----------------------------|-----------------|---|---------------------------|---|
| Provide patients with | ECC, Nursing | The hospital Pain Management | Ongoing | |
| standard patient fact | Administration, | Policy was revised to reflect the | | |
| sheets that outline the | Case | key educational topics to be | Implemented in April 2015 | |
| risks associated with the | Management | reviewed with patients. | | |
| use of prescription opioids | | Key components of the | | |
| as well as guidance on | | assessment and plan of care as | | |
| safe storage and proper | | well as the WHO clinical | | |
| disposal of unused | | guidelines for pain management | | |
| prescription medications. | | interventions that goes from | | |
| | | non-opioid strategies to low | | |
| | | dose opioid use and chronic | | |
| | | pain management. Discharge | | |
| | | instructions detailing this | | |
| | | information is provided to ECC | | |
| | | patients discharged with opioid prescriptions | | |
| Develop an internal | Nursing | Post discharge plans of care, | Ongoing | The hospital signed with |
| process to better assure | Administration, | including pain management, are | | CERNER to help with the |
| communication and | Case | included in the discharge | Implementation in January | implementation of an EHR |
| sharing of information | Management | summaries along with medical | 2019 | system to improve |
| about patients' pain | | | | |

| management treatment plans following acute level of care to ensure continuity of care. | | record access by the SMA practices. | | communication among providers |
|--|---|---|--|---|
| Increase public awareness of how to dispose of unused medications, consider development of a program to collect unused medications in a safe and controlled environment. | PR/Marketing with ECC, Nursing Administration, Case Management | There are standardized State Developed Patient Fact Sheets in use along with a Sturdy Developed Opioid Education and Overdose prevention Brochure that includes medication information, safe storage and proper disposal of unused prescription medications | Ongoing | |
| Improve access to behavioral and mental health support for patients | ECC, Nursing Administration | A relationship with a clinical psychiatrist was established to provide patients with behavioral health services two days per week. | Began in October of FY 2019 | Behavioral health consults in FY 2019 (October – May)=77 |
| Improve access to resources and support for patients presenting to the ED with an opioid overdose | ECC, Nursing Administration | Offer evaluation by our crisis clinicians to all patients presenting after opioid overdose for options for outpatient rehab or addiction therapy | Offer evaluation by our crisis clinicians to all patients presenting after opioid overdose for options for outpatient rehab or addiction therapy | FY 2017=218 overdose, 8.7 SUDE evaluation rate FY 2018=266 overdoes, 5.6% SUDE evaluation rate FY 2019=120 overdoes, 5% SUDE evaluation rate *Response rate for evaluations is low due to patient refusal of evaluation |
| | | Offer patients presenting in the ED for an overdose with Narcan | Began in FY 2017 | FY 2017=76 DIT PACKS FY 2018=134 DIT PACKS FY 2019 (YTD-May)=76 DIT PACKS |
| Sturdy Memorial Associates medical home physicians to continue use of the PHQ9 Depression | Associates Practices (Practices to Disseminate | Improve access to behavioral and mental health support through a relationship with McClean Hospital. | FY 2017: a relationship with McLean Hospital provided a full time social worker to split time between two primary care practices. Additionally, | CY 2017■ North Attleboro Medical Center=102 visits, 54 patients |



| Assessment tool and refer as required. | information to medical staff) | Dr. Brian Patel sits on the | pediatric offices have a social worker available 20 hours a week FY 2018: access was expanded to two full time licensed clinical social workers providing services among the primary care and pediatric associate's hours | Pediatric Patients=139 visits, 85 patients Mansfield Health Center=108 visits, 53 patients North Attleboro Medical Center=370 visits, 170 patients Pediatric Patients=425 visits, 249 patients Sturdy Memorial Associates Plainville=167 visits, 81 patients Mansfield Health Center=346 visits, 189 patients North Attleboro Medical Center=107 visits, 56 patients Pediatric Patients=79 visits, 62 patients Pediatric Patients=79 visits, 62 patients Sturdy Memorial Associates Plainville=81 visits, 63 patients Mansfield Health Center=94 visits, 53 patients |
|--|-------------------------------|--------------------------------|--|--|
| appropriate community | ECC/Nursing Administration, | Norton Opioid Taskforce to | Ongoing | |
| organizations to provide | Case | assist with identifying and | Meets quarterly for an hour | |
| community members with | Management | disseminating resources to the | | |
| resources. | | town of Norton | | |

