

Norwood Hospital

A STEWARD FAMILY HOSPITAL



Community Health Needs Assessment 2018

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Executive Summary

This report is a comprehensive analysis of health indicators for the Norwood Hospital service area. This service area is comprised of 20 communities in Norfolk and Bristol Counties including Attleboro, Canton, Dedham, Dover, Foxboro, Franklin, Mansfield, Medway, Medfield, Millis, Norfolk, North Attleboro, Norton, Norwood, Plainville, Sharon, Stoughton, Walpole, Westwood and Wrentham. The data represented in the following report is based on the hospital's 11 town primary service area which includes, Canton, Dedham, Foxboro, Franklin, Mansfield, Norfolk, Norwood, Sharon, Walpole, Westwood, and Wrentham. Data was gathered from publicly available sources as well as from the community through a focus group and surveying the community. A review of published literature was conducted to identify key health indicators for those living in the Norwood Hospital primary service area, counties and/or state. The information contained within this 2018 Community Health Needs Assessment (CHNA) may be used to target high priority needs within the community and be used to help develop targeted population health improvement strategies.

The goal has been to engage and learn from community members, particularly those most at-risk for experiencing health disparities, and develop recommendations for Community Benefits programming that bring about improved health outcomes in high priority populations. For the purpose of this CHNA high priority populations may be defined as, members of the community that have been historically marginalized due to racism, poverty and have had limited access to health care services. As noted in the Attorney General's Community Benefits Guidelines for Non-Profit Hospitals, released February 2018, *"It is well understood that racism – in all of its forms – and institutional bias impact health outcomes, both through their influence on the social determinants of health and also as an independent factor affecting health. The health equity framework illustrates how racism has an independent influence on all the social determinants of health and that racism in and of itself has a harmful impact on health"*. Through the development and implementation of evidence-based best practices in Community Benefits programming, Norwood Hospital seeks to respond to the guidance offered by the Office of the Attorney General and the health equity framework. We accomplish this by: addressing root causes of health disparities; educating community members on prevention and self-care particularly for chronic diseases such as cancer, heart disease, diabetes, obesity, as well as mental illness, substance use disorder, and addressing social determinants of health.

Social determinants of health include social, behavioral and environmental influences. These influences have become increasingly prevalent factors in addressing population health. Literature recommends cooperation between health care and social service agencies in order to better address social determinants of health and increase the efficacy of health promotion and chronic disease prevention programs. In particular, services related to housing, nutritional assistance, education, public safety, and income supports are ideal areas for cross sector collaboration with health services in the community.

A key takeaway from this body of work is that collaboration on health promotion and chronic disease prevention among health and social services organizations is critical to the success of community health improvement strategies. From addressing social and economic factors that impact one's ability to manage chronic disease, to partnering with community-based substance abuse prevention coalitions to identify evidence-based strategies to curtail the growing rise in opioid addiction, to implementing community benefits programs that enrich and strengthen the social fabric of our communities, together we must do more to support the families that call this community home. The results and recommendations herein are designed to be the basis for strategic actions for Norwood Hospital and its community partners.

Introduction

Norwood Hospital (Norwood) is a member of Steward Health Care, the largest private, for-profit physician-led health care network in the United States. Headquartered in Dallas, Texas, Steward operates 36 hospitals in the U.S. and the country of Malta that regularly receive top awards for quality and safety. The company employs approximately 40,000 health care professionals and is recognized as one of the world's leading accountable care organizations. The Steward Health Care Network includes thousands of physicians who help to provide more than 12 million patient encounters per year. Steward Medical Group, the company's employed physician group, provides more than 4 million patient encounters per year. The Steward Hospital Group operates hospitals in Malta and states across the U.S. including Arizona, Arkansas, Florida, Louisiana, Massachusetts, Ohio, Pennsylvania, Texas, and Utah.

Norwood Hospital, founded in 1919, is a full-service, 215-bed acute care community hospital located in Norwood, Massachusetts with a focus on delivering world class health care with the latest state-of-the-art advances in medical technology and treatment options. Norwood's highly-skilled staff provide the highest quality care and compassion to all members of the community. The hospital's major clinical services include advanced surgical services, obstetrics, cardiology, neurology, orthopedics, gastroenterology, behavioral health, cancer care, and pediatrics.

Norwood maintains a Community Benefits Department that focuses on integrating care across the spectrum of hospital, primary, and community-based care for members in our community as well as serving as advocates to the poor and underserved in our region. A Community Benefits Advisory Committee comprised of hospital leadership, representatives of local health and human service organizations, city health departments, youth community centers, senior centers, schools, and the fire department guides the planning and execution of the community health initiatives. This report details the health conditions and social factors affecting the people living in the communities surrounding Norwood Hospital, as well as the key issues the hospital should address to support the health and well-being of the residents of the 20 communities primarily served by Norwood Hospital, which include Canton, Dedham, Dover, Foxboro, Franklin, Mansfield, Medway, Medfield, Millis, Norfolk, North Attleboro, Norton, Norwood, Plainville, Sharon, Stoughton, Walpole, Westwood and Wrentham.

Evaluation of both the needs of the community and the needs of the hospital furthers the prospect of working collectively to improve both the health system and the health of the population. Opportunities are realized at the intersection of the hospital's strengths, the community's needs, and the state of health care in Massachusetts and the United States.

Community Benefits Mission Statement

Norwood Hospital, part of Steward Health Care, is committed to serving the physical and spiritual needs of our community by delivering the highest quality care with compassion and respect. To accomplish this, we collaborate with community partners to improve the health status of community residents by:

- Addressing root causes of health disparities;
- Educating community members on prevention and self-care, particularly for chronic diseases such as cancer, heart disease, obesity, diabetes, substance abuse disorder and mental illness; and
- Addressing social determinants of health.

Values:

Compassion:

Providing care with empathy in such a way that the person experiences acceptance, concern, hopefulness and sensitivity

Accountability:

Accepting responsibility for continuous performance improvement, embracing change and seeking new opportunities to serve

Respect:

Honoring the dignity of each person

Excellence:

Exceeding expectations through teamwork and innovation

Stewardship:

Managing our financial and human resources responsibly in caring for those entrusted to us.

Community Benefits Statement of Purpose

The Norwood Hospital community benefits purpose is to:

- Improve the overall health status of people in our service area. Norwood Hospital is committed to serving the entire community, including the uninsured, underinsured, poor, and disadvantaged;
- Provide accessible, high-quality health care services to all within its culturally diverse community, regardless of their ability to pay;
- Norwood Hospital is dedicated to collaborating with our staff, providers, and community representatives to deliver meaningful programs that address statewide health priorities and local health issues;
- Contribute to the well-being of our community by providing excellence in our health care outreach efforts including, but not limited to, reducing barriers to accessing health care, preventive health education, screenings, wellness programs and community-building; and
- Regularly evaluate our community benefits program.

Methods

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

Health Indicators and Demographics – Data Analysis

Demographic data was collected using publicly available databases maintained by the *U.S. Census Bureau*, the *MA Department of Early and Secondary Education* with some cross-referencing of *Center for Disease Control and Prevention (CDC)* databases. Health indicator data such as mortality, incidence, prevalence, and hospitalization rates were provided by the Massachusetts Department of Public Health, and by using other state, regional and national information sources (i.e. Uniform Crime Reporting (UCR) Program of the Federal Bureau of Investigation).

Key Informant Survey

An online survey was designed and distributed by Norwood Hospital to approximately 350 community stakeholders. These stakeholders included, but were not limited to, health and human services agency directors, school administrators, nurses, psychologists, law enforcement, fire departments, CHNA 7 and CHNA 20 members, church leaders, community health advisory committees, hospital frontline leadership staff, veteran organizations, senior centers, and food pantry directors. The survey was also made available to the community via the Norwood Hospital Facebook page. The survey was made available in May 2018 and was comprised of 19 questions. A total of 75 completed surveys (20% response rate) were received. A copy of the key informant survey questions can be found in the appendix.

Focus Group

A focus group was conducted by the Norwood Hospital team in September 2018. The focus group was conducted to improve local engagement and gather additional information on community attitudes towards health and wellness. All participants either worked or resided within the hospital's service area. The goal was to collect information from participants that reflected issues specific to the service area. In total 22 participants took part in the focus group. The data was then evaluated and used to inform community health improvement strategies. A copy of the focus group questions can be found in the appendix.

Literature Review

A literature review was conducted in order to gather information from recent governmental, public policy, and academic works. The relevant information was summarized and synthesized into a comprehensive literature review addressing the priority areas for community benefits, including: chronic disease, cardiovascular disease, cancer, diabetes, behavioral health, substance abuse disorders and housing stability/homelessness.

Findings

Racial and socioeconomic disparities exist in incidence and mortality rates for several categories of diseases. These disparities remain constant even as total incidence and mortality fluctuates. Cancer remains the leading cause of mortality in both Norfolk and Bristol counties, as well as in Massachusetts as a whole. Black, non-Hispanic males had the highest incidence and mortality rates for cancer in Massachusetts when compared to all other racial/ethnic groups. Black, non-Hispanic females also had disproportionately high mortality rates for cancer when compared to other demographic groups.

Chronic Disease

When looking at chronic disease, four service area communities had a higher percentage of all mortality due to chronic disease than the state average. Of these communities, Westwood had the highest percentage of all mortality due to chronic disease at (57.04%). It is worth noting that diabetes mortality data was unavailable for Westwood at the time of data collection, the percentage of all mortality due to chronic disease would likely rise even higher with the addition of this data.

Obesity

Obesity remains a prevalent issue for both children and adults in Massachusetts. Overweight/obesity disproportionately affects underserved populations that do not have the same opportunities to prevent obesity as other populations. This includes access to healthy foods, access to safe activity spaces, and other factors. These disparities in opportunity are apparent when observing obesity rates in different racial/ethnic groups. In Massachusetts Black non-Hispanic and Hispanic populations experience obesity rates of (35.6%) and (28.9%) compared to (22.7%) for White non-Hispanics. In 2015, (60%) of the Massachusetts population was classified as overweight or obese.

Mental Health

Given their early age of onset and poor recognition and treatment rates, mental health conditions are arguably among the most chronic of illnesses. For the purposes of this report, the prevalence of mental health and substance abuse disorders in the region is determined by the hospitalization count related to mental health and substance abuse disorders. In data collected through the Key Informant Survey and focus group, respondents indicated that substance abuse treatment/education and mental/behavioral health services, were of very high concern to health care professionals and community members in the Norwood Hospital service area.

Health Indicators

Our data show that race, ethnicity, and socioeconomic factors are indicators of health outcomes within the region. This should be taken into consideration when implementing Norwood Hospital's community benefits programs. Norwood Hospital must focus its efforts toward individuals and families in underserved communities who are at the greatest risk of experiencing health inequities due to socio-economic and/or sociodemographic status.

Community Partnerships

Norwood Hospital recognizes the effectiveness of the collective impact that comes from strategic partnerships, both medical and social, working together toward a common goal of improving health outcomes among all, but particularly for underserved populations. Norwood Hospital continuously strives to engage the community through collaborations with our community partners and our region. Together, we must work to improve the health and wellbeing of those at greatest risk for health inequities.

Demographics

Race, gender identity, age, disability status, etc. influences the social environment that individuals experience. The social environment impacts many mental and physical health outcomes, including: mental health, violence, risk behaviors (tobacco and drug use), physical health and well-being, and disease morbidity and mortality. Individuals are influenced by the social environment on three levels: interpersonal, community, and society (MDPH, 2017).

Across all three levels, systems of oppression such as structural racism and gender bias lead to social isolation, social exclusion, poor mental health, increased risk of violence, increased rates of poverty, higher hospitalizations, longer recovery times, and higher mortality rates for many conditions. Social isolation, social exclusion, racism, discrimination and poverty disproportionately affect low-income communities and communities of color and all negatively impact many aspects of health. Communities of color are more likely to have lower levels of resources and connectedness with other neighborhoods and higher levels of racial segregation. They also face more challenges when engaging in group action in neighborhoods to shift these conditions (Hobson-Prater & Leech, 2012).

Medically Underserved Areas (MUAs) and Medically Underserved Populations (MUPs) identify geographic areas and populations with a lack of access to primary care services. MUPs are specific sub-groups of people living in a defined geographic area with a shortage of primary care health services. These groups may face economic, cultural, or linguistic barriers to health care. Examples include, but are not limited to, those who are: homeless; low-income; Medicaid-eligible; Native American; or migrant farmworkers (HRSA, 2016).

Although health care providers intend to provide equal treatment to all, bias among providers has been shown to negatively impact patients. For example, studies suggest that physicians unknowingly offer different treatment options based on the patient's race, even when patients have similar symptoms. Patients are accessing care but being treated differently. These race-based differences may be reduced if physicians recognize they are susceptible to unconscious bias, especially when interacting with their patients and writing prescriptions. The bias among providers and the resulting differences in treatment may also contribute to health inequities (BPHC, 2017).

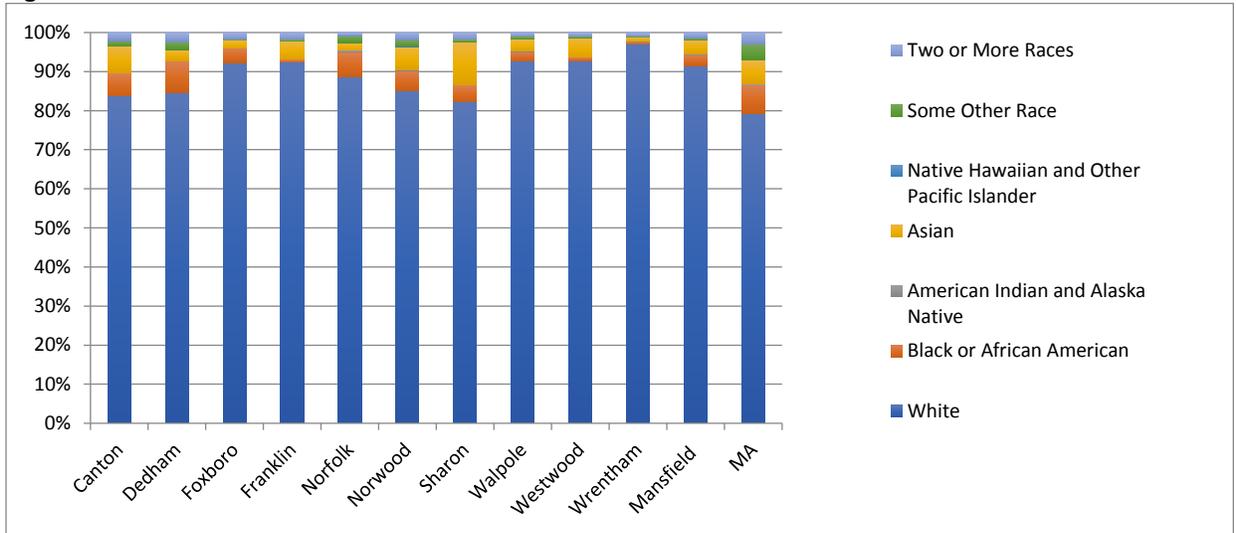
Racial and ethnic inequities were found in indicators of health care access, particularly for Latino adults. Higher percentages of Latino adults compared with White adults reported both the inability to see a doctor in the past 12 months because of cost and the lack of a doctor or health care provider. Inequities in these indicators tend to disproportionately affect adults with less than a high school diploma or household income less than \$25,000, as well as adults who are non-homeowners or foreign-born residents who lived in the U.S. for 10 or fewer years. To reduce the inequities associated with being uninsured or barriers to health care access, multi-sector interventions that target subpopulations at higher risk, should address social determinants, (e.g. by improving employment opportunities and wage conditions among vulnerable sub-populations, and sources of structural racism that affect health care provider-patient interactions (BPHC, 2017).

Table 1: Race Distribution – 2012-2016

	White	Black or African American	American Indian and Alaska Native	Asian	Native Hawaiian and Other Pacific Islander	Some Other Race	Two or More Races
Canton	83.7%	5.9%	0.0%	6.9%	0.0%	1.4%	2.1%
Dedham	84.7%	8.0%	0.2%	2.8%	0.0%	2.0%	2.4%
Foxboro	92.2%	3.9%	0.0%	2.0%	0.0%	0.2%	1.8%
Franklin	92.4%	0.8%	0.1%	4.6%	0.0%	0.4%	1.8%
Norfolk	90.1%	6.6%	0.4%	2.0%	0.0%	1.8%	0.8%
Norwood	85.1%	5.2%	0.2%	5.9%	0.0%	1.7%	1.9%
Sharon	82.3%	4.2%	0.1%	10.9%	0.0%	0.6%	1.8%
Walpole	92.6%	2.5%	0.1%	3.0%	0.0%	0.8%	1.0%
Westwood	92.7%	0.9%	0.0%	5.0%	0.0%	0.3%	1.0%
Wrentham	97.1%	0.6%	0.2%	1.0%	0.0%	0.2%	1.0%
Mansfield	91.6%	2.7%	0.3%	3.4%	0.0%	0.6%	1.4%
MA	79.3%	7.3%	0.2%	6.1%	0.0%	4.1%	3.0%

(SOURCE: US Census Bureau, 2012-2016 American Community Survey 5-Year Estimates)

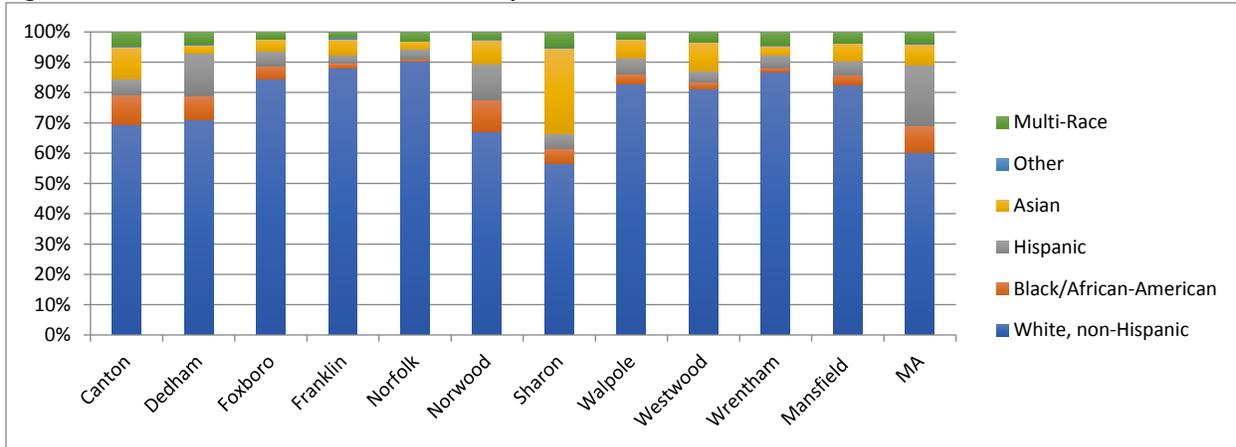
Figure 1: Race Distribution – 2012-2016



(Source: US Census Bureau, 2012-2016 American Community Survey 5-Year Estimates)

Cities/towns within the Norwood Hospital service area exhibited less diverse race distributions than the state average. Notably, (97.1%) of the residents in Wrentham were identified as White. The populations of Foxboro, Franklin, Norfolk, Walpole, Westwood, and Mansfield had population that identified as White at over (90%) from 2012 to 2016. The highest percentage of Black or African American residents was found in Dedham at (8%), this is above the state average. Sharon and Canton each exhibited a higher percentage of Asian residents than the state average of (6.1%) with (10.9%) and (6.9%) respectively. No city/town within the Norwood Hospital service area had a greater percentage of “some other race” or “2 or more race” residents than the state level.

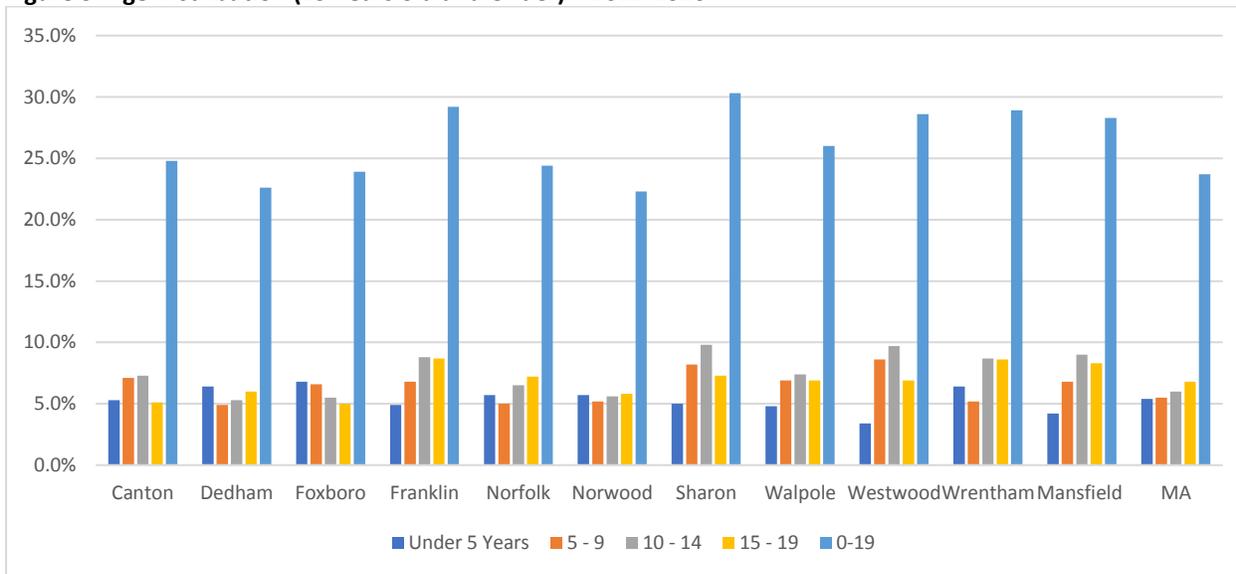
Figure 2: Race Distribution in Public School Population – 2017



(Source: MA Dept. of Elementary and Secondary Education, 2018, Enrollment by Race/Gender Report)-

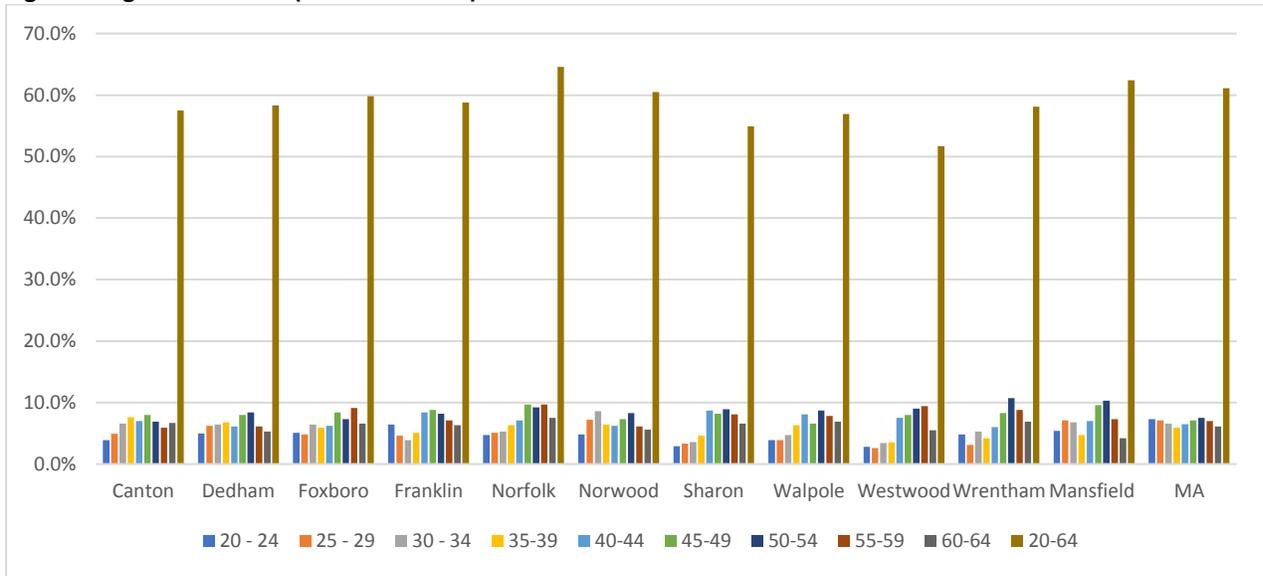
In 2017, (60.1%) of the public-school population in Massachusetts was White. At the state level, the next highest percentage was seen for Hispanic students at (20%), followed by Black/African American students at (9.0%). Of the Norwood Hospital service area cities/towns, only Sharon had a lower percentage of white students with (56.7%) of all students being White. Norwood and Canton had the highest percentage of Black/African American students with (10.5%) and (10.1%) respectively. The greatest percentage of Hispanic students was seen in Dedham at (14.0%), although this is still below the state average. Sharon had a significantly higher percentage of Asian students than the state or any other service area city/town, with (28.4%) of all public-school students being Asian.

