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Milford Regional Medical Center
2015 Community Health Assessment Report

Submitted to:
Milford Regional Medical Center

Health Resources in Action
Advancing Public Health and Medical Research

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2015 Community Health Assessment

EXECUTIVE SUMMARY

Introduction

In 2012, Milford Regional Medical Center (MRMC) commissioned Health Resources in Action (HRiA), a non-profit public health organization based in Boston, MA, to conduct a community health assessment (CHA) of its twenty-town service area in Southern Worcester County. This CHA aimed to provide an empirical foundation for future health planning as well as fulfill the community health assessment mandate for non-profit institutions put forth by the MA Attorney General and the Internal Revenue Service (IRS).

Through a review of secondary social, economic, and epidemiological data in the region, as well as through discussions with community residents and leaders, the following health issues emerged in 2012 as priority areas for the region to address:

- Health promotion and chronic disease prevention;
- Health care access;
- Behavioral health and substance abuse prevention; and
- Violence prevention.

Since the 2012 CHA was finalized, MRMC with a coalition of community partners have engaged in an ongoing community health improvement planning (CHIP) process to strategically and collaboratively address these issues in the region. In addition, in accordance with the IRS mandate of conducting a community health assessment every three years, MRMC commissioned HRiA to conduct its 2015 CHA.

The 2015 MRMC CHA provides an updated assessment on a broad range of health-related strengths and needs of the Greater Milford region as well as probes more specifically on the aforementioned priority areas to further inform the ongoing CHIP process and strategic direction.

Methods and Limitations

The 2015 Milford Regional Medical Center Community Health Assessment (MRMC CHA) defines health in the broadest sense through the social determinants of health framework, where numerous factors at multiple levels – from lifestyle behaviors (e.g., health eating and active living) to clinical care (e.g., access to medical services), to social and economic factors (e.g., poverty) to the physical environment (e.g., transportation infrastructure) – have an impact on the community's health.

The 2015 MRMC CHA updates data from the 2012 CHA through the following: a review and synthesis of new and updated secondary data sources; a brief community survey administered online and in waiting rooms in English, Spanish, and Portuguese to 1,013 residents of 13 communities in the Greater Milford region; and key informant interviews with eight individuals representing diverse sectors, including leaders in health, government, public safety, and faith communities. Also, as previously mentioned, this 2015 CHA specifically focuses on the four identified priority areas from the 2012 CHA.

It should be noted that for the secondary data analyses, in several instances, regional data could not be disaggregated to the town level due to the small population size of the communities in the region. Additionally, several sources did not provide current data stratified by race/ethnicity, gender, or age;

thus, these data could only be analyzed at the overall population level. Likewise, data based on self-reports, such as the Behavioral Risk Factor Surveillance Survey, should be interpreted with particular caution, as respondents may over- or underreport behaviors and illnesses based on fear of social stigma or misunderstanding the question being asked, or be prone to recall bias. For primary data collection through surveys and interviews, it is important to recognize results are not statistically representative of a larger population due to non-random recruiting techniques and small sample size.

Findings

The following provides a brief overview of key findings that emerged from this assessment.

Community Social, Economic, and Physical Context

When compared to the state, the MRMC service area has a higher concentration of residents that are young, White, and highly educated. Certain segments of the population face day-to-day challenges related to access to services, transportation limitations, and the rising cost of housing and living.

"Due to the increases in the cost of living and health care, it is difficult to stay in this area to support the family and focus on eating healthily."
– Survey participant

- **Demographic Characteristics:** All cities and towns in the MRMC primary service area have a higher concentration of young people under the age of 18, when compared to the state. Over 90% of residents overall self-identified as White across eight of the nine cities/ towns in the region. Milford reported the lowest White population in the region (81.6%); however, this percentage is still higher than the state percentage overall (with 75.7% self-identifying as White). One in four Milford residents (26.1%) speak a language other than English at home, and key informants identified that there are growing populations of Ecuadorian, Guatemalan, and Portuguese residents and immigrants in Milford.
- **Income, Poverty, and Employment:** All communities had a higher median household income than the state overall ($66,866), with the exception of Milford ($66,311) and Northbridge-Whitinsville ($66,541). This differed from the 2012 CHA, which used the 2006-2010 ACS estimates, where all communities in the MRMC's primary service area had a higher median income than the state overall. Similarly, while the 2012 CHA data reported that all MRMC service area cities/ towns had poverty rates below the state average (7.5%), the percent of families below the poverty level in Milford (8.4%) now surpasses that of the state (8.1%), in the most current estimates. One in three survey participants identified employment or job opportunities as hard to access in their community, with youth jobs and jobs for those over the age of 55 specifically identified as limited.
- **Educational Attainment:** Quantitative data show variation in educational attainment across the Milford region. Approximately half of adult residents aged 25 years or older in Franklin, Medway, and Mendon have a college degree or higher, exceeding the statewide percentage (39.4%). In contrast, Bellingham, Blackstone, Milford, Northbridge-Whitinsville, and Uxbridge have lower higher education rates than the state.
- **Overall Access to Services:** The 2015 Greater Milford CHA Survey asked respondents to think about the different services available in their community and rank how easy or hard they are to access. The top services identified as hard to access, in rank order, included: affordable public transportation (77.4%); alcohol or drug treatment services for youth (62.8%); counseling or mental health services for youth (54.5%); alcohol or drug treatment services for adults (52.9%);

affordable health insurance (40.6%); affordable housing (40.6%); employment or job opportunities (34.1%); and services to address domestic violence (30.7%).

  - **Transportation:** Over three out of four survey respondents identified affordable public transportation as hard to access, limiting residents' access to the otherwise diverse amenities and services available in the community, such as health care and social services, and job opportunities. Numerous respondents also commented that active transportation options, such as biking and walking, are limited due to poor infrastructure and safety concerns.
  - **Housing and Cost of Living:** Two in five survey respondents deemed affordable housing as hard to access. A few respondents drew connections between the increasing cost of housing, and its impact upon housing stability, maintaining a healthy lifestyle through the purchasing of healthy foods or participation in physical activity, and accessing community services.

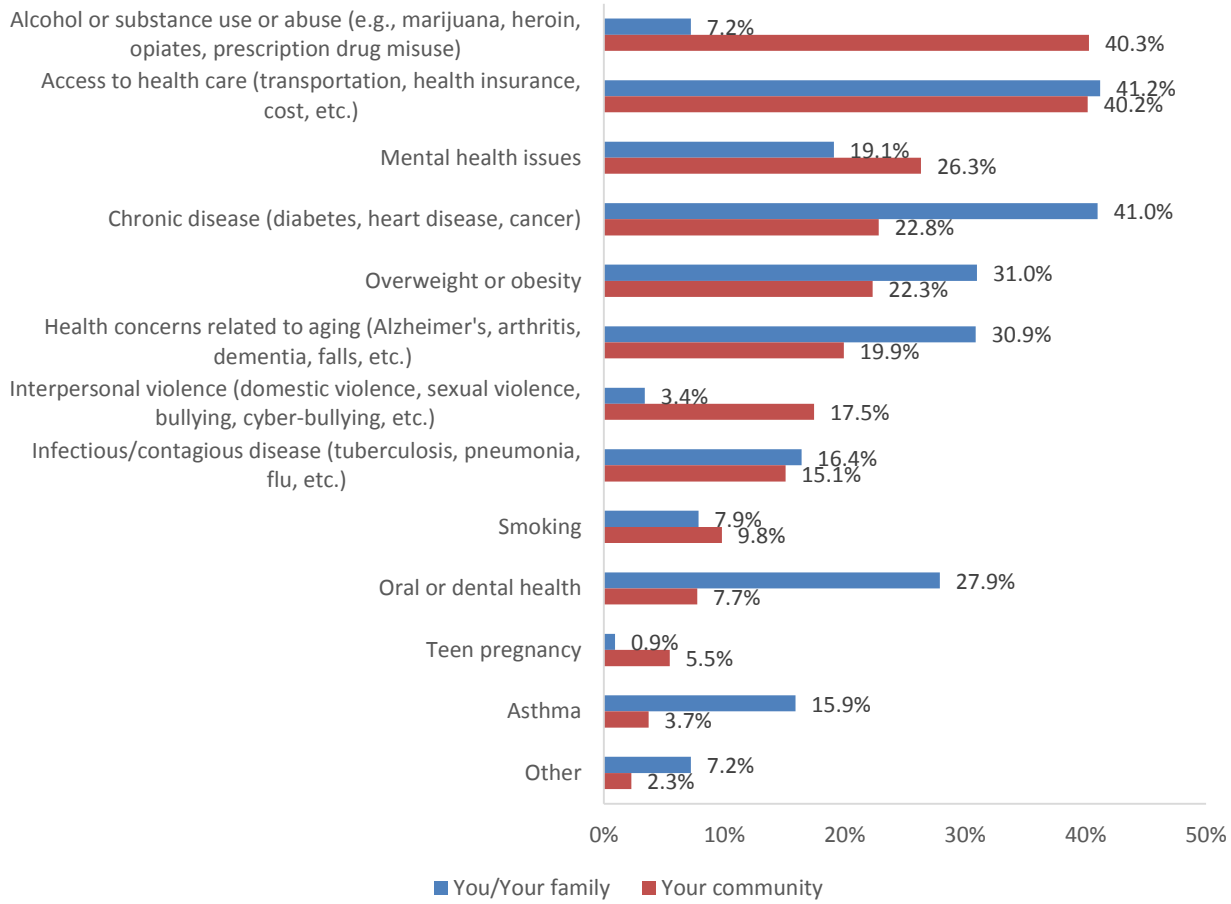
- **Crime and Violence:** Overall, the Greater Milford region was described as a safe community, with rates of violent and property crime throughout all MRMC cities and towns being lower than the statewide rate overall. However, as in the 2012 CHA, interviewees continued to identify bullying (and particularly cyber-bullying) among youth, and domestic violence as concerns. In addition, a few key informants identified sexual violence as an area of concern.
- **Social Support and Cohesion:** Interviewees identified the importance of connectedness, social support, and cohesion was discussed as an important determinant of health that impacted a range of issues, and particularly substance abuse and mental health. Populations of particular concern included youth, young adults (e.g. those between the ages of 20-40), the elderly, and ethnic communities.

<u>Perception of Health Status and Health Issues of Concern</u>

The MRMC primary service area overall is a healthy community, with a lower percentage of individuals reporting fair or poor health, and poor physical health, when compared to the state. However, alcohol or substance use or abuse, access to health care, mental health issues, chronic disease, and overweight or obesity continue to be key health concerns for the community. These priority areas coincided with three of the four priority areas identified in the 2012 CHA – specifically health promotion and chronic disease prevention, health care access, and behavioral health and substance abuse prevention.

Greater Milford CHA survey respondents were each asked to identify the top three health issues impacting their families and themselves, and the top three health issues impacting the communities in which they lived or worked. The results are detailed in the following figure.

Top Three Health Issues with the Largest Impact on the Respondent/ Family and on the Community, 2015 (n=968)



DATA SOURCE: Greater Milford Community Health Assessment Survey, 2015
NOTE: Data arranged in descending order by "Your community" responses

<u>Health Care Coverage, Access, and Utilization</u>

Medical services in the MRMC region are of high quality overall; however, there is concern that the services available cannot meet demand. Access to care, identified as a key priority area in the 2012 CHA, continues to be of concern among assessment participants due to barriers to accessing timely and affordable health care.

"The most pressing health concern in the community is the dearth of providers, both primary care physicians and mental health providers."
– Interview participant

- **Health Care Access and Utilization:** Nearly one in four individuals ages 18+ reported not receiving an annual checkup in the past year for the state, MetroWest region, and individual MRMC service area cities and towns. Individual cities and towns in the MRMC primary service area surpassed the statewide percentage of 23.3% of individuals who did not receive an annual checkup in the past year, ranging from 25.6% in Hopedale to 27.2% in Franklin. The data also show that approximately one in ten individuals reported not having a personal doctor for the state, region, and individual MRMC cities and towns.

- **Barriers to Care:** Survey participants identified the following as the most common barriers to accessing health services (in rank order): long wait times for appointments (32.3%); lack of evening or weekend services (27.5%); office not accepting new patients (26.3%); cost of care (21.4%); unfriendly provider or office staff (14.9%); and insurance problems/ lack of coverage (14.6%). Specifically, shortages of primary care physicians, behavioral health providers, and substance abuse services were mentioned as concerns. In addition, concerns went beyond the absolute cost of health insurance; many patients were identified as underinsured, or unable to afford the associated costs of health care even with their current insurance. Finally, the importance of ensuring that health services accommodate diverse populations was mentioned.

<u>Health Outcomes and Behaviors</u>

Health outcome indicators varied across cities and towns in the MRMC primary service area, when compared to the region overall and the state. Assessment participants specifically identified outcomes related to healthy eating and physical activity, substance use and abuse, and mental health as particular concerns. In addition, a shortage of available and effective substance abuse services and behavioral health services were identified as concerns.

- **Chronic Disease:** Assessment participants mentioned concerns around chronic conditions, and particularly diabetes and hypertension. However, these concerns were mentioned in direct connection to obesity, healthy eating, and physical activity.
    - **Coronary Heart Disease (CHD):** Hospitalization rates related to CHD in the region ranged from 252.8 per 100,000 population in Hopedale to 340.1 per 100,000 population in Medway. The MA rate falls in between this range, at 293.9 per 100,000 population.
    - **Stroke:** Overall, stroke (cerebrovascular disease) hospitalization rates in the Greater Milford region were generally lower than the state rate (224.4 per 100,000), with the exception of Mendon and Northbridge, at 273.0 and 231.8 per 100,000, respectively.
    - **Diabetes and Hypertension:** For diabetes, the statewide percentage (8.3%) was slightly lower than that of the Greater Milford region (9.3%), while for hypertension, the statewide percentage (29.3%) was higher than that of the region (26.6%).
    - **Asthma:** The age-adjusted rate of asthma-related hospitalizations for all cities/towns in Milford Regional Medical Center's primary service area were lower than the rate of the state (885.6 per 100,000), ranging from 512.7 per 100,000 in Mendon to 825.6 per 100,000 in Northbridge.
    - **Cancer:** Cancer continues to be a chronic condition affecting many in the region. With exception to Blackstone, Medway, and Northbridge, all the other cities and towns have age-adjusted cancer-related hospitalization rates higher than that of Massachusetts as a whole. Rates range from 318.1 per 100,000 in Northbridge to 435.0 per 100,000 in Hopedale.
- **Healthy Eating and Physical Activity:** The CHA highlights efforts in the Greater Milford region to increase healthy eating and physical activity for community residents. Such efforts, some of which stemmed from the 2012 CHA and improvement planning process, included community fitness events and getting fresh fruits and vegetables from local farmers to a local food pantry. Assessment participants mentioned the continued need for greater access to affordable, healthy fruits and vegetables, public transportation, well-maintained sidewalks and bike paths, and safe parks and playgrounds to improve nutrition and increase physical activity. Data indicate that residents in the Greater Milford region have similar healthy eating and physical activity behaviors to residents statewide, with slightly less than 20% of the region's residents eating more than five fruits and vegetables per day, and less than 20% getting no physical exercise in the last month.

- **Overweight and Obesity:** Data show there is a slightly higher percentage of overweight individuals in the Greater Milford region (63.5%) in comparison to in the state overall (58.7%), while the percentage of obese individuals is slightly lower in the region (21.2%) than in the state overall (23.1%). Interviewees discussed that obesity particularly impacts lower income, immigrant, and minority populations, likely due to financial constraints and cultural barriers that limit access to healthy foods, physical activity, and preventive health care. For adolescents, approximately one in five MetroWest 1st graders are considered overweight or obese according to BMI data, while one in four 4th, 7th, and 10th graders in the region are considered overweight or obese. Overall, a higher percentage of younger children—1st, 4th, and 7th graders—in Milford are overweight or obese, while Bellingham has a greater percentage of 10th graders in that category.
- **Substance Use and Abuse:** Participants in the 2015 Greater Milford CHA survey ranked alcohol or substance use or abuse as the top health issue impacting the respondents' community, affecting individuals from all walks of life. Beyond the resultant health impacts, substance abuse was identified as impacting community well-being and safety. For adolescents, between 2006-2014 there has been a steady decline among both middle and high school youth for current cigarette smoking, current alcohol use, and current marijuana use. However, when stratified by sexual orientation, data show that substance use disproportionately impacts sexual minorities, with current cigarette, alcohol, and marijuana use being 12.9, 4.7, and 8.8 percentage points higher, respectively, for sexual minority students compared to heterosexual students. For adults, binge drinking and current tobacco use rates in the MRMC cities/ towns were slightly lower than the statewide rates; however, interviewees specifically mentioned opioid and other drugs (e.g. prescription drugs) as concerns. Within the MRMC region, Milford had the highest number of unintentional opioid fatal overdoses between 2012-2014.
- **Substance Abuse Treatment Services:** The 2015 CHA survey identified alcohol or drug treatment services for youth and adults as one of the top services that are "hard to access." Interviewees echoed these findings, identifying such services as inadequate to effectively address addiction, and/ or difficult to access due to service shortages and location of services.
- **Mental Health:** Compared to the state percentage of 8.9%, the MetroWest region and all MRMC individual cities and towns had lower percentages of residents reporting poor mental health, at 6.1% for the region, and ranging from 6.3% in Franklin to 7.3% in Bellingham and Milford. Yet, 2015 assessment participants continue to identify mental health as a priority health issue in the region. Anxiety, depression, and self-harming behaviors continue to be of concern, particularly for youth. Mental health issues were attributed to stress and academic pressures for youth, and social isolation for both youth and adults. In addition to impacting health and quality of life, mental health issues were identified as exacerbating substance use and abuse, and violence.
- **Mental Health Services:** Interviewees identified the need for increased mental health services. Long wait times, the location of services, and the difficult navigation between primary care and behavioral health services were mentioned as specific barriers to accessing services and resources.
- **Injury:** While riding as a passenger in a car with a driver impaired by alcohol has decreased steadily for high school students, in 2014, one in three high school youth (30%) rode in a car

"The community is working hard to get safety net patients into [behavioral health] services, but it is a work in progress everywhere."
– Interview participant

driven by a high school student who was texting or e-mailing while driving in the past 30 days. In addition, approximately two in five students (38%) reported driving while texting in the past 30 days. While this number decreased overall since 2010, when stratified by grade level, reports of texting while driving doubled between 11th grade (25%) and 12th grade (51%). Milford reported the highest rate of motor vehicle-related emergency visits (1,173.4 per 100,000 population) among the region's cities/ towns, and was the only city/town to exceed the rate of the state (1,075.9 per 100,000 population).

- **Communicable/ Infectious Disease:** While infrequently mentioned by assessment participants, an increase in active tuberculosis was mentioned by a few as a concern, particularly among immigrant populations.
- **Oral Health:** Assessment participants expressed concern for the availability of affordable and accessible preventative oral health services.

Prioritizing for the Future

Survey participants prioritized resources for health issues within the larger domains of health promotion and chronic disease prevention; health care access; behavioral health (mental health and substance abuse); and violence prevention.

"There is a lot of work being done in Milford. I'm impressed by how quickly the community is responding… If it seems like we need to start something, there are people who will start running things."
– Interview participant

- **Health Care Access:** 80% of respondents ranked access to primary care providers as high priority for resource allocation, followed by access to specialty care providers (62.8%), and providers of dental and oral health services (60.0%). Almost half of respondents identified prescription drug assistance (49.5%), providers who accept Medicaid (47.1%), and services to help people navigate the health system (46.5%) as high priority. Interviewees frequently identified patient outreach, navigation, and follow-up services as gaps in the health system. By focusing on patient navigation, interviewees believed that there would be increased use of preventive services and decreased usage of the emergency room as the primary source of health care.
- **Health Promotion and Chronic Disease Prevention:** Almost nine out of ten (87.4%) survey participants reported that the health or social services in their community should focus more on prevention of diseases or health conditions. Approximately 70% of survey respondents ranked programs that help people prevent chronic disease (e.g., diabetes, heart disease), and school-based programs that promote physical activity and health eating as high priority. These priority areas coincide with concerns about the rising cost of health care, and the increase community emphasis upon chronic disease prevention for adolescents and adults. The option to prioritize "policy changes that make it easier to walk or bike in your community" received the highest "low priority" percentage, at 21.1%. This could be due to efforts that have been made in the region already, or due to the fact that an upstream policy change intervention may have felt far removed from the topic of chronic disease prevention and health promotion to survey respondents.
- **Behavioral Health (Mental Health and Substance Abuse):** Services focused upon youth were ranked as high priority, with almost three in four (72.5%) survey respondents highly prioritizing youth mental health screening and counseling for issues such as depression and suicide, and two in three (66.2%) highly prioritizing school-based prevention and counseling on mental health and substance abuse. Interestingly, over 90% of survey participants ranked all of the

listed health programs and issues as medium or high priority, possibly indicating the importance of behavioral health to the MRMC region overall.

- **Violence Prevention:** School-based programs to prevent bullying and dating violence were both ranked as high priority areas for the MRMC region, at 69.9% and 64.5%, respectively. Similarly, two in three respondents (67.1%) ranked counseling and advocacy to support victims of domestic and sexual violence as a high priority area. This is consistent with key informant interviewees concerns regarding adolescent bullying, cyber bullying, domestic violence, and sexual violence, as mentioned in the Crime and Violence section of the report. Of all issue and program areas, outreach and education to specific populations such as seniors, LGBTQ, persons with disabilities, and non-English speaking victims of domestic and sexual violence received the lowest prioritization of all priority areas. However, interviewees identified many of these populations as being socially isolated; this could imply susceptibility to violence that remains under the radar.

Conclusion

The 2015 CHA reaffirmed that chronic disease prevention and health promotion, health care access, behavioral health, and violence prevention continue to resonate as community priorities. While much has been done to make strides in each of these areas, the 2015 MRMC CHA will continue to guide the ongoing community health improvement planning process.

Milford Regional Medical Center
2015 Community Health Assessment

INTRODUCTION

It is increasingly recognized that when it comes to health, one's ZIP code may be more influential than one's genetic code (Robert Wood Johnson Foundation Commission to Build a Healthier America, 2014). Human behavior, opportunities to pursue healthy lifestyles, and health outcomes are not only shaped by clinical care, but also by the physical, cultural, and socioeconomic environments in which people live. Non-profit hospitals have a tradition of not only providing critical health care services to community members, but also in engaging with the community to address its broader needs through a public health approach. Founded in 1903, Milford Regional Medical Center (MRMC) serves the greater Milford region in Massachusetts (hereafter referred to as Greater Milford, or the MRMC service area) with high quality medical care as well as community wellness and educational programs.