| | PR to assist if required | Participation in the ACEP opioid collaborative to help develop best practices to fight opioid addiction Partnership with Column Health to bring mental illness and substance use disorder | Grand Opening of the site is April 23, 2019 | Site opened April 24, 2019 As of May 31, 2019 the clinic |
|--|---------------------------------------|--|--|--|
| | | treatment to our local community | | has registered 52 patients |
| | | | Open house was held on May 14, 2019 | Sent 2,800 invitations educating about collaboration and the event with over 200 individuals in attendance |
| | | | Liaison on boarded for the ECC to assist with warm transfer to the outpatient clinic | |
| | | Dr. Patel did a PSA on Opioids, alternatives for local cable access as part of the Norton Opioid Task Force | Friday, April 13, 2018 | |
| | | Dr. Patel provided a brief overview on treatment alternatives at the Norton Opioid Task Force | Friday, May 18, 2018 | |
| Collaborate with community partners as part of the Healthy Living Consortium to increase education and awareness in the community. | Senior Management, PR/Marketing | Senior management sits on the committee | Held Monthly at the Hospital beginning in January 2017 | |

^{*} Dates required, if ongoing then please indicate.



⁽⁻⁻⁾ Outcome measures are not quantifiable or no data is available.

Priority Area #4: Overweight/Obesity

Goals:

- > Increase the availability of resources to help reduce the growing rate of obesity.
- > Increase the awareness of programs available to assist in medical weight loss.
- > Increase physician awareness of programs in place to aid in weight loss for patients at risk of weight related illness.

Contributing Factors: Bristol County has a higher percentage of residents that are obese (28 percent) compared to both Norfolk County and the state (20 percent and 25 percent, respectively). In addition, County Health Rankings identify that a higher percentage of adults 20 years of age report no leisure time physical activity (27 percent) despite have greater access to exercise opportunities (95 percent). Additionally, the food environment index is worse than the state and nation as a whole.

| OVERWEIGHT/OBESITY STRATEGIES AND IMPLEMENTATION | | | | |
|---|---|---|-----------------------------------|---------------------------------------|
| Identified Strategy | Department | Details on Implementation | When was Strategy Implemented* | Outcome Measures (if quantifiable) |
| Continue to support and expand the newly launched Sturdy Wellness Weight Management Program and ensure physician referrals to appropriate service lines: Cardiac Rehab, Pulmonary Rehab, Wellness Exercise, | Nursing Administration, Cardiac and Pulmonary Rehab PR and Marketing for exposure | Wellness Coordinator will track physician referrals and provide education to practices as necessary. | Ongoing | |



| Medical Weight Management, and Nutrition Counseling. | | | | |
|---|--------------------------|--|--|---|
| Sturdy Wellness Weight Management Program | Nursing | Program identified for obesity management utilizing medical, surgical and interventional processes. | Medical program opened 4/16 More clinic days were added to meet demand In June 2018, the program moved from the Hospital clinic setting to one of the affiliate medical groups, Attleboro Medical Associates, for efficiency and ease of access for patients | FY 2017: The medical clinic started 4 hours per week and by the month's end there were so many referrals to the clinic that we trended the hours for a provider to equal 24 hours per week. The clinic has 2 RN's and one secretary to handle a volume of approximately 200 a month currently. A retrospective study of the first 100 patients in 2017 revealed a 5% weight reduction in 90% of population, along with 60% of them continuing to achieve a reduction of 10% FY 2018: 378 initial patient consults for the wellness program and a total of 1,738 follow up visits FY 2019 (YTD): a total of 184 initial patient consults and a total of 1,598 follow up visits |
| Support wellness programming and education for area youth to promote good | Nursing, PR/Marketing | HealthyChoices is a traveling health fair, visits local schools within the Hospitals service area. The | FY 2017 Programs ■ Beckwith School–Rehoboth 11/9/16=150 (5th graders) | FY 2017: program reached 585 students |



| nutritional and physical activity habits at a young age through the successful HealthyChoices program, which targets 5th graders to educate them during an impressionable time. | | Nutrition Booth educates students on the importance of a healthy diet including exercise. It shows exactly how much sugar or fat is in a particular items and suggests staying away from those choices. The representative explains what a healthy diet consists of. | Coelho Middle School–S. Attleboro 2/8/17=200 (5th graders) Mildred Aitken School–Seekonk 3/8/17=100 (5th graders) Amvet School–N. Attleboro 4/12/17=135 (4th & 5th graders) FY 2018 Programs Beckwith School-Rehoboth 11/8/17=150 (5th graders) Community School-N. Attleboro 1/10/18=100 (4th & 5th graders) Wood School 2/14/18=135 (5th graders) Ahern School-Foxboro 4/11/18=230 (5th graders) FY 19 Programs (YTD) Mildred Aitken School-Seekonk 2/13/19=100 (5th graders) Beckwith School Rehoboth | FY 2018: program reached 615 students FY 2019 (YTD): program reached 250 students |
|---|-------------------------|--|--|--|
| Sturdy Wellness Weight Management- Bariatric and Surgical Interventions | Nursing PR/Marketing | A partnership with Dr. Shikora from Brigham and Women's Center for Bariatric Medicine was developed to provide patients with pre- and post- operative appointments and support locally for those who are eligible for surgical interventions. | 3/13/19=150 (5th graders) Surgical and interventional programs opened 5/16. Informational sessions on weight loss and surgical weight loss are offered monthly at a duration of 2 hours each session. The surgical clinic opened in May and the first patient went to surgery in September. | FY 2017: 6 informational sessions held with Dr. Shikora Total of 33 in attendance with 39% scheduling an appointment with the physician for surgical interventions 18 patients received bariatric surgical interventions |