Figure 3: Age Distribution (19 Years old and Under) – 2012-2016



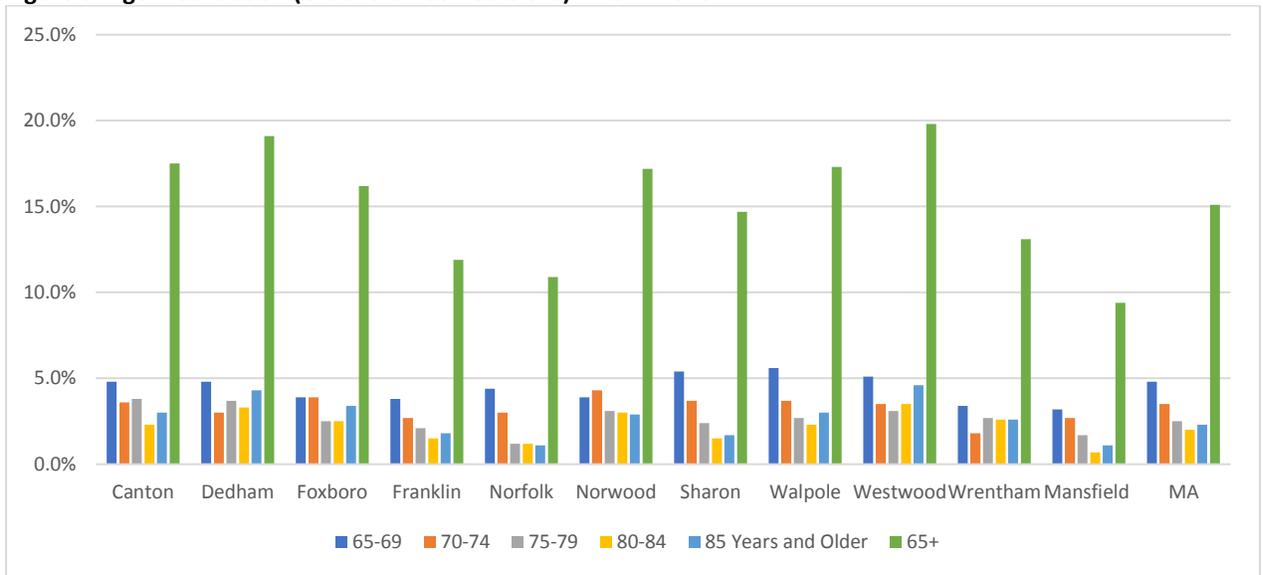
(Source: US Census Bureau, 2012-2016 American Community Survey 5-Year Estimates)

Figure 4: Age Distribution (20-64 Years old) – 2012-2016



(Source: US Census Bureau, 2012-2016 American Community Survey 5-Year Estimates)

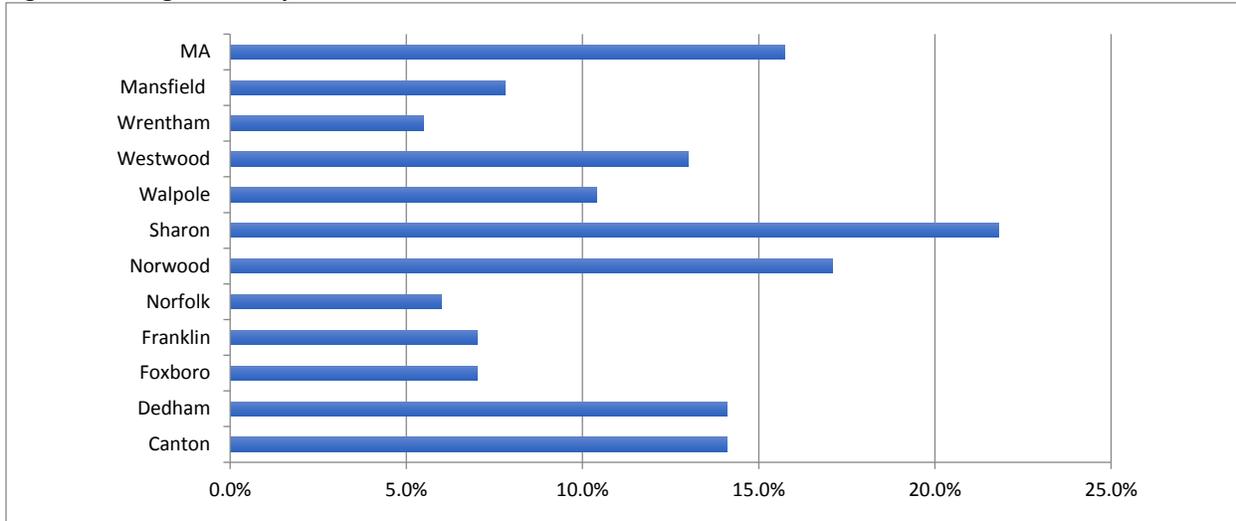
Figure 5: Age Distribution (Older than 65 Years Old) – 2012-2016



(Source: US Census Bureau, 2012-2016 American Community Survey 5-Year Estimates)

From 2012 to 2016, (15.1%) of the Massachusetts population was age 65 or over. Westwood, Walpole, Sharon, Norwood, Dedham, and Canton each had a greater percentage of the population above age 65 than the state average. In Westwood (19.8%) of the population was age 65 or over, this is the highest percentage seen in the Norwood Hospital service area. With the exception of Norwood, all service area cities/towns had a greater percentage of the population under the age of 20 than the state average. Sharon had the highest percentage of the population under age 20 at (30.3%).

Figure 6: Foreign Born Population



(Source: US Census Bureau, 2012-2016 American Community Survey 5-Year Estimates)

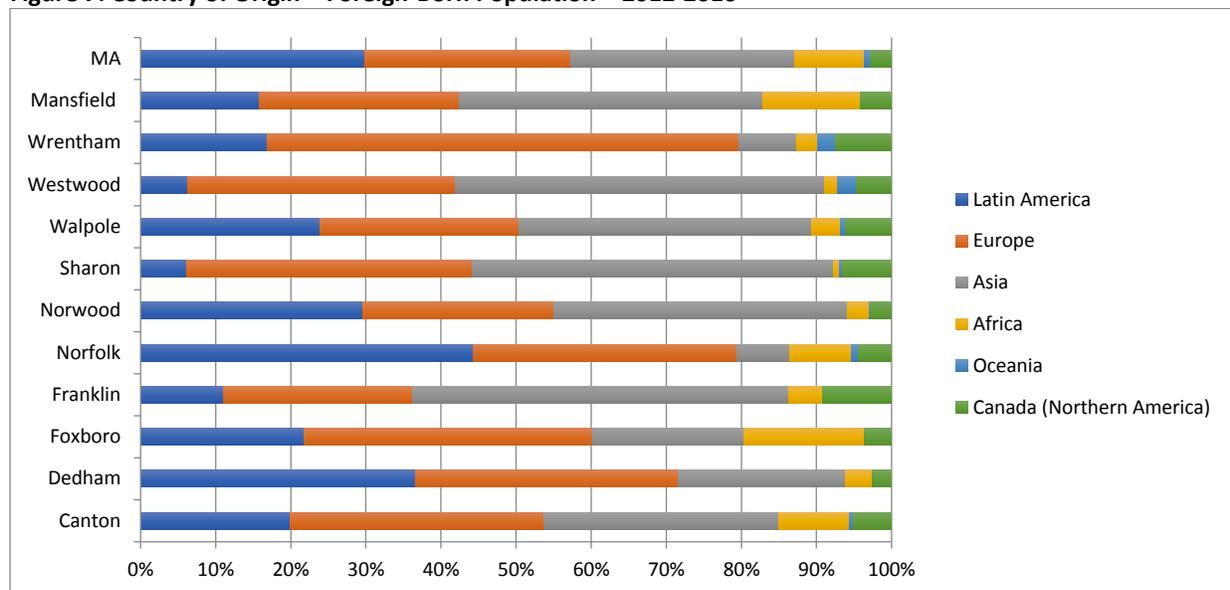
From 2012 to 2016, (15.7%) of the Massachusetts population was foreign born. Within the Norwood Hospital service area, only Sharon and Norwood exceed this percentage with (21.8%) and (17.1%) of the population being foreign born. Westwood had the lowest percentage of foreign-born residents with just (5.5%). With the exception of Sharon and Norwood, every town within the Norwood hospital service area had less than (15%) of the total population born in a foreign country.

Table 2: Country of Origin – Foreign Born Population – 2012-2016

	Latin America	Europe	Asia	Africa	Oceania	Canada (Northern America)
Canton	19.9%	33.8%	31.3%	9.5%	0.5%	5.1%
Dedham	36.6%	34.9%	22.3%	3.5%	0.1%	2.5%
Foxboro	21.8%	38.4%	20.1%	16.0%	0.0%	3.6%
Franklin	11.0%	25.2%	50.1%	4.5%	0.0%	9.2%
Norfolk	44.3%	35.0%	7.1%	8.1%	1.0%	4.4%
Norwood	29.6%	25.4%	39.1%	2.9%	0.2%	2.8%
Sharon	6.1%	38.0%	48.2%	0.8%	0.3%	6.6%
Walpole	23.9%	26.5%	39.0%	3.8%	0.6%	6.2%
Westwood	6.3%	35.6%	49.3%	1.7%	2.5%	4.7%
Wrentham	16.9%	62.8%	7.7%	2.7%	2.4%	7.5%
Mansfield	15.8%	26.6%	40.5%	13.0%	0.0%	4.1%
MA	15.7%	14.4%	15.7%	4.9%	0.4%	1.5%

(Source: US Census Bureau, 2012-2016 American Community Survey 5-Year Estimates)

Figure 7: Country of Origin – Foreign-Born Population – 2012-2016



(Source: US Census Bureau, 2012-2016 American Community Survey 5-Year Estimates)

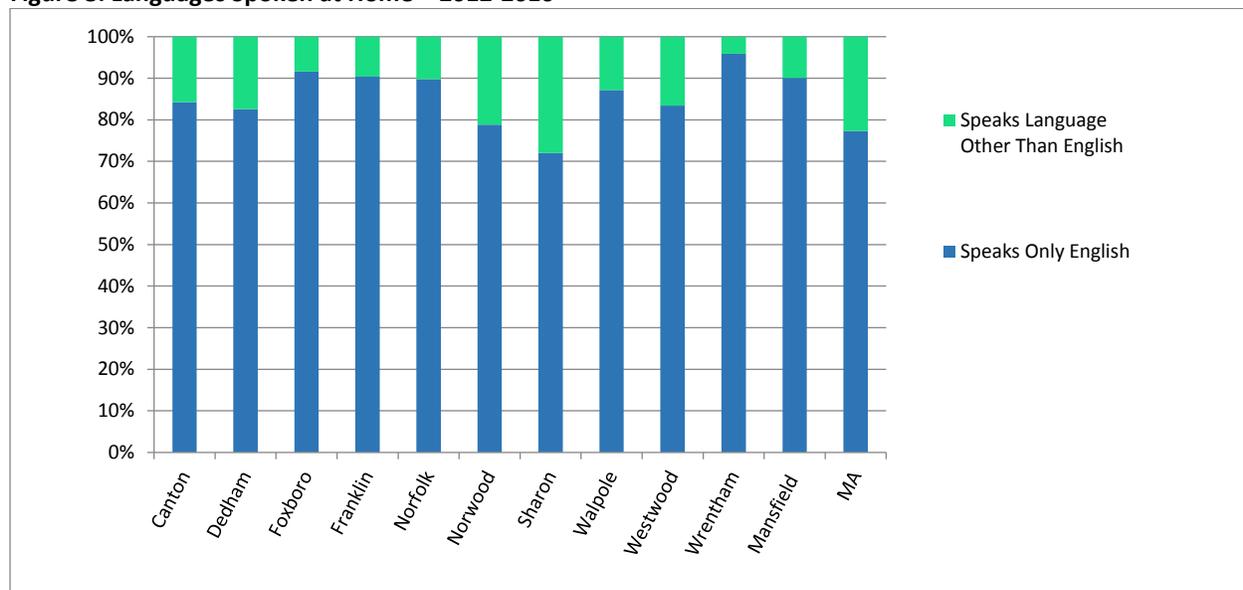
From 2012 to 2016, (31.4%) of the foreign-born population in Massachusetts originated in Latin America, the same percentage originated in Asia. Those of European descent accounted for (28.8%) of the foreign-born population in Massachusetts over this period of time. Norfolk and Dedham exhibited a greater proportion of individuals who originated in Latin America with (44.3%) and (36.6%) respectively. Individuals of European descent accounted for (62.8%) of the foreign-born population in Wrentham, more than double the state average. Six of 11 service area communities had a higher percentage of the foreign-born population originating in Asia than the state level. The highest percentage of foreign-born population originating in Asia was seen in Franklin at (50.1%).

Table 3: Distribution of Language Spoken at Home

	Speaks English Only	Speaks Language Other Than English	Speaks English "less than very well"	Spanish	Other Indo-European Languages	Asian and Pacific Islander Languages	Other Languages
Canton	84.3%	15.7%	5.2%	3.2%	6.6%	3.8%	2.2%
Dedham	82.6%	17.4%	5.2%	6.3%	7.3%	1.3%	2.5%
Foxboro	91.6%	8.4%	2.3%	1.4%	5.1%	1.1%	0.8%
Franklin	90.4%	9.6%	1.8%	1.6%	3.0%	3.6%	1.5%
Norfolk	89.8%	10.2%	2.3%	7.0%	2.8%	0.4%	0.0%
Norwood	78.8%	21.2%	6.7%	4.2%	11.6%	3.1%	2.3%
Sharon	72.0%	28.0%	7.4%	1.2%	14.4%	10.4%	2.0%
Walpole	87.2%	12.8%	2.7%	3.7%	5.4%	2.2%	1.6%
Westwood	83.4%	16.6%	4.7%	1.2%	8.3%	5.7%	1.4%
Wrentham	95.9%	4.1%	0.8%	0.7%	3.0%	0.2%	0.1%
Mansfield	90.1%	9.9%	2.4%	2.9%	4.4%	2.2%	0.4%
MA	77.3%	22.7%	8.9%	8.6%	8.7%	4.1%	1.4%

(Source: US Census Bureau, 2012-2016 American Community Survey 5-Year Estimates)

Figure 8: Languages Spoken at Home – 2012-2016



(Source: US Census Bureau, 2012-2016 American Community Survey 5-Year Estimates)

From 2012 to 2016, an estimated (22.7%) of Massachusetts households spoke a language other than English at home. Spanish was the most commonly spoken language other than English, (8.6%) of Massachusetts households identified as speaking Spanish during this period of time. Only Sharon had a greater percentage of households speaking a language other than English at home at (28%). No city/town within the Norwood Hospital service area exceeded the state average for households speaking Spanish at home. Norwood and Sharon had a greater percentage of households that spoke an Indo-European language than the state average at (11.6%) and (14.4%) respectively. Sharon also had the highest percentage of households speaking an Asian language at home with (10.4%).

Focus group and survey participants identified several of the same populations as underserved in the Norwood Hospital service area community. The most underserved community identified by the survey respondents were those with a mental health condition, about (61%) of survey respondents ranked this population as one of the top three most underserved populations in the Norwood Hospital community. This population was followed by those in poverty, the elderly, the uninsured or underinsured, and those who did not speak English or had English as a second language. Focus group participants identified the same populations as being underserved and furthermore included those in early stage substance abuse recovery as well as students with working parents often referred to as latchkey kids. Both the survey respondents and focus group participants identified the disabled as underserved.

Educational Attainment

Educational attainment often helps individuals have access to resources that promote good health, such as physical activity breaks, school lunches, after-school programs and health-based resources such as screenings and management of chronic conditions. These programs have been shown to improve health outcomes, like childhood obesity, and mental health as well as school performance and learning outcomes (MDPH, 2017).

Unfortunately, not all school systems have the resources to provide these vital programs. As students spend a significant portion of their day in school, schools also provide basic necessities such as shelter, sanitary facilities, food and water, and opportunities for socialization. All of these exposures while in school are directly associated with both better health and learning outcomes (MDPH, 2017).

Even after leaving the education system, educational attainment continues to impact individuals' health. Education is associated with better jobs, higher incomes, and economic stability. Education can also provide a greater sense of control over one's life and stronger social networks, which again are linked to ability to engage in healthy behaviors and better overall health. Unfortunately, educational attainment in Massachusetts is not equitable. Students from low-income communities and communities of color may face challenges in getting to school, differential public-school resources, inequitable discipline practices, resources, and afterschool programming (MDPH, 2017).

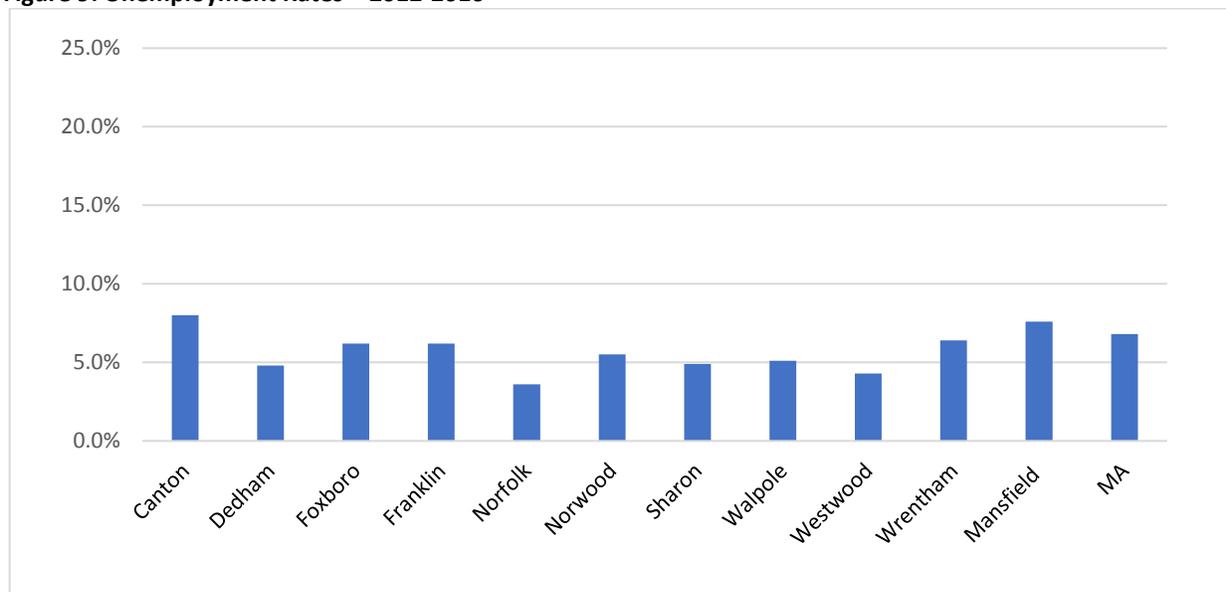
Education is associated with health in many ways. Higher educational attainment is associated with improved working conditions and income, which in turn allows for improved housing, nutrition, control of hazards and stress, as well as direct health benefits, including quality health insurance, retirement benefits, and sick leave (Braveman, Cubbin, Egerter, Williams, & Pamuk, 2010). Educational attainment is also closely linked to improved health knowledge, literacy, and behaviors, which are, in turn, associated with improved disease management (Braveman, Cubbin, Egerter, Williams, & Pamuk, 2010). Individuals with more years of formal education tend to have healthier behaviors and better health outcomes. Education also helps promote and sustain healthy lifestyles and positive choices that support and nurture personal development, relationships, and community well-being (Ross & Mirowsky, 1999).

Employment

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

The proportion of unemployed residents declined from (10.2%) in 2010 to (5.8%) in 2015, reflecting a (43%) decrease over this period. From 2010 to 2015, the percentage of Massachusetts residents who were unemployed was lower than the national average. In 2015, (5.8%) of Massachusetts residents 16 years of age or older were unemployed, compared to (6.3%) for the US. Following national patterns, a greater share of younger individuals was unemployed in 2011-2015. A total of (21.1%) of Massachusetts residents 16-19 years of age were unemployed and (12%) of persons 20-24 years of age were unemployed (MDPH, 2017).

Figure 9: Unemployment Rates – 2012-2016



(Source: US Census Bureau, 2012-2016 American Community Survey 5-Year Estimates)

Unemployment across the Norwood hospital service area was higher in the Canton and Mansfield communities when compared to the state at (6.8%) according to the U.S. Census ACS 5-year estimates (Fig.26). Canton reported unemployment at (8%) and Mansfield at (7.6%). The percentage was lowest in Norfolk which recorded unemployment at (3.6%), almost half of that of the state during the same time period. The town of Norwood recorded unemployment at just over (5%).

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

Chronic Disease

The prevention and management of chronic diseases is a priority of the Massachusetts Department of Public Health (MDPH). A variety of modifiable and non-modifiable risk factors are associated with chronic disease; nutrition, physical activity, and tobacco use/exposure are three key modifiable risk factors that directly impact cancer, diabetes, and cardiovascular disease rates (MDPH, 2017). These chronic conditions in turn contributed to (56%) of all mortality and over (53%) of all health care expenditures (\$30.9 billion a year) in Massachusetts (MDPH, 2017).

Numerous studies have shown that although nutrition, physical activity, and tobacco use/exposure are modifiable, societal and environmental conditions may limit or restrict access to the resources and opportunities needed to modify these risk factors. For example, a history of policies rooted in structural racism have resulted in environments in which there are inequities in access to healthy foods, safe spaces for physical activity, walkable communities, quality education, housing, employment, and health care services. The health implications of these disparities are evident in the fact that Black and Hispanic residents of Massachusetts experience disproportionately high incidence and mortality of chronic diseases. Healthy people cannot exist in unhealthy environments. Because of this, MDPH frames its chronic disease prevention and wellness efforts around addressing the social determinants of health and focusing on policies that ensure that all individuals have the ability to make healthy choices (MDPH, 2017)

By their very definition, chronic diseases are managed rather than cured. Management practices include medication, medical intervention and lifestyle changes. These management practices generally increase the lifespan and quality of life in patients. This leads to increased prevalence of chronic diseases as the proportion of the population living with these conditions and the associated economic burden grows. Preventive measures are key in reducing the health and economic impacts associated with chronic disease. To prevent chronic disease, people need opportunities to live a healthy lifestyle which includes, among other things, participating in adequate physical activity, eating a balanced diet, managing stress and limiting exposure to chronic stressors, refraining from tobacco use, and limiting alcohol consumption (Adler & Newman, 2002).