Several years ago in 2012, Milford Regional Medical Center (MRMC) commissioned Health Resources in Action (HRiA), a non-profit public health organization based in Boston, MA, to conduct a community health assessment (CHA) of its twenty-town service area in Southern Worcester County. This CHA aimed to provide an empirical foundation for future health planning as well as fulfill the community health assessment mandate for non-profit institutions put forth by the MA Attorney General and the Internal Revenue Service (IRS).

Through a review of secondary social, economic, and epidemiological data in the region, as well as through discussions with community residents and leaders, the following health issues emerged in 2012 as priority areas for the region to address:

- Health promotion and chronic disease prevention;
- Health care access;
- Behavioral health and substance abuse prevention; and
- Violence prevention.

Since the 2012 CHA was finalized, MRMC with a coalition of community partners have engaged in an ongoing community health improvement planning (CHIP) process to strategically and collaboratively address these issues in the region. In addition, in accordance with the IRS mandate of conducting a community health assessment every three years, MRMC commissioned HRiA to conduct its 2015 CHA.

The 2015 MRMC CHA provides an updated assessment on a broad range of health-related strengths and needs of the Greater Milford region as well as probes more specifically on the priority areas to further inform the ongoing CHIP process and strategic direction.

About Milford Regional Medical Center

Milford Regional Medical Center (MRMC) serves the healthcare needs of the residents of over twenty towns in Central Massachusetts. MRMC is a comprehensive healthcare system that comprises the Medical Center; Tri-County Medical Associates, Inc., an affiliated physician practice group; and the Milford Regional Healthcare Foundation. As a full-service, community, and regional teaching hospital, MRMC is a 145-bed, nonprofit, acute-care facility with more than 300 primary care physicians and specialists on their active medical staff.

In 2014, MRMC broke ground on a new building, slated for completion in 2015. This building will house:

- A new emergency department, increasing its capacity from 30 to 52 beds, and doubling its size to nearly 30,000 square feet;
- A new intensive care unit, increasing its capacity from 10 to 16 beds, and almost tripling its size to 13,000 square feet; and
- A new telemetry floor with 24 private patient rooms that will allow the hospital to convert multi-patient rooms in other areas to private rooms without reducing capacity.

In addition, MRMC hosts eight state-of-the art operating suites, consolidated surgical services (including admitting and pre-admission testing), a medical/ surgical floor with private rooms that have advanced patient monitoring capabilities, a Maternity Center with home-like labor, delivery, recovery, and postpartum rooms, and a Cancer Center that provides comprehensive cancer services (including radiation therapy) from the world-renowned Dana-Farber/Brigham and Women's Cancer Center.

Affirming the World Health Organization's broad definition of health as "a state of complete, physical, mental, and social well-being and not merely the absence of disease," MRMC's Community Benefits program's mission statement reads as follows:

> *Milford Regional Medical Center is dedicated to the improvement of community health through leadership and effective partnership to promote wellness and eliminate health disparities in our service area.* (Milford Regional Medical Center, n.d.)

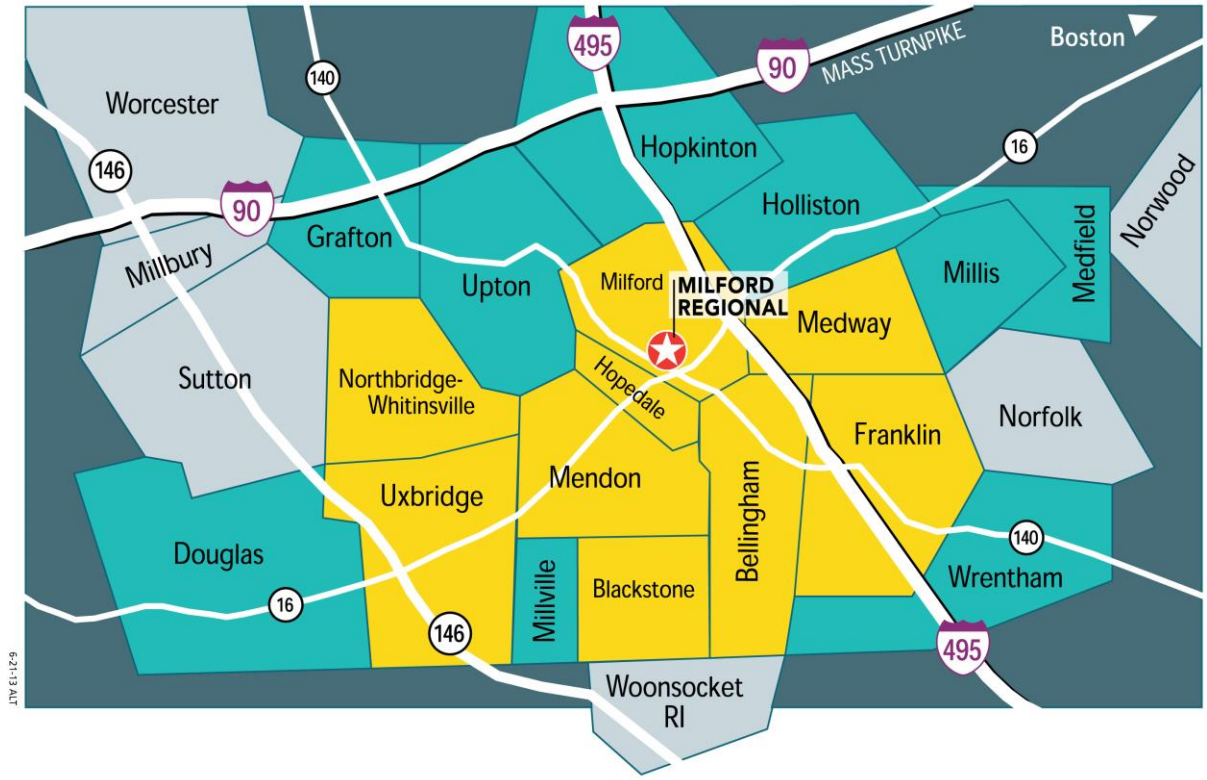
Community health improvement efforts are conducted in collaboration with the Community Health Network Area (CHNA) 6 and other community partners to address unmet health needs in the service area, with a particular focus on the uninsured, elders, adolescents, and immigrants. In addition, in response to previous assessments, MRMC's Community Benefits program has also been active in the following priority areas:

- Supporting healthcare reform and reducing health disparities;
- Addressing adolescent risk factors; and
- Chronic disease management in disadvantaged populations.

Geographic and Population Scope of the MRMC CHA

The MRMC CHA focused on numerous towns that comprise MRMC's service area in Figure 1. The community health assessment survey focused on the communities of Bellingham, Blackstone, Douglas, Franklin, Hopedale, Medway, Mendon, Milford, Northbridge-Whitinsville, Sutton, Upton, and Uxbridge, as they are communities within MRMC's service area as well as covered by the Community Health Network Area (CHNA) 6, the community coalition that is a key partner in the planning and implementation phase of this process. Due to the constraints in availability of secondary data by community, in many instances data only represent several of the communities within the region. While the CHA process aimed to examine the health concerns across the entire region, there was a particular focus on identifying the needs of the most underserved population groups of the region, including youth, the elderly, and those with the greatest barriers to health care (e.g., low income residents, non-English speakers).

Figure 1: Milford Regional Medical Center Service Areas



A Community Benefits Advisory Committee of MRMC provided strategic oversight throughout the CHA process. The committee, which was comprised of 21 members from community organizations and MRMC institutions including administrators, clinicians, and leaders in patient support services, provided guidance on each step, including feedback on CHA methodology, identification of key informant interviewees, and discussions of preliminary findings. In addition to different departments within MRMC, Advisory Committee members were from organizations such as Center for Adolescent & Young Adult Health, Edward M. Kennedy Health Center, Family Continuity, Inc., Community Health Network Area 6, Hockomock Area YMCA, Tri County Medical Associates, Milford Public Schools, and Tri River Family Health Centers.

COMMUNITY HEALTH ASSESSMENT METHODS

Overview

The 2015 Milford Regional Medical Center Community Health Assessment (MRMC CHA) updates data from the 2012 CHA through the review of new and updated secondary data sources, as well through the engagement of community residents through an online survey and key informant interviews. Also, as previously mentioned, this 2015 CHA also specifically focuses on the four identified priority areas from the 2012 CHA.

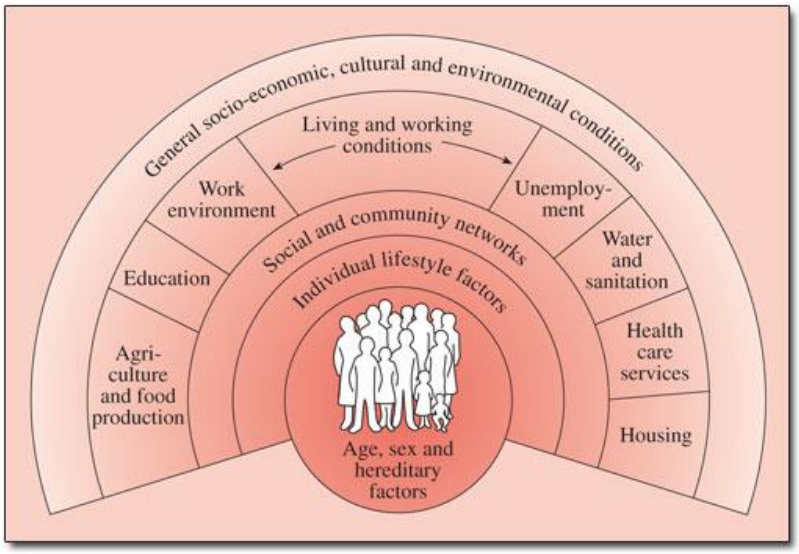
The following section describes the theoretical framework that undergirds the approach to the 2015 MRMC CHA, as well as specific methods for data collection and analysis.

Theoretical Framework

The places where an individual lives, works, learns, and plays impacts one's health behaviors and outcomes. Thus, as in the 2012 CHA, the 2015 CHA uses the social determinants of health theoretical framework to define health in the broadest sense. This framework recognizes that numerous factors at multiple levels— from lifestyle behaviors (e.g., exercise and alcohol consumption), to clinical care (e.g., access to medical services), to social and economic factors (e.g., employment opportunities), to the physical environment (e.g., transportation)—all have an impact on the community's health.

The diagram in Figure 2 provides a visual representation of the multitude of factors that affect health, demonstrating how individual lifestyle factors, which are closest to health outcomes, are influenced by more upstream factors such as quality of housing and educational opportunities. This report provides information on many of these factors, as well as reviews key health outcomes among the residents of Greater Milford.

Figure 2: Social Determinants of Health Framework



Quantitative Data

<u>Reviewing Existing Secondary Data</u>

As in the 2012 MRMC Community Health Assessment, existing and updated data were drawn from state, Community Health Network Area (CHNA), and local sources to develop a social, economic, and health portrait of the Milford Regional Medical Center primary service area. Sources of data included, but were not limited to, the U.S. Census, Centers for Disease Control and Prevention, Massachusetts Department of Public Health, and F.B.I. Uniform Crime Reports. Aside from population counts, age, and racial/ethnic distribution, other data from the U.S. Census derive from the American Community Survey, which is comprised of data from a sample of a given geographic area. Per Census recommendations, aggregated data from the past five years were used for indicators to yield a large enough sample size to look at results by municipality.

Other types of data included self-reported data of health behaviors from large, population-based surveys such as the Behavioral Risk Factor Surveillance System (BRFSS), as well as vital statistics based

on birth and death records. It should be noted there are some data in this current report that were also included in the previous 2012 CHA because of the lack of updated data available within the three year timeframe.

Additionally, various community-level data pertaining to a number of the communities within Greater Milford were accessed through a local data warehouse developed by the MetroWest Health Foundation. These localized data resources draw from a variety of sources, including MA Department of Public Health, vital statistics, BRFSS, and the U.S. Census.

Survey

To gather quantitative data that were not provided by secondary sources, a brief community survey was developed and administered online and as hard copies in waiting rooms to residents of 13 communities in the Greater Milford region. The survey was administered in three languages – English, Spanish, and Portuguese. The survey explored key health concerns of community residents as well as their primary priorities for services and programming. A copy of the English version of the survey instrument can be found in Appendix A.

The Advisory Committee reviewed and provided feedback on the survey and also assisted with disseminating the survey link via their partners (e.g., sending an email announcement out to their contacts). These partners included, but were not limited to, the Edward M. Kennedy Community Health Center, the Milford Youth Center, and Community Partners for Health (CHNA 6). Snowball method was used, with partners asking others to forward on the survey link.

To engage residents without Internet access, hard copy surveys in all three languages were disseminated in numerous locations and events, including in waiting rooms, at church events, at community meetings, and at the YMCA.

Survey analyses were restricted to respondents who live in one of the 13 communities in Milford Regional Medical Center's service area. A total of 1,013 respondents who live in the select communities answered the survey and thus, were included in the final sample. The characteristics of survey respondents are presented in Table 1.

Overall, the majority of respondents identified as the following:

- Between the ages of 40-64 years of age (64.2%);
- Female (83.6%);
- Caucasian/White, Non-Hispanic (87.2%); and
- Primarily English speakers at home (93.6%).

Approximately half or slightly over half of respondents identified as the following:

- College graduate or more (55.8%);
- Not a parent of children under 18 (58.3%);
- Resident of Milford (48.2%); and
- Employment in Milford (52.4%).

For type of employment, there was a wider spread of responses: 30.9% of respondents identified as a health or social service provider, 19.6% were employed in the business, retail, food service, or other sector, 16.9% identified as a municipal employee, and 13.7% were not employed or retired.

Table 1: Greater Milford Community Health Assessment Survey Respondent Characteristics (N=1,013)

	Percent
Age	
Under 40 years old	18.3%
40-64 years old	64.2%
65 years old or older	17.5%
Gender	
Male	16.4%
Female	83.6%
Race/Ethnicity	
African American/Black, Non-Hispanic	0.8%
American Indian/Native American, Non-Hispanic	0.9%
Asian/Pacific Islander, Non-Hispanic	1.1%
Brazilian, Non-Hispanic	2.1%
Portuguese, Non-Hispanic	1.3%
Caucasian/White, Non-Hispanic	87.2%
Hispanic/Latino(a), any race	3.5%
Middle Eastern, Non-Hispanic	0.5%
Other, Non-Hispanic	1.2%
Two or more races, Non-Hispanic	1.5%
Educational Attainment	
High school graduate or less	15.3%
Some college/Associate's degree	28.9%
College graduate or more	55.8%
Type of Employment	
Not employed or retired	13.7%
Stay-at-home parent	5.7%
Student	2.4%
Health or social service provider	30.9%
Municipal employee (e.g., work for local government, town employee, teacher, law)	16.9%
Clergy	0.5%
Employed in business, retail, food service, or other sector	19.6%
Other	15.9%
Primary Language Spoken at Home	
English	93.6%
Spanish	3.0%
Portuguese	2.6%
Arabic	0.8%
Parent of Children under 18	
Yes	41.7%
No	58.3%

	Percent
City/Town of Residence	
Bellingham	3.7%
Blackstone	3.2%
Douglas	3.8%
Franklin	7.6%
Hopedale	5.9%
Medway	1.8%
Mendon	5.6%
Milford	48.2%
Millville	1.3%
Northbridge	6.6%
Sutton	1.7%
Upton	3.4%
Uxbridge	7.4%
City/Town of Work	
Bellingham	0.9%
Blackstone	0.5%
Douglas	0.5%
Franklin	5.0%
Hopedale	1.3%
Medway	0.8%
Mendon	0.9%
Milford	52.4%
Millville	0.1%
Northbridge	2.1%
Sutton	0.4%
Upton	1.4%
Uxbridge	1.0%
None of the above	32.5%

DATA SOURCE: Greater Milford Community Health Assessment Survey, 2015

Qualitative Data: Key Informant Interviews
Key informant interviews were conducted with eight individuals representing diverse sectors, including leaders in health, government, public safety, and faith communities. The interviews explored participants' perceptions of the health-related strengths and needs of MRMC's primary service area and specifically probed on addressing the four current CHIP priority areas identified through the 2012 assessment. Interviews were conducted by phone, lasted up to an hour in length, and followed a semi-structured interview guide to ensure consistency in the topics covered.

Analyses
Survey data frequencies were conducted using SPSS statistical software, Version 20. Some response options were collapsed for ease of interpretation.

As in the 2012 CHA, the collected qualitative data gathered from the open-ended questions of the online survey as well as the key informant interviews were manually coded and then analyzed thematically for main categories and sub-themes. Data analysts identified key themes that emerged across all groups and interviews as well as the unique issues that were noted for specific populations. Frequency and intensity of discussions on a specific topic were key indicators used for extracting main themes. While municipality differences are noted where appropriate, analyses emphasized findings common across the greater Milford region. Selected paraphrased quotes – without personal identifying information – are presented in the narrative of this report to further illustrate points within topic areas.

Limitations
As with all research efforts and as was true in the 2012 CHA, there are several limitations related to the assessment's research methods. It should be noted that for the secondary data analyses, in several instances, regional data could not be disaggregated to the town level due to the small population size of the communities in the region. In many instances, data at the Community Health Network Area (CHNA) 6 are provided. CHNA 6 is a large geographic area and is comprised of Bellingham, Blackstone, Douglas, Franklin, Hopedale, Medway, Mendon, Milford, Millville, Northbridge, Sutton, Upton, and Uxbridge. Thus, while many of these cities and towns overlap with the MRMC service area, it is not a perfect overlap.

Additionally, several sources did not provide current data stratified by race/ethnicity, gender, or age; thus, these data could only be analyzed at the overall population level. Town-specific data were largely not available, and in cases where such data were available, sample sizes were often small and must be interpreted with caution. In some instances, data for only a few towns were available for the region.

Likewise, data based on self-reports, such as the Behavioral Risk Factor Surveillance Survey, should be interpreted with particular caution. In some instances, respondents may over- or underreport behaviors and illnesses based on fear of social stigma or misunderstanding the question being asked. In addition, respondents may be prone to recall bias—that is, they may attempt to answer accurately but remember incorrectly. In some surveys, reporting and recall bias may differ according to a risk factor or health outcome of interest.

For the survey data, it is important to recognize results are not statistically representative of a larger population due to non-random recruiting techniques. For example, while over 1,000 participants participated in the 2015 Greater Milford Community Health Assessment survey, respondents were recruited via email lists or at community locations. Thus, these individuals were already engaged in the

health system or in the community and may share similar perspectives, when compared to those who may not be engaged.

In addition, for qualitative data, MRMC identified key informants for interviews, and many of these participants were community leaders and health practitioners already involved in the community health improvement planning process resulting from the 2012 CHA. Thus, these individuals may not be representative of community leaders or providers across the region, as some have been involved with MRMC and its partners, and have been actively engaged in the planning process to improve the health of the community.

Lastly, it is important to note that data were collected at one point in time, so findings, while directional and descriptive, should not be interpreted as definitive.

DEMOGRAPHIC CHARACTERISTICS

Who Lives in Greater Milford?

Many factors are associated with the health of a community, including the resources and services available as well as the characteristics of a community's population. Below is a description of the population of the Greater Milford region, characterized by population count and growth, age, gender, race and ethnicity. While these characteristics are important and have an impact a person's health, the distribution of these characteristics in a community can affect the needs of a community, as well as the number and type of services and resources available to meet these needs.

Population

According to 2009-2013 American Community Survey (ACS) population estimates, there were 139,622 people in MRMC's primary service area (Table 2). Franklin and Milford are the largest communities followed by Bellingham. U.S. Census data from 2000 and 2010 Census reveal that there has been population growth across the region in the past decade, yet Northbridge-Whitinsville (19.2%) and Uxbridge (20.6%) saw the largest increase in its population during that time period.

Table 2: Population by State and Cities/ Towns, 2009-2013

Geographic Location	Population
Massachusetts	6,605,058
Bellingham	16,438
Blackstone	9,035
Franklin	32,064
Hopedale	5,928
Medway	12,866
Mendon	5,851
Milford	28,109
Northbridge-Whitinsville	15,844
Uxbridge	13,487

DATA SOURCE: U.S. Department of Commerce, Bureau of the Census, 2009-2013 5-Year American Community Survey

Age Distribution

Table 3 shows that in comparison to the state overall, all of the cities/ towns in the MRMC primary service area have a higher concentration of young people under the age of 18. Most notably, approximately 27% of the populations of Franklin, Hopedale, and Medway are under 18 years old, compared to 21.3% in the state.

Northbridge-Whitinsville, Hopedale, and Bellingham are the communities with the largest senior populations (65+) with approximately 13% of the population in that age group for each community. This is comparable to the senior population in MA overall, with 14.1% of the population in MA being over the age of 65.

Table 3: Age Distribution by State and Cities/ Towns, 2009-2013

Geography	Under 18 yrs old	18 to 24 yrs old	25 to 44 yrs old	45 to 64 yrs old	65 yrs old and over
Massachusetts	21.3%	10.4%	26.4%	27.8%	14.1%
Bellingham	22.0%	8.5%	26.7%	30.2%	12.5%
Blackstone	23.2%	9.3%	23.0%	33.5%	11.0%
Franklin	27.4%	9.3%	24.3%	27.9%	11.1%
Hopedale	27.0%	5.7%	21.2%	33.3%	12.7%
Medway	26.8%	6.8%	20.9%	34.3%	11.3%
Mendon	25.1%	7.4%	21.7%	34.3%	11.6%
Milford	24.6%	7.5%	27.5%	28.1%	12.4%
Northbridge-Whitinsville	25.7%	7.8%	25.4%	28.4%	12.9%
Uxbridge	23.8%	7.7%	23.9%	32.1%	12.4%

DATA SOURCE: U.S. Department of Commerce, Bureau of the Census, 2009-2013 5-Year American Community Survey

Table 4 demonstrate great variability in the increases in the senior population in the last decade, as was reported in the 2012 CHA. From 2000 to 2010, Uxbridge (+50.4%) and Mendon (+40.4%) experienced substantial growth in their senior populations according to U.S. Census, as did Bellingham (+28.5%) and Franklin (+23.1%). Hopedale was the only geographic location that reported a decrease in the senior population (-12.0%).