| Physicians to enhance | Associate | Tracking of referrals into | There are currently 36 patients in the program, which runs 2 Wednesday afternoons per month. The weight reduction has been astonishing, along with improvement in other risk factors. The interventional population has been 8 patients thus far; however this is a self-pay program. | FY 2018: 8 informational sessions held with Dr. Shikora Total of 37 in attendance with 54% scheduling an appointment with the physician for surgical interventions 12 patients received bariatric surgical interventions FY 2019 (YTD): 4 classes held Total of 23 in attendance with 35% in scheduling an appointment with the physician for surgical interventions YTD (May 2019): 9 patients received bariatric surgical interventions Tince the program's inception, 39 patients have undergone bariatric surgery. Weight loss avg of 70.16 lbs Highest recorded weight loss to date at 162.7 lbs Lowest recorded to date at 19.3 lbs FY 2017 (~5 months): 95 |
|----------------------------|-----------|----------------------------|--|---|
| screening for pre-diabetes | Practices | the diabetes management | Oligoling | outpatient orders received |

| and other weight related illnesses, make referrals to appropriate programs. | (practices to work with medical staff to ensure awareness) | program began in May 2017 | | FY 2018 (May not included): 211 outpatient orders into the diabetes management program FY 2019 (YTD, 5 months): 128 outpatient orders into the diabetes management program |
|--|--|---|---|--|
| Provide healthy cooking demonstrations at the Hospital. | Nutrition and Food Services | Scheduled through nutrition and food services along with registered dieticians | April 18th - Healthy Breakfast cooking demonstration June 23, 2017 - Healthy Grilling cooking demonstration August 23, 2017 - Healthy Grilled | |
| | | | Vegetables cooking demonstration November 1, 2017- Health Holiday Sides cooking demonstration | 60 community residents confirmed |
| | | | May 22, 2018 - Local produce and vegetables demonstration July 27, 2018 - Healthy Summer Salads | 35 community residents registered 24 community residents registered |
| | | | November 15, 2018 - Healthy Holiday Sides Cooking Demonstration March 30, 2019 - Vegetables 101 | 20 community residents registered 24 community residents |
| | | | May 20, 2019-Healthy Spring Breakfasts | registered 20 community residents registered |
| Collaborate with local experts to promote the importance of physical activity and local resources for such activity. | TBD | WALKABOUT event held at Capron Park Zoo, booths included information on exercise, portion control, sugar consumption etc. | October 14, 2017 October 13, 2018 | |
| Provide education on proper nutrition and physical activity through various mediums | PR/Marketing in collaboration with | Content provided to local newspapers and local cable access. | Article published on 1.22.17 for cardiac health and wellness Article published on 6.11.17 for Healthy Summer Eating | Readership of 90,000 Readership of 90,000 |



| including website, and health related newspaper | appropriate departments | | Article published 7.16.17 for Exercise Tips | Readership of 90,000 |
|---|-------------------------|--|--|----------------------|
| columns. | | | Article published on 9.27.17 on Healthy Lunches for Going Back to School. | Readership of 90,000 |
| | | | Registered Dietitian attended local community Farmer's Market-provided education via local cable access on | |
| | | | local health food options available on October 2, 2018 | |
| | | | Article published September 15 on Childhood Obesity and prevention | Readership of 90,000 |
| | | | Cardiac Rehab and Wellness Exercise | |
| | | | Coordinator provided education about both programs to local cable | |
| | | | access on December 31, 2018 | |
| Provide educational teaching on healthy eating in areas with poor food environment indexes. | TBD | Registered Dietician attended local Farmer's Market and did on camera interview on healthy food choices and options in our | October 2, 1018 | |
| Collaborate with | CEO and | Bruce Auerbach sits on | Held monthly from January 2017 until | |
| community partners as part of the Healthy Living | Senior Leadership | Healthy Living Consortium which is held monthly at | June 2018 | |
| Consortium to increase education and awareness | | Sturdy | | |
| within the community. | | | | |

^{*} Dates required, if ongoing then please indicate.



⁽⁻⁻⁾ Outcome measures are not quantifiable or no data is available.

Appendix G. Membership

Community 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) | |