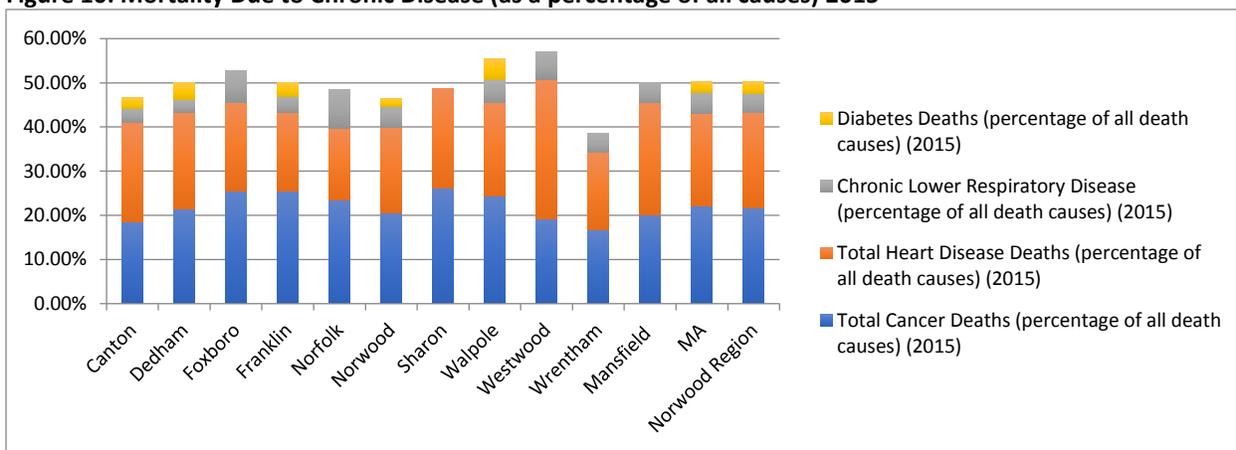
The modern environment is typically not supportive of healthy lifestyle habits. In the current environment, sedentary behavior, overeating, and alcohol consumption often occur at unhealthy levels, in turn increasing risk of chronic disease. Changing the environment to promote healthier behaviors requires strategic vision and planning. Implementing systems and policies that increase opportunities for physical activity, provide support to live tobacco free, and improve access to healthy foods, are strategies that have been used to create healthier environments. Systems and policies that address other social determinants by improving access to routine preventive medical care and increasing educational and employment opportunities will also contribute to healthy environments. Establishing a healthier environment and shifting social norms can support individuals' choices to lead healthier lives at the interpersonal and environmental levels. Ultimately a healthier environment will encourage individuals to lead a healthier lifestyle, greatly improving their health and longevity (BPHC, 2017).

Table 4: Mortality Due to Chronic Disease (as a percentage of all causes) 2015

	Total Cancer Deaths (percentage of all death causes) (2015)	Total Heart Disease Deaths (percentage of all death causes) (2015)	Chronic Lower Respiratory Disease (percentage of all death causes) (2015)	Diabetes Deaths (percentage of all death causes) (2015)
Canton	18.58%	22.53%	3.16%	2.37%
Dedham	21.52%	21.84%	2.85%	3.80%
Foxboro	25.60%	20.00%	7.20%	NA
Franklin	25.51%	17.86%	3.57%	3.06%
Norfolk	23.53%	16.18%	8.82%	NA
Norwood	20.59%	19.41%	4.71%	1.76%
Sharon	26.09%	22.61%	NA	NA
Walpole	24.40%	21.05%	5.26%	4.78%
Westwood	19.23%	31.41%	6.41%	0.00%
Wrentham	16.67%	17.54%	4.39%	NA
Mansfield	20.15%	25.37%	4.48%	NA
MA	22.10%	21.00%	4.80%	2.40%
Norwood Region	21.72%	21.52%	4.39%	2.57%

(Source: Massachusetts Department of Public Health) Note: At the time of data collection, mortality data for diabetes was unavailable for Foxboro, Franklin, Sharon, Wrentham and Mansfield. Chronic lower respiratory disease data was also unavailable for Sharon.

Figure 10: Mortality Due to Chronic Disease (as a percentage of all causes) 2015



(Source: Massachusetts Department of Public Health) Note: At the time of data collection, mortality data for diabetes was unavailable for Foxboro, Franklin, Sharon, Wrentham and Mansfield. Chronic lower respiratory disease data was also unavailable for Sharon.

In 2015, about (50.30%) of all mortality in Massachusetts was due to cancer, heart disease, chronic lower respiratory disease, and diabetes. The figure above shows that (50.20%) of all mortality in the Norwood Hospital service area was attributable to the same causes. Foxboro, Walpole, Westwood and Mansfield each exceeded this percentage. Of the cities/towns within the Norwood Hospital service area, Canton, Norwood, and Wrentham each had a lower percentage of mortality due to these causes (even after the state average for mortality due to diabetes is added to Wrentham).

The Norwood Hospital focus group cited chronic disease as one of their top three health concerns in the community. This finding was supported by key informant survey respondents. When asked “What do you think are the top 3 most important “health problems” in your community?”, chronic conditions including obesity, cardiovascular diseases, cancers, diabetes, and conditions associated with aging made up half of the top 10 health concerns reported by survey respondents. Both focus group participants and survey respondents acknowledged the success of community engagement programs by Norwood Hospital, but also brought up the need for further healthy behavior education and chronic disease prevention initiatives. Chronic diseases, and the lack of community education on these conditions were major concerns of community members who participated in the focus group and survey.

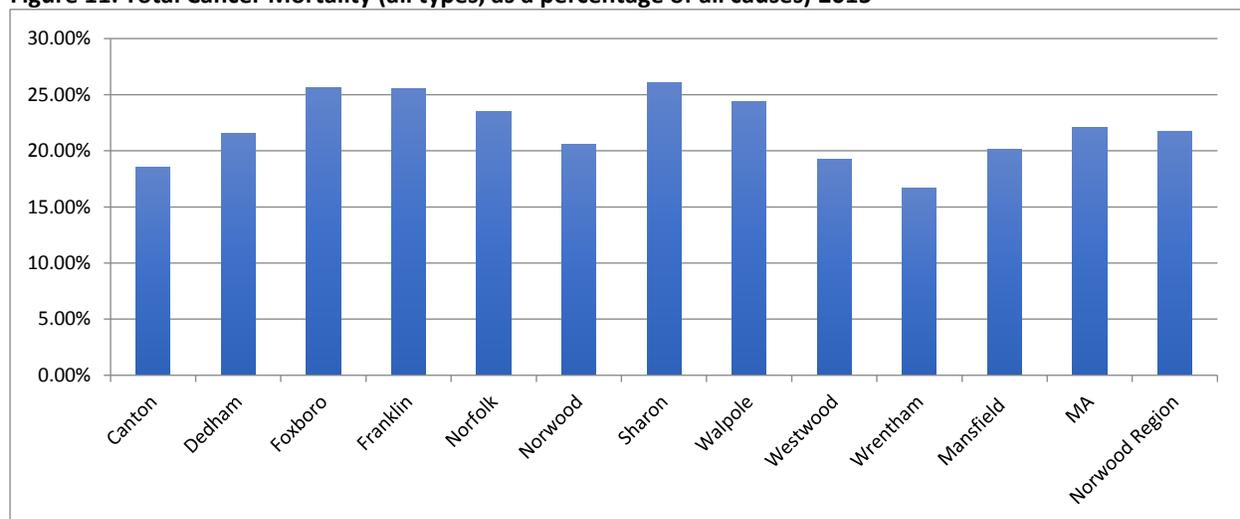
Cancer

In 2006, cancer surpassed heart disease as the leading cause of death in Massachusetts and has remained the leading cause of mortality since. Although cancer incidence and mortality rates decreased from 2010 to 2014, there were still more than 36,000 cases of cancer diagnosed annually over that period. From 2010 to 2014, the age-adjusted cancer incidence rate in Massachusetts was (471.1 per 100,000 population). Over the same period of time, cancer incidence decreased 3.2% annually among men. Despite this, cancer incidence rate for men remained higher than that of women (505.7 versus 450.4 per 100,000 population) (MDPH, 2017).

Black non-Hispanic men and White non-Hispanic women had the highest “all cancer” incidence rates from 2010 to 2014. During this period of time, breast cancer was the most commonly diagnosed cancer among women and prostate cancer was the most frequently diagnosed cancer among men. Lung cancer, colon cancer, and melanoma are also among the leading types of cancer diagnosed in both women and men. Together, these five cancers account for more than half of all cancer cases across the Commonwealth (MDPH, 2017).

Socioeconomic factors contribute to increased incidence rates of cancer as well as a disproportionate amount of late stage cancer diagnoses in certain underserved populations. Obesity, tobacco use, and tobacco exposure are leading risk factors for many cancers including colorectal and breast cancer. Additionally, lack of access to healthy foods, limited physical activity, and lack of access to smoking cessation services also contribute to increased cancer risk. Gaps in health care coverage represent a barrier to covering the costs of diagnostic testing. For examples, individuals with high deductibles, low premiums, or high co-pays must pay for diagnostic tests to confirm a cancer diagnosis, thus leading to delays in diagnosis and increased mortality (MDPH, 2017).

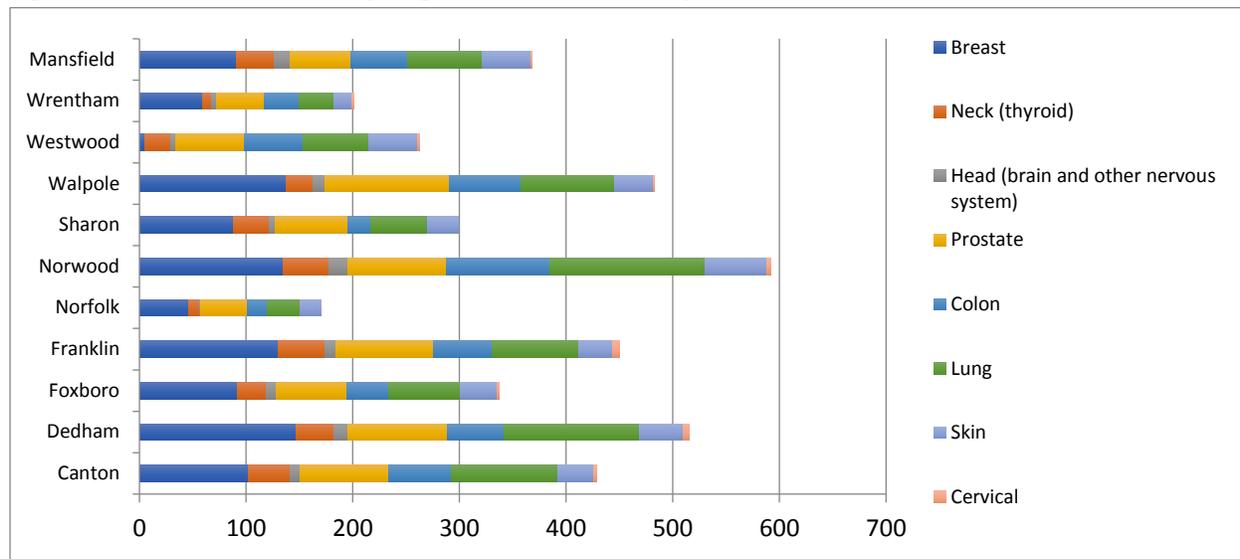
Figure 11: Total Cancer Mortality (all types, as a percentage of all causes) 2015



(Source: Massachusetts Department of Health)

In 2015, (22.10%) of total mortality in Massachusetts was due to cancer, the Norwood Hospital service area exhibited a slightly lower percentage at (21.72%). Of the cities/towns in the Norwood Hospital service area five had higher percentages of mortality due to cancer than the state and regional averages. These included Foxboro, Franklin, Norfolk, Sharon, and Walpole. Sharon had the highest percentage of mortality due to cancer at (26.09%). Wrentham experienced the lowest percentage of mortality due to cancer at (16.67%), followed by Canton and Westwood at (18.58%) and (19.23%) respectively.

Figure 12: Total Cancer Counts by Diagnosis (observed and expected case counts) 2009-2013



(Source: Massachusetts Department of Public Health)

From 2009-2013, breast cancer was the most diagnosed form of cancer in the state and in the Norwood Hospital service area. Westwood was the only city/town within the Norwood Hospital service area that did not have breast cancer as the most diagnosed form of cancer during this time period. Lung cancer and prostate cancer were the other two most diagnosed forms of cancer during this time period. No city/town within the Norwood Hospital service area experienced more than 20 cases of cervical or cancer of the head (brain or other nervous system) during this period.

Survey respondents cited cancer as one of the top five health problems in the Norwood Hospital community, (15 out of 74) respondents ranked cancer as one of the top three health problems in the community. Survey responses also indicated that cancer patients experienced unique concerns compared to those with other chronic conditions. When asked “What are the top 3 concerns for cancer patients?” (59 out of 74) key informant survey respondents stated that financial concerns and lack of insurance was the top concern for cancer. Financial issues were followed by “challenges related to transportation to care” with 48 responses, “lack of available emotional support resources for the patient and family” ranked third with 34 responses. Focus group participants also brought up issues related to transportation, some participants went as far as saying “there’s a gaping hole with lack of transportation to doctor’s appointments, tests, services, etc., and patients must go into Boston instead”. Additionally, when asked about the availability of low/no cost resources for cancer patients, (18 of 42) survey respondents did not believe that there were adequate low/no cost resources available. Those who responded “No” stated that although they knew programs were available, they found these programs to be inadequate or not well known by patients.

Heart Disease

Cardiovascular disease is a broad term that encompasses a number of adverse health outcomes, including congestive heart failure, myocardial infarction, and stroke. In Massachusetts, cardiovascular disease is the second leading cause of death after cancer (MDPH, 2017)

Hypertension is a chronic condition and is also a critical risk factor for adverse cardiovascular and cerebrovascular outcomes including, stroke, heart attacks, and congestive heart failure. In 2014, hypertension contributed to \$19 million in total hospitalization costs in Massachusetts. Hypertension disproportionately impacts people of color, this is due to social and economic inequities such as access to health care and high poverty rates. The prevalence of hypertension has remained relatively stable over recent years,

in 2015 (29.6%) of Massachusetts adults reported being diagnosed with hypertension. A larger percentage of Black non-Hispanic adults were diagnosed with hypertension (39.4%) compared to White non-Hispanic adults (30.7%). Racial/ethnic disparities in rates of hypertension are likely a contributing factor to the similar disparities seen when observing hospitalizations for congestive heart failure, myocardial infarction, and stroke (MDPH, 2017).

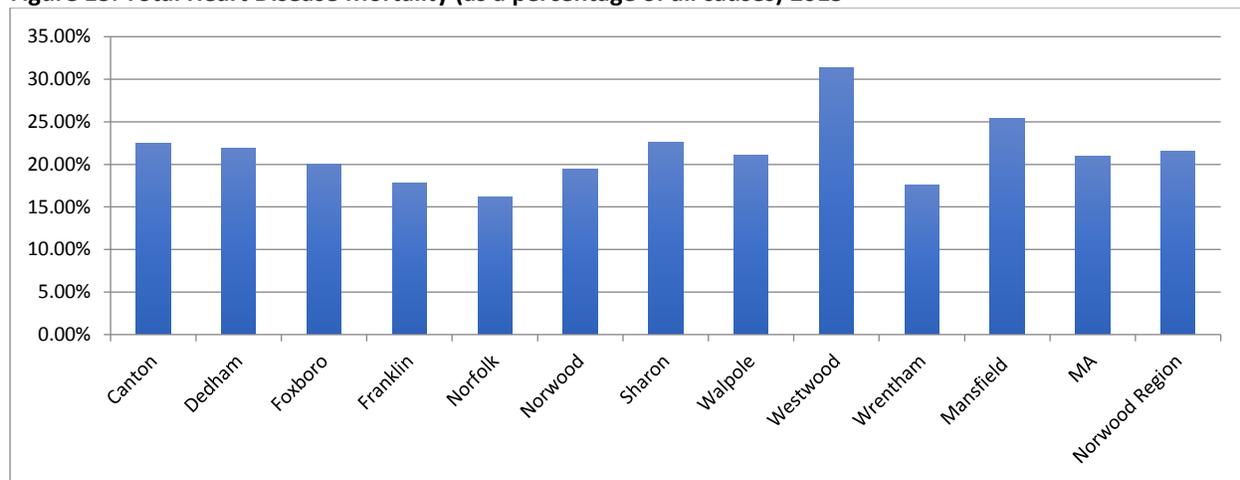
Congestive heart failure poses a debilitating health and economic burden (Heo, Lennie, Okoli, & Moser, 2009) (Krumholz, 1997). In 2014, congestive heart failure accounted for \$540 million in total hospitalization costs in Massachusetts (Center for Health Information and Analysis, 2014). In 2014, the rate of hospitalizations attributed to congestive heart failure for Black non-Hispanic residents (520.5 per 100,000 population) was more than twice as high than that for non-Hispanic White residents (248.4 per 100,000 population). Similarly, Hispanic residents (400.7 per 100,000 population) were hospitalized for congestive heart failure at a rate that was 1.6 times higher than that for non-Hispanic White residents (248.4 per 100,000 population) (MDPH, 2017).

The rate of myocardial infarction-related hospitalizations in Massachusetts declined 9.5% from 2010 (169.9 per 100,000 population) to 2014 (153.7 per 100,000 population). In 2014, the myocardial infarction hospitalization rate for Hispanic residents in Massachusetts (182.5 per 100,000 population) and Black non-Hispanic residents (159.0 per 100,000 population) exceeded the state average (153.7 per 100,000 population) and the average for White non-Hispanic residents (145.6 per 100,000 population) (MDPH, 2017).

Strokes were responsible for \$613 million in total hospitalization costs in Massachusetts in 2014 (Center for Health Information and Analysis, 2014). This number is independent of the indirect costs associated with stroke such as lost productivity and disability (MDPH, 2017). Racial/ethnic disparities continue to exist in stroke-related hospitalizations. In 2014, Black non-Hispanic residents (368.1 per 100,000 population) experienced stroke-related hospitalization at a rate that was nearly twice as high as that for White non-Hispanic residents (201.5 per 100,000 population). Similarly, Hispanic residents (264.9 per 100,000 population) had a stroke hospitalization rate that was 1.3 times that for White non-Hispanic residents (201.5 per 100,000 population) (MDPH, 2017).

Risk factors for heart disease, include smoking, being overweight or obese, being physically inactive, having a family history of early heart disease, having a history of preeclampsia during pregnancy, unhealthy diet, and age. After menopause, women are more apt to get heart disease. Women who have gone through early menopause, either naturally or because they have had a hysterectomy, are twice as likely to develop heart disease as women of the same age who have not yet gone through menopause (NIH, 2017).

Figure 13: Total Heart Disease Mortality (as a percentage of all causes) 2015



(Source: Massachusetts Department of Public Health)

In 2015, (21%) of all mortality in Massachusetts was due to heart disease. The Norwood Hospital service area had a slightly higher percentage at (21.52%). Of the cities/towns in the Norwood Hospital service area, Westwood, Mansfield, and Sharon had the highest percentage of mortality due to heart disease at (31.41%), (25.37%), and (22.61%) respectively. The lowest rates of mortality due to heart disease were seen in Norfolk where only (16.18%) of mortality was due to heart disease. Foxboro, Franklin, Norwood, and Wrentham all had percentages of mortality due to heart disease less than the state and service area averages.

Heart disease, including stroke and high blood pressure was the fifth most concerning health problem among survey respondents. When asked to rank the top three health concerns in the community, (20 of 74) respondents ranked heart disease among the top three health concerns for the Norwood Hospital community. Focus group and survey participants did not cite specific achievements or areas in need of change specific to heart disease.

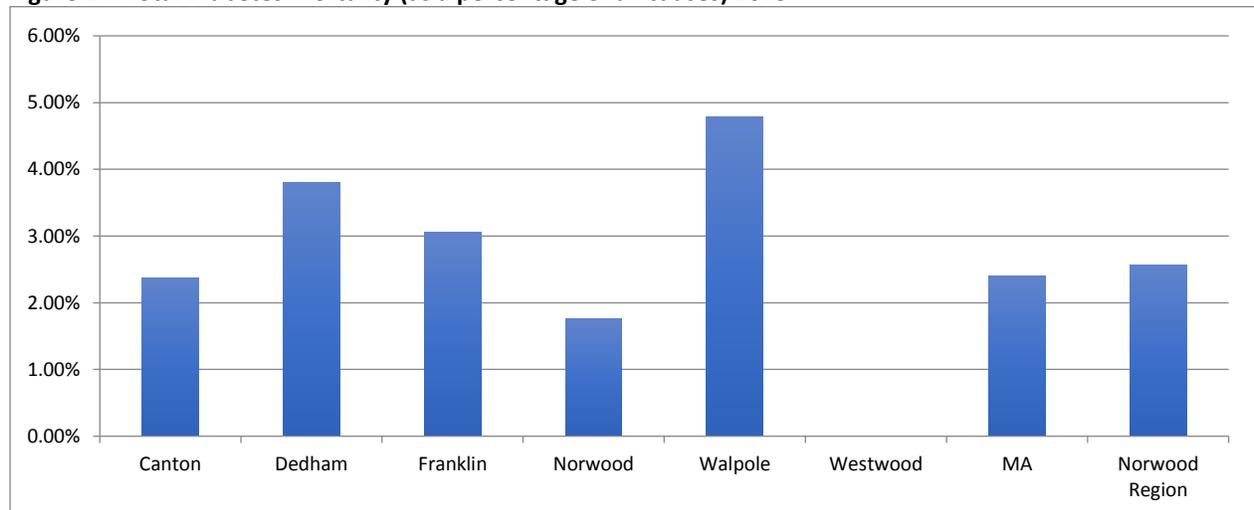
Diabetes

Across the United States, the prevalence of diabetes is projected to increase dramatically over the coming years. By 2030, it is projected that the prevalence of type 1 diabetes and type 2 diabetes will increase by (54%), affecting 54.9 million. In 2015, an estimated (8.9%) of Massachusetts residents had been diagnosed with diabetes (MDPH, 2017).

Socioeconomic disparities exist in diabetes prevalence. In Massachusetts, adults with an annual household income of less than \$25,000 (15.6%) have three times the prevalence of diabetes compared to those with an annual household income greater than \$75,000 (5%). The prevalence of diabetes is also inversely associated with educational attainment. A total of 14.5% of adults without a high school degree were diagnosed with diabetes compared to 5% of adults with four or more years of post-high school education (MDPH, 2017).

Diabetes prevalence and mortality in Massachusetts also differs by race/ethnicity. In 2015, a greater proportion of Black non-Hispanic (12.3%) and Hispanic (11.7%) adults reported being diagnosed with diabetes compared to White non-Hispanic adults (8.7%). In 2014, Black non-Hispanic residents were more than 2.1 times more likely to die from diabetes than White non-Hispanic residents (29.5 versus 13.8 per 100,000 population) (MDPH, 2017).

Figure 14: Total Diabetes Mortality (as a percentage of all causes) 2015



(Source: Massachusetts Department of Public Health) Note: At the time of data collection, diabetes mortality data was unavailable for Foxboro, Norfolk, Sharon, Wrentham, and Mansfield.

In 2015, (2.40%) of all mortality in Massachusetts was due to diabetes. The Norwood Hospital service area had a slightly higher percentage of mortality due to diabetes at (2.57%). Data was unavailable for several cities/towns within the Norwood Hospital service area. In communities where data was available, the highest percentage of mortality due to diabetes was seen in Walpole where (4.78%) of mortality was attributed to diabetes. Dedham and Franklin also had a higher percentage of diabetes related mortality than the state and service area levels. The lowest percentage of mortality due to diabetes was seen in Westwood where no mortality was attributed to diabetes in 2015.