Table 4: Percent Change in Population Aged 65+ by State and Cities/Towns, 2000 and 2010

Geographic Location	2000 Aged 65+ Population	2010 Aged 65+ Population	% Change 2000 to 2010
Massachusetts	860,162	902,724	4.9
Bellingham	1,483	1,906	28.5
Blackstone	890	1,018	14.4
Franklin	2,418	2,977	23.1
Hopedale	913	803	-12.0
Medway	1,137	1,325	16.5
Mendon	443	622	40.4
Milford	3,448	3,618	4.9
Northbridge-Whitinsville	1,821	2,070	13.7
Uxbridge	1,105	1,662	50.4

DATA SOURCE: U.S. Department of Commerce, Bureau of the Census, 2000 Census and 2010 Census

Racial and Ethnic Diversity

As was seen in the 2012 CHA, the Greater Milford region is predominantly White with over 90% of residents self-identifying as White across eight of the nine cities/towns in the region. While still higher than the White population for the state overall (with 75.7% self-identifying as White), Milford reported the lowest White population in the region at 81.6%. Key informant interviewees particularly identified that there are growing populations of Ecuadorian, Guatemalan, and Portuguese residents and immigrants in Milford. One key informant also added, *"It seems like you should add another 5 to 6,000 people to Milford's Census population numbers to account for the growth in immigrant populations. I don't think the current numbers capture that."*

Table 5 shows the racial and ethnic distribution by town, according to the 2009-2013 ACS estimates. Among the nine towns in MRMC's service area, Milford has the largest Hispanic/Latino (10.0%) and Black (2.2%) populations in the region. Bellingham (3.7%), Franklin (4.2%), and Medway (4.3%) have the largest Asian populations in the region.

There is variation in the region on the percent of the population that speaks a language other than English at home. Milford has the largest population of non-English speakers at home (26.1%), surpassing the state's rate overall at 21.9%. Bellingham (10.5%), and Hopedale and Medway (both at 9.4%) follow after Milford. Franklin, which had the second largest population of non-English speakers at home at the time of the 2012 CHA, now ranks fifth in the region at 9.0% (Figure 3).

In Milford, Portuguese is the language most commonly spoken by non-English speakers (at 11.5% of the population), followed by Spanish (at 8.4%) (Table 6). These rates are slightly higher than what was reported in the 2012 CHA (at 10.6% and 7.9%, respectively) using the 2006-2010 American Community Survey five-year estimates. While small in population, one key informant also mentioned the need for Quechua translation, which is an unwritten language spoken by the Ecuadorian population.

Table 5: Racial/ Ethnic Composition by State and Cities/ Towns, 2009-2013

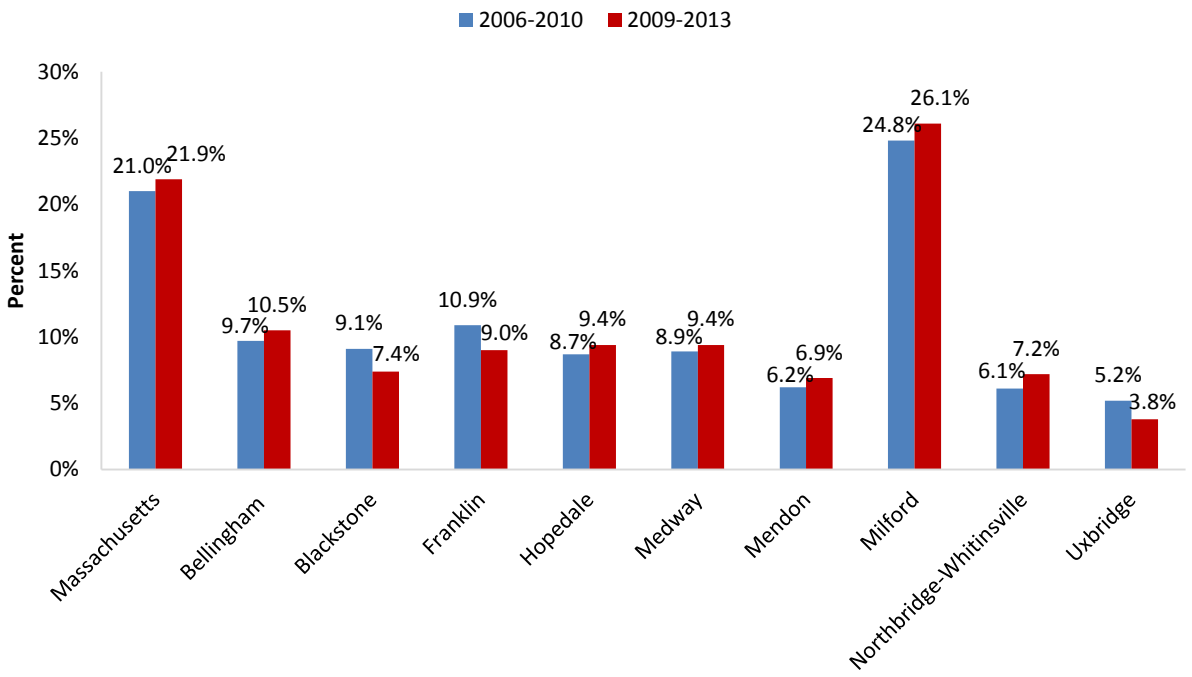
Geography	White	Black	Asian	Hispanic/ Latino	Two or more races	Other
Massachusetts	75.7%	6.3%	5.5%	9.9%	1.8%	0.8%
Bellingham	90.5%	1.9%	3.7%	2.2%	1.0%	0.7%
Blackstone	92.6%	1.0%	1.0%	3.8%	1.0%	0.6%
Franklin	91.6%	0.9%	4.2%	2.2%	1.0%	0.1%
Hopedale	94.6%	0.2%	1.6%	3.7%	0.0%	0.0%
Medway	89.8%	0.4%	4.3%	3.6%	1.7%	0.2%
Mendon	93.7%	0.5%	0.9%	3.9%	0.5%	0.5%
Milford	81.6%	2.2%	2.5%	10.0%	1.9%	1.8%
Northbridge-Whitinsville	94.6%	0.4%	0.9%	2.2%	1.9%	0.0%
Uxbridge	96.8%	0.4%	1.0%	1.1%	0.6%	0.1%

DATA SOURCE: U.S. Census Bureau, 2009-2013 5-Year American Community Survey

NOTE: White, Black, Asian, and Other include only individuals that identify as one race; Hispanic/Latino include individuals of any race

NOTE: Other includes American Indian and Alaska Native, Native Hawaiian and other Pacific Islander, or other race alone

Figure 3: Percent of Population Who Speak Language Other Than English at Home by State and Cities/ Towns, 2006-2010 and 2009-2013



DATA SOURCE: U.S. Department of Commerce, Bureau of the Census, 2009-2013 5-Year American Community Survey

Table 6: Languages Most Spoken in Milford, MA, 2006-2010, 2009-2013

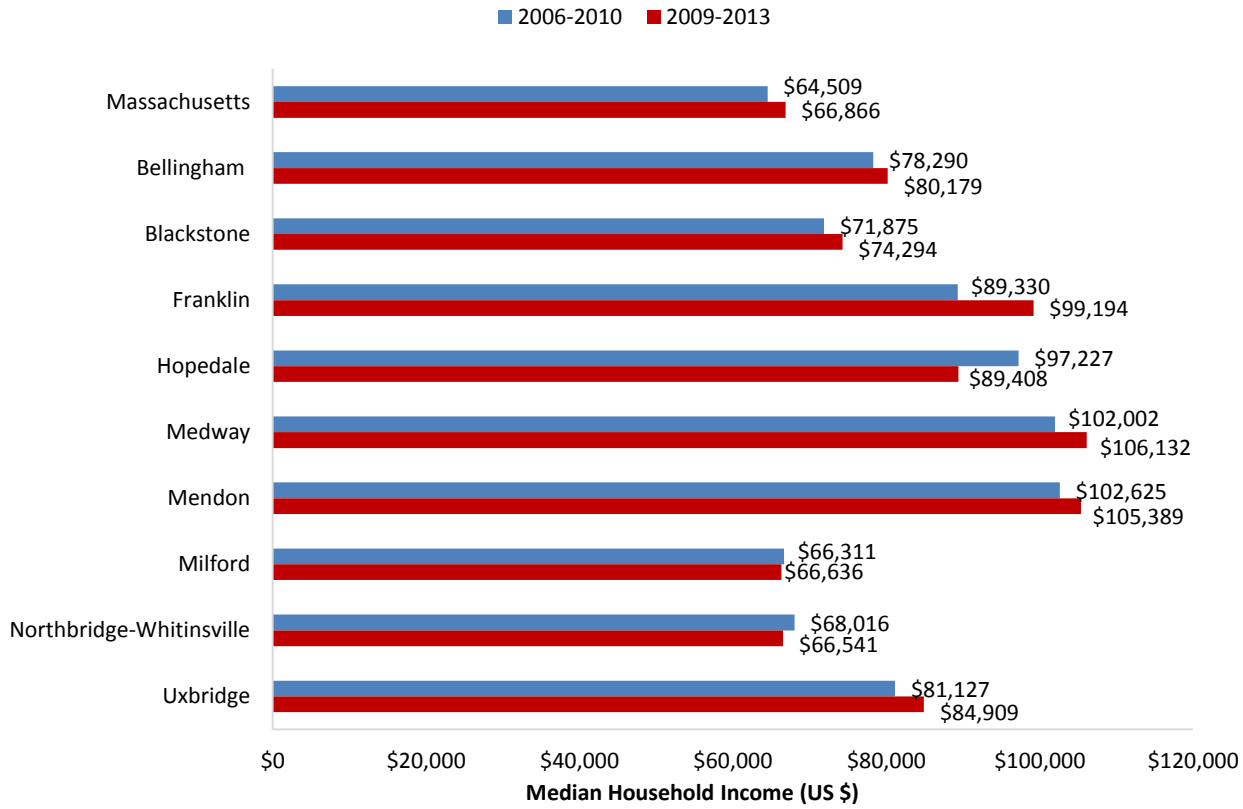
	2006-2010		2009-2013	
Language	**N**	**Percent**	**N**	**Percent**
Portuguese	2,996	10.6%	2,994	11.5%
Spanish	2,213	7.9%	2,191	8.4%
French	174	0.6%	270	1.0%
Gujarati	133	0.5%	158	0.6%
Italian	113	0.4%	134	0.5%

DATA SOURCE: U.S. Department of Commerce, Bureau of the Census, 2006-2010 and 2009-2013 5-Year American Community Survey

Income, Poverty, and Employment

Similar to the findings in 2012, the median household income of communities in the region varied, ranging from $66,311 in Milford to $106,132 in Medway (Figure 4). Notably, using the 2009-2013 five-year American Community Survey (ACS) estimates, all communities had a higher median household income than the state overall ($66,866), with the exception of Milford ($66,311) and Northbridge-Whitinsville ($66,541). This differed from the 2012 CHA, which used the 2006-2010 ACS estimates, where all communities in the MRMC's primary service area had a higher median income than the state overall.

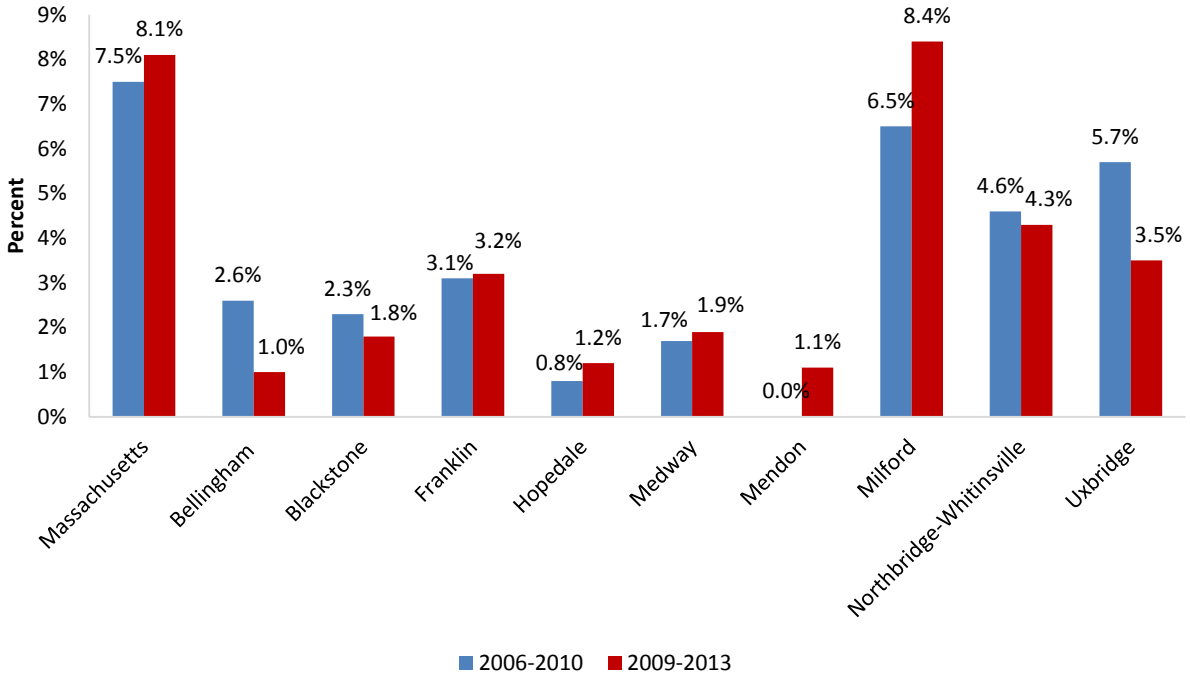
Figure 4: Median Household Income by State and Cities/Towns, 2006-2012 and 2009-2013



DATA SOURCE: U.S. Department of Commerce, Bureau of the Census, 2006-2010 and 2009-2013 5-Year American Community Survey

Like median household income, poverty rates in the region varied. Using the 2009-2013 ACS estimates, the percent of families below the poverty level ranged from 1.0% in Bellingham to 8.4% in Milford (Figure 5). Notably, while the 2012 CHA data reported that each of the cities/towns in the primary MRMC service area had poverty rates below the state average (7.5%), the percent of families below the poverty level in Milford (8.4%) now surpasses that of the state (8.1%), in the most current estimates.

Figure 5: Percent of Families Below Poverty Level by State and Cities/Towns, 2006-2010, 2009-2013



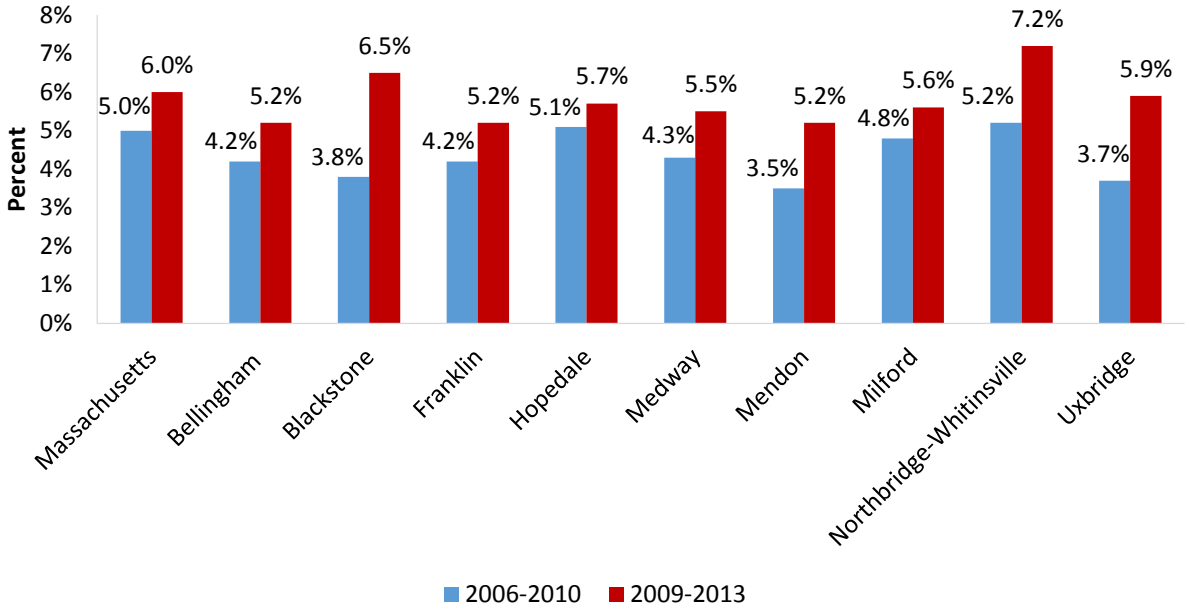
DATA SOURCE: U.S. Department of Commerce, Bureau of the Census, 2006-2010 and 2009-2013 5-Year American Community Survey

Interview participants discussed how the 2008 economic downturn still affects the region, a similar theme that emerged in discussions in the previous CHA. As one current interviewee noted, *"Like every other community, the downturn of the economy in 2008 hit the community. There has been an uptick of people getting services from the local food pantry. People are getting back to work, but we still have a ways to go."* Numerous participants mentioned the need for jobs and job training in the region.

This theme was reiterated among survey respondents. One in three participants (34.1%) in the 2015 Greater Milford Community Health Assessment Survey identified employment or job opportunities as hard to access in their community (Figure 6). As one survey respondent commented, *"Underemployment and previous job loss make many things difficult to afford for my family and so many other local families."* Specifically, youth jobs, and jobs for those who are over the age of 55 were identified as limited.

Unemployment rates in all of the cities/towns of Milford Regional Medical Center's primary service area have continued to rise since the 2012 CHA was completed, with the unemployment percentages of Northbridge-Whitinsville (7.2%) and Blackstone (6.5%) exceeding that of the state overall (6.0%).

Figure 6: Percent of Population Aged 16+ Years Unemployed by State and Cities, 2006-2010 and 2009-2013

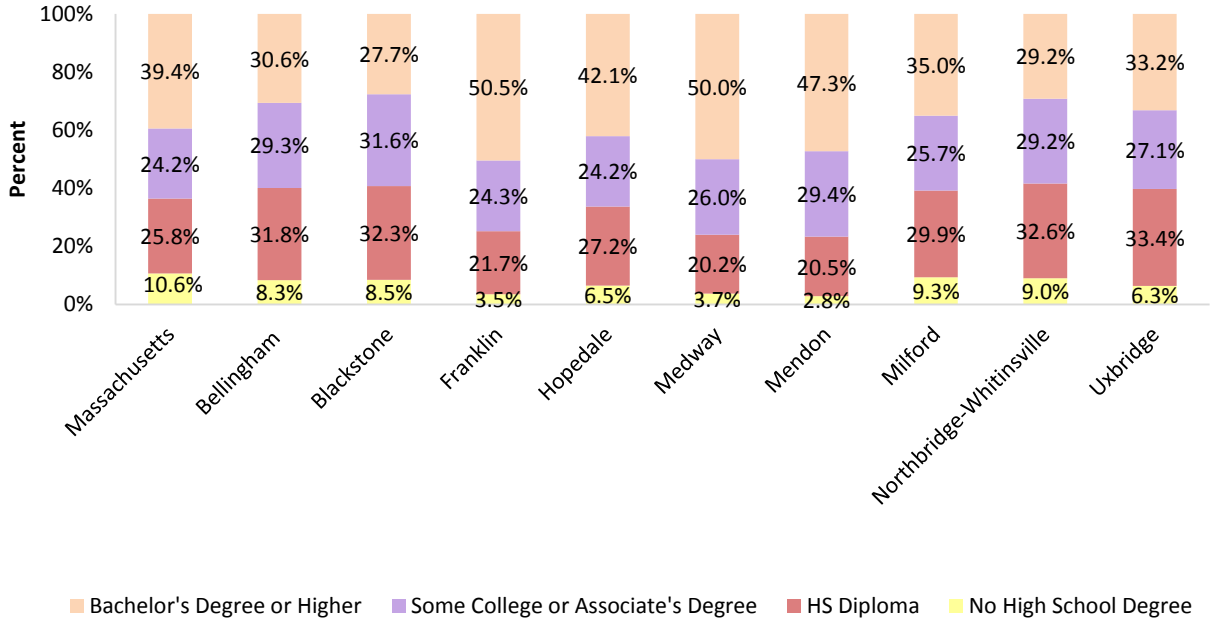


DATA SOURCE: U.S. Department of Commerce, Bureau of the Census, 2006-2010 and 2009-2013 5-Year American Community Survey

Educational Attainment

Quantitative data show variation in educational attainment across the Milford region (Figure 7). Approximately half of adult residents aged 25 years or older in Franklin (50.5%), Medway (50.0%), and Mendon (47.3%) have a college degree or higher, exceeding the statewide percentage (39.4%). In contrast, Bellingham (30.6%), Blackstone (27.7%), Milford (35%), Northbridge-Whitinsville (29.2%), and Uxbridge (33.2%) have lower higher education rates than the state.