Seven out of 74 survey respondents ranked diabetes as a top 3 health concern for the Norwood Hospital community. When asked about programs available for those with diabetes, focus group participants stated *“there are healthy aging coalitions within the Norwood Hospital service area, these groups have programs for diabetes management and prevention. However, meetings draw low attendance and occasionally have to be cancelled due to this low attendance”*. Neither the focus group participants or survey respondents mentioned any other known programs for patients with diabetes or those at risk of developing diabetes.

Obesity

Obesity is both a chronic disease and a risk factor for other chronic conditions including type 2 diabetes, cardiovascular disease, some cancers, and many other health problems that interfere with daily living and reduce the quality of life. Engaging in physical activity and maintaining a healthy diet have been proven to lower the incidence of obesity, however not all Massachusetts residents have the same opportunities to prevent obesity. Structural barriers to accessing healthy foods and beverages as well as opportunities to be physically active disproportionately affect people of color in the Commonwealth (MDPH, 2017).

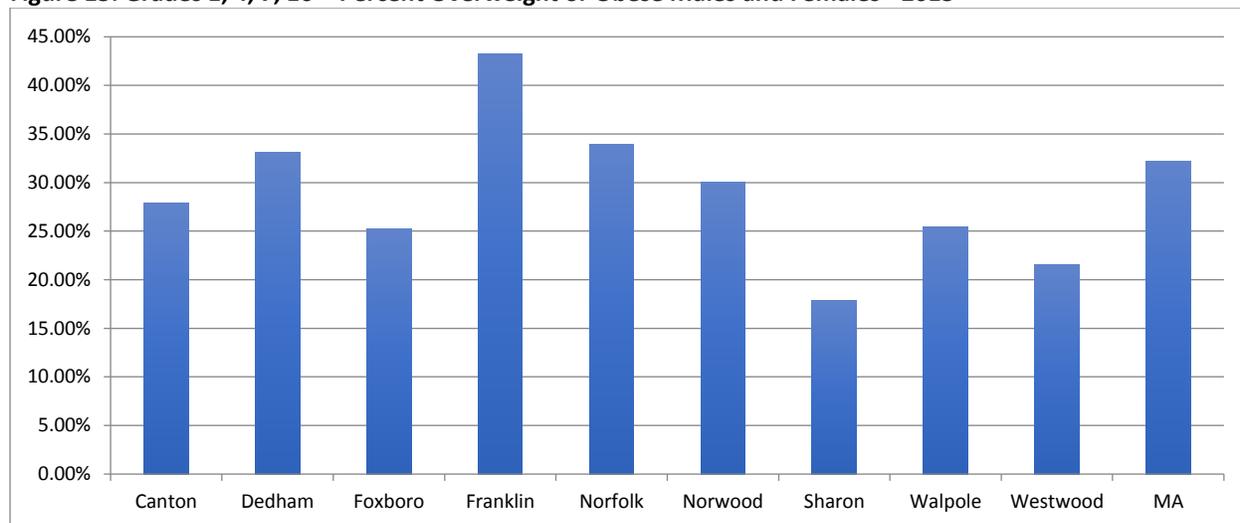
Overweight is defined as having a body mass index (BMI) of 25.0 to 29.9 kg/m². Obesity is defined as a BMI greater than or equal to 30.0kg/m². Both conditions are linked to poor nutrition and inadequate physical activity, although other factors contribute to the development of overweight/obesity. Given the association between obesity chronic diseases, addressing obesity is a public health priority. Reducing the prevalence of obesity should in turn reduce the incidence of several chronic diseases and their associated health and economic burdens (MDPH, 2017).

In 2015, nearly (60%) of Massachusetts adults were classified as overweight or obese, (24.3%) had a BMI greater than or equal to 30.0kg/m². More than one-third of Black non-Hispanic adults (35.6%) were obese compared to Hispanic (28.9%), and White non-Hispanics (22.7%). Adults with disabilities (34.3%) were significantly more likely to be obese than adults with no disability (20.7%). Adults who have less than a high school education are almost twice as likely to be obese than adults with four or more years of college (MDPH, 2017).

Childhood obesity has important implications for the physical and emotional well-being of children and youth. Child overweight is defined as a BMI at or above the 85th percentile for age. Child obesity is defined as BMI at or above the 95th percentile of expected for age. Children who are obese are more likely to develop risk factors for chronic disease early in life, such as high blood sugar, high triglycerides, and high blood pressure. Children who are obese are also more likely to develop chronic diseases and experience bullying related to weight. Childhood obesity is linked to poor nutrition and inadequate physical activity in adulthood; and inequities persist across socioeconomic status and race/ethnicity. Massachusetts is ranked as the fifth worst US state on the prevalence of obesity among children enrolled in the Women, Infant and Children (WIC) program who are two to four years old (MDPH, 2017).

BMI screening reports conducted by school districts indicate that the prevalence of overweight and obesity in school aged children decreased by 2.1% from 2009 (34.3%) to 2015 (31.3%). However, this reduction in overweight and obesity was not consistent across all school districts. The prevalence of overweight and obesity did not change in school districts where median household income was less than \$37,000. These districts had the highest prevalence across the state with approximately 40% of students being overweight or obese (MDPH, 2017).

Figure 15: Grades 1, 4, 7, 10 – Percent Overweight or Obese Males and Females - 2015



(Source: Massachusetts Department of Public Health) Note: At the time of data collection, obesity prevalence data was unavailable for Wrentham, Mansfield and Norwood Region

In 2015, (32.20%) of Massachusetts males and females (grades 1, 4, 7, 10) were overweight or obese. Dedham, Franklin, and Norfolk each had a higher percentage of overweight or obese individuals in these age categories than the state average. Franklin had the highest percentage with (43.20%), followed by Norfolk with (33.90%) of the observed individuals being classified as overweight or obese. Sharon had the lowest percentage of overweight/obese males and females (grades 1, 4, 7, 10) at (17.90%). Canton, Foxboro, Norwood, Walpole, and Westwood also exhibited lower levels of overweight/obesity than the state average.

When asked “what are the top 3 most important health problems in your community?” (21 out of 74) survey respondents selected obesity as one of their top three concerns. When asked what Norwood Hospital could do to improve healthcare in the community, some respondents stated that more behavior modification, nutrition, and exercise education programs would improve healthcare in the Norwood Hospital community. Focus group participants and key informant survey respondents expressed concerns about limited healthy food options in lower income communities across Massachusetts. They viewed this limited access as directly linked to obesity and chronic disease among residents.

Mental Health

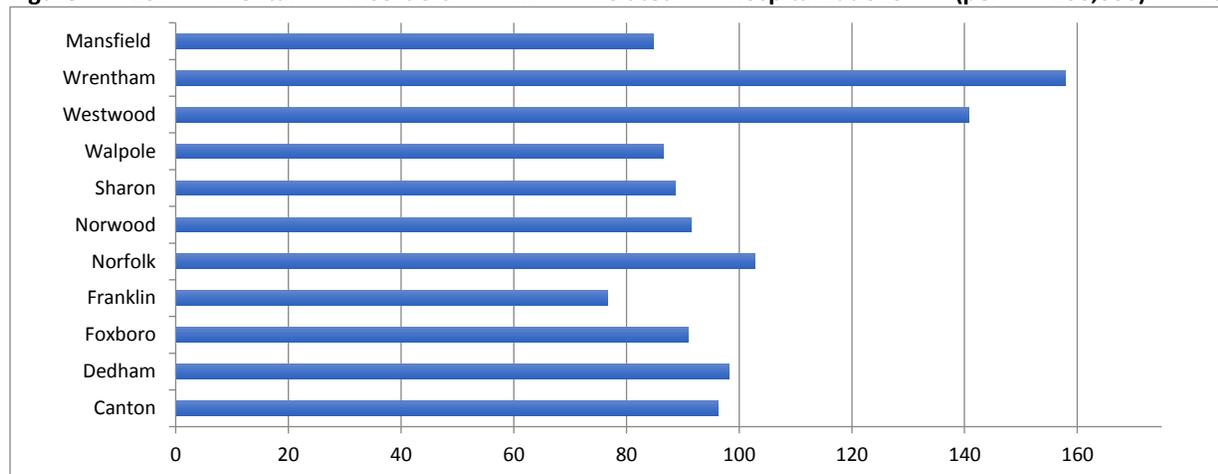
Mental health intersects with many areas of public health, including addiction, cancer, cardiovascular disease, and HIV/AIDS. Integrated treatment is critical for treating people with co-occurring disorders and can ultimately lead to better health outcomes and reduction in health care costs. Increasing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

Mental health impacts the overall health of individuals of all ages. For many adults who have mental disorders, symptoms were present, but often not recognized or addressed in childhood and youth. For a young person with symptoms of a mental disorder, early diagnosis and treatment is associated with increased effectiveness of treatment. Early treatment can help prevent more severe, lasting problems as a child ages (NIMH, 2018). Interventions addressing social and emotional risk factors can greatly improve outcomes for children and adolescents. Promoting emotional wellness and social connectedness across the life course is a Title V priority for MDPH, including during early childhood and adolescence (MDPH, 2017).

The impact of depression and other mental disorders on overall health in older adults can be severe. Current research has found that depression is associated with worse health outcomes in people with conditions like heart disease, diabetes, and stroke. Depression can complicate the treatment of these conditions, including making it more difficult for someone to care for themselves and seek treatment when needed. In older adults, depression may be disregarded as frailty, or it may be viewed as an inevitable result of life changes, chronic illness, and disability (NIMH, 2018).

The coexistence of both a mental disorder and a substance use disorder (SUD) is known as co-occurring disorders. People with mental health disorders are more likely to experience a SUD. Often, people receive treatment for one disorder while the other disorder remains untreated. Undiagnosed, untreated, or undertreated co-occurring disorders can lead to a higher likelihood of experiencing negative outcomes, such as homelessness, incarceration, medical illnesses, suicide, or even early death (SAMHSA, 2016). Approximately one in four persons ages 11 and older in the MassHealth patient population were identified as having a serious mental illness. Of these individuals, roughly two in five have been homeless for some period of time between 2011 and 2015. The risk of fatal opioid-related overdose is six times for those with a serious mental illness and three times higher for those diagnosed with depression compared to those without any mental health diagnosis (MDPH, 2017).

Figure 16: Mental Disorders: All Related Hospitalizations (per 100,000) 2013



(Source: Massachusetts Department of Public Health)

In 2013, Wrentham experienced the highest rate of hospitalizations related to mental disorders of all cities/towns within the Norwood Hospital service area (157.81 per 100,000). Westwood and Norfolk had the next highest rates at (140.75) and (102.87) respectively. Franklin exhibited the lowest rate of mental health related hospitalizations at (76 per 100,000). The remaining cities/towns in the Norwood Hospital service area had rates between (84.82) and (98.26) hospitalizations per 100,000.

Mental health was a top three health concern among focus group participants and was the most reported health concern of survey respondents, 50 out of 74 respondents ranked mental health problems as a top three health concern in the community. According to survey respondents, those with a mental health condition are the number one underserved population in the Norwood Hospital service area, this was supported by focus group participants who also stated that this group was underserved in the Norwood community.

Both the focus group participants and survey respondents stated that the Norwood community is generally doing a good job in dealing with mental and behavioral health conditions. Focus group participant stated that the Norwood community is *“progressive in attitudes towards mental illness and reducing the stigma associated with mental health treatment”*, focus group participants believe that these attitudes are leading to more individuals seeking treatment. However, survey respondents and focus group participants indicated that there is still a need for improvements in mental health offerings from Norwood Hospital. Specifically, they stated that there was a need for more mental health beds in healthcare facilities, more outreach measures related to mental health, and increased access to mental health programs.

Substance Use Disorder

In 2014, there were 2,200 overdoses from alcohol, 17,465 overdoses from illicit drugs, and 25,760 overdoses from prescription drugs in the US. This number increased in 2015, as total overdose deaths totaled 52,404, including 33,091 (63.1%) that involved an opioid (CDC, 2016). Among those under the age of 45, Massachusetts ranked highest among all states for rate of opioid-related emergency department visits and second highest for rate of opioid-related inpatient stays. The CDC reported that Massachusetts had the nation's second highest rate of fentanyl seizures among all states in 2014 (MDPH, 2017).

The National Survey on Drug Use and Health (NSDUH) in 2015 estimated 27.1 million people in the US aged 12 and older had used illicit drugs in the past month. Of these, a majority (22.2 million) reported using marijuana and 3.8 million misused prescription opioids (SAMSHA, 2015). According to 2013-2014 NSDUH estimates, the prevalence of past month binge drinking, past month illicit drug use and past month marijuana use among Massachusetts residents age 12 and older exceeded the national averages (binge drinking: (24.2% vs. 22.9%); illicit drug use: (13.2% vs 9.8%) and marijuana use: (11.8% vs 8%) (MDPH, 2017). During the same survey period, an estimated 20.8 million, approximately 1 in 10 people needed substance use treatment (i.e., treatment for problems related to the use of alcohol or illicit drugs). Of this population, (10.8%) received treatment (SAMSHA, 2016).

Rates of substance use and misuse vary by demographics and geographic factors. Variations across population groups are shaped by several factors, including biological, genetic, psychological, familial, religious, cultural, and historical circumstances. Massachusetts offers a variety of treatment approaches to address the needs of individuals with substance use disorders. However, there are important disparities in the outcomes and effectiveness of substance use treatment for different populations. Treatment interventions should be individually tailored and incorporate culturally competent and linguistically appropriate practices relevant to specific populations and subpopulation groups (MDPH, 2017)

Alcohol

Alcohol is also the most prevalent substance used in the past month by Massachusetts residents 18 to 25 years of age. In 2013-2014, (70.2%) of Massachusetts young adults reported using alcohol in the past month and (43.9%) reported binge drinking in the past month, exceeding national averages for alcohol use among this population (past month alcohol use: 59.6%; past month binge drinking: 37.8%) (MDPH, 2017).

Despite the legal drinking age of 21, alcohol is the primary substance used by youth. According to NSDUH (2013-2014), there has been a decrease in past month alcohol use and binge drinking in the US among individuals 12 to 17 years of age. In 2015, (61%) of Massachusetts high school students reported using alcohol in their lifetime: (34%) reported past month use; (18%) reported binge drinking in the past month (MDESE & MDPH, 2015).

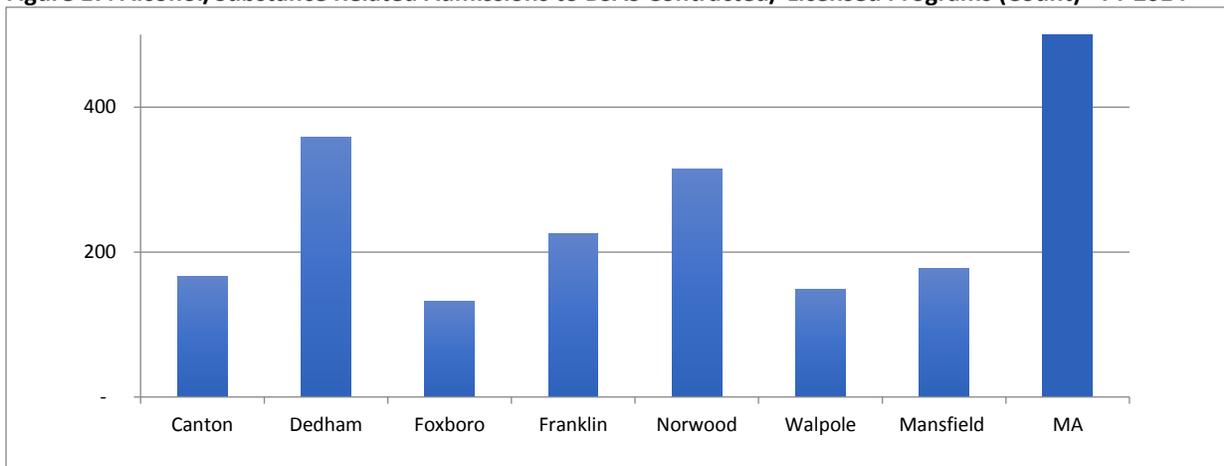
The proportion of BSAS clients who identified as veterans increased (12.1%) from Fiscal Year 2011 (5,095 clients) to Fiscal Year 2016 (5,713 clients). In Fiscal Year 2016, (4%) of the BSAS treatment population identified as veterans. Also, in Fiscal Year 2016, alcohol was the primary drug reported among the BSAS veteran population (48%) (MDPH, 2017).

Marijuana

According to the National Survey on Drug Use and Health (NSDUH) in 2015, an estimated 27.1 million people in the US aged 12 and older used illicit drugs in the past month. Of these, a majority (22.2 million) reported using marijuana and 3.8 million misused prescription opioids (SAMSHA, 2015). During the same survey period, an estimated 20.8 million, approximately 1 in 10 people needed substance use treatment (i.e., treatment for problems related to the use of alcohol or illicit drugs). Of this population, (10.8%) received treatment (SAMSHA, 2015).

In Fiscal Year 2016, among BSAS treatment program enrollments, (59.9%) of those 13 to 17 years of age reported marijuana as their primary drug, and (16.2%) reported opioid as their primary drug of choice. Of enrollees that were 18 to 25 years of age, (68.3%) reported opioids as their primary drug (MDPH, 2017).

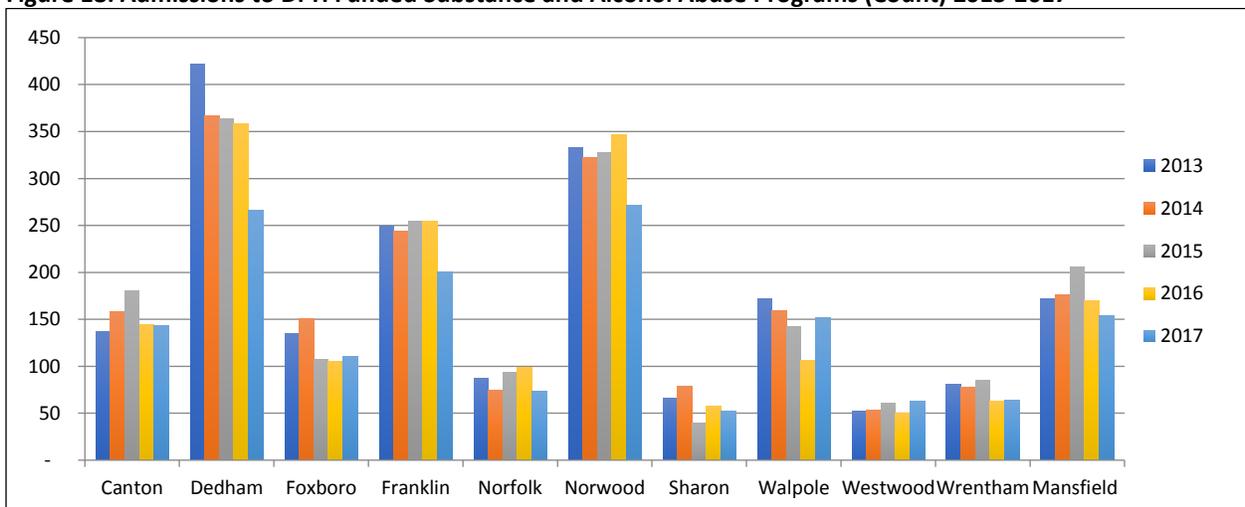
Figure 17: Alcohol/Substance Related Admissions to BSAS Contracted/ Licensed Programs (Count) - FY 2014



(Source: Massachusetts Department of Public Health – Bureau of Substance Abuse Services) Note: At the time of data collection Alcohol/substance related incidence data was unavailable for Norfolk, Sharon, Westwood, Wrentham, and Norwood region

In the 2014 fiscal year, there were 107,358 alcohol or substance related admissions to BSAS contracted/licensed programs in Massachusetts. The total count within the Norwood Hospital service area was unavailable. Of the service area towns with available data Dedham exhibited the highest count of alcohol/substance related admissions at 359. Norwood followed with 315 reported admissions. Foxboro had the lowest count of alcohol/substance related admissions at just 132.

Figure 18: Admissions to DPH Funded Substance and Alcohol Abuse Programs (Count) 2013-2017



(Source: Massachusetts Department of Public Health – Bureau of Substance Abuse Services) Note: At the time of data collection DPH admissions data was unavailable for MA and Norwood Region

From 2013 to 2017, Dedham and Norwood had the highest count of admissions to DPH-funded substance and alcohol abuse programs with 1,777 and 1,601 admissions respectively. Over this same time period there were only 279 admissions in Westwood and 371 in Wrentham. While Dedham and Norwood had the highest counts, there was a downward trend in annual admissions in these towns and within the entire Norwood Hospital Service area. In 2013, there were 1,906 total admissions to DPH Programs in the Norwood Hospital service area. This number has decreased each year. Within the Norwood Hospital service area, just 1,550 admissions to these programs occurred in 2017.

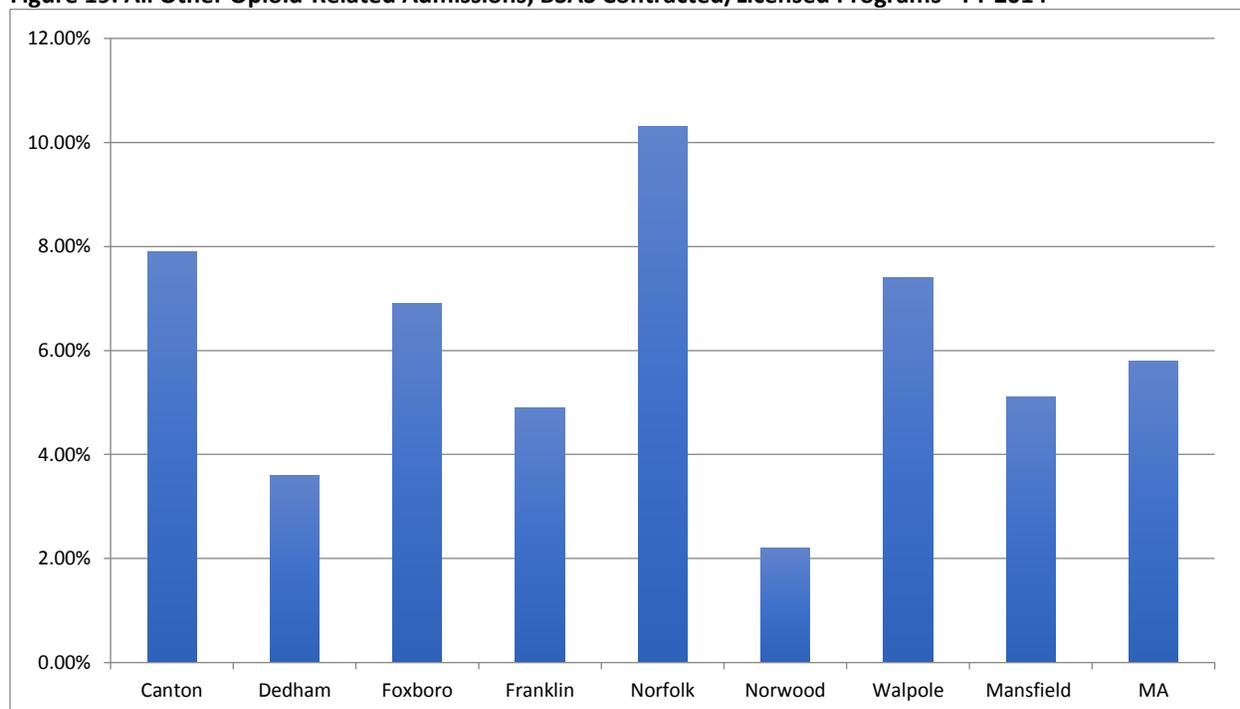
Opioids

In Massachusetts, there has been a dramatic increase in opioid-related deaths. The number of opioid-related deaths in 2016 represents a (17%) increase over 2015, and a (450%) increase since 2000. Almost every community in Massachusetts is affected by the opioid epidemic. A key strategy to understanding the opioid epidemic is to improve the timely analysis and dissemination of data on opioid overdoses (MDPH, 2017).

Increasingly, there is evidence suggesting that fentanyl is fueling the current opioid epidemic. A Massachusetts-CDC collaborative epidemiologic investigation identified that the proportion of opioid overdose deaths in the state involving fentanyl, a synthetic, short-acting opioid with 50-100 times the potency of morphine, increased from (32% to 74%) from 2013 to 2016 (MDPH, 2017).

Intervention is an important component in the continuum of services to address substance use disorder (SUD) in a community. Secondary prevention targets individuals who have low levels of alcohol and/or drug use and would benefit from prevention and safety messages. Tertiary prevention targets individuals who exhibit a greater degree of SUD and experience problems associated with their alcohol or drug use. These individuals would benefit from prevention and harm reduction messages, as well as referrals to treatment. Individuals may experience a range of alcohol and drug use from no use to addiction. Depending on usage level, individuals may benefit from different levels of service. A person-centered approach includes prevention, safety and harm reduction messages tailored to what the individual is ready to receive (MDPH, 2017).

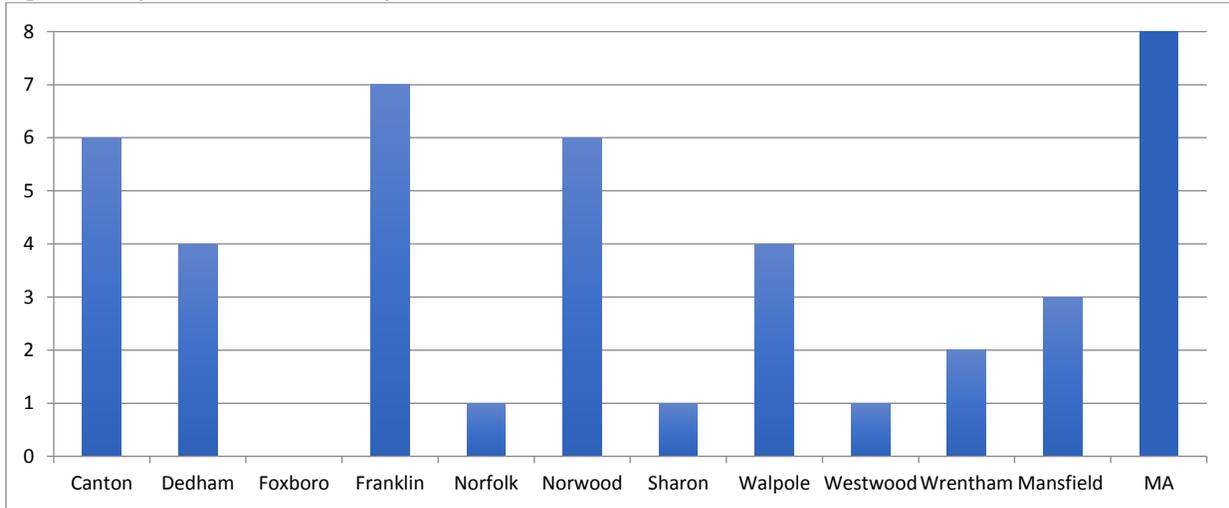
Figure 19: All Other Opioid-Related Admissions, BSAS Contracted/Licensed Programs - FY 2014



(Source: Massachusetts Department of Public Health – Bureau of Substance Abuse Services) Note: at the time of data collection, opioid related hospitalization data was unavailable for Sharon, Westwood, Wrentham and Norwood region.

In 2014, (5.8%) of all admissions to BSAS contracted/licensed programs in Massachusetts were related to opioids. Within the Norwood Hospital service area four cities/towns exceed this percentage. Norfolk had the highest percentage of admissions related to opioids at (10.30%), Canton followed at (7.90%). Norwood experienced the lowest percentage of opioid related hospitalizations of all service area cities/towns. In Norwood, only (2.20%) of all hospitalizations in 2014 were related to opioids. Dedham had the second lowest percentage of opioid related hospitalizations at (3.6%).

Figure 20: Opioid Related Mortality Count 2015



(Source: Massachusetts Department of Public Health – Bureau of Substance Abuse Services)

In 2015 there were 1,637 opioid related deaths in Massachusetts. Of the Norwood Hospital service area cities/towns, Franklin had the highest number of deaths related to opioids with 7 deaths associated with opioids. Canton and Norwood exhibited the second highest counts with 6 opioid related deaths each. There were no opioid related deaths in Foxboro in 2015 and only one opioid related death was reported in Norfolk, Sharon, and Westwood during the same time period.

Substance abuse was the second greatest health concern of survey participants, second only to mental illness with (49 of 74) respondents ranking substance abuse as one of the top three health problems in the Norwood Hospital community. The focus group also cited substance abuse as a top concern. The focus group believed that those with an existing or previous substance abuse disorder to be underserved in the Norwood community. According to the focus group, there have been improvements on substance abuse issues by working with schools and law enforcement agencies, although they believed that further cooperation among the hospital and local police could lead to further improvements. Opioids and vaping were of particular concern among focus group participants, both survey and focus group participants cited the need for more education and intervention programs to help decrease the prevalence of these issues.

Housing Stability

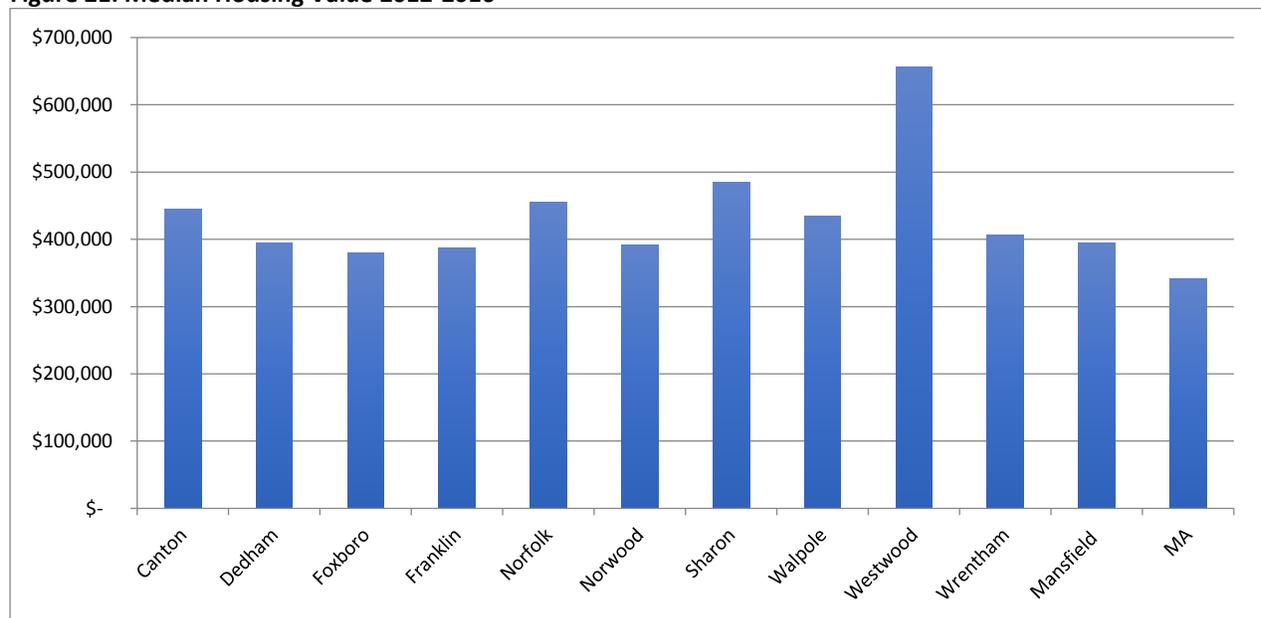
Massachusetts is currently dealing with a severe housing crisis due in large part to a low rate of housing production which has not kept pace with population growth and needs. Increasing rents have outpaced wages, and the lingering effects of the foreclosure crisis still have an impact. As a result, there is a shortage of suitable and affordable units for young workers, growing families, and the increasing senior population. Overcoming these barriers will require addressing a variety of causes, including high development costs and exclusionary and restrictive zoning laws, which have made it difficult to keep up with the housing demand (MA Legislature, 2016).

The Massachusetts population is growing older, and our world class educational institutions and thriving technology companies continue to attract young professionals at a high rate. The state is ill prepared to meet the housing needs of this rapidly changing demographic. Baby Boomers (those born between 1946 and 1964) made up (50%) of the state’s labor force in 2010. In coming decades, 1.4 million boomers are expected to retire or move away by 2030, this will reduce the size of the skilled workforce significantly. Thus, housing production is an economic imperative for the Commonwealth (MA Legislature, 2016).

There is a high demand for homes in Massachusetts’ historically working-class communities. As more middle-income and working-class households move to these lower cost communities in hopes of finding more affordable housing. This demand is driving up prices. Home prices are still more affordable the further one moves away from the urban core (The Boston Foundation, 2017).

Average monthly rents have not fallen further despite the increase in housing construction. This is likely because a disproportionate amount of the new rental units are priced at luxury levels and are not attainable by the majority of the Massachusetts’ population. The prices of these units have declined enough to bring the overall average rent down without much affecting median rent or rents in the lower end of the price spectrum. Hence, even as average rents have fallen, the proportion of renters who are housing cost-burdened continued to rise in 2017 (The Boston Foundation, 2017).

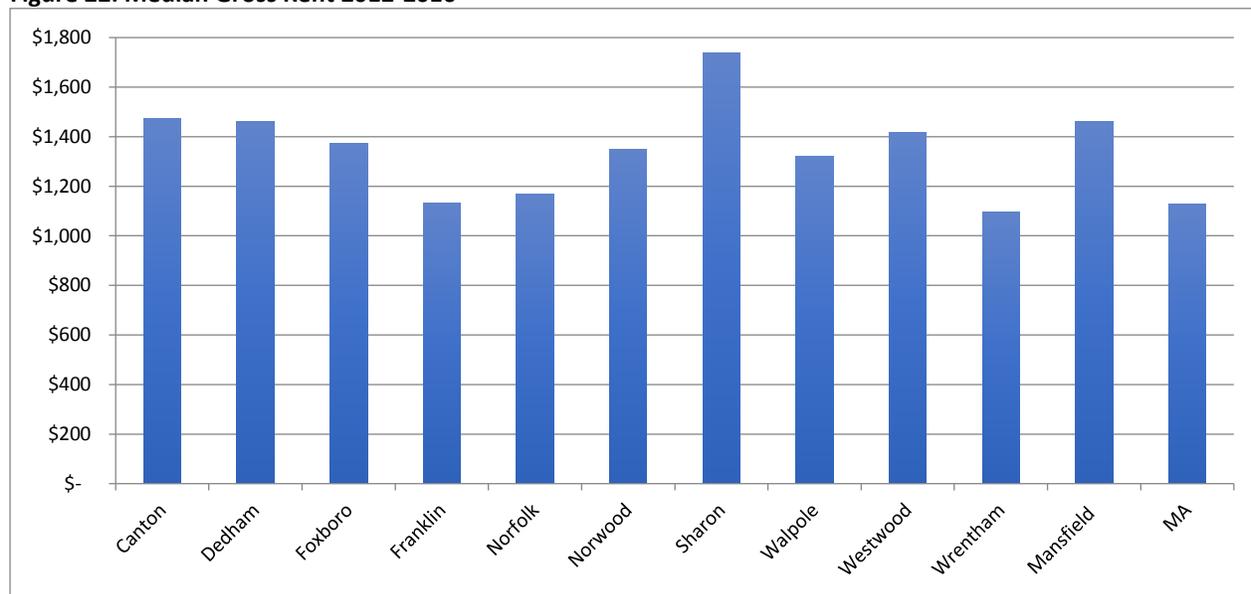
Figure 21: Median Housing Value 2012-2016



(Source: US Census Bureau, 2012-2016 American Community Survey 5-Year Estimates)

From 2012 to 2016 the median value of a home in Massachusetts was \$341,000. During this period of time every city/town in the Norwood Hospital service area had a higher median home value than the MA state value. The highest median home value was seen in Westwood where median value was \$656,200. Canton, Norfolk, Sharon, Walpole and Wrentham each had a median home value of greater than \$400,000. The lowest median home value in the Norwood Hospital service area was found in Foxboro where the median value of a home was \$380,400.

Figure 22: Median Gross Rent 2012-2016



(Source: US Census Bureau, 2012-2016 American Community Survey 5-Year Estimates)

From 2012 to 2016, the median gross rent in Massachusetts was \$1,129. Within the Norwood Hospital service area, only Wrentham has a lower median gross rent than the state level (\$1,096). The highest median gross rent was found in Sharon at \$1,738. Canton, Dedham, Westwood, and Mansfield each exceed a median rent of \$1,400. Aside from Wrentham, only Franklin and Norfolk had median gross rents less than \$1,200.

Homelessness

In FY 2018, the Commonwealth will spend a total of \$432 million on a series of housing programs as well as initiatives aimed at combatting homelessness. Of this sum, \$183 million goes to the former with the larger share (\$249 million) going to homeless programs. However, this amount represents the second consecutive annual funding cut. The state budget for housing related spending is now \$71 million below the amount in the FY 2016 budget, a (14%) reduction. What makes this cut in state funding even more serious is that it is coming on top of a sharp reduction in federal funding for housing in the Commonwealth. FY 2018 estimated funds for federal housing programs in Massachusetts are expected to be \$71 million less than in FY 2017. Together, the state and federal cuts in the current fiscal year alone amount to more than \$100 million (The Boston Foundation, 2017).

As of August 31, 2018, there were 3,636 families with children and pregnant individuals in Massachusetts' Emergency Assistance (EA) shelter program. 36 of these families with children were being sheltered in motels. (The number rose to 37 families in motels as of November 2, 2018.) This number does not count families who are sharing living spaces, living in unsafe conditions, or sleeping in their cars. During state FY 2018, 8,145 families completed applications for assistance, of these families 4,895 families were assisted with emergency shelter and/or HomeBASE diversion assistance. 3,250 families were denied assistance (40% denial rate, as reported by DHCD). Citizens' Housing and Planning Association (CHAPA) estimates a

shortage of 158,769 affordable rental homes for extremely low-income households in Massachusetts as of November 2017.

A report by the *National Low-Income Housing Coalition* details how low wages and high rents lock renters out in Massachusetts and all across the country. For 2017, the Massachusetts statewide housing wage is \$27.39/hour, meaning that a worker would have to earn that amount per hour in order to afford the fair market rent for a 2-bedroom apartment (\$1,424/month), without having to pay more than 30% of their income toward rent. The housing wage is based on a worker working 40 hours/week, 52 weeks/year. For 2016, it was \$25.91 and for 2015, it was \$24.64/hour. Massachusetts ranked as the 6th least affordable state in the country, when looking at the 50 states and Washington, D.C. (MCH, 2018).

Poverty contributes heavily to homelessness. According to the U.S. Census Bureau's 2015 American Community Survey report (released in October 2016), the overall poverty rate in Massachusetts was just under (11.5%) in 2015. This includes an estimated 752,071 people in Massachusetts living in households that fell below the poverty threshold. This estimate includes 202,513 children under the age of 18 and 92,468 elders age 65 and older. 355,730 people were living in households with incomes under (50%) of the federal poverty guidelines (MCH, 2018)

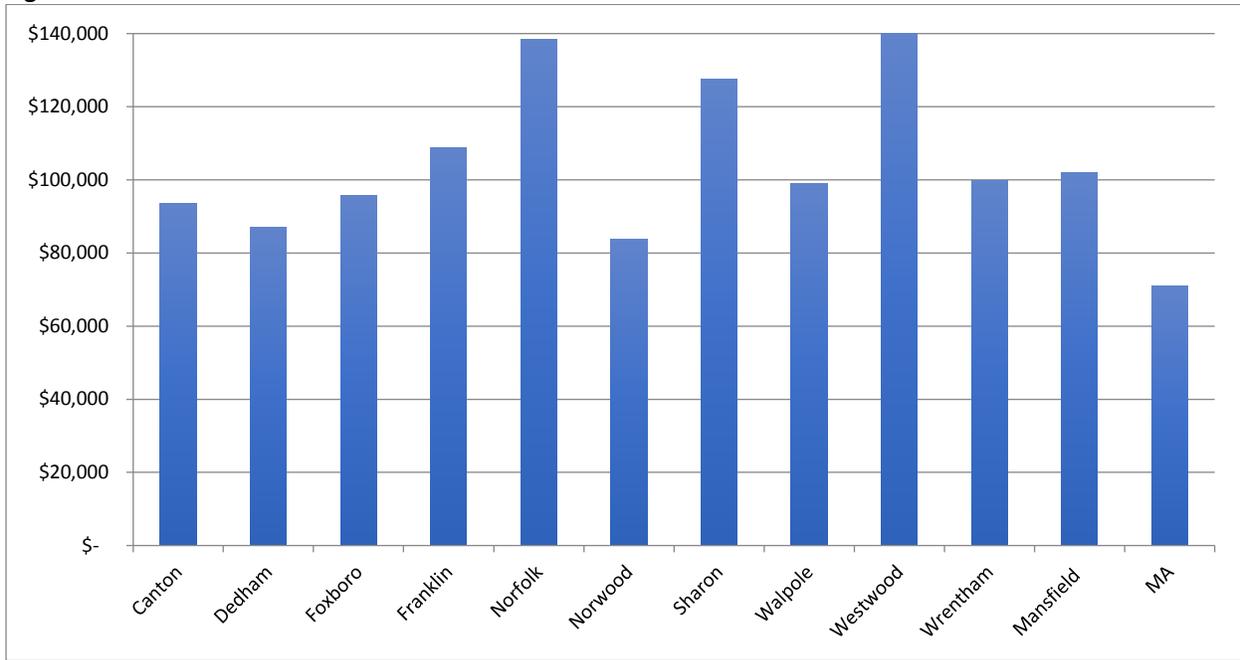
Poverty

Income, poverty, and unemployment are each profoundly linked with health (Braveman, Cubbin, Egerter, Williams, & Pamuk, 2010). Income influences where people choose to live, ability to purchase healthy foods, opportunity to participate in physical and leisure activities, and to access health care and screening services. Having a job and job-related income provide individuals the opportunities to make healthy choices, engage in healthy behaviors, access necessary health care services, and enjoy a long life (MDPH, 2017). Unemployment is also associated with poor health, including increased stress, hypertension, heart disease, stroke, arthritis, substance use, and depression; and the unemployed population experiences higher mortality rates than the employed (Henkel, 2011)

While being employed is important for economic stability, employment affects our health through more than just economic drivers. Physical workspace, employer policies, and employee benefits all directly and indirectly impact an individual's health. Job benefits such as health insurance, sick and personal leave, child and elder services and wellness programs can impact the ability of both the worker and their family to achieve good health (MDPH, 2017).

Stark racial disparities exist in poverty rates across Massachusetts. From 2011-2015, approximately one in three (29.3%) Hispanic residents and one in five Black non-Hispanic (22%), American Indian or Alaska Native (22.9%), or Native Hawaiian or other Pacific Islander (22.4%) residents recorded incomes below the federal poverty level. These patterns stand in dramatic contrast to less than one in 10 (7.8%) White non-Hispanic and one in seven (14.6%) Asian non-Hispanic residents with incomes below the federal poverty level. Some people's housing costs exceed 30% of their income, leaving less money to cover other necessities (MDPH, 2017).

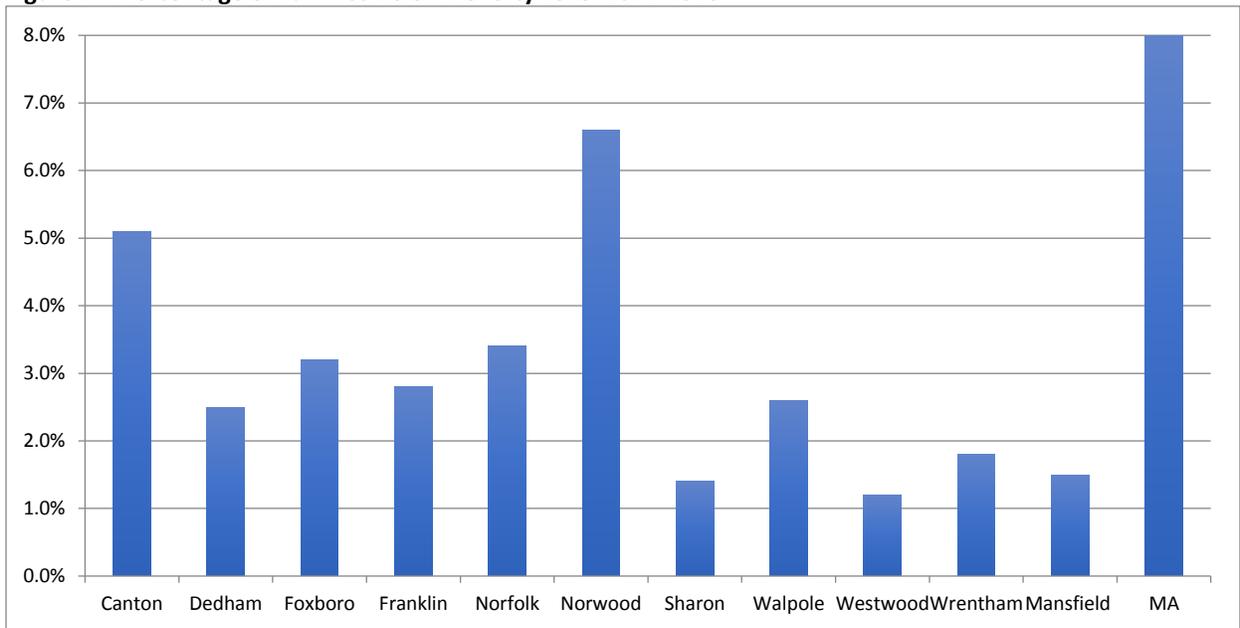
Figure 23: Median Household Income 2012-2016



(Source: US Census Bureau, 2012-2016 American Community Survey 5-Year Estimates)

From 2012 to 2016, the median household income in Massachusetts was \$70,954. Every town in the Norwood Hospital service area had a higher median household income during this same time period and no service area city or town had a median household income of less than \$80,000. The highest median household incomes were seen in Westwood and Norfolk, \$140,355 and \$138,452 respectively. Franklin, Sharon, and Mansfield each had median household incomes greater than \$100,000. The lowest median household income in the Norwood Hospital service area was seen in Norwood at \$83,883.