Figure 7: Educational Attainment of Adults 25 Years and Older by State and Cities/Towns, 2009-2013



DATA SOURCE: U.S. Department of Commerce, Bureau of the Census, 2009-2013 5-Year American Community Survey

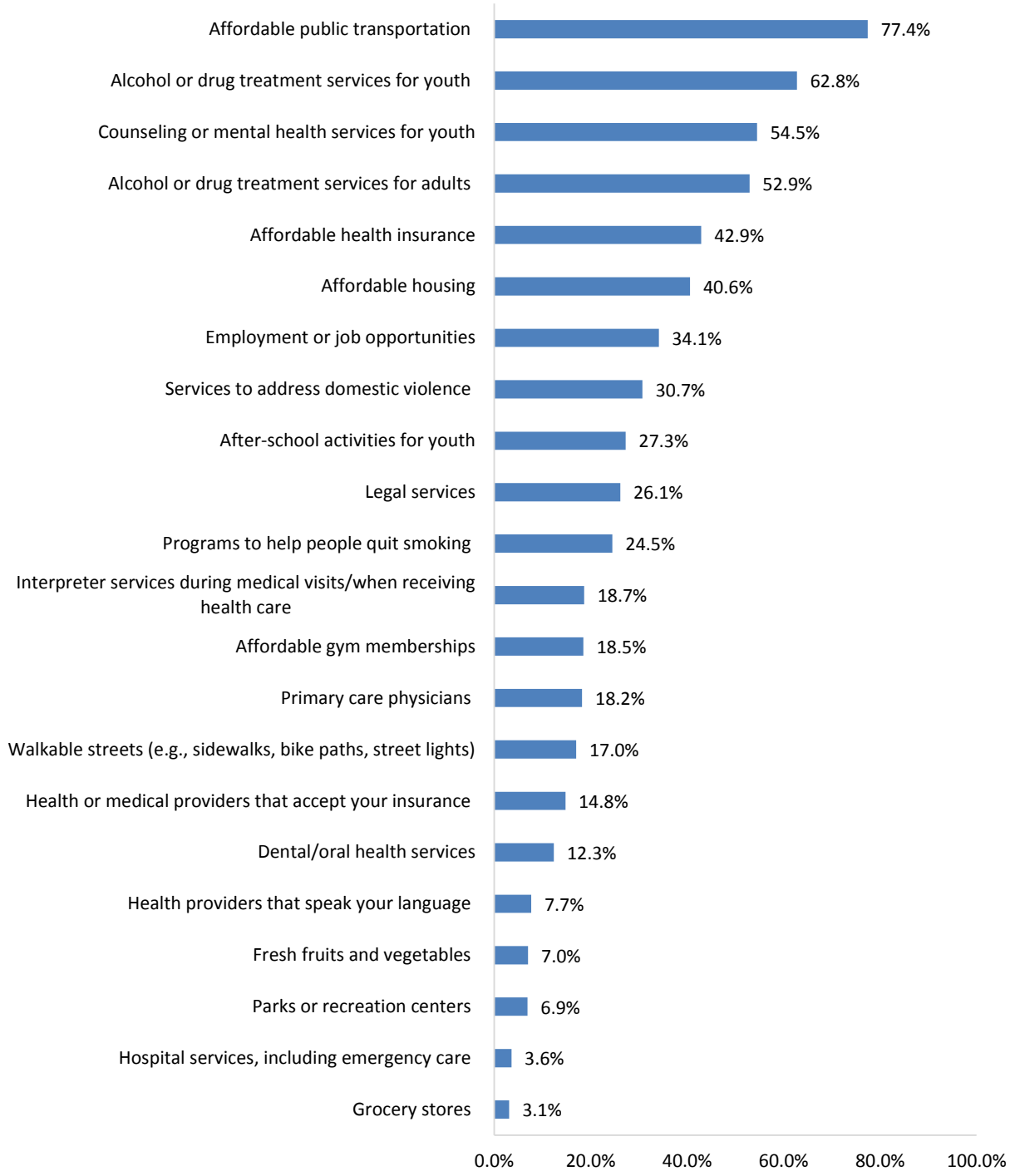
SOCIAL AND PHYSICAL ENVIRONMENT

Overall Access to Services

The 2015 Greater Milford CHA Survey asked respondents to think about the different services available in their community and rank how easy or hard they are to access. Survey results are visualized in Figure 8, and the top services identified as hard to access, in rank order, included:

- Affordable public transportation (77.4%);
- Alcohol or drug treatment services for youth (62.8%);
- Counseling or mental health services for youth (54.5%);
- Alcohol or drug treatment services for adults (52.9%);
- Affordable health insurance (42.9%);
- Affordable housing (40.6%);
- Employment or job opportunities (34.1%); and
- Services to address domestic violence (30.7%).

Figure 8: Services that CHA Survey Respondents Considered Hard to Access in the Community, 2015



DATA SOURCE: Greater Milford Community Health Assessment Survey, 2015
NOTE: Data in arranged descending order

Transportation

As seen in Figure 8, 77.4% of survey respondents identified affordable public transportation as hard to access. The lack of transportation is particularly critical to note, as numerous survey respondents commented that while their community may have diverse amenities and services available, access is limited by transportation availability. One survey respondent commented:

> *"We have a lot in Milford, but if you do not drive or cannot drive anymore, it is not easy."* - Survey participant

Echoing the survey participant, the majority of key informant interviewees also mentioned the lack of public or shared transportation as an ongoing issue that impacts the health of residents. As one interviewee stated, *"There is no public transportation and people may not have access to a reliable car. It's getting worse as boomers are going into retirement."*

Specifically, the limited public transportation was seen as a hindrance to accessing health care and social services in the community. One interviewee described this, saying, *"If you need to get to MRMC within Milford, you're out of luck. If you're over 60 and can schedule time with the senior van, there's possibility. In essence, that's the only public transportation. If you're a mom with children and no care, you walk. I want a fixed route and on demand transportation system for Milford. The challenge is money. Milford is not in the catchment area of the Massachusetts Bay Transportation Authority (MBTA). This needs to be a priority."*

Specifically, as in the 2012 CHA, limited public transportation was seen particularly as an issue for youth, who are not yet of driving age. Therefore, they may be unable to get themselves to recreational facilities or medical appointments, or take advantage of employment opportunities. One interviewee stated, *"There's no bus to Worcester. Kids can't get there without a car. In 1979, we had a bus to Worcester, so kids who didn't have a job could get a job in Worcester. Now, there aren't enough jobs in Northbridge within walking distance for kids."*

Table 7 details the percentage of community residents that use various forms of transportation as they commute to and from their workplaces. As was seen in the 2012 CHA, consistent with the state, the majority of residents in these cities/towns commute alone via car, truck, or van. For the remaining residents, only in Franklin (as well as with the statewide average) are commuters more likely to take public transit than carpool; this was also true at the time of the 2012 CHA.

Table 7: Means of Transportation to Work for Workers Aged 16+ by State and Cities/Town, 2009-2013

Geography	Car, truck, or van (alone)	Car, truck, or van (carpool)	Public Transit (excluding Taxis)
Massachusetts	72.1%	7.9%	9.3%
Bellingham	86.0%	5.9%	2.8%
Blackstone	92.1%	3.1%	1.0%
Franklin	76.3%	6.4%	9.0%
Hopedale	85.1%	6.9%	1.4%
Medway	84.0%	6.0%	3.2%
Mendon	78.5%	8.0%	3.3%
Milford	80.8%	9.9%	2.0%
Northbridge-Whitinsville	87.3%	6.9%	0.0%
Uxbridge	84.0%	9.8%	0.5%

DATA SOURCE: U.S. Department of Commerce, Bureau of the Census, 2009-2013 5-Year American Community Survey

In addition to the lack of affordable, public transportation, numerous survey respondents commented that active transportation options, such as biking and walking, are limited due to poor infrastructure and safety concerns. Specifically, numerous respondents cited a lack of sidewalks, poorly designed sidewalks, or unmaintained, crumbling sidewalks as issues. One respondent stated, *"The sidewalks and road are a mess! ... It's very dangerous for people as they walk in the dark down broken down sidewalks and roads."* Another respondent echoed this concern, stating, *"Regarding 'walkable streets', there are bike paths, but our sidewalks are complete junk. They're often torn-up and broken. I have no idea how anyone in a wheelchair gets around. They often switch what side of the road they are on so a pedestrian would have to cross back and forth through traffic. Or, [they are] very often non-existent."*

In addition, a few respondents cited speeding as an issue that impacts active transportation options. As one respondent commented, *"We need better enforcement of speed in residential areas. In Milford, speeding is a way of life."*

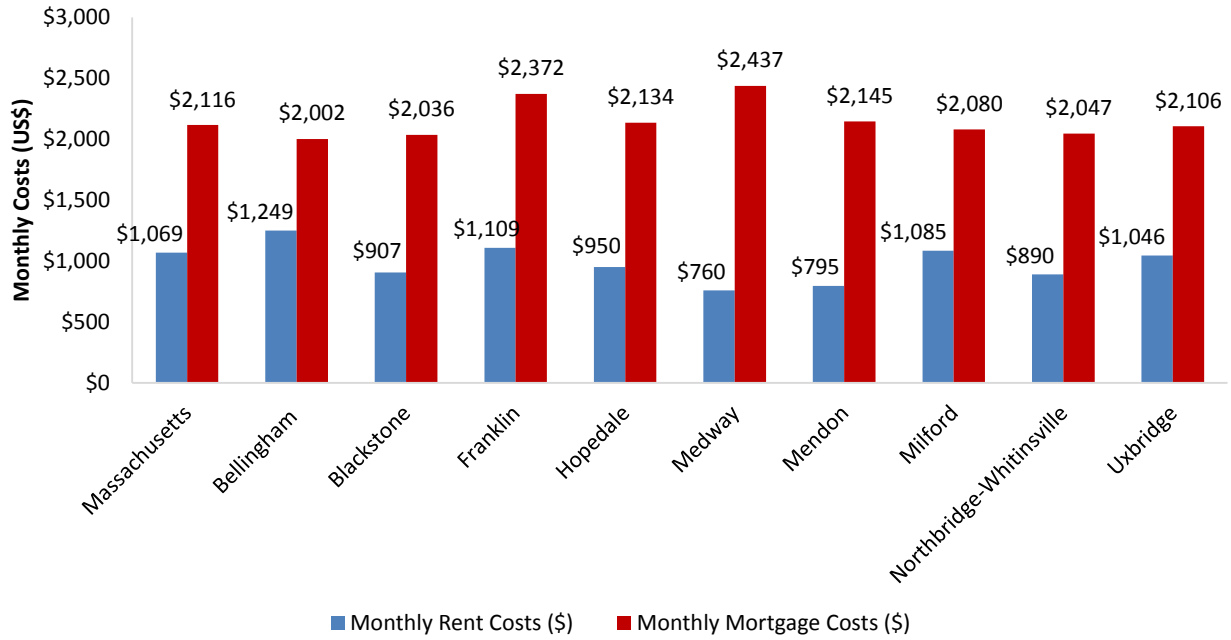
Housing and Cost of Living

As seen in Figure 9, two in five survey respondents deemed affordable housing as hard to access. A few respondents drew connections between the increasing cost of housing, and its impact upon housing stability and maintaining a healthy lifestyle. One respondent commented, *"With receiving negative wages due to the increases in the cost of living and health care, it is difficult to stay in this area to support the family and focus on eating healthily."* Another respondent echoed this, writing, *"There are MANY working class poor right here in this community. In my own home, many times in the last year there have been mighty slim pickings in the kitchen. The mortgage comes first, then healthy food. If you choose to eat healthy, the costs are out of reach. Poor quality food is encouraged because it is cheaper. If money is tight, then you go cheap."*

Similar to the 2012 CHA, updated data showed that the median monthly housing cost for a mortgage or for rental units were similar across the region (Figure 9). For example, according to most recent estimates, monthly mortgage costs ranged from $2,002/per month in Bellingham to $2,437/month in Medway (a range of $435). This is similar to mortgage costs statewide ($2,116/month) as well. Monthly rental costs ranged from $760/month in Medway to $1,249 in Bellingham (a range of $489). Again, this

was similar to the statewide average of $1,069 for rental costs. Interestingly, while Medway had the lowest median monthly rents in the region, it simultaneously had the highest median monthly mortgage costs as well.

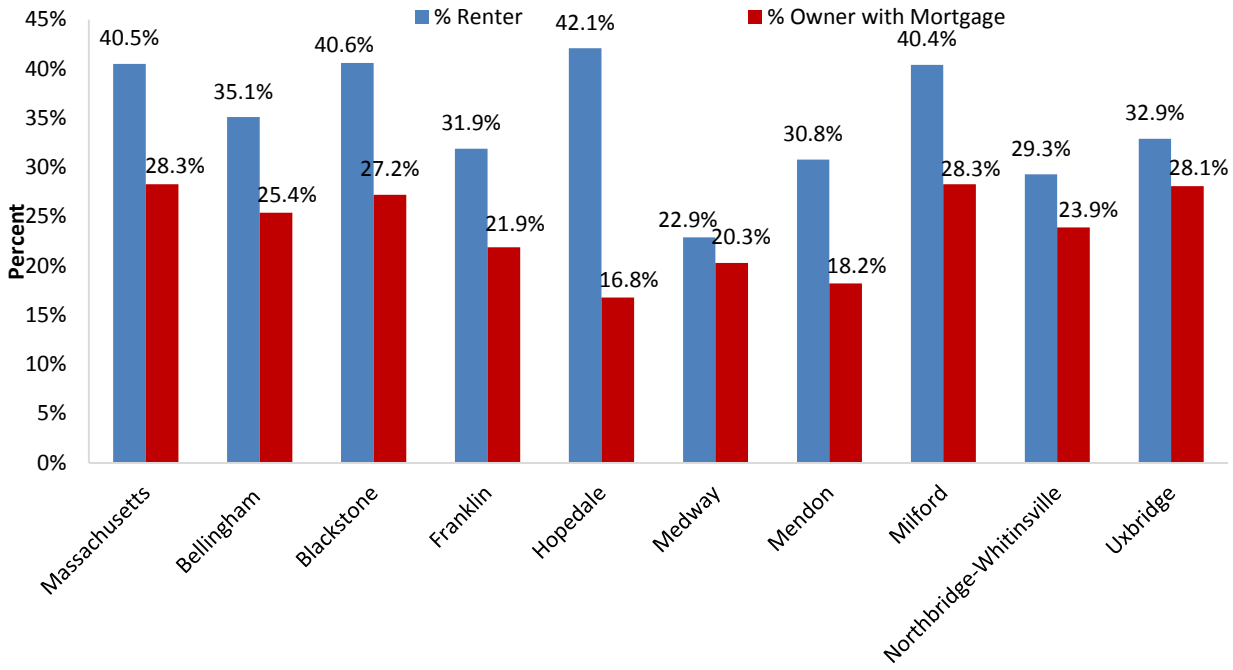
Figure 9: Monthly Median Housing Costs for Owners and Renters by State and Cities/Towns, 2009-2013



DATA SOURCE: U.S. Department of Commerce, Bureau of the Census, 2009-2013 5-Year American Community Survey

While absolute housing costs are telling, they do not necessarily speak to how housing prices compare to the overall cost of living. Figure 10 illustrates the percentage of renters and owners whose housing costs comprised 35% or more of their household income. Overall, this proportion was lower for homeowners with a mortgage than for renters across all cities and towns. While almost all of the cities/towns in Greater Milford had comparable or lower percentages of renters and homeowners who paid more than a third of their income towards housing than at the state level (40.5% of renters, 28.3% of homeowners), there was substantial variability among these communities. Specifically, two in five renters in Blackstone (40.6%), Hopedale (42.1%), and Milford (40.4%) put at least 35% of their income towards housing, compared to fewer than one in four in Medway (22.9%). Among homeowners, Milford had the highest percentage of residents who spent 35% or more of their income on housing costs, at 28.3%; this is comparable to the statewide percentage as well.

Figure 10: **Percent of Renters Whose Housing Costs are 35% or more of Household Income by State and Cities/Towns, 2009-2013**



DATA SOURCE: U.S. Department of Commerce, Bureau of the Census, 2009-2013 5-Year American Community Survey

In addition to housing, survey respondents commented that access to different services was dependent upon one's financial stability and means. One survey respondent succinctly stated, *"I think for most people, it comes down to money. It does for me."*

Numerous respondents mentioned that there were community services and youth programs in the Greater Milford region; however, as one respondent commented, *"There is always a place for a kid from a wealthy family. However, there are many families that simply cannot afford after school programs. With more than one child, the costs are too great."*

A few other respondents commented that opportunities to exercise and socialize were limited, due to the lack of availability and/or inaccessibility of parks and playgrounds, the timing of community exercise classes during work hours, and the pricing of gym memberships at neighborhood community centers.

Crime and Violence

Both violent crime and property crime differed across the cities and towns in MRMC's primary service area (Table 8). Violent crime rates were lowest in Medway (7.7 per 100,000 population) and highest in Hopedale (302.4 per 100,000 population) in 2013, although these rates were all lower than the statewide rate (413.4 per 100,000 population). The violent crime rates increased for the state and across the majority of cities/towns in MRMC's service area since the 2012 CHA; however, exceptions include Franklin (-135.5 per 100,000 population), Medway (-39.1 per 100,000), Mendon (-34.1 per 100,000), and Milford (-164 per 100,000).

Property crime rates for MRMC's service area remained lower than the state's rate (2,015.2 per 100,000 population), and varied from 524.0 per 100,000 in Franklin to 1,921.9 per 100,000 in Northbridge-Whitinsville.

Table 8: Offenses Known to Law Enforcement per 100,000 Population by State and Cities/Towns, 2011 and 2013

Geographic Location	Violent Crime Rate* (2011)	Violent Crime Rate* (2013)	Property Crime Rate** (2011)	Property Crime Rate** (2013)
Massachusetts	428.4	413.4	2258.7	2,051.2
Bellingham	176.5	210.6	2075.2	1,751.0
Blackstone	165.2	186.9	1486.6	923.7
Franklin	157.0	21.5	358.2	524.0
Hopedale	218.6	302.4	1076.2	957.7
Medway	46.8	7.7	771.6	858.5
Mendon	119.1	84.7	510.6	965.8
Milford	368.9***	204.9	1779.0***	1,843.7
Northbridge-Whitinsville	164.5	237.1	1771.8	1,921.9
Uxbridge	169.9	154.1	1314.7	1,291.4

* Violent crime includes: murder and non-negligent manslaughter; forcible rape; robbery; and aggravated assault
**Property crime includes: burglary; larceny-theft; motor vehicle theft; and arson
***Milford crime rate data not available in the UCR for 2011. 2010 data are noted in the table above.
DATA SOURCE: Federal Bureau of Investigation (2011 and 2013), Uniform Crime Reports, Offenses Known to Law Enforcement, by State, by City

When the issues of violence and safety were discussed by interviewees, in general, the Greater Milford region was deemed as safe, where *"you can walk on any street, day or night, without concern."* However, as in the 2012 CHA, bullying (and particularly cyber-bullying) among youth, and domestic violence continued to be identified as concerns. In addition, a few key informants identified sexual violence as an area of concern.

<u>Bullying</u>

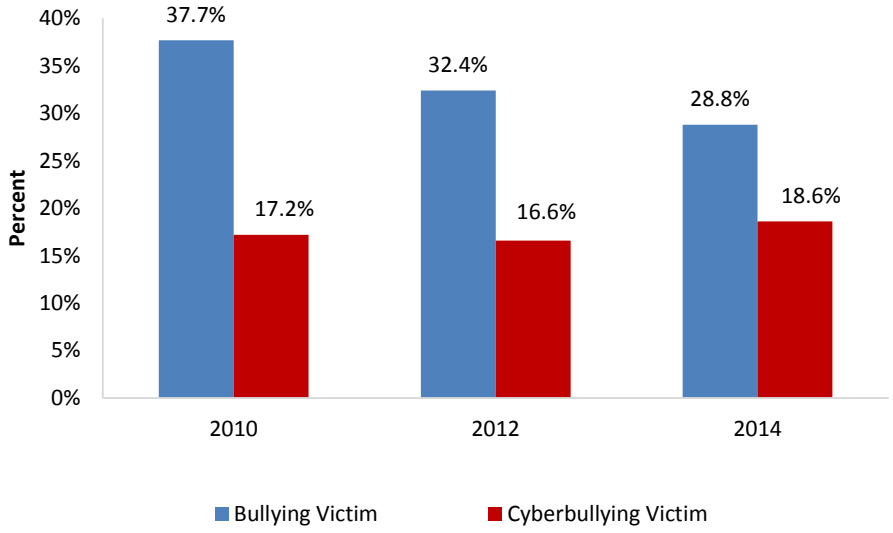
One interviewee talked about the difficulty of preventing and addressing bullying in timely ways, since it often happens subtlety within and between peer groups, and online through social media. This interviewee stated, *"Bullying is a really tough thing to get at. We get at it once it reaches the streets. You find violence [that results from bullying] when [youth] can't take it anymore."* A few interviewees mentioned that schools have resource officers as well as anti-bullying policies to address bullying; however, as reflected in the quote, often these resources are activated in response to bullying once it boils over into overt reactions. New and continued approaches to bullying prevention continue to be needed. As one interviewee suggested, *"In my mind, [youth] need more meaningful peer connections and positive role models. They need mentors who are older."* Such an approach would not only impact bullying, but other health issues such as mental health and substance abuse.

While data on bullying specific to the MRMC communities were not available, updated regional trend data from the MetroWest Adolescent Health Survey, funded by the MetroWest Health Foundation, is shown in Figure 11 and Figure 12. It should be noted that these data were from 21 school districts from a region larger than MRMC's service area. However, they provide a snapshot that in 2014, 28.8% of

middle school youth had been the victims of bullying, as compared to 37.7% in 2010 (a decrease of almost nine percentage points). Similarly, there was a decrease of eight percentage points for high school students who reported being the victims of bullying, from 31.8% in 2010 to 23.7% in 2014. This is an improvement from the 2012 CHA, which had shown a slight increase in the percent of high school students reporting bullying victimization between 2006-2010.

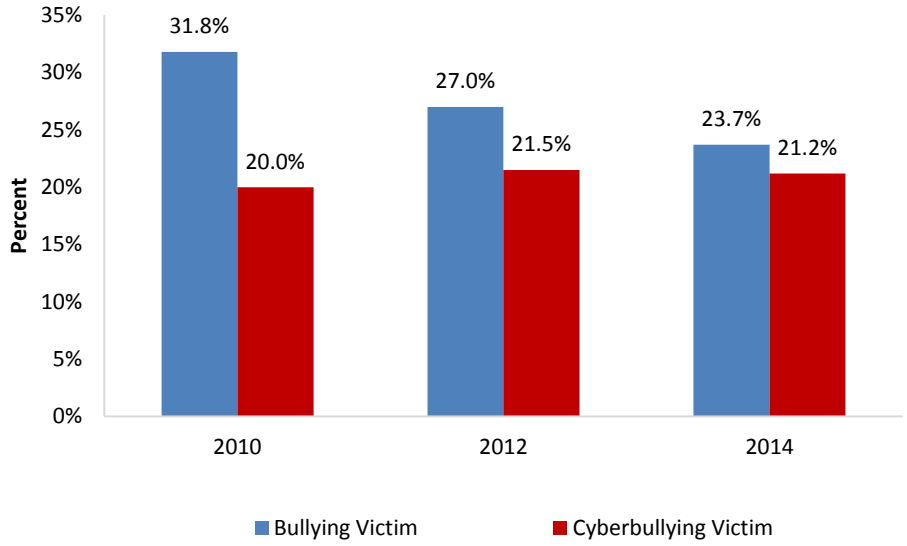
Cyberbullying, by contrast, remained relatively steady between 2010 and 2014, increasing by less than two percentage points for both middle school youth and high school youth (from 17.2% to 18.6% among middle school youth, and 20.0% to 21.2% among high school youth).

Figure 11: Trends in Percent of Youth (Grades 7 and 8) Bullying Victimization in MetroWest Region, 2010-2014



DATA SOURCE: MetroWest Health Foundation, 2014 MetroWest Adolescent Health Survey Middle School Report

Figure 12: Trends in Percent of Youth (Grades 9 through 12) Bullying Victimization in MetroWest Region, 2010-2014



DATA SOURCE: MetroWest Health Foundation, 2014 MetroWest Adolescent Health Survey High School Report

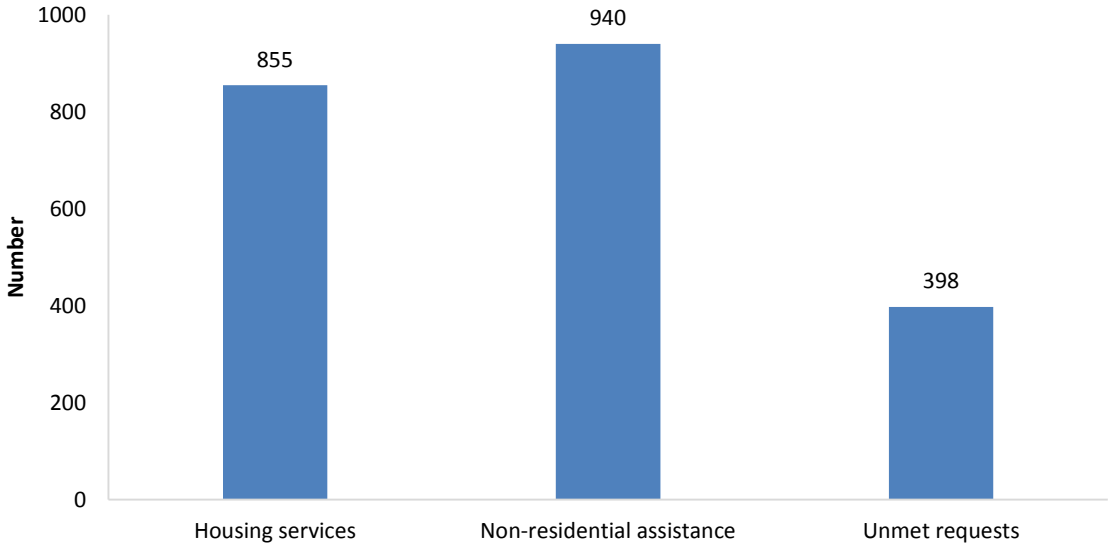
Domestic violence

> *"Interpersonal violence is an everyday violence. It can be partners, spouses, children, children vs. parents, and vice versa. It's the whole umbrella of violence of people who know and love one another. These are the things that occur behind closed doors." – Interview participant*

While local domestic violence data were not available, Massachusetts's data from the 2014 National Census of Domestic Violence Services demonstrate the magnitude of domestic violence victims' need for assistance (Figure 13). In a one-day period, 1,795 victims were assisted through housing services (including emergency shelters and transitional housing) and non-residential assistance and services (including counseling, legal advocacy, and children's support groups). Yet, on this one day, almost 400 people had unmet requests for services, of which 68% were housing related. According to this census, reported causes of unmet requests for help included:

- Reduced government funding;
- Not enough staff reported;
- Cuts from private funding sources; and
- Reduced individual donations.

Figure 13: Number of Adults and Children Serviced by Local Domestic Violence Programs in Massachusetts in One Day, 2014



DATA SOURCE: National Network to End Domestic Violence, Domestic Violence Counts: National Census of Domestic Violence Services (Census) 2014, as cited by Jane Doe Inc.
NOTE: Data for September 10, 2014 as part of National Network to End Domestic Violence's Domestic Violence Counts, an annual count of unduplicated adults and children seeking services U.S. domestic violence shelter programs in one 24-hour period

In the Greater Milford region, one interviewee named the Northbridge Association of Churches as taking up the charge to connect victims with support and resources.

Sexual Violence

While there was no localized data around sexual assault and violence, anecdotally a few interviewees expressed concern for both children and adults. As one interviewee said, *"We are seeing more sexual assaults involving children than in other communities. These are things that occur behind closed doors."*

Another interviewee talked about how sexual assault often leads to other health problems, such as mental health issues and substance use and abuse. Thus, this person underscored the importance of the need for services to outreach to and follow-up with victims of sexual violence.

Social Support and Cohesion

> *"If there were one thing that needs to be prioritized in the next year, it'd be building more of a village and continuing to build a path of connectedness. This is for people of all ages. We need to connect people, and also connect organizations. We need to see who's doing what, and what our focus needs to be. Keeping the entire community connected is the only way to help the community heal and stay healthy."* – Interview participant

As in the 2012 CHA, the importance of connectedness, social support, and cohesion was discussed as an important determinant of health that impacted a range of issues, and particularly substance abuse and mental health. As one interviewee stated, *"There are so many people who have an emptiness in their*

lives. They're feeling lonely and falling through the cracks. There are a lack of positive role models and connections. We need community initiatives to address this."

Populations of particular concern included youth, young adults (e.g. those between the ages of 20-40) and the elderly. Interviewees mentioned technology as a culprit for breaking down social connectedness, particularly for youth and young adults. As one assessment participant stated, *"Everybody is connected by cell phones but there is no connectedness. We see that in young people, but also in society as well."* Young adults between the ages of 20-40 were an age group of concern as well, since they were out of school and not always integrated into a consistent familial or community structure. Finally, interviewees mentioned the need to ensure that the elderly population was integrated into community life. As one interviewee said, *"There is so much loneliness in the elderly. We are seeing more and more people living alone in their homes. There really are no people checking on these older people, which really affects the hospital community. More people are coming in – and medical issues become more prominent when lonely."*

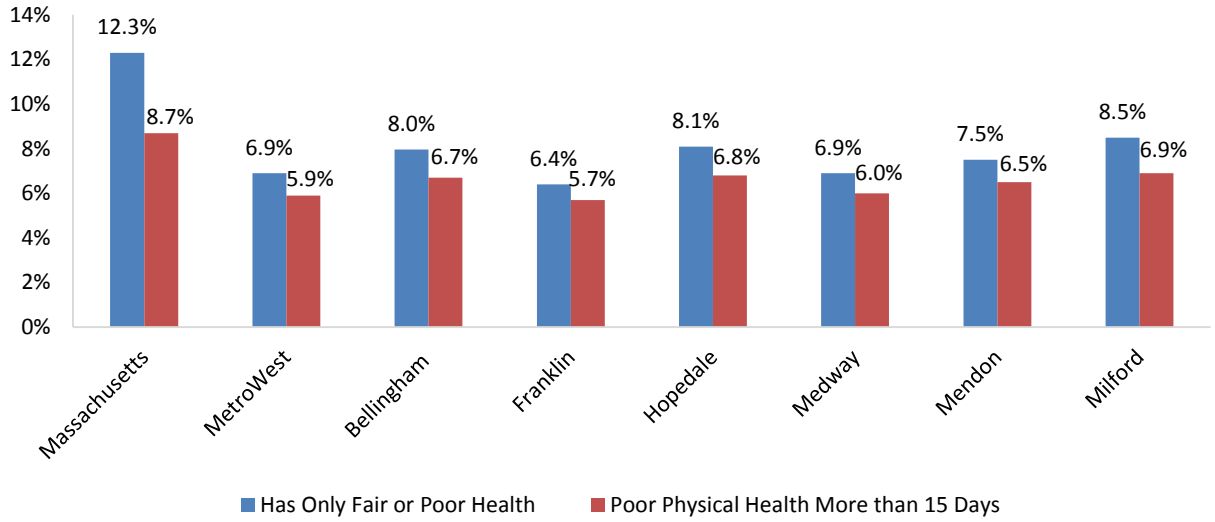
For ethnic communities, one interviewee stated that there is social cohesion and support within the Greater Milford region, as *"a lot of people take care of each other within ethnic communities.*" However, another interviewee also mentioned that in the broader community, *"there are issues of xenophobia – the fear of people who are not like us. You can see it in the political structure – it's under the radar."* Thus, while there might be internal supports within immigrant and minority communities, they may potentially need more opportunities and access to connect with groups and organizations in the broader community.

Finally, churches and faith communities were highlighted by a few interviewees as resources to promote community connectedness.

PERCEPTIONS OF HEALTH STATUS AND HEALTH ISSUES OF CONCERN

When compared to the statewide rates, the MetroWest region and individual cities and towns for which small area data estimates were available revealed lower percentages of individuals reporting fair or poor health, and poor physical health for more than fifteen days (Figure 14). Overall, 12.3% of MA residents reported having only fair or poor health, compared to 6.9% for the MetroWest region, and 8.5% in Milford, which had the highest percentage among the individual cities and towns. Similarly, 8.7% of MA residents overall reported having poor physical health for more than fifteen days, compared to 5.9% of residents in the region and 6.9% in Milford, which again had the highest percentage among individual cities and towns. Franklin had the lowest percentage of individuals reporting fair or poor health, or poor physical health for more than fifteen days, at 6.4% and 5.7%, respectively.

Figure 14: Percent Reporting Fair or Poor Health, or Poor Physical Health for More than 15 days



DATA SOURCE: Massachusetts Department of Public Health as cited by MetroWest Health Foundation, MetroWest BRFSS Telephone Survey, 2005-2011
NOTE: Data not available for Blackstone, Northbridge-Whitinsville, and Uxbridge

Participants' Top Health Issues of Concern

Greater Milford CHA survey respondents were each asked to identify the top three health issues impacting their families and themselves, and the top three health issues impacting the communities in which they lived or worked. The results are detailed in Figure 15.

The following are the top health issues identified as having the biggest impact upon survey respondents or their family, in rank order:

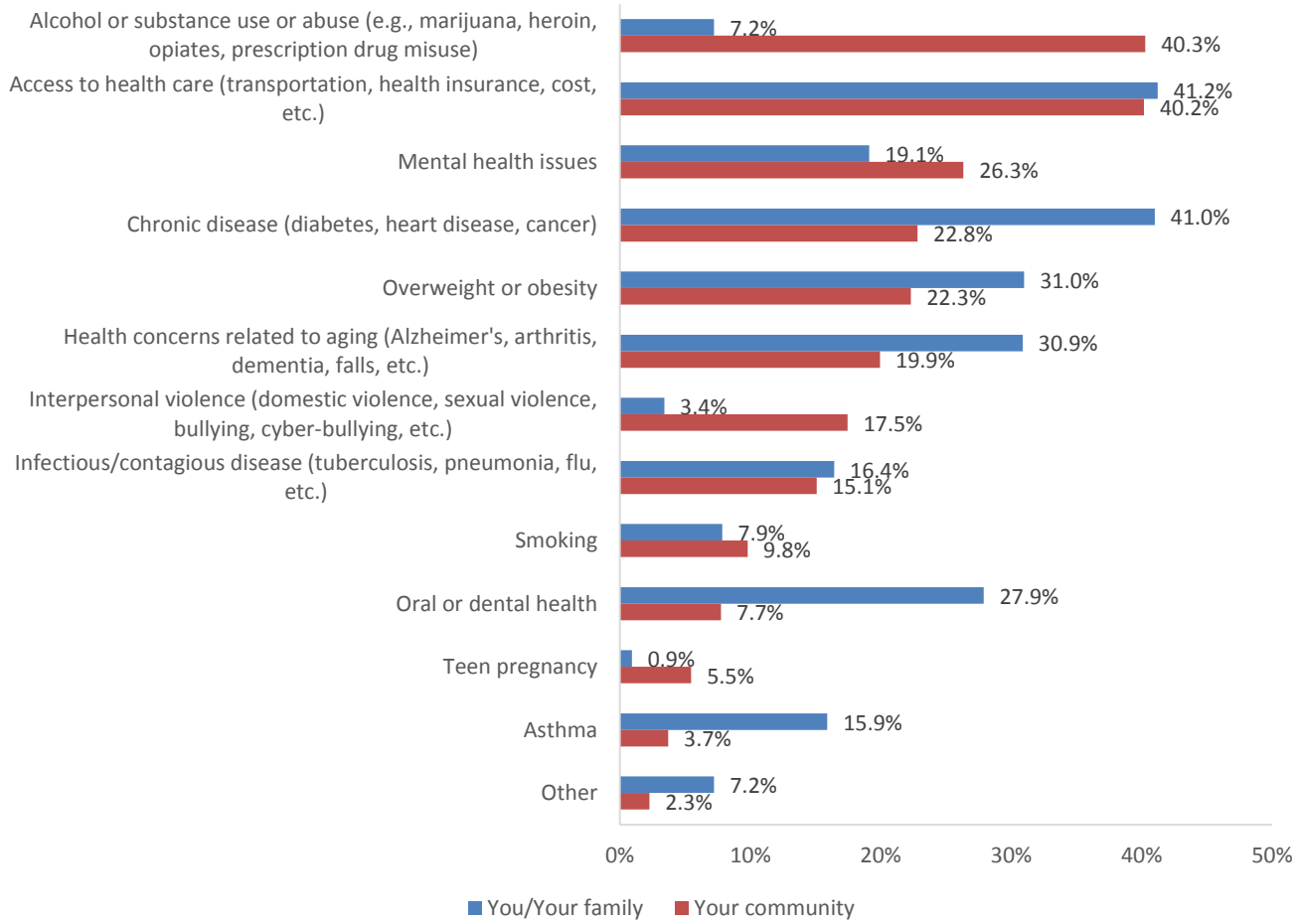
- Access to health care (41.2%);
- Chronic disease (diabetes, heart disease, cancer) (41.0%);
- Overweight or obesity (31.0%);
- Health concerns related to aging (Alzheimer's arthritis, dementia, falls, etc.); and
- Oral or dental health (27.9%).

The following are the top health issues identified as having the biggest impact upon the community in which the survey respondent lived or worked:

- Alcohol or substance use or abuse (e.g., marijuana, heroin, opiates, prescription drug misuse) (40.3%);
- Access to health care (e.g., transportation, health insurance, costs, etc.) (40.2%);
- Mental health issues (26.3%);
- Chronic disease (e.g., diabetes, heart disease, cancer) (22.8%); and
- Overweight or obesity (22.3%).

These identified priority areas collectively coincided with three of the four priority areas identified in the 2012 CHA – specifically, health promotion and chronic disease prevention, health care access, and behavioral health and substance abuse prevention.

Figure 15: Top Three Health Issues with the Largest Impact on the Respondent/ Family and on the Community, 2015 (n=968)



DATA SOURCE: Greater Milford Community Health Assessment Survey, 2015
NOTE: Data arranged in descending order by "Your community" responses

HEALTH CARE COVERAGE, ACCESS, AND UTILIZATION

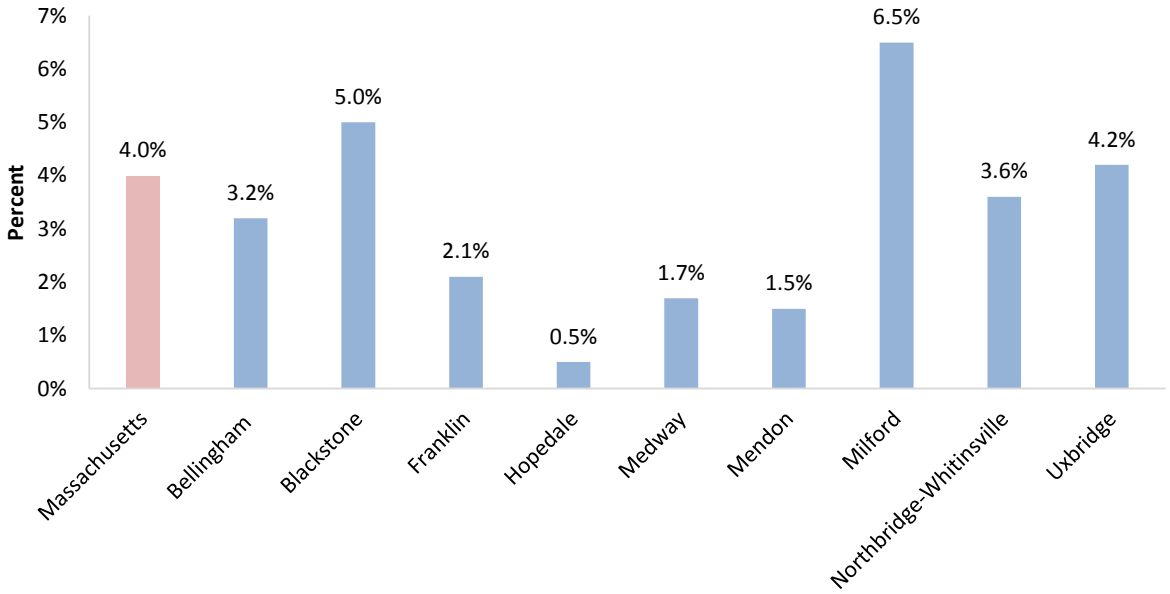
> *"[The most pressing health concern in the community] is the dearth of providers, both primary care physicians (PCP) and mental health providers."*– Interview participant

Access to care, identified as a key priority area in the 2012 CHA, continues to be of concern among assessment participants. While the passage of MA's health care reform efforts in 2006 and the Affordable Care Act in 2010 have reduced the state's health uninsurance rate to 4.0%, barriers to accessing timely and affordable health care continue to exist. The following sections discuss the state of health insurance coverage in Massachusetts, access and utilization of care, and barriers to accessing care for residents in the Greater Milford region.

Insurance Coverage

Figure 16 depicts the uninsurance rate of individuals of all ages for MA overall (4.0%), and for cities and towns in the MRMC service area. While the majority of cities and towns have similar or lower uninsurance rates than the state overall, Blackstone and Milford have rates slightly higher than the state, at 5.0% and 6.5%, respectively. Hopedale has the lowest uninsurance rate in the region, at 0.5%. Interview participants discussed the challenges with insurance coverage, particularly among seniors and those who were low income. It is important to note that while an individual or family may have health insurance, coverage is not necessarily continuous. For example, gaps can occur as people move between jobs and/or miss timelines for re-enrollment or re-certification (Chen, Lao, Lee, Stillman, & Weintraub, 2013).

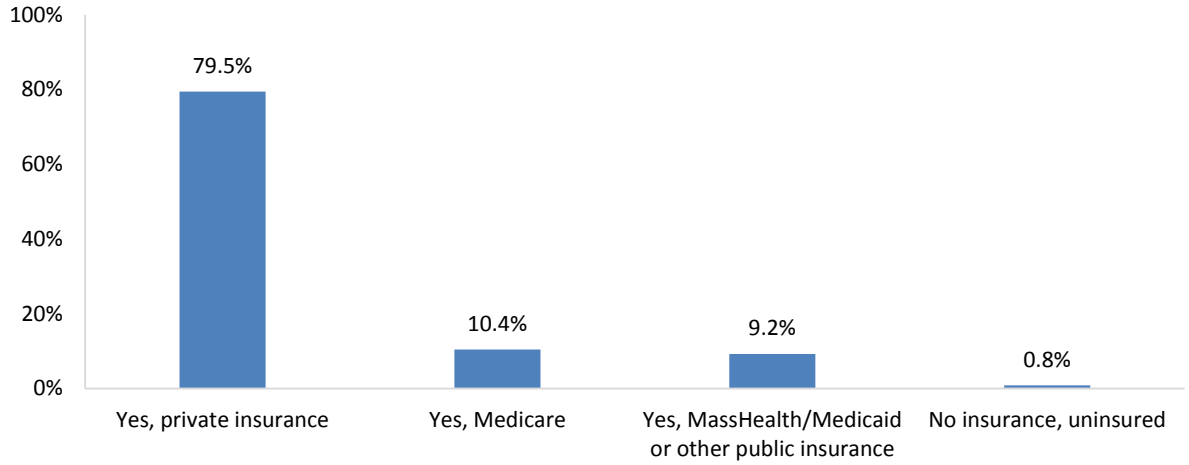
Figure 16: Uninsurance Rate of Individuals of All Ages by State and Primary Service Area, 2009-2013



DATA SOURCE: U.S. Census Bureau, 2009-2013 5-Year American Community Survey

From the Greater Milford Community Health Assessment Survey, only 0.8% of respondents reported that they were uninsured, which was lower than the rate of the state and individual MRMC cities and towns (Figure 17). With so few sample respondents being uninsured, it is important to note that the experiences of survey respondents may not be representative of the experiences of the MRMC service area population overall, and particularly, the uninsured population.

Figure 17: Survey Respondents' Health Insurance Coverage Types, 2015 (n=834)



DATA SOURCE: Greater Milford Community Health Assessment Survey, 2015

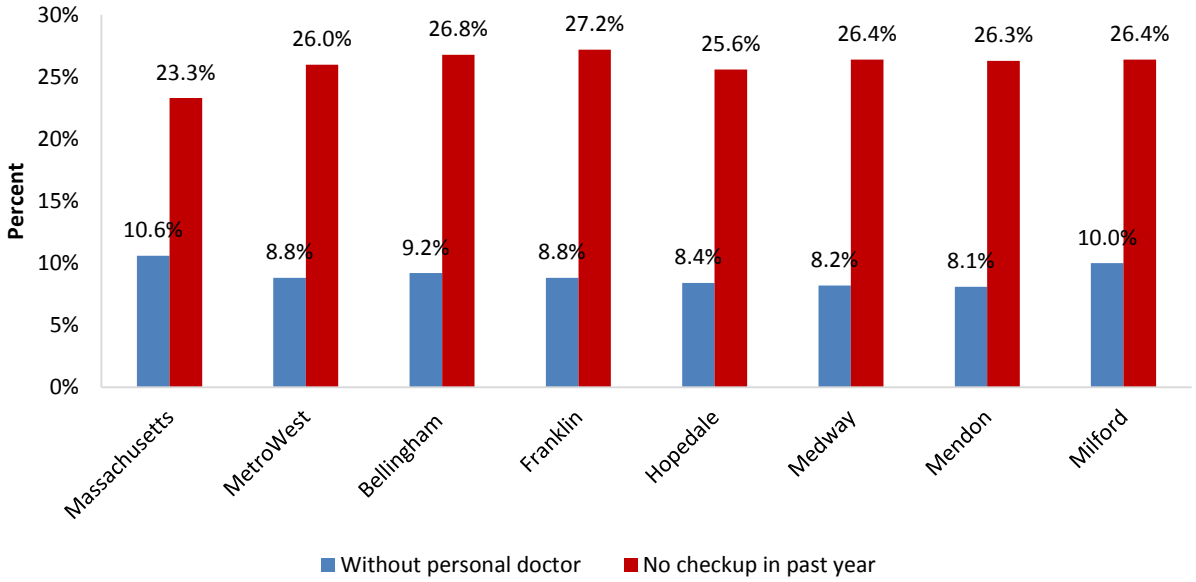
Health Care Access and Utilization

In spite of low uninsurance rates, nearly one in four individuals ages 18+ reported not receiving an annual checkup in the past year for the state, MetroWest region, and individual MRMC service area cities and towns (Figure 18). Individual cities and towns in the MRMC primary service area surpassed the statewide percentage of 23.3% of individuals who did not receive an annual checkup in the past year, ranging from 25.6% in Hopedale to 27.2% in Franklin. The data also show that approximately one in ten individuals reported not having a personal doctor for the state, region, and individual MRMC cities and towns.