Figure 24: Percentage of Families Below Poverty Level 2012-2016

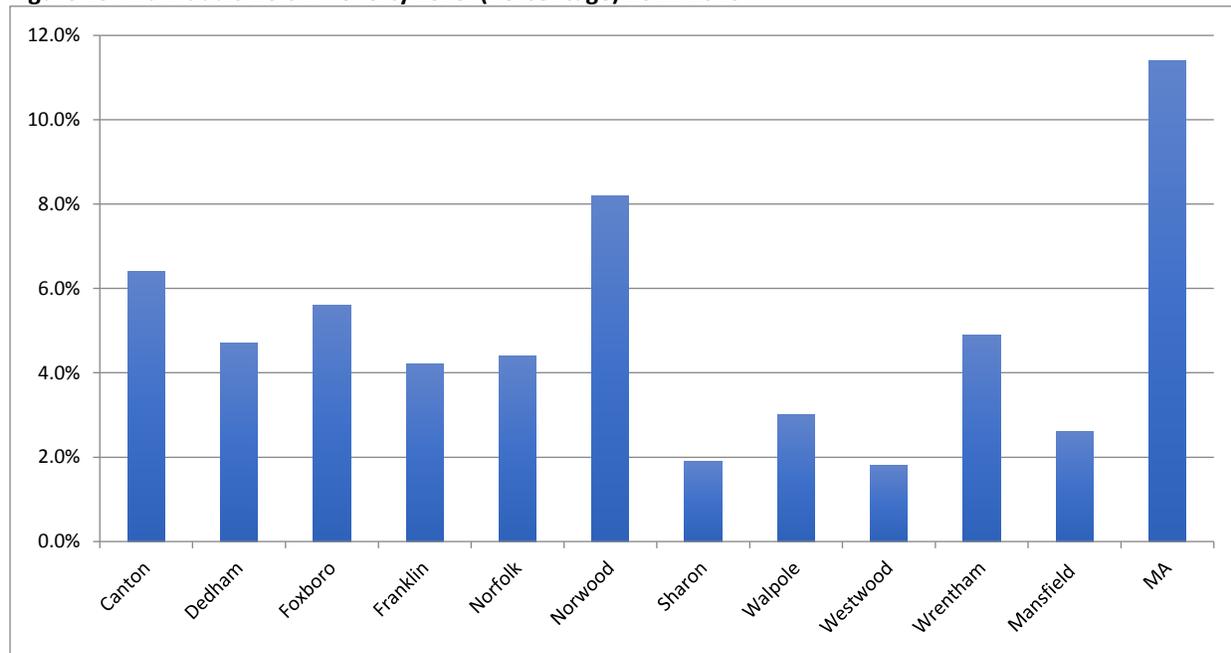


(Source: US Census Bureau, 2012-2016 American Community Survey 5-Year Estimates)

From 2012 to 2016, 8.0% of Massachusetts families were living below poverty level. Every city/town in the Norwood Hospital service area had levels below the state average. Only Canton and Norwood ex-

ceeded (4%) of families living below poverty level with (5.1%) and (6.6%) respectively. The lowest percentage of families living in poverty was seen in Westwood at just (1.2%). Sharon was the next lowest with (1.4%) of families below poverty level.

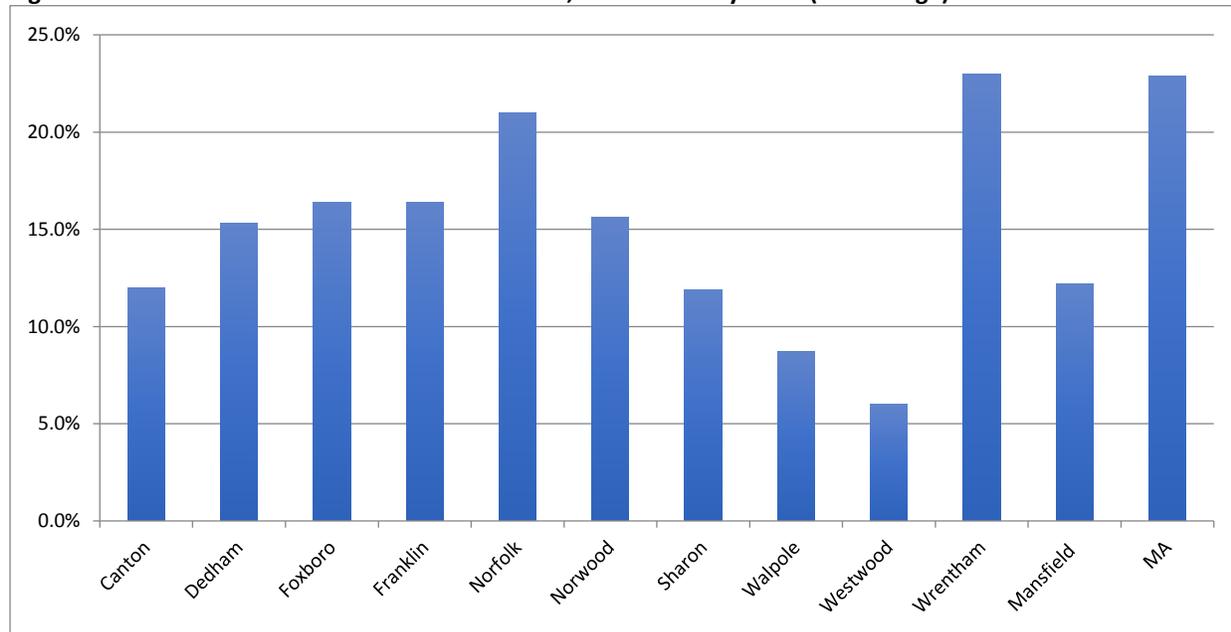
Figure 25: Individuals Below Poverty Level (Percentage) 2012-2016



(Source: US Census Bureau, 2012-2016 American Community Survey 5-Year Estimates)

From 2012 to 2016, an estimated (11.4%) of Massachusetts individuals were below poverty level. No Norwood Hospital service area city/town approached this percentage. Norwood was the only service area city/town that exceeded (8%) of individuals living below poverty level (8.2%). The majority of service area cities/towns experienced less than 6% of individuals below poverty level. The lowest percentages were seen in Westwood and Sharon with just (1.8%) and (1.9%) of individuals living below poverty level.

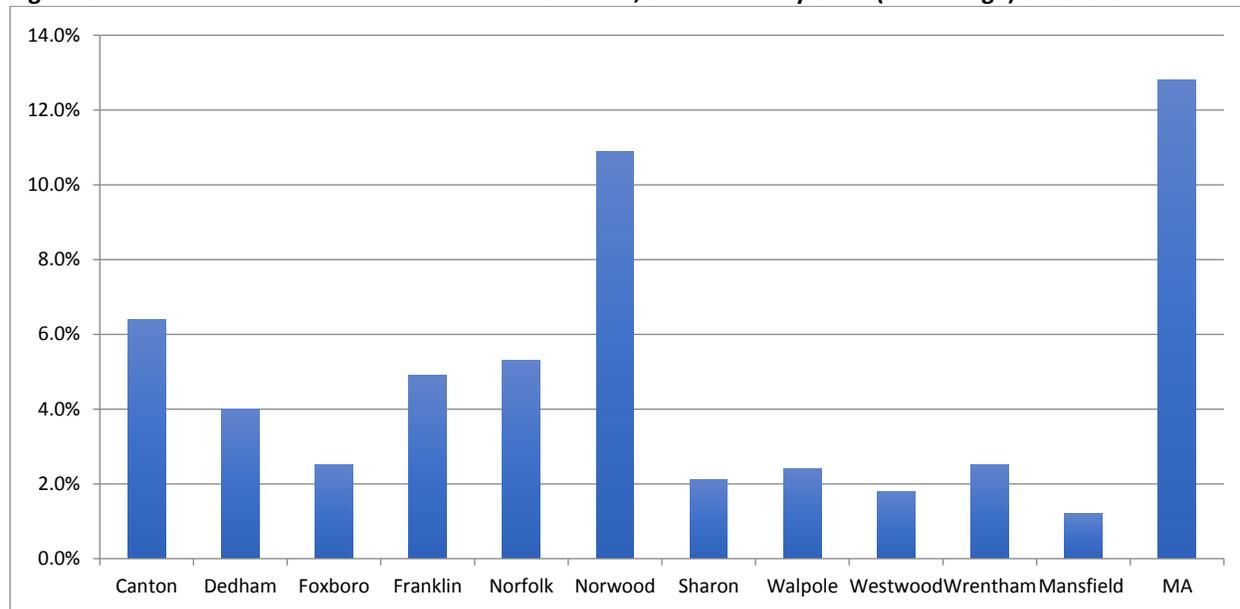
Figure 26: Unrelated Individuals 15 Years and Over, Below Poverty Level (Percentage) 2012-2016



(Source: US Census Bureau, 2012-2016 American Community Survey 5-Year Estimates)

From 2012 to 2016, (22.9%) of unrelated individuals over the age of 15 were below the poverty level in Massachusetts. Wrentham barely exceeded this percentage at (23%). The remaining service area cities/towns exhibited levels of poverty in this group below the state average. Norfolk had the second highest percentage of unrelated individuals over 15 living below poverty level at (21%). The lowest percentage of unrelated individuals over the age of 15 living below poverty level was seen in Westwood at just (6%).

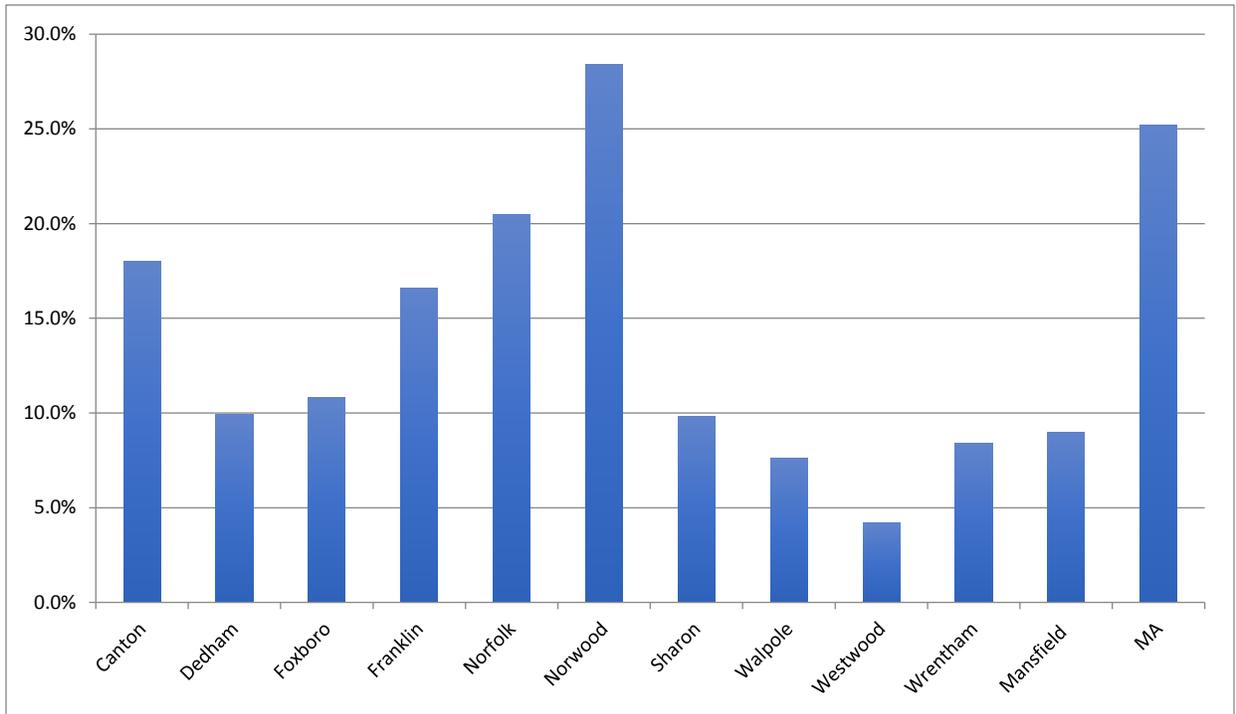
Figure 27: Families with Related Children Under 18 Years, Below Poverty Level (Percentage) 2012-2016



(Source: US Census Bureau, 2012-2016 American Community Survey 5-Year Estimates)

From 2012 to 2016, (12.8%) of families with related children under 18 were below poverty level. No Norwood Hospital service area city/town exceeded this level. Norwood had the highest percentage of these families below poverty level at (10.9%). Of the remaining cities/towns, only Canton exceeded (6%) of these families living below poverty level. The lowest percentage of these families living in poverty was seen in Mansfield at just (1.2%). Foxboro, Sharon, Walpole, Westwood and Wrentham each had (2.5%) or less families with related children under 18 below poverty level.

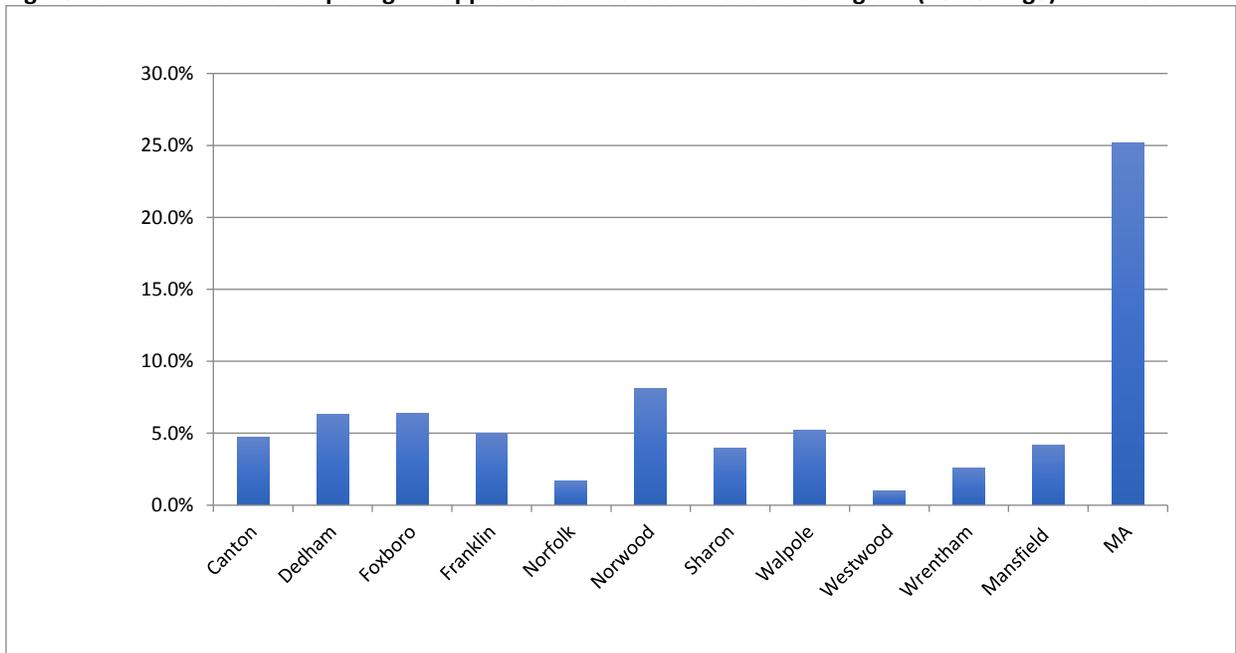
Figure 28: Female HOH Below Poverty Level (Percentage) 2012-2016



(Source: US Census Bureau, 2012-2016 American Community Survey 5-Year Estimates)

From 2012 to 2016, (25.2%) of female head of households were below poverty level. Within the Norwood Hospital service area, only Norwood exceeded this percentage at (28.4%). Norfolk and Canton had the second highest percentage of female head of households below poverty level with (20.5%) and (18%) respectively. The lowest percentage of these households below poverty level was found in Westwood where only (4.2%) of female head of households were living below poverty level. Dedham, Sharon, Wrentham and Mansfield each recorded a percentage less than (10%).

Figure 29: Households Participating in Supplemental Nutrition Assistance Program (Percentage) 2012-2016



(Source: US Census Bureau, 2012-2016 American Community Survey 5-Year Estimates)

From 2012 to 2016, (25.2%) of Massachusetts households participated in SNAP. No town within the Norwood Hospital service area exceeded this percentage. Norwood reported the highest percentage of SNAP

participating households at (8.1%). Foxboro and Dedham followed with (6.4%) and (6.3%) of households participating in SNAP. Just (1%) of families living in Westwood participated in SNAP during this same period of time. Canton, Sharon, Wrentham, and Mansfield each had less than (5%) of all households participating in SNAP.

When asked about the best features of the Norwood Hospital community service area, several respondents cited the affordability of housing as a major positive feature of the community. The focus group did not discuss housing affordability, but rather accessibility. Members of the focus group stated that the waiting list for housing in Norwood is currently 2-3 years, if trends continue this could have serious implications for the Norwood community in the future. The focus group emphasized issues related to homelessness in the community. The focus group stated that the homeless population was underserved. There are no homeless shelters in Norwood, rather the majority of shelters are located in and around Boston. According to the focus group there is a rise in the number of homeless individuals seeking out family in the Norwood community looking for a place to live. The focus group stated a need for mobile/temporary shelters that could be used in case of emergency as well as the need to have Norwood Hospital staff participate in training specific to the needs of the homeless population.

Recommendations

Norwood Hospital is well positioned to partner with community-based organizations and coalitions to address the following key strategic priorities to improve health outcomes and wellness in the region:

1. **Chronic Diseases**
 - a. Cancer
 - b. Heart Disease
 - c. Diabetes
2. **Mental Health**
3. **Substance Use Disorders**
4. **Housing Stability**
 - a. Homelessness

Our data show that race, ethnicity, and socio-economic factors are indicators of health outcomes within the region. This should be taken into consideration when implementing Norwood Hospital's community benefits programs. Norwood Hospital will focus its efforts toward individuals and families in underserved communities who are at the greatest risk of experiencing health inequities due to socio-economic and/or sociodemographic status, lack of access to health and social services, and lack of chronic disease self-management support.

In recognition of the need for further investments in the social determinants of health, as noted in *The Attorney General's Community Benefits Guidelines for Non-Profit Hospitals* released February 2018, GSMC will also consider these six priorities in Community Benefits planning:

- **Built Environment**
 - The built environment encompasses the physical parts of where we live, work, travel and play, including transportation, buildings, streets, and open spaces.
- **Social Environment**
 - The social environment consists of a community's social conditions and cultural dynamics.
- **Housing**
 - Housing includes the development and maintenance of safe, quality, affordable living accommodations for all people.
- **Violence**
 - Violence is the intentional use of physical force or power, threatened or actual, against oneself, another person, or against a group or community, with the behavior likely to cause physical or psychological harm.
- **Education**
 - Education refers to a person's educational attainment – the years or level of overall schooling a person has.
- **Employment**
 - Employment refers to the availability of safe, stable, quality, well-compensated work for all people.

Chronic Disease

Cancer

Cancer is the leading cause of mortality in Massachusetts. Rates of cancer mortality were higher than the state level in five of 11 Norwood Hospital service area communities, overall the hospital service area exhibits a slightly lower percentage of total mortality due to cancer at (21.72%) versus (22.1%) at the state level. Service area communities with cancer mortality rates above the state level include Foxboro, Franklin, Norfolk, Sharon, and Walpole. Sharon had the highest percentage of mortality due to cancer at (26%).

Norwood Hospital already offers several support and educational programs for cancer patients. However, focus group participants and survey respondents stated that they were unaware of these programs or believed that they were inadequate. Norwood Hospital should expand existing program offerings to better serve cancer patients and those in high risk populations. In addition to expanding current offerings, partnerships with national cancer organizations will ensure that cancer education and management practices are current.

Both the focus group participants and survey respondents stated that transportation was a major issue for cancer patients. Aside from the cost of care, lack of access to low cost/free transportation to treatment at Norwood Hospital was a top concern for (64.86%) of survey respondents. Focus group participants brought up the concern that it was actually easier for patients to find low cost/free transportation to Boston hospitals than it was to find similar transportation options to Norwood Hospital. Partnering with a transportation provider would reduce the burden of treatment for cancer patients in the Norwood Hospital service area.

Community-Wide Recommendations

- Pursue partnerships with national cancer organizations like the American Cancer society, use these partnerships to advance education and emotional support initiatives for cancer patients and families
- Pursue partnerships with organizations that provide transportation services to improve accessibility of treatment at local hospitals
- Continue to work with community organizations to better disseminate information related cancer, cancer treatment, and available resources for those effected by cancer in the community

Health System Recommendations

- Continue to offer smoking cessation support groups and consider expanding cessation support groups to include vaping
- Continue to offer free cancer screenings with a focus on bringing in individuals belonging to high risk populations
- Continue to offer and expand cancer related educational programs with a focus on targeting high risk populations
- Continue to offer cancer support groups and “Look Good, Feel Better” workshops, expand reach of these programs
- Develop community partnerships with organizations able to assist in marketing cancer support programs to those most at risk

Cardiovascular Disease

Heart disease is the second leading cause of death in Massachusetts behind cancer. In 2015, heart disease was responsible for (21%) of total mortality in Massachusetts. The Norwood Hospital service area exhibited a higher percentage at (21.52%). Six of the 11 service area communities had higher levels of heart disease mortality than the state average, these include Canton, Dedham, Sharon Walpole, Westwood, and Mansfield.

Multiple lifestyle behaviors are risk factors for heart disease, these include physical activity, nutrition, and smoking/smoke exposure. Hypertension is a chronic cardiovascular condition that is also a risk factor for more severe cardiovascular diseases and acute cardiac incidents. In Massachusetts, a larger percentage of Black non-Hispanic adults were diagnosed with hypertension (39.4%) compared to White non-Hispanic adults (30.7%). Racial/ethnic disparities in rates of hypertension are likely a contributing factor to the similar disparities seen when observing hospitalizations for congestive heart failure, myocardial infarction, and stroke.

Norwood Hospital already offers a number of heart disease related programs, these include free blood pressure monitoring at local YMCA's, smoking cessation support groups and community engagement and education. The hospital should continue these offerings while making an effort to specifically target high risk and underserved populations. Partnerships with faith and community-based organizations such as senior housing authority, or the like, may help this effort. Norwood Hospital should also pursue partnerships with national heart disease organizations to ensure that educational offerings and intervention programs to be used are the most current evidence-based methods. A heart disease management program would also assist community members in learning how to manage their disease, prevent disease progression, and improve quality of life.

Community-Wide Recommendations

- Pursue partnerships with national organizations like the American Heart Association, use these partnerships to enhance and expand community engagement programs covering cardiovascular disease prevention and management.
- Partner with community organizations in underserved populations and in those with a disproportionately high incidence and mortality due to cardiovascular disease to offer cardiovascular disease education and prevention programs

Health System Recommendations

- Bring free blood pressure screening programs to underserved communities and those with disproportionately high incidence and mortality due to cardiovascular disease
- Participate in community and faith-based heart health and stroke awareness campaigns
- Continue to offer blood pressure monitoring at the YMCA
- Continue to offer and expand smoking cessation support groups
- Continue to engage the community with cardiovascular disease related educational offerings

Diabetes

The prevalence of diabetes is projected to increase dramatically over the coming years. By 2030, it is projected that the prevalence of type 1 diabetes and type 2 diabetes will increase by (54%), affecting 54.9 million Americans. In 2015, an estimated (8.9%) of Massachusetts residents had been diagnosed with diabetes. However racial/ethnic disparities exist in diabetes prevalence and mortality. In 2015, a greater proportion of Black non-Hispanic (12.3%) and Hispanic (11.7%) adults reported being diagnosed with diabetes compared to White non-Hispanic adults (8.7%). In 2014, Black non-Hispanic residents were more than 2.1 times more likely to die from diabetes than White non-Hispanic residents (29.5 versus 13.8 per 100,000 population).

Socioeconomic disparities exist in diabetes prevalence. In Massachusetts, adults with an annual household income of less than \$25,000 (15.6%) have three times the prevalence of diabetes compared to those with an annual household income greater than \$75,000. Similar trends are seen between diabetes and educational attainment. A total of (14.5%) of adults without a high school degree were diagnosed with diabetes compared to (5%) of adults with four or more years of post-high school education. In 2015, (2.40%) of all mortality in Massachusetts was due to diabetes. The Norwood Hospital service area had a slightly higher percentage of mortality due to diabetes at (2.57%). Survey respondents rated diabetes as a top 3 health concern for the Norwood Hospital community (9.46%).