From respondents to the 2015 Greater Milford Community Health Assessment Survey, over nine out of ten identified private doctor's offices or group practices as their providers of main medical care (Table 9). Similarly, when asked for respondents' sources of health information, nine in ten identified a doctor, nurse, or other health provider, with over six in ten identifying websites (Figure 19). The top five sources of health information identified, in rank order include:

- Doctor, nurse or other health provider (91.2%)
- Websites (61.9%);
- Pharmacy (38.1%);
- Family members (22.9%); and
- Employer (14.2%).

Figure 18: Health Care Access and Utilization Indicators for MA Residents Ages 18+, by State, Region, and Cities/Towns, 2005-2011



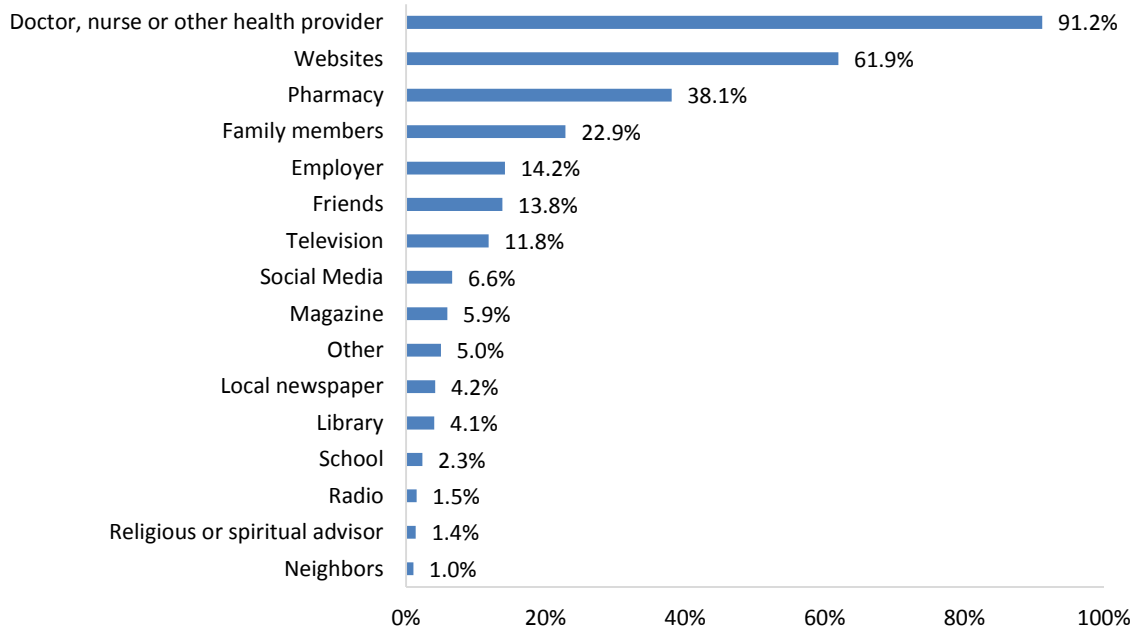
DATA SOURCE: Massachusetts Department of Public Health as cited by MetroWest Health Foundation, MetroWest BRFSS Telephone Survey, 2007-2011
NOTE: Data not available for Blackstone, Northbridge-Whitinsville, and Uxbridge

Table 9: Survey Respondents' Providers of Main Medical Care, 2015 (n=849)

	Percent
Private doctor's office or group practice	91.6%
Community health center	4.5%
Walk-in medical clinic	0.2%
Free medical program	0.9%
Emergency Room	0.8%
Veteran's Administration facility	0.7%
Other	1.2%

DATA SOURCE: Greater Milford Community Health Assessment Survey, 2015

Figure 19: Survey Respondents' Sources of Health Information, 2015



DATA SOURCE: Greater Milford Community Health Assessment Survey, 2015

Barriers to Care

Figure 20 illustrates most common barriers to accessing health services in the MRMC service area, as reported by respondents to the 2015 Greater Milford Community Health Assessment Survey. The following are the most common barriers to accessing health services within the past two years (in rank order):

- Long wait times for appointments (32.3%);
- Lack of evening or weekend services (27.5%);
- Office not accepting new patients (26.3%);
- Cost of care (21.4%);
- Unfriendly provider or office staff (14.9%); and
- Insurance problems/ lack of coverage (14.6%).

Assessment participants agreed that medical services available in the Greater Milford region are of high quality overall. However, as represented in the top three challenges cited in Figure 20, there were concerns that services available could not necessarily meet the demand. Numerous key informants identified a shortage of primary care physicians—as well as a shortage of providers for behavioral health and substance abuse services—as a barrier to care for Greater Milford residents. As one interviewee stated, *"We do have a problem recruiting primary care providers to our community health center. We would love to see improvement, whether through increasing pay, or whatever. It's even harder to recruit primary care providers into community health centers throughout the state."*

In regards to the cost of health care and insurance coverage type and status, the fourth and sixth ranked challenges to accessing care, numerous survey respondents commented that their concerns went beyond the absolute cost of health insurance; many patients are underinsured or cannot afford the associated costs of health care (e.g. co-pays, prescriptions, and laboratory tests) even with their current insurance. As one survey respondent stated, *"Regarding 'affordable health insurance,' I'm including the*

total cost of health care. My insurance plan may be affordable, but the deductible is quite high and there are numerous copays." Similarly, costs related to specialty services including behavioral health and dental services were also prohibitive, regardless of insurance type and coverage. One interviewee specifically mentioned, "*Dental care is hard to be able to afford, even with insurance,"* with another mentioning that they were particularly concerned about dental care for MassHealth patients.

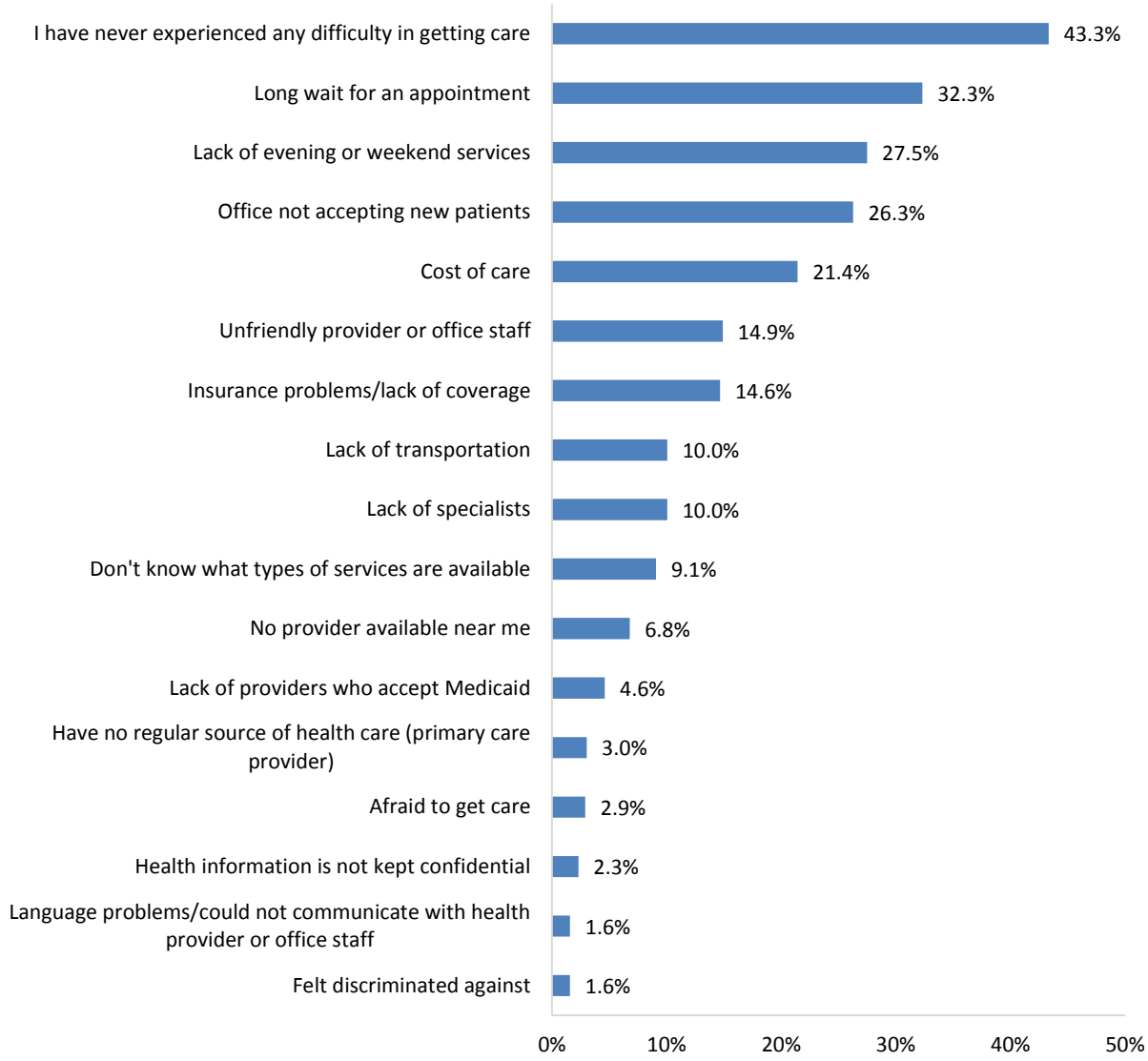
While no interviewees specifically mentioned challenges related to unfriendly providers or office staff, the fifth ranked barrier to care, interviewees mentioned the importance of ensuring that health services accommodate diverse populations. This observation could be closely tied to an individual's experience with the care staff they encounter. For example, in regards to translation services, one interviewee mentioned that the hospital is mandated to provide interpreter services to everybody; thus, once the translator arrives, care is likely to be more appropriate and effective. However, as this person stated, *"once the translator leaves, the patients could fall through the cracks."*

Finally, while not ranked highly through the survey data, one interviewee identified cultural perceptions of healthcare as a barrier to care for some populations. As this person stated, *"There are cultural differences that exist among immigrant populations. People just go to the doctors when they are sick. We want to show people that accessing preventive care isn't wrong. I'd love to see this gap closed and find ways to work with these populations … not just have them conform to our beliefs, but for us to conform to their beliefs as well."*

In addition, survey respondents reported on their personal experiences with health care services (Table 10). While almost all participants reported knowing where to go for medical and dental services, only 68% reported knowing where to go for mental health services. Over two in three reported that it is hard to use public transportation to get to medical/ dental services as well, echoing what was previously mentioned in the Transportation section of the assessment.

Almost one in three reported that cost of care was a barrier to care for himself or herself or a household member (Table 10). Discrimination when trying to get medical care due to race, ethnicity, language, gender, age, sexual orientation, or income was not widely reported by survey respondents. However, it is important to note that while this could be an indication of quality care in the region, it also may be a reflection of the demographics of survey respondents, who were primarily between the ages of 40-64 years old (64.2%), female (83.6%), White, Non-Hispanic (87.2%), highly educated (55.8% with a college degree or more), employed (83.8%), and English speakers (93.6%) (Table 1).

Figure 20: Survey Respondents' Reported Challenges to Accessing Care, 2015



DATA SOURCE: Greater Milford Community Health Assessment Survey, 2015
NOTE: Data arranged in descending order

Table 10: Percent of Respondents who Agreed with the Following Statements about Personal Experiences with Health Care Services, 2015

	% Agree
If I need medical services, I know where to go to receive them.	97.9%
If I need dental services, I know where to go to receive them.	94.0%
The health or social services in my community should focus more on prevention of diseases or health conditions.	87.4%
It's hard to use public transportation to get to medical/dental services.	86.7%
If I need mental health services, I know where to go to receive them.	68.0%
I or someone in my household has not received care needed because the cost was too high.	30.8%
When trying to get medical care, I have felt discriminated against because of my income.	10.1%
When trying to get medical care, I have felt discriminated against because of my race, ethnicity or language.	4.2%
When trying to get medical care, I have felt discriminated against because of my gender, age or sexual orientation.	3.6%

DATA SOURCE: Greater Milford Community Health Assessment Survey, 2015

HEALTH OUTCOMES AND BEHAVIORS

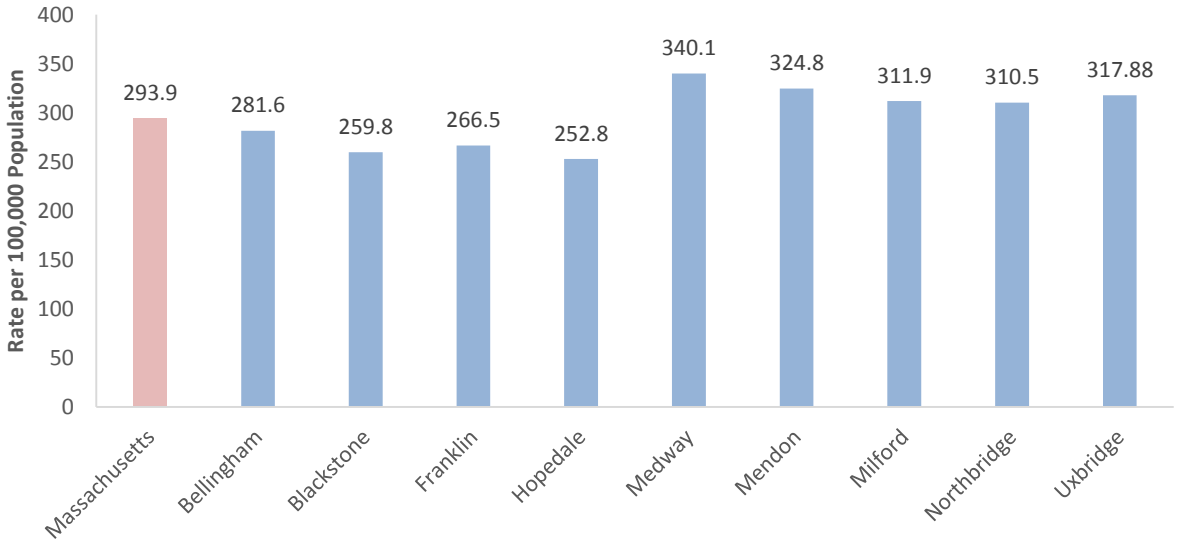
This section of the report provides a quantitative overview of leading health conditions in Greater Milford while also discussing the pressing concerns that residents and leaders identified during in-depth interviews.

Chronic Disease

Assessment participants mentioned concerns around chronic conditions, and particularly diabetes and hypertension. However, as in the 2012 CHA, these concerns were mentioned in direct connection to obesity, healthy eating, and physical activity. The following section provides an overview of chronic disease prevalence and hospitalization rates.

As illustrated in Figure 21, hospitalization rates related to coronary heart disease in the region ranged from 252.8 per 100,000 population in Hopedale to 340.1 per 100,000 population in Medway. The MA rate falls in between this range, at 293.9 per 100,000 population.

Figure 21: Rate of Coronary Heart Disease Hospitalization per 100,000 Population, by State and Cities/Towns, 2010-2012



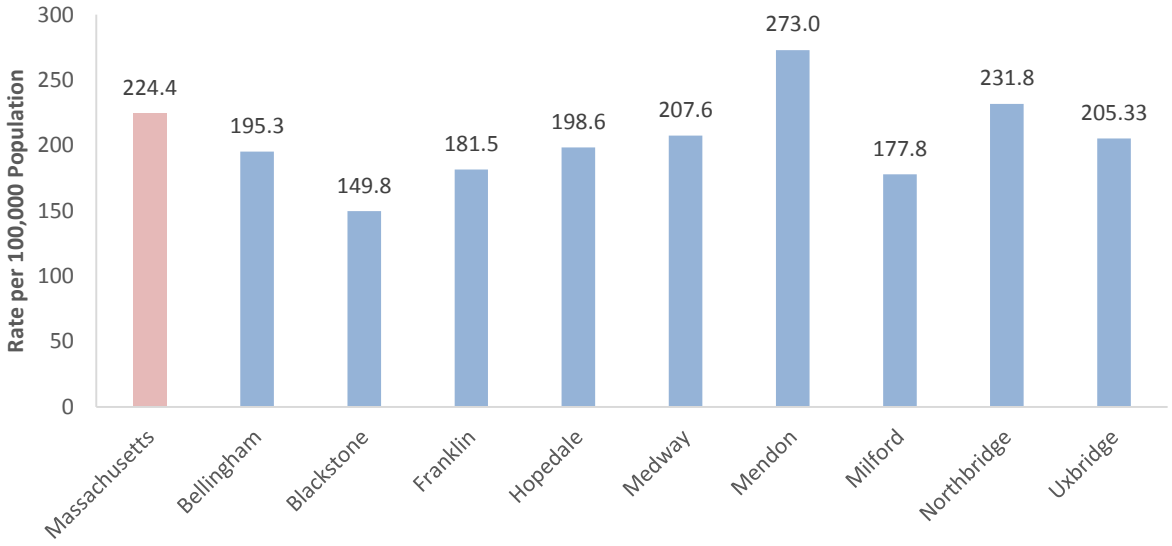
DATA SOURCE: Massachusetts Department of Public Health, MassCHIP, 2010-2012

As illustrated in Figure 22, there was variability in the rate of stroke (cerebrovascular disease) hospitalization across the cities/towns of Milford Regional Medical Center's primary service area. Mendon (273.0 per 100,000) and Northbridge (231.8 per 100,000) had the highest rates of cerebrovascular disease hospitalization, whereas Blackstone (149.8 per 100,000) had the lowest. Overall rates were generally lower than the MA state rate for cerebrovascular disease hospitalization, which was 224.4 per 100,000.

Figure 23 depicts the percent of individuals diagnosed with diabetes, as well as the percent of individuals who ever had hypertension, by state and region (CHNA 6). For diabetes, the statewide percentage (8.3%) was slightly lower than that of the Greater Milford region (9.3%), while for hypertension, the statewide percentage (29.3%) was higher than that of the region (26.6%).

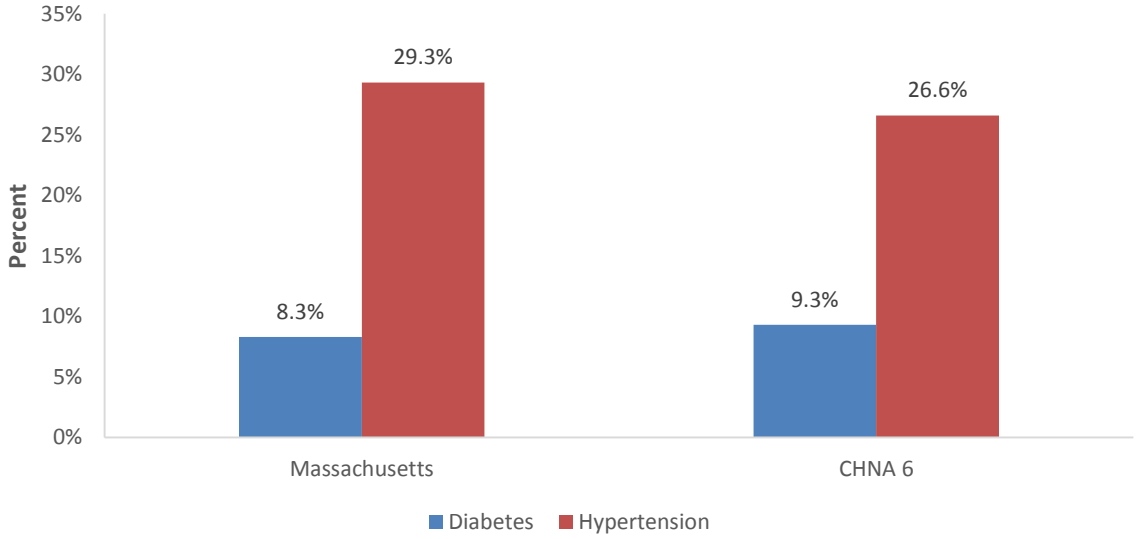
Figure 24 illustrates the age-adjusted rate of asthma-related hospitalizations per 100,000 population, by state and cities/towns in Milford Regional Medical Center's primary service area. The rates for individual cities and towns were lower than the rate of the state (885.6 per 100,000). Northbridge had the highest rate, at 825.6 per 100,000, and Mendon had the lowest rate, at 512.7 per 100,000.

Figure 22: Rate of Stroke (Cerebrovascular Disease) Hospitalization per 100,000 Population, by State and Cities/Towns, 2010-2012



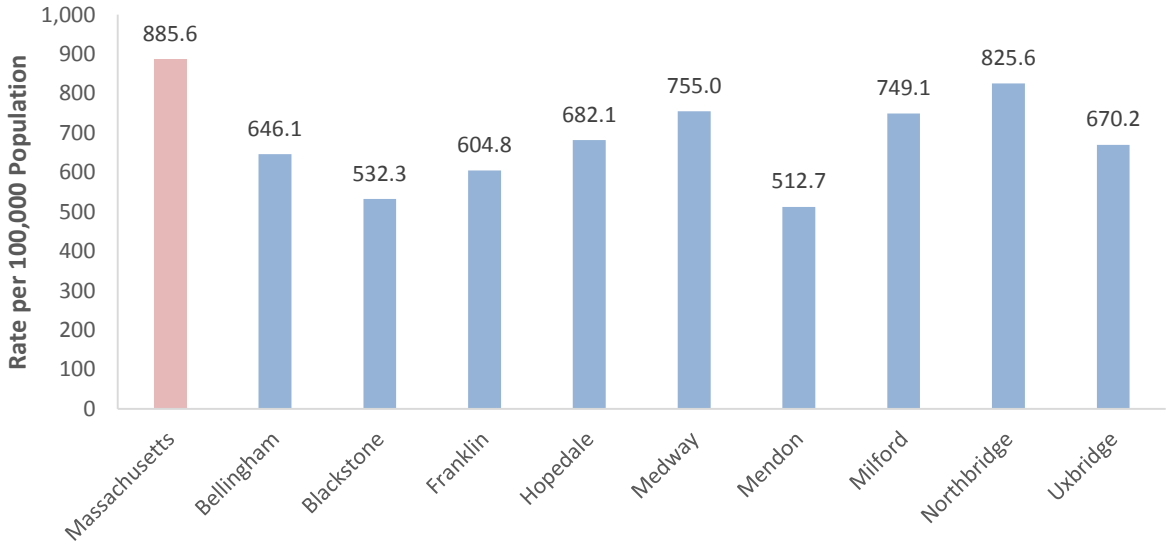
DATA SOURCE: Massachusetts Department of Public Health, MassCHIP, 2010-2012

Figure 23: Percent Diagnosed Diabetic and Ever Had Hypertension, by State and CHNA, 2011-2013



DATA SOURCE: Massachusetts Department of Public Health, MassCHIP, 2011-2013

Figure 24: Age-Adjusted Asthma-Related Hospitalization Rate per 100,000 Population, by State, Region, and Cities/Towns, 2010-2012



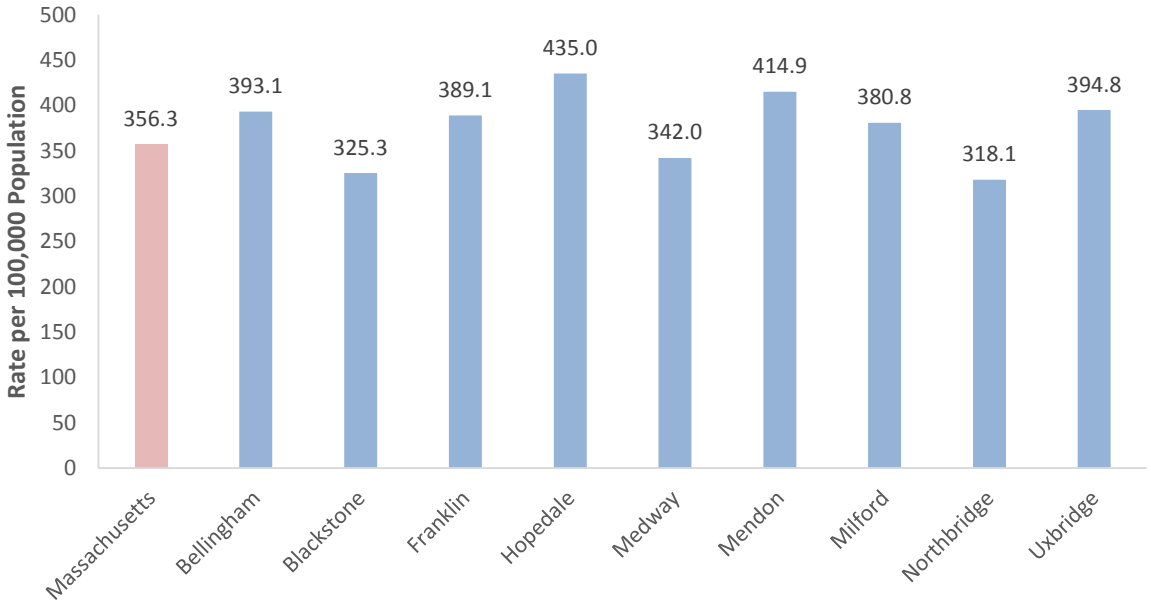
DATA SOURCE: Massachusetts Department of Public Health, MassCHIP, 2010-2012

Cancer

Cancer continues to be a chronic condition affecting many in the region. Figure 25 shows the age-adjusted cancer hospitalization rate per 100,000 population, by state and the cities and towns in the MRMC primary service area. With exception to Blackstone, Medway, and Northbridge, all the other cities and towns have cancer-related hospitalization rates higher than that of Massachusetts as a whole. Rates range from 318.1 per 100,000 in Northbridge to 435.0 per 100,000 in Hopedale.

Table 11 summarizes the age-adjusted cancer incidence rates per 100,000 population for the state and for MRMC cities and towns, by cancer type. Prostate cancer had the highest incidence rates overall for all geographic areas. Additionally, with exception to Blackstone, all of the cities and towns had higher prostate cancer incidence rates (ranging from 158.3 per 100,000 in Hopedale to 316.4 per 100,000 in Mendon) than the state (151.0 per 100,000). Breast cancer incidence rates for Blackstone (122.9 per 100,000), Medway (124.4 per 100,000), and Milford (105.7 per 100,000) were below the statewide rate of 135.7 per 100,000, while the rates for the remaining cities and towns were higher than that of the state. The lung cancer incidence rate for Blackstone (106.0 per 100,000) was higher than those of the state (69.3 per 100,000) and the remaining cities and towns. Mendon had the lowest lung cancer incidence rate (40.1 per 100,000). Finally, with exception to Hopedale, Northbridge, and Medway, colorectal cancer rates for the individual cities and towns were slightly below that of the state (42.3 per 100,000), ranging from 32.3 per 100,000 in Blackstone to 37.9 per 100,000 in Bellingham.

Figure 25: Age-Adjusted Cancer Hospitalization Rate per 100,000 Population, by State and Cities/Towns, 2010-2012



DATA SOURCE: Massachusetts Department of Public Health, MassCHIP, 2010-2012

Table 11: Age-Adjusted Cancer Incidence Rates per 100,000 Population, by Type and by State and Cities/Towns, 2007-2011

Geography	Breast	Colorectal	Lung	Prostate
Massachusetts	135.7	42.3	69.3	151.0
Bellingham	166.8	37.9	84.1	175.1
Blackstone	122.9	32.3	106.0	148.4
Franklin	148.2	53.5	63.9	185.3
Hopedale	142.7	50.7	60.2	158.3
Medway	124.4	65.0	89.4	169.0
Mendon	168.3	36.3	40.1	316.4
Milford	105.7	35.2	74.4	189.8
Northbridge	136.0	52.7	70.6	181.0
Uxbridge	162.8	35.5	93.6	213.0

DATA SOURCE: Massachusetts Department of Public Health, MassCHIP, 2007-2011

Healthy Eating, Active Living, and Overweight/Obesity

Healthy Eating and Physical Activity

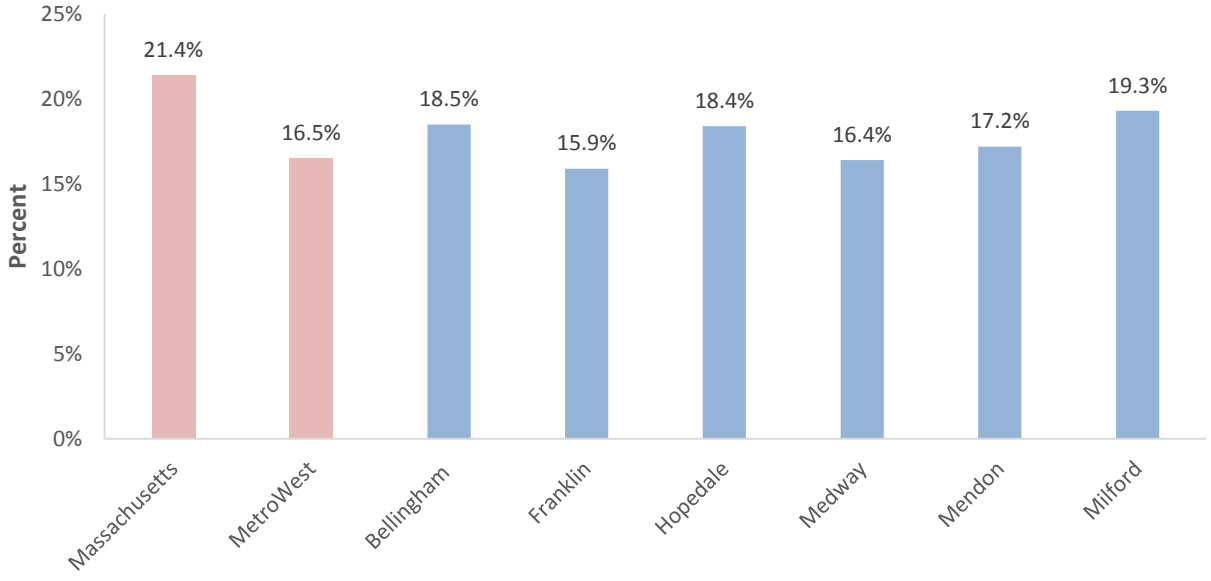
Interview participants highlighted efforts that have been made in the Greater Milford region to increase healthy eating and physical activity for community residents. Such highlighted efforts included, but were not limited to: health insurance companies providing incentives for members to join fitness programs; community fitness events; community centers providing opportunities for youth to cook, work out, and get homework help; walking clubs through senior centers; Milford Rail Trails, which converted old rail beds into walking and biking trails; vouchers for farmer's markets; local farms that

provide fresh fruits and vegetables to people in need; and efforts to work with food pantry donors to donate healthy choices. Specifically, one effort that came out of the 2012 CHA and improvement planning process included getting fresh fruits and vegetables from local farmers to a local food pantry, and promoting cooking lessons at the food pantry to provide instructions on how to prepare healthy foods. As a part of this effort, a few legislators conducted their own cooking show for the food pantry, which was launched in the summer of 2015.

Yet, in spite of these strides, obesity, and particularly the lack of healthy eating and physical activity, continued to be of concern in the Greater Milford region. Interview and survey participants mentioned the continued need for greater access to affordable, healthy fruits and vegetables. As previously mentioned, with job insecurity, and housing and cost of living increases, families often struggled to prioritize spending on memberships to fitness centers, or healthy fruits and vegetables, especially with the availability of cheaper fast food alternatives. In addition, assessment participants mentioned that the built environment, including ensuring the availability of well-maintained sidewalks and bike paths, and safe parks and playgrounds, also had an impact on people's desire and ability to be physically active. Finally, transportation was again mentioned as a barrier to accessing farmers markets and fitness programs in some localities, due to their distance from some communities.

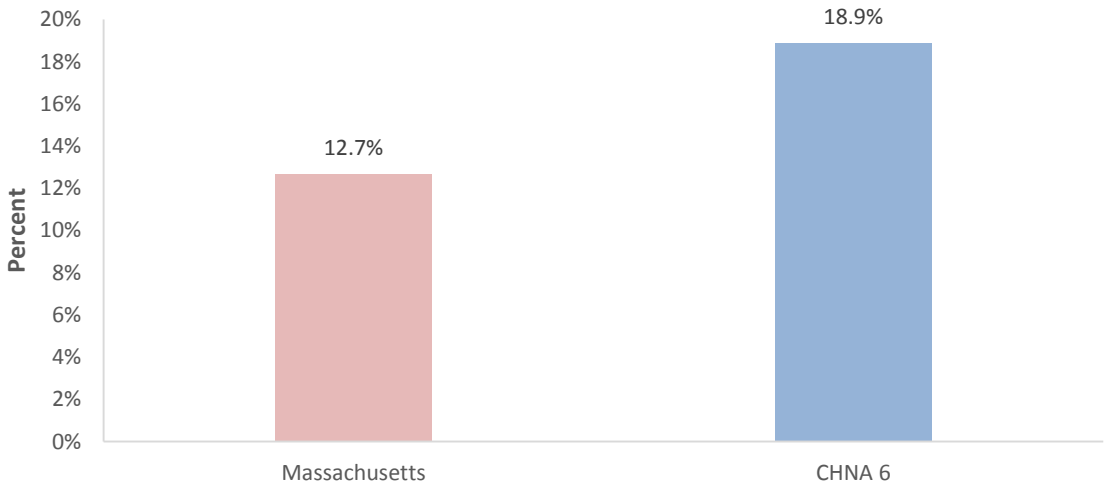
Quantitative data indicate that residents in the Greater Milford region have similar physical activity behaviors to residents statewide and in the MetroWest region overall, and similar healthy eating behaviors to residents statewide. As seen in
Figure **26**, slightly less than 20% reported getting no physical exercise in the last month, according to the Behavioral Risk Factor Surveillance System. Figure 27 shows slightly less than 20% of adults in CHNA 6 reported to consume five or more fruit and vegetable servings per day (the recommended guideline) in the last month, which is a slightly higher percentage than the percentage of those statewide (12.9%).

Figure 26: Percent Individuals that Reported No Exercise, 2005-2011



DATA SOURCE: Massachusetts Department of Public Health as cited by MetroWest Health Foundation, MetroWest BRFSS Telephone Survey, 2005-2011
NOTE: Data not available for Blackstone, Northbridge-Whitinsville, and Uxbridge

Figure 27. Percent Adults Reported Eating Five or More Servings of Fruits and Vegetables per Day, 2011-2013



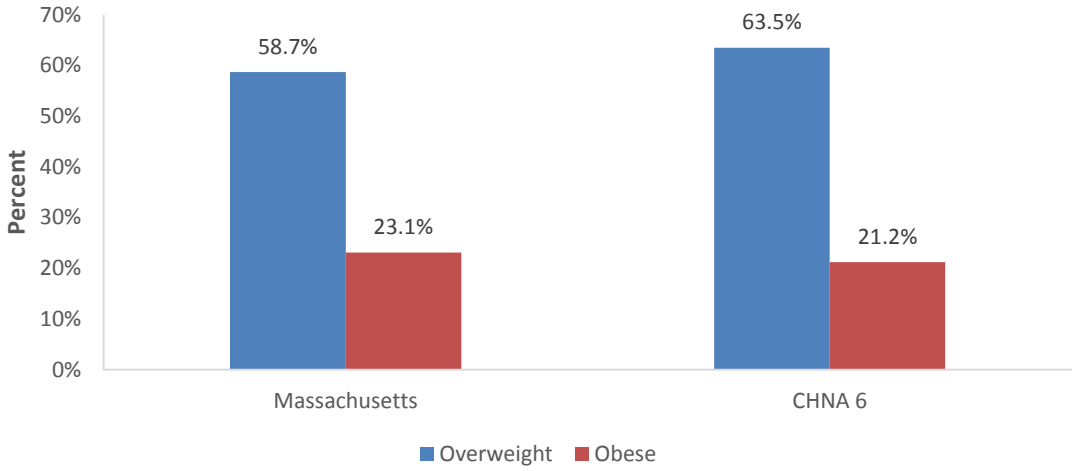
DATA SOURCE: Massachusetts Department of Public Health, MassCHIP, 2011-2013

Overweight and Obesity

While CHA survey respondents noted that overweight and obesity was a health concern for themselves, their family, and their community, data on weight status indicate that nearly one in five adults is obese. As seen in Figure 28, the Greater Milford region (CHNA 6) had a slightly higher percentage of overweight adults than the state as a whole (63.5% vs. 58.7%, respectively), while the Greater Milford region had a similar but slightly smaller percentage of obese adults to that of the state (21.2% vs. 23.1%, respectively).

Key informant interviewees discussed that obesity particularly impacts lower income, immigrant, and minority populations in the Greater Milford region, likely due to financial constraints and cultural barriers that limit access to healthy foods, physical activity, and preventive health care.

Figure 28: Percent of Obese Individuals, by State and CHNA, 2011-2013



DATA SOURCE: Massachusetts Department of Public Health, MassCHIP, 2011-2013

Table 12 shows approximately one in five MetroWest 1st graders are considered overweight or obese according to BMI data, while one in four 4th, 7th, and 10th graders in the region are considered overweight or obese. There is variation across communities in the region. Overall, a higher percentage of younger children—1st, 4th, and 7th graders—in Milford are overweight or obese, while Bellingham has a greater percentage of 10th graders in that category.

Table 12: Percent 1st, 4th, 7th, and 10th Grade Public School Students Considered Overweight or Obese, 2012-2014

Geography	1st Grade	4th Grade	7th Grade	10th Grade
Massachusetts	27.7%	33.4%	33.3%	32.0%
MetroWest	21.5%	26.3%	26.8%	25.2%
Bellingham	18.0%	23.7%	32.9%	36.5%
Hopedale	24.6%	33.2%	22.3%	23.6%
Medway	20.7%	26.6%	28.7%	22.5%
Mendon-Upton	18.4%	27.6%	23.4%	28.4%
Milford	32.2%	36.8%	37.0%	28.9%

DATA SOURCE: Essential School Health Service (ESHS) data report, MA Department of Public Health, Mass CHIP as cited by the MetroWest Health Foundation, Child Overweight or Obesity Rates, 2012-2014
NOTE: Data not available for Blackstone, Franklin, Northbridge-Whitinsville, and Uxbridge

Substance Use and Abuse (Alcohol, Tobacco and Other Drugs)

> *"[The most pressing health concern in the community] is addiction because it's the most underserved as far as availability of resources – like treatment and encouraging people to seek treatment… We're seeing younger and younger people every year becoming addicted… What does a heroin addict look like? Look in the mirror. [They are] across the spectrum of age, race, socioeconomics, people who are Vice Presidents, and affluent people and their children." – Interview participant*

The 2012 CHA identified substance use and abuse as one of the most pressing health concerns across the Greater Milford region. As seen in Figure 29, this was also true in the 2015 Greater Milford CHA survey, where alcohol or substance use or abuse was ranked the top health issue impacting the respondents' community.

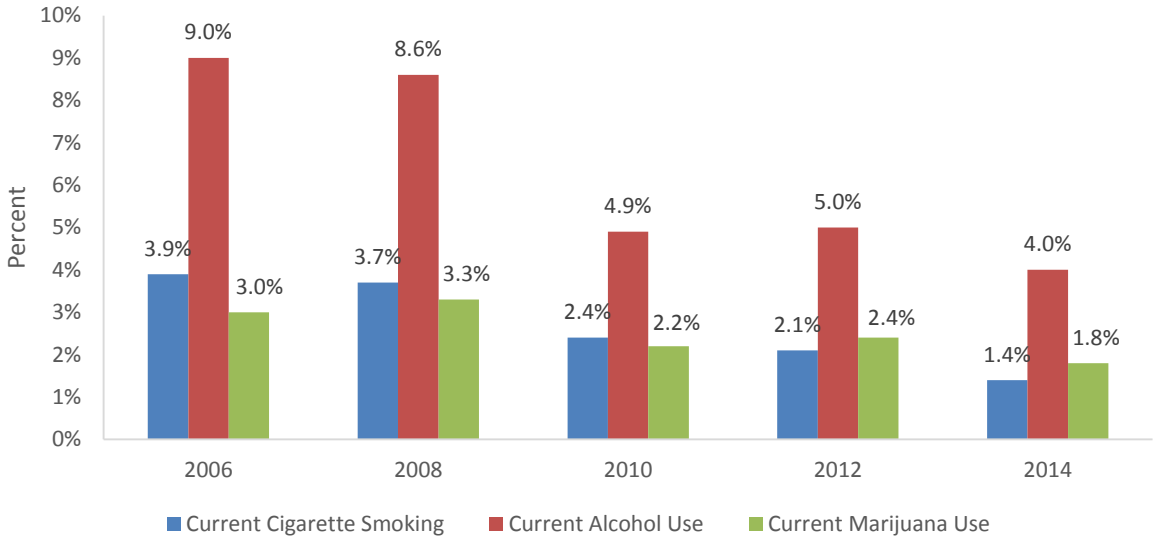
As was reflected in the above quote, numerous key informant interviewees spoke of how substance use and abuse affected people of all walks of life. While one interviewee remarked that youth *"do some substances as part of teen development,"* another interviewee identified adults from twenty to forty years of age as being most affected *"because they don't have the traditional support network. At twenty, they are out of the school system. At forty, they may not be married and may not have strong family support or roots in the community."*

Assessment participants identified substance abuse as a concern, not only because it has an impact on the health of youth and adults, but it also affects the perception of community well-being and safety for the community. As one survey respondent commented, *"Although Milford has many parks and playgrounds and the bike path, I am often concerned about some of the people who use these areas to drink alcohol and use drugs. There have been a few occasions where I have had to notify the police because I have found syringes on the ground."*

Adolescent Substance Use and Abuse

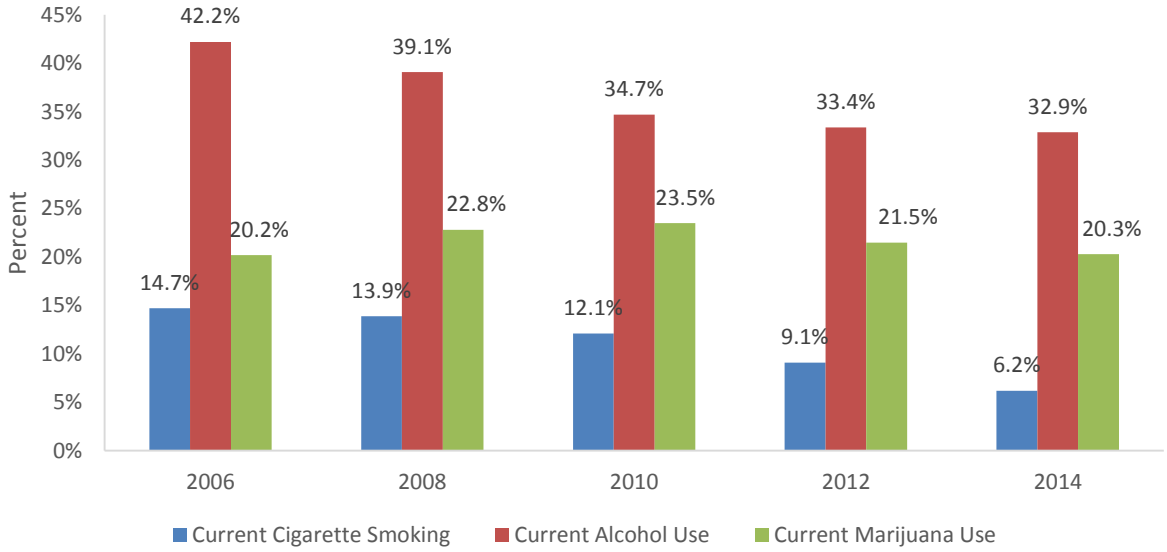
Youth substance abuse data were not available by CHA or by city/town. However, data were available for the larger MetroWest region. Figure 29 and Figure 30 visualize the most recent data for the MetroWest region, stratified by middle and high school. From 2006-2014, there has been a steady decline among both middle and high school youth for current cigarette smoking, current alcohol use, and current marijuana use ('current use' defined as within the 30 days prior to survey administration).