There are healthy aging coalitions within the Norwood Hospital service area, these groups have programs for diabetes management and prevention. However, focus group participants stated that these meetings draw low attendance and occasionally have to be cancelled due to this low attendance. These coalitions should work with the community to better schedule these meetings to align with the schedules of potential participants. The Diabetes Prevention Program offered by the YMCA is effective, but there is an economic barrier to attend. The hospital may consider working with the YMCA to reduce or eliminate this cost for participants in high risk or underserved populations. Alternatively, the Hospital could develop their own lifestyle behavior intervention and education offerings for the service area community. Norwood Hospital should also continue to offer their diabetes support group, while specifically targeting individuals in high risk and underserved populations.

Community-Wide Recommendations

- Pursue partnerships with the American Diabetes Association (ADA) and/or other diabetes education and prevention organizations in the community to advance disease prevention and management
- Continue to offer Diabetes Prevention Program at the YMCA, work with YMCA to reduce cost of program

Health System Recommendations

- Offer free nutrition and wellness educational programs through the Nutrition and Wellness Clinic at Norwood Hospital
- Continue to offer diabetes support group, improve reach and target high risk/underserved populations
- Continue to engage the community with diabetes related educational offerings

Mental Health

Mental health intersects with many areas of public health, including addiction, cancer, cardiovascular disease, and HIV/AIDS. Increasing awareness and building capacity in service systems are important in helping identify and treat co-occurring disorders (MDPH, 2017).

Mental health impacts the overall health of individuals of all ages. Interventions addressing social and emotional risk factors can greatly improve outcomes for children and adolescents. The impact of depression and other mental disorders on overall health in older adults can be severe. Current research has found that depression is associated with worse health outcomes in people with conditions like heart disease, diabetes, and stroke. Undiagnosed, untreated, or undertreated co-occurring disorders can lead to a higher likelihood of experiencing negative outcomes, such as homelessness, incarceration, medical illnesses, suicide, or even early death (SAMHSA, 2016).

Mental health was a top three health concern among focus group participants and was the number one health concern of survey respondents (67.57%). Survey respondents also indicated that those with a mental illness were the number one underserved population, this was supported by focus group. Both the focus group and survey responses stated that the Norwood community is doing a good job increasing access to mental illness treatment and reducing the stigma associated with mental illness.

Community-Wide Recommendations

- Develop partnerships with organization such as the National Alliance on Mental Illness (NAMI) to create community-based strategies that create a conversation on the prevalence of Mental Illness
- Promote mental illness awareness and access to treatment to decrease stigma surrounding mental illness

Health System Recommendations

- Engage community-based service providers to learn of and promote services that may be available to community members in need of services
- Implement strategic partnerships with community organizations that are able to provide services to community members, particularly high priority populations
- Collaborate with health and human service organizations to develop a comprehensive care plan that would be accessible to providers at all points of care
- Continue to offer free “Family Connections” course
- Continue to offer NAMI support groups

Substance Use

From 2013 to 2017, Dedham and Norwood had the highest count of admissions to DPH-funded substance and alcohol abuse programs with 1,777 and 1,601 admissions respectively. While Dedham and Norwood had the highest counts, there was a downward trend in annual admissions in these towns and within the entire Norwood Hospital Service area. In 2013, there were 1,906 total admissions to DPH Programs in the Norwood Hospital service area. This number has decreased each year and in 2017 there were 1,550 admissions to these programs in the Norwood Hospital service area.

Substance abuse was the second greatest health concern of survey participants (66.22%), second only to mental illness (67.57%). The focus group also cited substance abuse as a top concern. The focus group found those with an existing or previous substance abuse disorder to be underserved in the Norwood community. According to the focus group, there have been improvements on substance abuse issues by working with schools and law enforcement agencies, although they believed that further cooperation among the hospital and local police could lead to further improvements. Opioids and vaping were of particular concern among focus group participants, both survey and focus group participants cited the need for more education and intervention programs to help decrease the prevalence of these issues.

Norwood hospital currently offers support groups for substance abuse patients and caregivers. The hospital could consider implementing substance abuse prevention measures, including education, screenings, and awareness initiatives to further reduce the prevalence of substance abuse. Norwood Hospital could also partner with community-based organizations and schools to promote SBIRT and substance abuse awareness in service area communities, especially in underserved and high-risk communities.

Community-Wide Recommendations

- Promote substance use awareness, prevention and access to treatment, especially in underserved and high-risk populations
- Support community-based substance abuse prevention programs

Health System Recommendations

- Promote best practices in substance use disorder treatment across the continuum of care
 - Engage community-based service providers to learn of and promote services that may be available to community members in need of services
 - Continue collaborations and expand access to support groups for patients and caregivers
-

Housing Stability

Homeless individuals are at a heightened risk of developing chronic and acute health conditions. The homeless are also at a heightened risk of developing a mental illness, substance abuse disorder, and in some cases co-occurring substance and mental health disorders.

The focus group emphasized issues related to homelessness in the community. The focus group stated that the homeless population was underserved in the Norwood community as there are no homeless shelters in Norwood. According to the focus group there is a rise in the number of individuals “showing up at family member’s doorsteps looking for a place to live”.

Norwood Hospital should seek out partnerships with local and national organizations to promote housing stability and establish protocols for emergency shelters in the case of an emergency. The hospital could also work to develop health education initiatives targeting low income and homeless individuals and families.

Community-Wide Recommendations

- Partner with organizations seeking to expand affordable housing for individuals and families below poverty level
- Pursue partnerships with Norwood housing authority and other community-based organizations to promote housing stability

Health System Recommendations

- Where possible, consider screening patients for housing stability prior to hospital discharge and seek ways to identify social support programs able to assist patients with housing instability
- Consider a partnership with Boston Medical Legal Partnership to offer support to the high priority cases
- Create educational programs on healthy lifestyle habits tailored to low income individuals and families

Homelessness

Community-Wide Recommendations

- Pursue partnerships with organizations, such as housing authorities and local shelters, working to prevent homelessness and expand housing options for homeless individuals and families
- Pursue partnerships with organizations such as the Red Cross to establish support and volunteer opportunities for emergency shelter plans for homeless individuals in case of emergency events

Health System Recommendations

- Partner with local organizations that offer psycho/social support to homeless populations within the service area to offer support
- Provide support to local shelters and housing boards working to prevent homelessness

Underserved Populations

Race, gender identity, age, disability status, etc. influences the social environment that individuals experience. The social environment impacts many mental and physical health outcomes, including: mental health, violence, risk behaviors (tobacco and drug use), physical health and well-being, and disease morbidity and mortality. Individuals are influenced by the social environment on three levels: interpersonal, community, and society (MDPH, 2017). Across all three levels, systems of oppression such as structural racism and gender bias lead to social isolation, social exclusion, poor mental health, increased risk of violence, increased rates of poverty, higher hospitalizations, longer recovery times, and higher mortality rates for many conditions. (Hobson-Prater & Leech, 2012).

Certain underserved communities are not highly represented in the Norwood Hospital service area. Communities in the service area tend to be more homogenous than the state as a whole. Service area communities also tended to have a smaller uninsured population than the state average, with the exception of Norwood (3.50% uninsured compared to 3.20% uninsured at state level). Focus group and survey participants stated that they believed those with a mental illness and the homeless were the most underserved communities in the hospital service area.

In order to better serve underserved populations, Norwood hospital should target initiatives towards these populations. Despite the smaller proportions of underserved communities in the service area, these groups should not be forgotten. Norwood Hospital can broadly support underserved communities by supporting health care reform, working to remove barriers to treatment, and promoting public health insurance options to the uninsured. These actions will reduce barriers to treatment experienced by underserved populations.

Community-Wide Recommendations

- Identify civic associations and/or churches that provide support to underserved communities and partner with such organizations to offer support in removing barriers to care
- Advocate at the municipal and state level for public policies that alleviate the social burdens on underserved communities

Health System Recommendations

- Provide assistance to community members seeking to apply for public health insurance coverage provided through MassHealth
- Maintain and continue to grow the partnership with health care networks that are able to offer care coordination and access to social supports to patients post hospital discharge
- Ensure members of the underserved population are assisted in identifying a primary care provider
- Promote the expansion of medical training programs so as to grow the number of medical providers that can assist in providing high quality care to those that are underserved due to language barriers or cultural differences

Limitations

Data collected for analysis was derived from publicly accessible, governmental sources. Some data sources lacked information on certain towns. Data presented in this report is the most recently available at the time of the creation of this report. As such, some of the relative changes, though classified as increases or decreases, are qualitative valuations relative to state values. Though it would have been preferable to have more recent data with statistical evaluation for significance (p value) and correlation (r value), we were limited to currently available datasets.

In previous versions of this CHNA, data had been collected through use of the Massachusetts Community Health Information Profile (MassCHIP). However, at the time of data collection for this CHNA, this resource was unavailable to researchers. Researchers instead relied on datasets provided by the Accreditation Coordinator/Director MassCHIP, Office of the Commissioner, Massachusetts Department of Public Health and guidance provided by the same in order to collect data used to compile this CHNA.

Although the community focus group provide valuable information, serving as important tools for data collection and community engagement, there are some limitations to consider. Focus group data is qualitative in nature and reflect only the views and opinions of a small sample. Focus groups are limited to the views and opinions of the participants and are not all-inclusive of the various perspectives of the larger populations; they do not constitute complete data for the communities in which focus groups were held. There was only one focus group conducted in the Norwood Hospital service area. This focus group was majority white (81%) and female (77%). Greater diversity of focus group participants would have been advantageous.

Though the intent of this project was to capture the views and opinions of all or most health and human service providers within the Norwood Hospital service area, there were also limitations to the survey distribution. The survey was distributed via email by the CHNAs that encompass cities and towns in the Norwood Hospital service area, to be circulated to its membership. Not all health and human service providers within the service area are members of CHNAs, some may have been excluded due to a lack of access to computer-based technology. Some providers had a longer period of time to access and respond to the survey as the survey distribution was ultimately at the control and discretion of the Norwood Hospital staff and the respective CHNA leadership. Furthermore, the survey was distributed via the Norwood Hospital Facebook page thereby an inherent bias may be present as primarily individuals with access to internet and knowledgeable of the Norwood Hospital Facebook page, would be likely to access the survey and respond. In total, 350 individuals were emailed the survey, and the number who had the ability to access the survey via Facebook is unknown. Overall, 75 individuals responded to the survey (20%). Additionally, the sample of service providers many not accurately represent the larger provider population.

Appendix A.

Supplemental Health Indicators and Demographic Data

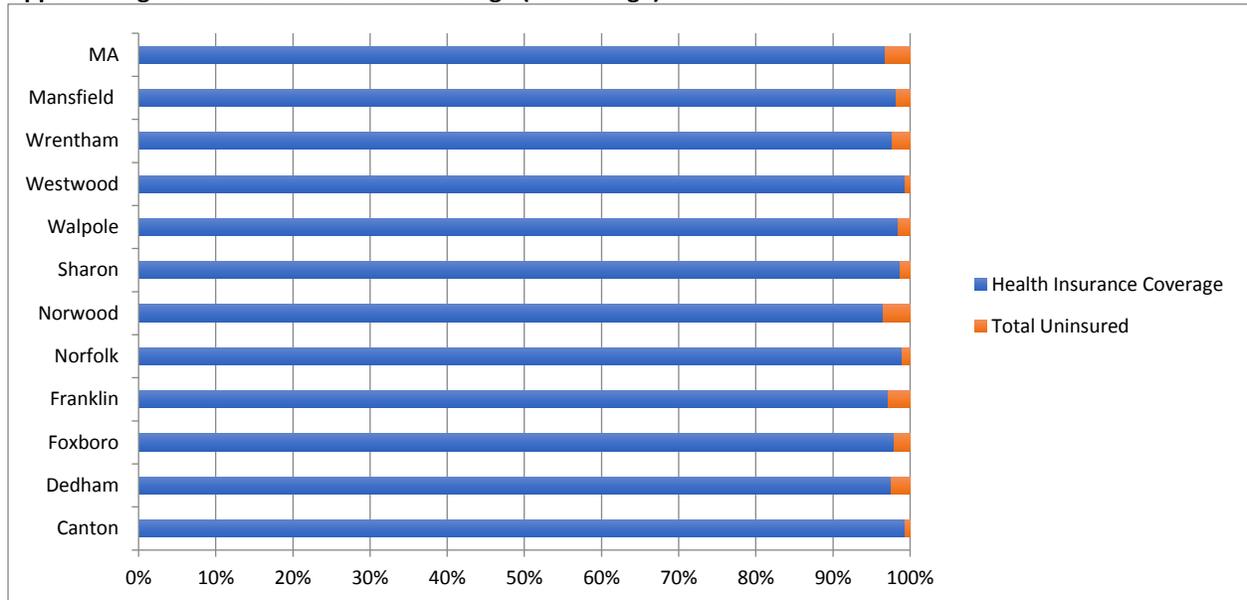
Health Indicators

Appendix Table 1: Health Insurance Coverage (Percentage) 2012-2016

	Health Insurance Coverage	Total Uninsured	Health Insurance (Privately Insured)	Health Insurance (Publicly Insured)	Uninsured Children (<18)
Canton	99.30%	0.70%	85.70%	27.40%	0.00%
Dedham	97.60%	2.40%	81.70%	31.20%	0.60%
Foxboro	97.90%	2.10%	84.40%	26.90%	0.20%
Franklin	97.20%	2.80%	73.90%	41.70%	1.20%
Norfolk	98.90%	1.10%	94.60%	15.50%	0.00%
Norwood	96.50%	3.50%	80.60%	30.40%	3.60%
Sharon	98.70%	1.30%	86.20%	22.60%	0.20%
Walpole	98.50%	1.50%	87.10%	25.30%	1.00%
Westwood	99.30%	0.70%	85.70%	27.40%	0.00%
Wrentham	97.70%	2.30%	87.10%	20.30%	1.80%
Mansfield	98.20%	1.80%	90.40%	18.00%	0.80%
MA	96.80%	3.20%	74.30%	35.00%	1.30%

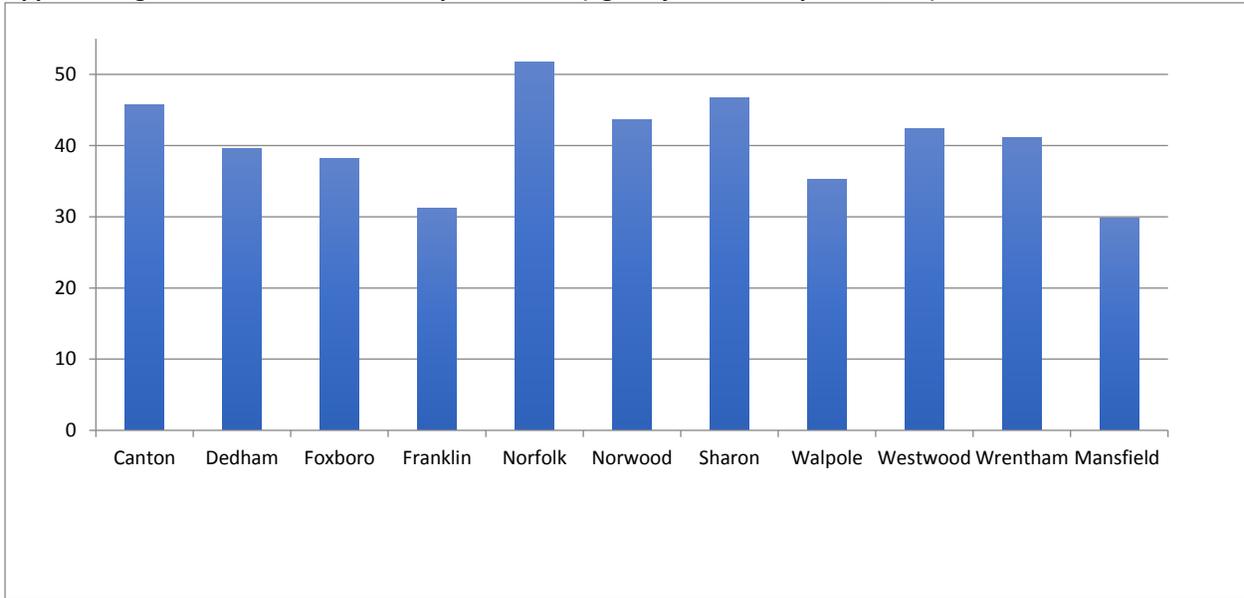
(Source: US Census Bureau, 2012-2016 American Community Survey 5-Year Estimates)

Appendix Figure 1: Health Insurance Coverage (Percentage) 2012-2016



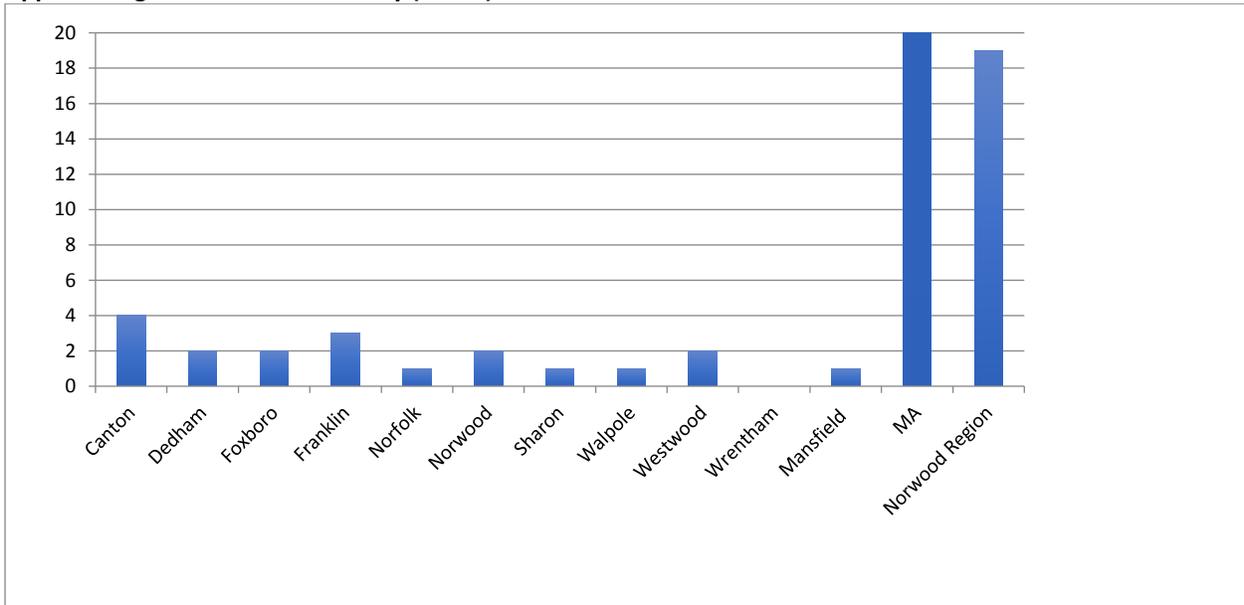
(Source: US Census Bureau, 2012-2016 American Community Survey 5-Year Estimates)

Appendix Figure 2: Asthma Related Hospitalizations (age-adjusted rates per 100,000) 2013



(SOURCE: Massachusetts Department of Public Health)

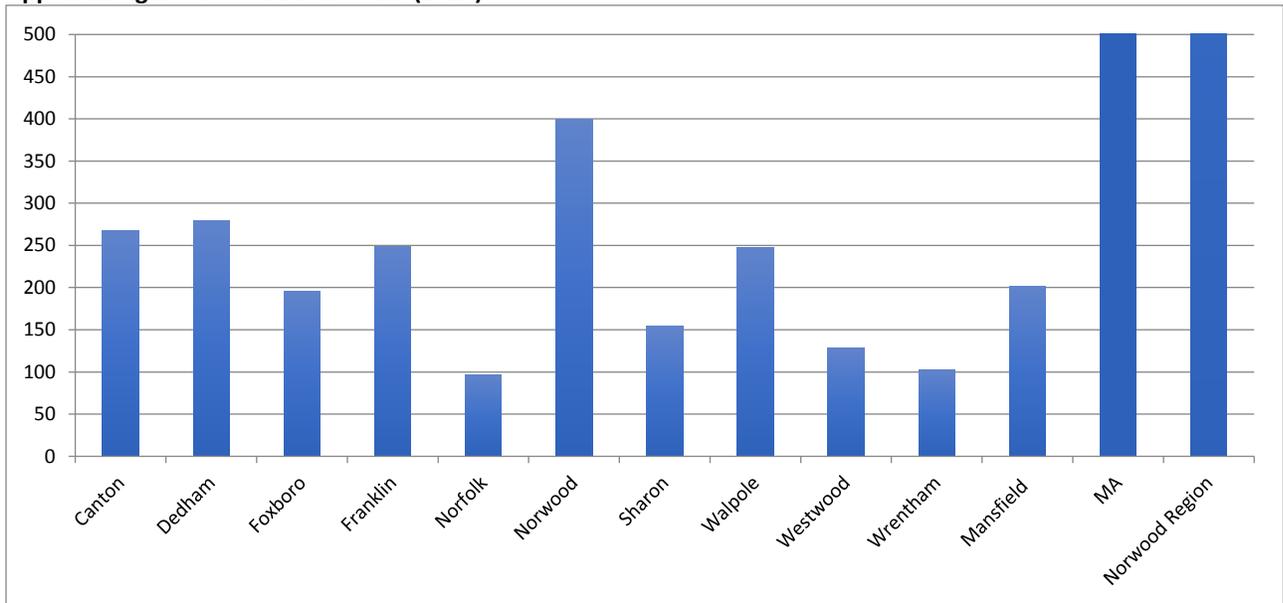
Appendix Figure 3: Suicide Mortality (Count) 2015



(SOURCE: Massachusetts Department of Public Health)

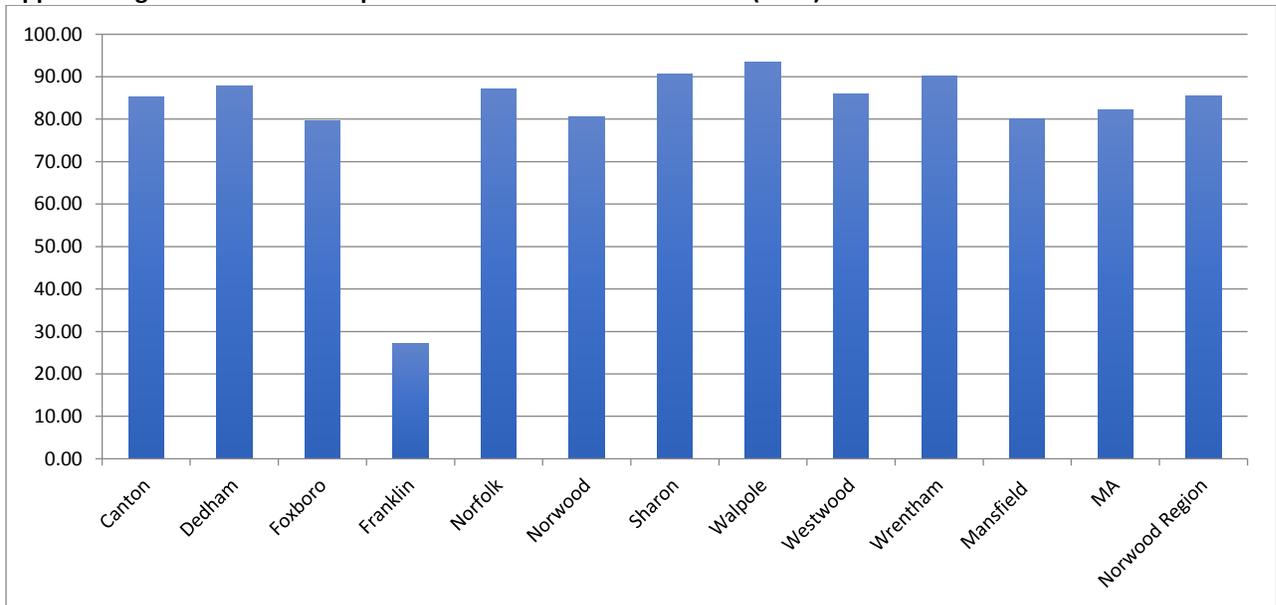
Reproductive and Sexual Health

Appendix Figure 4: Total Birth Count (2015)



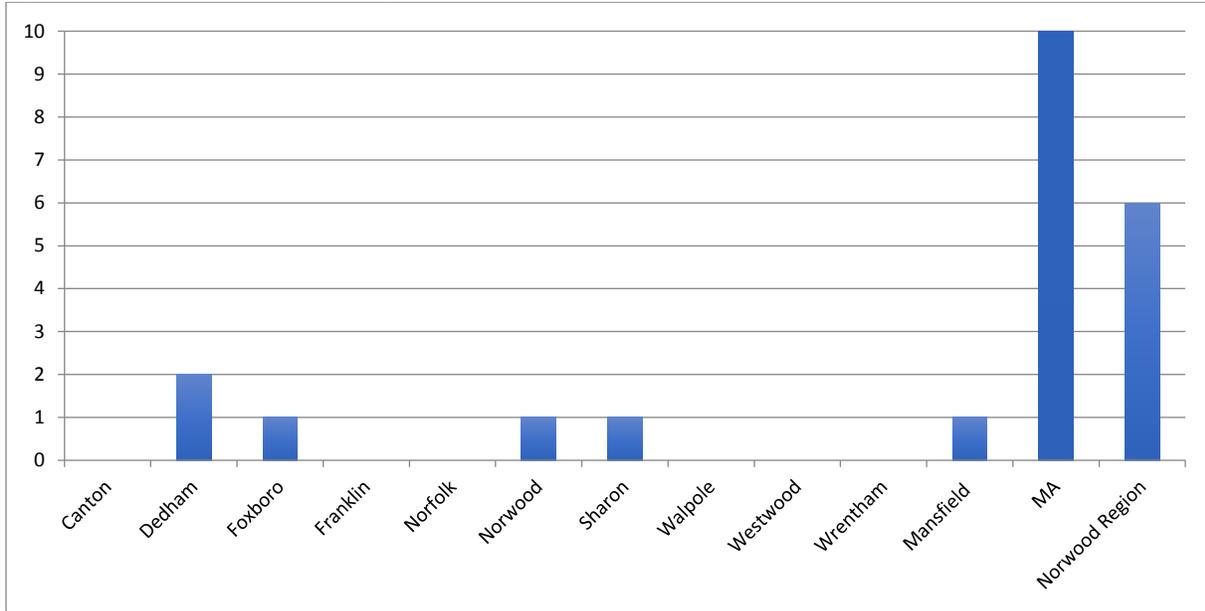
(Source: Massachusetts Department of Public Health)

Appendix Figure 5: Percent Adequate Prenatal Care - Kessner Index (2015)



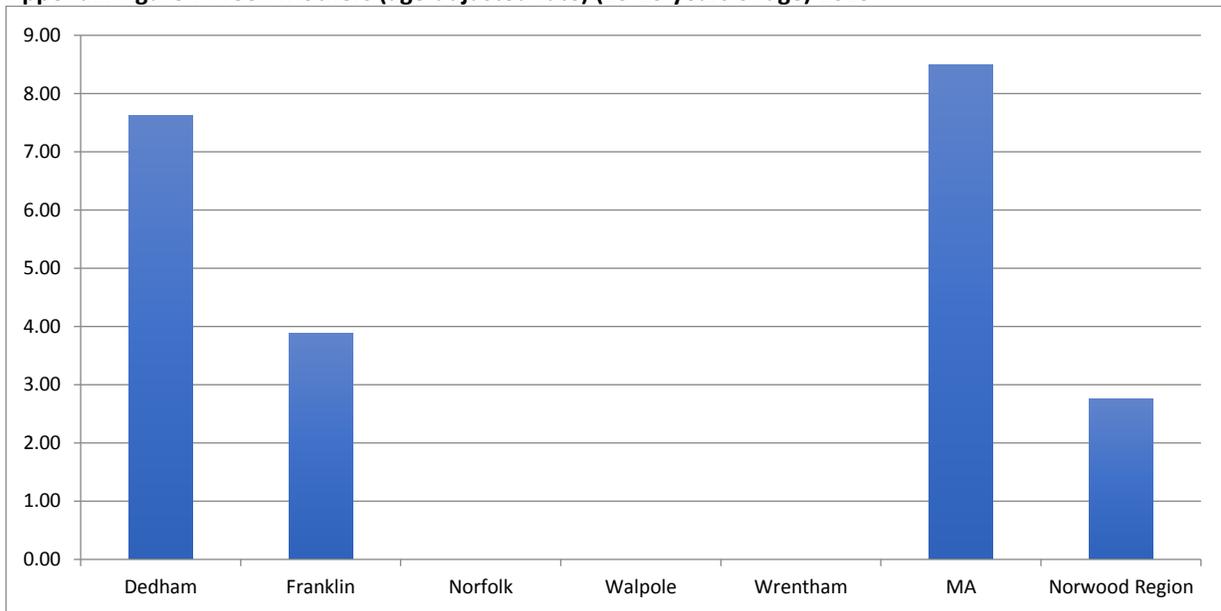
(Source: Massachusetts Department of Public Health)

Appendix Figure 6: Infant Mortality Count - 2015



(Source: Massachusetts Department of Public Health) Note: 310 Infant deaths were reported in Massachusetts 2015 – a rate of 4.30 per 100,000

Appendix Figure 7: Teen Mothers (age-adjusted rate) (15-19 years of age) 2015



(Source: Massachusetts Department of Public Health) Note: Data unavailable for Canton, Foxboro, Norwood, Sharon, Westwood and Mansfield

Appendix Table 2: Chlamydia, Gonorrhea, and Syphilis Case Count – 2017

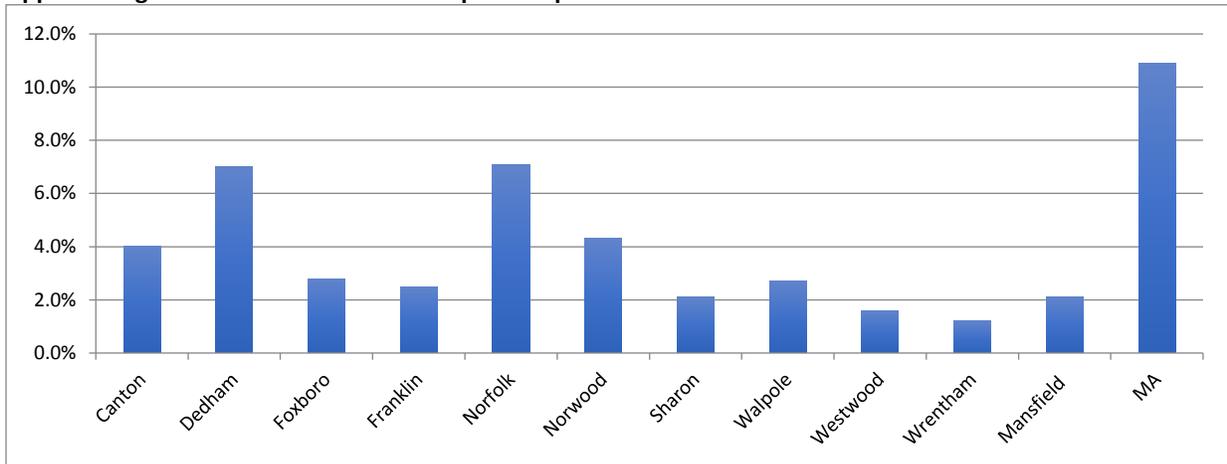
	Chlamydia	Gonorrhea	Syphilis
MA	29,247	7,308	1,086
Norwood Region	518	78	10

(Source: Massachusetts Department of Public Health)

Demographic Data

Social

Appendix Figure 8: Distribution of the Hispanic Population – 2012-2016



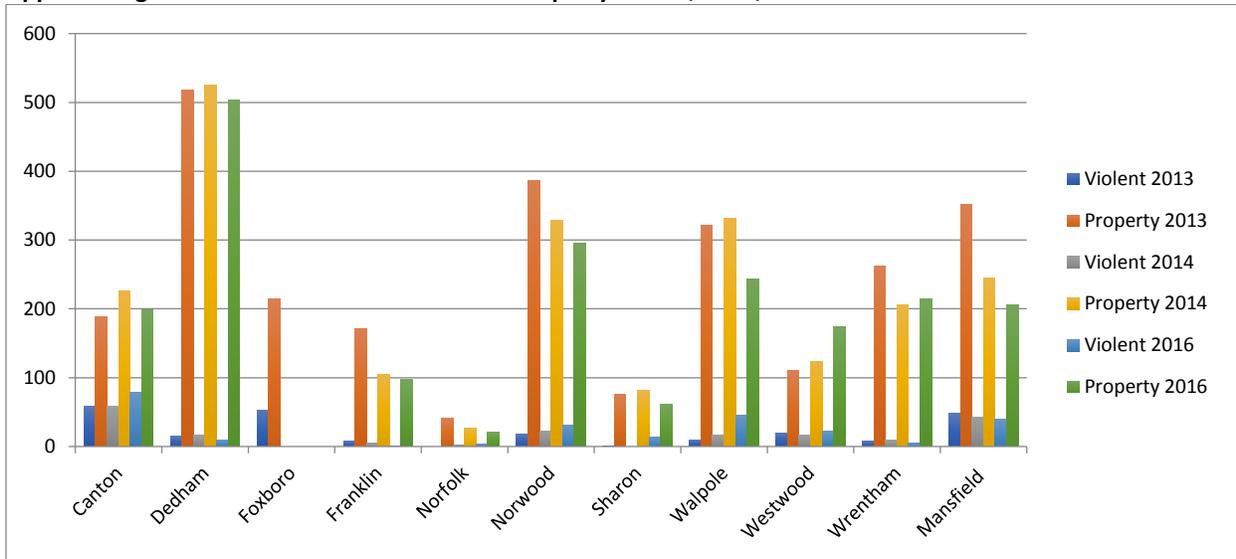
(Source: US Census Bureau, 2012-2016 American Community Survey 5-Year Estimates)

Appendix Table 3: Homicide Mortality Count – 2013-2016

	2013	2014	2016
Canton	0	0	0
Dedham	0	0	1
Foxboro	NA	NA	NA
Franklin	0	0	0
Norfolk	0	0	0
Norwood	0	1	1
Sharon	0	0	0
Walpole	0	0	0
Westwood	0	0	0
Wrentham	0	0	0
Mansfield	0	0	0
MA	138	132	58
Norwood Region	NA	NA	NA

(Source: US Department of Justice)

Appendix Figure 9: Crime Count – Violent and Property – 2013, 2014, 2016



(Source: US Department of Justice)

Education

Appendix Table 4: High School Graduation Rates (Percentage) 2012-2016

	2012	2013	2014	2015	2016
Canton	96.8%	91.5%	95.7%	94.8%	94.9%
Dedham	88.3%	89.8%	91.8%	87.8%	91.7%
Foxboro	89.7%	97.2%	91.6%	96.4%	95.2%
Franklin	92.8%	82.7%	96.3%	96.5%	95.7%
Norfolk	97.1%	100.0%	95.7%	97.1%	100.0%
Norwood	88.7%	92.3%	85.7%	90.9%	93.1%
Sharon	95.1%	96.8%	95.5%	95.7%	94.6%
Walpole	94.1%	97.4%	94.1%	95.1%	95.0%
Westwood	96.0%	96.4%	99.1%	96.1%	97.6%
Mansfield	95.3%	93.0%	95.3%	95.3%	97.5%
MA	84.7%	85.0%	86.1%	87.3%	87.5%
Wrentham	N/A	N/A	N/A	N/A	N/A

(Source: MA Dept. of Elementary and Secondary Education, 2018, Enrollment by Race/Gender Report- DISTRICT)

Appendix Table 5: High School Drop Out Rates (Percentage) 2012-2016

	2012	2013	2014	2015	2016
Canton	0.0%	4.5%	3.3%	0.9%	2.2%
Dedham	4.9%	4.9%	2.2%	4.8%	2.6%
Foxboro	0.0%	0.9%	3.0%	0.9%	0.9%
Franklin	0.9%	0.6%	0.4%	0.2%	0.9%
Norfolk	0.0%	0.0%	0.0%	1.0%	0.0%
Norwood	4.2%	3.7%	4.4%	2.9%	3.6%
Sharon	0.4%	0.3%	1.3%	0.0%	1.2%
Walpole	0.8%	0.4%	2.1%	1.0%	1.0%
Westwood	0.9%	0.9%	0.0%	0.4%	0.0%
Mansfield	3.2%	1.9%	3.4%	1.2%	0.9%
MA	2.5%	2.2%	2.0%	1.9%	1.9%
Wrentham	N/A	N/A	N/A	N/A	N/A

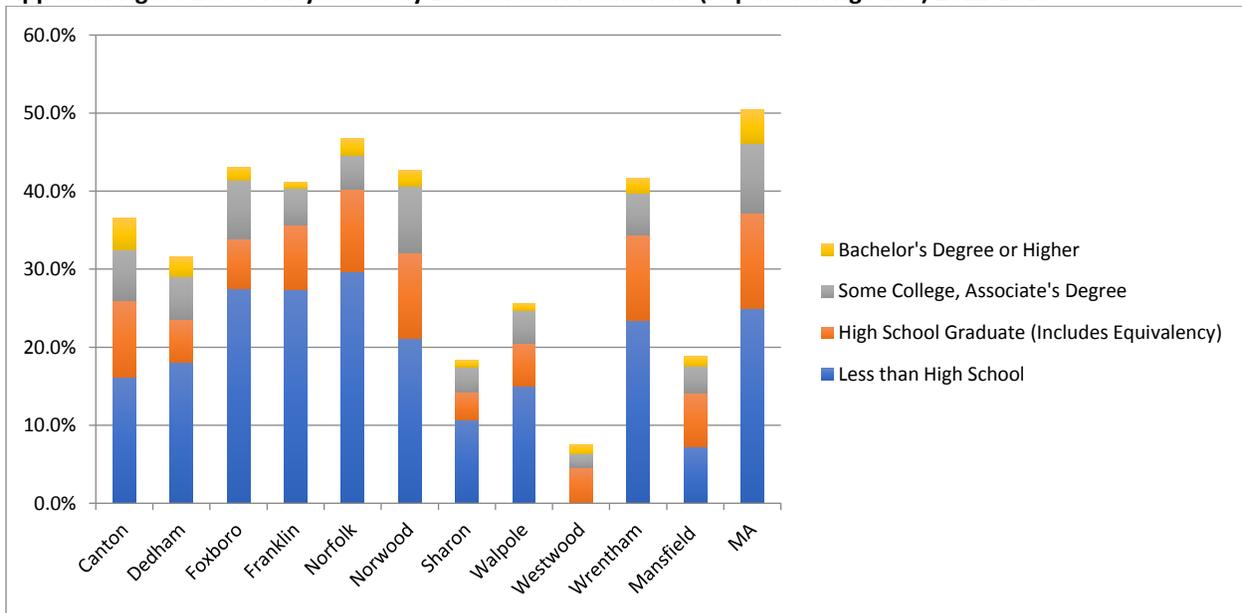
Appendix Table 6: Highest Educational Attainment (Population Age 25+) – 2012-2016

	Less than 9th Grade	9th to 12th Grade No Diploma	High School Graduate (Includes Equivalency)	Some College No Degree	Associate's Degree	Bachelor's Degree	Graduate/Professional Degree
Canton	1.3%	1.9%	17.1%	16.9%	8.1%	31.6%	23.2%
Dedham	2.5%	3.7%	24.5%	15.1%	6.7%	27.3%	20.3%
Foxboro	1.4%	3.7%	20.9%	19.0%	8.9%	30.5%	15.6%
Franklin	1.2%	2.9%	18.5%	14.7%	8.3%	33.3%	21.1%
Norfolk	2.7%	3.5%	20.9%	14.2%	7.6%	28.1%	23.1%
Norwood	2.9%	3.1%	25.3%	15.2%	7.9%	29.4%	16.1%
Sharon	1.3%	1.4%	8.4%	10.7%	5.0%	32.0%	41.2%
Walpole	3.8%	3.0%	20.2%	14.8%	7.8%	30.7%	19.8%
Westwood	1.0%	2.3%	13.2%	8.7%	6.4%	33.5%	34.8%
Wrentham	0.2%	2.3%	23.5%	14.5%	11.8%	30.7%	17.0%
Mansfield	0.9%	1.8%	18.6%	16.4%	8.6%	31.6%	22.1%
MA	4.7%	5.3%	25.1%	16.0%	7.7%	23.1%	18.2%

(Source: US Census Bureau, 2012-2016 American Community Survey 5-Year Estimates)

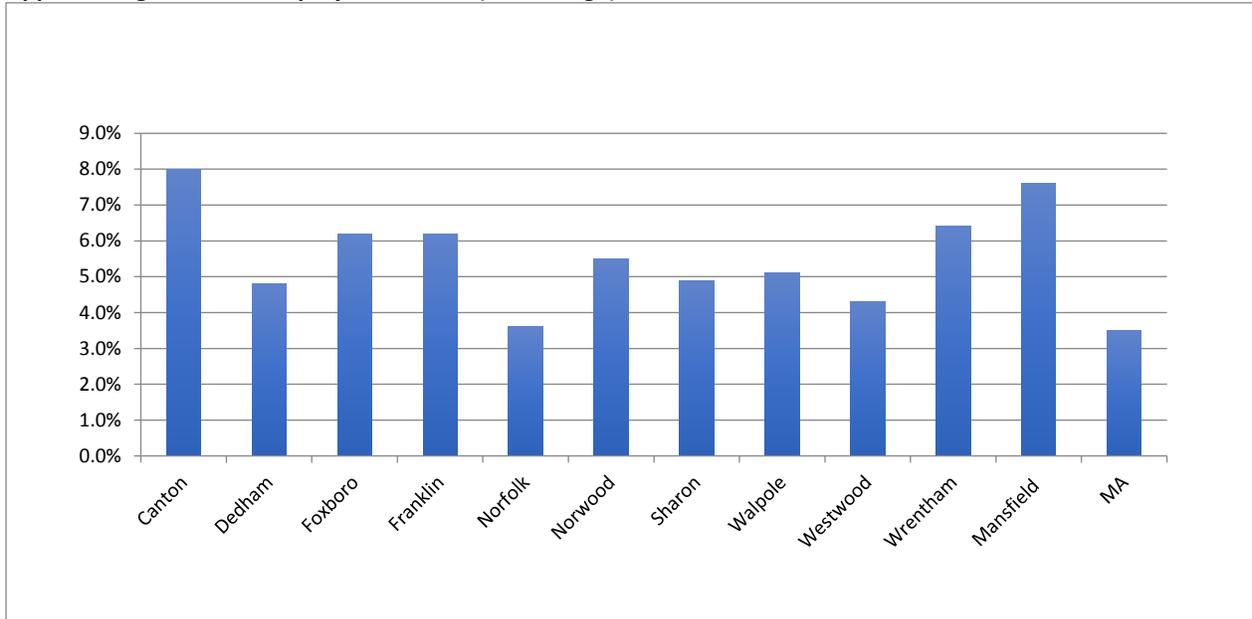
Economics

Appendix Figure 10: Poverty Status by Educational Attainment (Population Age 25+) 2012-2016



(Source: US Census Bureau, 2012-2016 American Community)

Appendix Figure 11: Unemployment Rates (Percentage) 2018



(Source: US Census Bureau, 2012-2016 American Community)

Appendix B. Key Informant Survey

*Community Health Needs Assessment- Key Informant Survey**

Introduction:

Norwood Hospital is conducting a Community Health Needs Assessment to identify primary health concerns in our community. (Norwood Hospital's community service area includes Attleboro, Canton, Dedham, Dover, Foxboro, Franklin, Mansfield, Medfield, Medway, Millis, Norfolk, North Attleboro, Norfolk, Norton, Norwood, Sharon, Stoughton, Walpole, Westwood and Wrentham.) As part of this process, we are inviting you to participate in a survey about the health of the community. The survey will take less than 4 minutes to complete. Please be assured that your responses will remain anonymous.

Survey results, and other data gathered, will be analyzed by the hospital and used to develop a three-year plan aimed at addressing our community's most critical health issues. The Community Health Needs Assessment will be completed by January 2019 and made available on www.Norwood-Hospital.org.

Thank you

Survey Questions:

1. What is your current age?
2. What is your gender?
3. Which group below most accurately describes your racial background? (check all that apply)
4. What is your highest grade in school, year in college or post-college degree work you've completed?
5. Describe the organization for which you work that provides services in Norwood Hospital's community service area
6. Do you live in Norwood Hospital's community service area?
7. What are the top 3 best features overall about the Norwood Hospital community service area?
8. In the following list, what do you think are the 3 most important factors for a "healthy community"? (Those factors which most improve the quality of life in a community.)
9. In the following list, what do you think are the 3 most important "health problems" in our community? (Those problems which have the greatest impact on overall community health.)
10. What do the people in the community do to stay physically and emotionally healthy? (check all that apply)
11. From where do you think people in the community get their healthcare information? (Check all that apply)
12. Where do the people in the community primarily go for their healthcare needs?
13. What are the top 3 obstacles that prevent people in this community from accessing healthcare?
14. What are the top 3 populations that you identify as underserved/underrepresented in this community?
15. What are the top 3 concerns for cancer patients?
16. Are there resources and support systems (free or low cost) readily available to address these concerns for cancer patients in this community? (e.g., job loss, housing, insurance issues, transportation, etc.)
17. In what ways is Norwood Hospital servicing the community well
18. What can Norwood Hospital do to improve the healthcare in the community it serves?
19. Are there any other healthcare concerns that you would like to address?

** For a complete copy of aggregated survey responses contact Norwood Hospital*

Appendix C. Focus Group Questions

*Focus Group Questions**

1. Is there a sense of community where you live/work? Why or why not?
 - a. What do you like most about living / working in this community?
 - b. What are your concerns about living / working in this community?
2. What is healthy about the community?
3. What kinds of health and human services are easily accessible in the community?
4. What kinds of health and human services do you feel are missing and would be beneficial in the community?
5. What are the top health concerns (no more than 3) within the community?
 - a. What are some strategies that could address these concerns?
6. What populations would you identify as underserved or underrepresented within the community? (elderly, low income, mentally ill, disabled, ESL)
7. What do you feel are the biggest obstacles to health access for your community? (language, insurance, financial)
8. Is behavioral health a major issue within your community (including Alzheimer's and Dementia)?
9. Is substance abuse a major health issue within your community?
10. How is chronic disease (health issues like diabetes, hypertension, obesity which require continuous monitoring and treatment) impacting your community?
 - a. How do these issues affect the way people in the community live/work/play? (**i.e., school attendance, job attendance**)
11. Does your community have a higher incidence of any of the following problems?
 - a. Domestic Violence?
 - b. Gang/Youth Violence?
 - c. Elderly Abuse/Neglect?
 - d. Child Abuse/Neglect?
 - e. Homelessness?
 - f. Any other major problems?
12. For members of the community dealing with cancer, what are their major concerns during treatment?

- a. Are there resources (free or low cost) available to assist cancer patients with their concerns? (i.e., job loss, housing insurance, immigration status, disability programs, child/elder care, transportation, etc.)
- b. Are there (emotional) support programs/groups available for cancer patients in your community?

13. In what ways is **Norwood Hospital** serving the community well?

14. What are the primary things that **Norwood Hospital** can do to serve the community better and improve the health and quality of life?

15. What services do you perceive as being the most needed in the community at this point in time?

16. Do you have any other concerns that you'd like to voice?

** For complete copies of the focus group summaries please contact Norwood Hospital*

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