Figure 29: Trends in Youth (Grades 7 and 8) Current Substance Use in MetroWest Region, 2010-2014



DATA SOURCE: MetroWest Health Foundation, MetroWest Adolescent Healthy Survey Middle School Report, 2014
NOTE: 'current use' defined as within the 30 days prior to survey administration

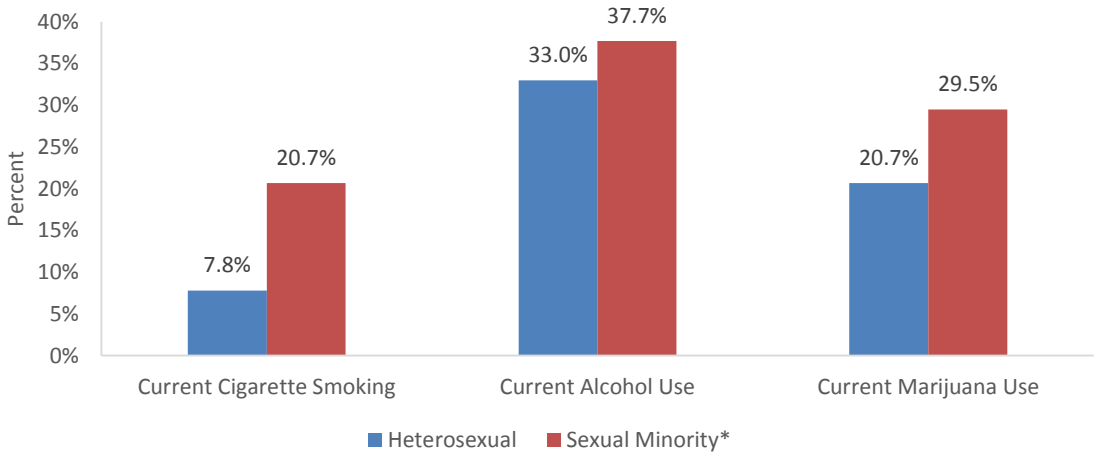
Figure 30: Trends in Youth (Grades 9 through 12) Current Substance Use in MetroWest Region, 2010-2014



DATA SOURCE: MetroWest Health Foundation, MetroWest Adolescent Healthy Survey High School Report, 2014
NOTE: 'current use' defined as within the 30 days prior to survey administration

While trend lines for current youth substance use looks encouraging overall, stratification by sexual orientation indicate that substance use disproportionately impacts sexual minorities, defined as gay, lesbian, bisexual, or not sure. In 2012, current cigarette smoking rates for high school students were 12.9 percentage points higher for sexual minorities than for heterosexual students (Figure 31). Similarly, current alcohol use and current marijuana use rates were 4.7 and 8.8 percentage points higher, respectively, for sexual minority students compared to heterosexual students.

Figure 31: Youth (Grades 9 through 12) Current Substance by Sexual Orientation in MetroWest Region, 2012

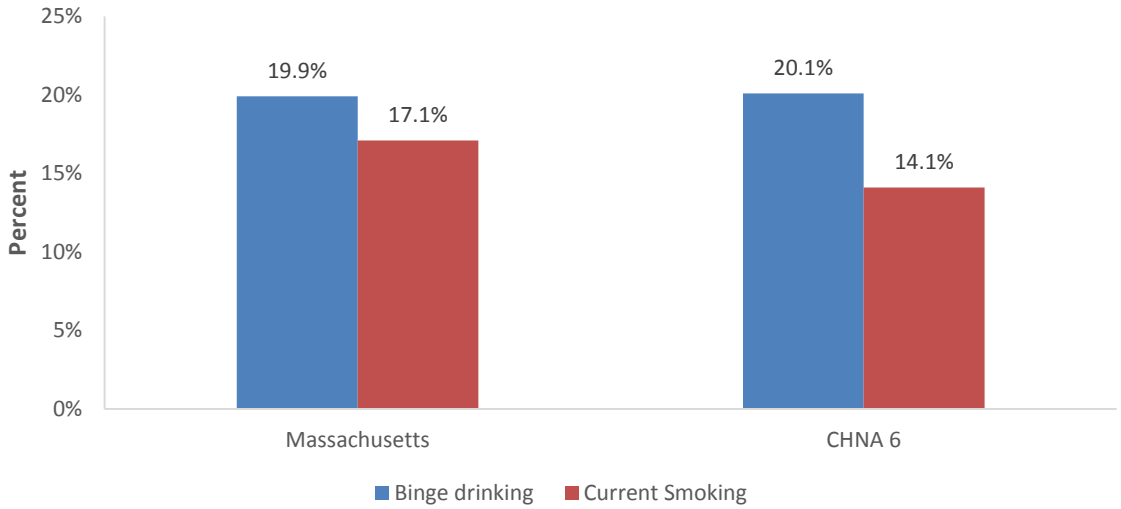


DATA SOURCE: MetroWest Health Foundation, MetroWest Adolescent Healthy Survey High School Report, 2012
NOTE: 'current use' defined as within the 30 days prior to survey administration
* Gay/lesbian, bisexual, or not sure

Adult Substance Use and Abuse

Among adults, binge drinking and current tobacco use rates in the region were slightly lower than the statewide rates (Figure 32).

Figure 32: Percent Reported Binge Drinking and Current Smoking, by State and CHNA, 2011-2013

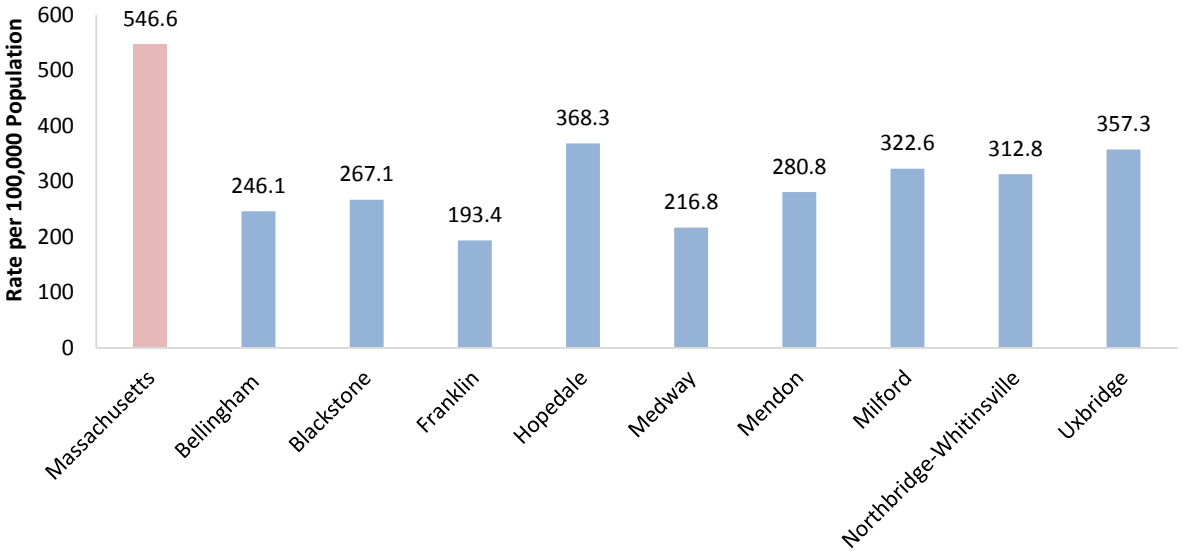


DATA SOURCE: Massachusetts Department of Public Health, MassCHIP, 2011-2013

Opioids and other drugs (e.g., prescription drugs) were mentioned by key informant interviewees as a concerning issue with regards to substance abuse in the region. One interviewee stated, *"Opioid abuse and deaths are tragic … the fact that we have so many users. It affects all walks of life. It hits in unexpected places. It's leading to people doing things they don't normally do … stealing, breaking into homes, etc."*

Figure 33 illustrates the most recently available data on the non-fatal opioid-related case rate per 100,000 in the state, and the MRMC cities and towns. Opioid-related cases include opioid-related drug abuse, dependence, and overdoses/ poisonings. The state rate was higher than all of the individual cities and towns, and more than double the rates of Bellingham, Blackstone, Franklin, and Medway.

Figure 33: Non-Fatal Opioid-Related Case* Rate per 100,000 Population, by State and Cities/Towns, 2009



DATA SOURCE: MA Inpatient Hospital Discharge Database, MA Outpatient Emergency Department Database, MA Outpatient Observation Stay Database, Division of Health Care Finance and Policy as cited by MA Department of Public Health

* Opioid-related cases include opioid-related drug abuse, dependence, and overdoses/poisonings

Figure 34 illustrates the age-adjusted opioid-related emergency visit rate per 100,000 population, by state and MRMC cities/towns for which data estimates were available. Again, the state rate is higher than the MetroWest region and the cities and towns, and more than double the rates for Bellingham, Franklin, Medway, and Mendon.

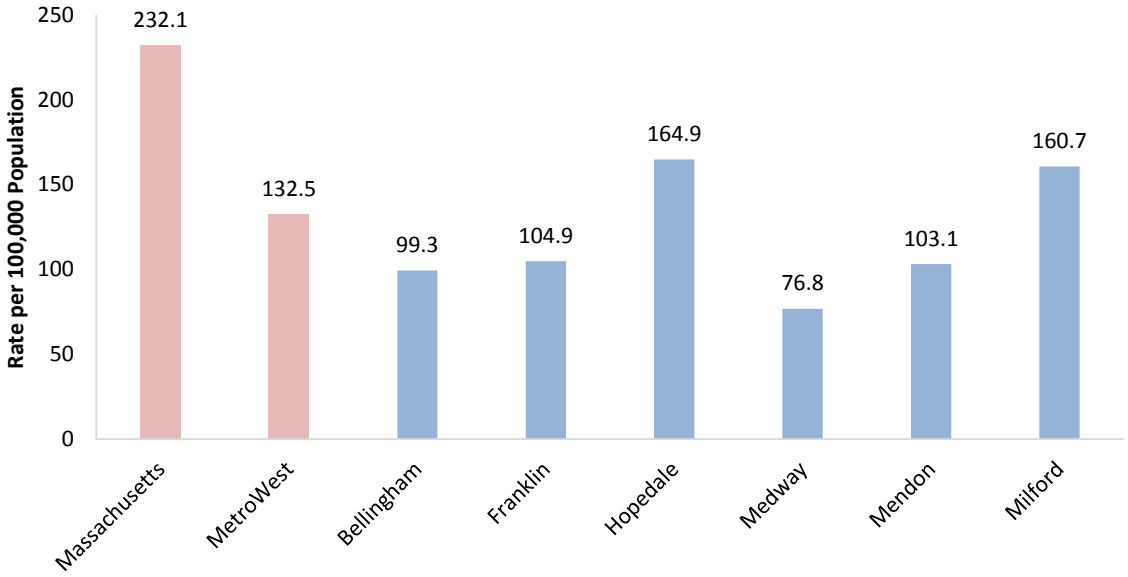
Table 13 details the absolute number of unintentional opioid fatal overdoses by state, and by cities/ towns from 2012-2014. Across the three-year span, Milford had the highest number of overdoses, with seven cases, followed by Bellingham, Franklin, and Uxbridge, with six cases each. Only Blackstone had no cases of unintentional opioid fatal overdoses.

While the absolute number of fatal cases is low overall, it is important to note that the crude rate of unintentional opioid fatal overdoses in MA has more than tripled since 2000 (Figure 35).

In addition to opioid addiction, numerous participants made connections between opioid addiction leading to heroin use and addiction for both youth and adults due to its relative affordability. One interviewee called heroin the *"drug of choice, given that it's much less expensive than Oxycontin or other over the counter drugs."* Another interviewee echoed this observation, stating, *"Heroin is plentiful and potent and cheap. They run it like Dominos Pizza. You call a number and they are already out in the car… You can work on the law enforcement with supply, but it's the demand side that needs attention."*

One key informant observed that construction workers might be one population particularly at risk for substance use and abuse behaviors. While no data was available to substantiate this observation, anecdotally, this informant stated, *"Many construction workers come in [to community health centers] with preexisting issues with controlled substances that were initially used for pain management to control back pain."*

Figure 34: Age-Adjusted Opioid-Related Emergency Visit Rate per 100,000 Population, by State, Region, and Cities/Towns, 2007-2011



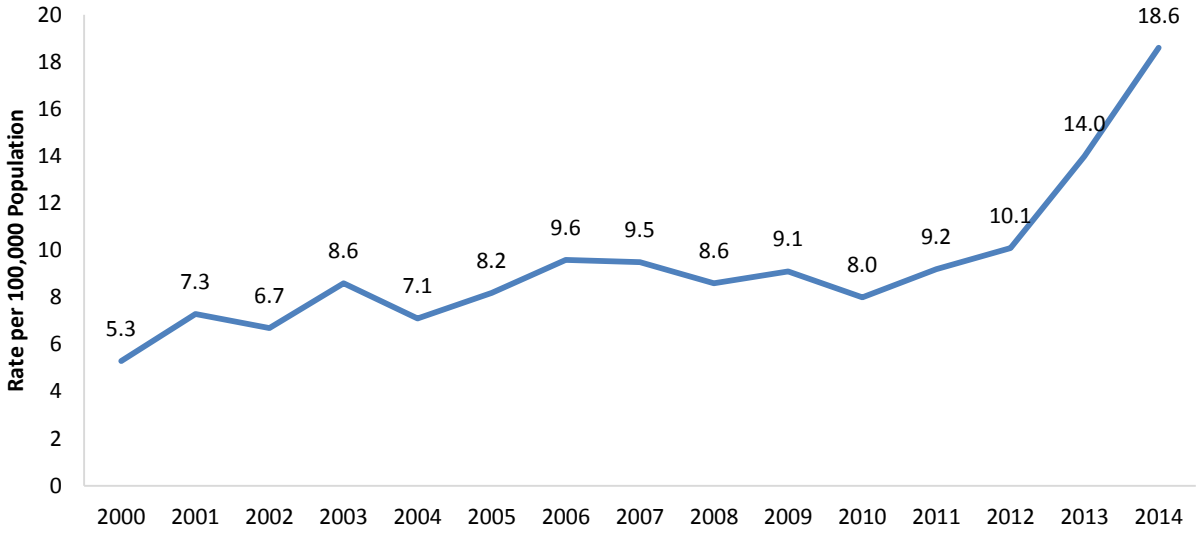
DATA SOURCE: Massachusetts Department of Public Health MassCHIP as cited by MetroWest Health Foundation, 2007-2011
NOTE: Data not available for Blackstone, Northbridge-Whitinsville, and Uxbridge

Table 13: Number of Unintentional Opioid Fatal Overdoses by Cities/ Towns, 2012-2014

Geography	2012	2013	2014
Massachusetts	668	910	1,047
Bellingham	3	1	2
Blackstone	0	0	0
Franklin	1	2	3
Hopedale	0	0	2
Medway	0	1	0
Mendon	0	2	0
Milford	4	2	1
Northbridge-Whitinsville	2	1	1
Uxbridge	3	2	1

DATA SOURCE: Massachusetts Department of Public Health, Registry of Vital Records and Statistics, 2015
NOTE: 2013 and 2014 data are subject to updates, for some cases are still in the process of being confirmed

Figure 35: Trends in Unintentional Opioid Fatal Overdose Crude Rates per 100,000 Population in MA, 2000-2014



DATA SOURCE: Massachusetts Department of Public Health, Registry of Vital Records and Statistics, 2015
NOTE: 2013 and 2014 are subject to updates, for some cases are still in the process of being confirmed

Substance Abuse Treatment Services

> *"If you have cancer, you have great doctors to treat you. But, when it comes to opioids, you don't have any."* – Interview participant

Almost two thirds (62.8%) of survey participants deemed alcohol or drug treatment services for youth as "hard to access." Similarly, one in two participants ranked such services for adults as "hard to access."

This perception was echoed through key informant interviews, where numerous interviewees remarked that substance abuse treatment was either difficult to access or inadequate to effectively address addiction. One interviewee stated, *"The traditional medical approach is that we will sit and wait for you to come get help. We'll ship you out for 14 days, which isn't enough, and then do the best we can with methadone. We will give you whatever your insurance company will buy. But, you talk to addicts [and they say], 'You ship me out to Bridgewater and I meet four more dealers.' There aren't organizations seeking out junkies asking, 'Do you want help?'… you wait until they hit rock bottom."* Another interviewee echoed this, stating, *"Drug use and abuse requires follow-ups. It requires counseling. There needs to be people to check up on you. That's the biggest gap that I see."*

Another interviewee identified the availability of community support groups and substance abuse treatment facilities as the biggest challenge to addressing opioid abuse. As this person said, *"The closest facilities are in Worcester or Taunton – that is just too far for people to travel when struggling. We need to find beds and provide insurance coverage for treatment. Learn to Cope and counseling centers are needed."*

In spite of the perceived shortage of substance abuse treatment services, a few interviewees remarked that the community recently started a coalition to address this issue and get better treatment facilities as a response to recent opioid deaths in the area.

Mental Health

> *"The one thing that should be done that could make the biggest difference in improving community health is addressing suicide. We feel kids consider it to be a choice. [In our coalition], the majority of people want to talk about suicide because [people have] lost someone to suicide. We need to keep this issue in front of people."* – Interview participant

As in the 2012 CHA, assessment participants continued to identify mental health as a priority health issue in the region. As one interviewee stated, *"We used to see a teeny percentage of patients with behavioral health issues, but now it's very high. We've had a major increase and are trying to use a team approach to deal with the increasing number of patients."*

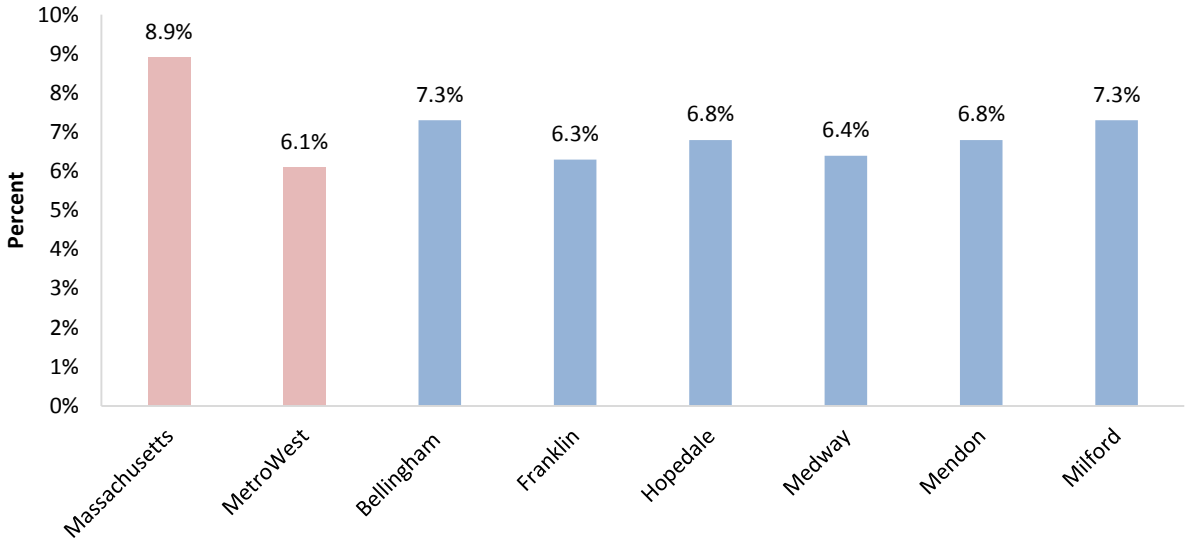
Anxiety and depression continued to be of concern, particularly for youth. As one interviewee stated, *"There are always psychosomatic issues. Teens are not always able to identify [that] those headaches and tummy aches are related to stress. They are not dealing with stress well. A lot of these kids are overscheduled. They have no downtime."* Other interviewees attributed youth mental health issues to academic pressures in the school system.

For both youth and adults in the region, other interviewees connected mental health issues with individuals who are socially isolated, saying, *"Individuals are not connected to supports – they have burnt bridges with family or friends. Some can be homeless or just not connected."*

In addition to impacting the quality of life, interviewees mentioned that mental health issues for both youth and adults could lead to or exacerbate other health issues, including substance use and abuse and violence.

To gauge mental health status, the Behavioral Risk Factor Surveillance System reports the percentage of individuals reporting poor mental health (which includes stress, depression, and problems with emotions) for more than 15 days during the past 30 days. These data are illustrated in Figure 36 for the state, region, and for MRMC service area cities and towns for which small area estimates were available. Compared to the state percentage of 8.9%, the region and all individual cities and towns had lower percentages of residents reporting poor mental health, at 6.1% for the region, and ranging from 6.3% in Franklin to 7.3% in Bellingham and Milford.

Figure 36: Percent Reporting Poor Mental Health for More than 15 Days in the past 30 days, by State, Region, and Cities/Towns, 2005-2011

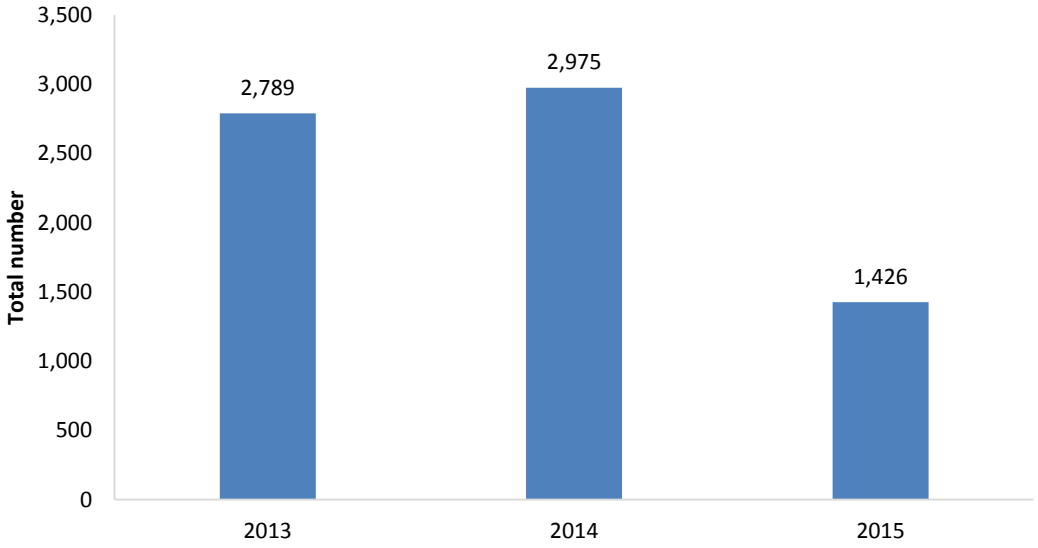


DATA SOURCE: Massachusetts Department of Public Health as cited by MetroWest Health Foundation, MetroWest BRFSS Telephone Survey, 2005-2011
NOTE: Data not available for Blackstone, Northbridge-Whitinsville, and Uxbridge

Figure 37 depicts the number of behavioral health patients utilizing the emergency department (ED) at MRMC from 2013-2015. Assuming that the number of patients for July-December of 2015 equals the number of patients seen from January-June, 2015, ED utilization remained relatively steady since 2013.

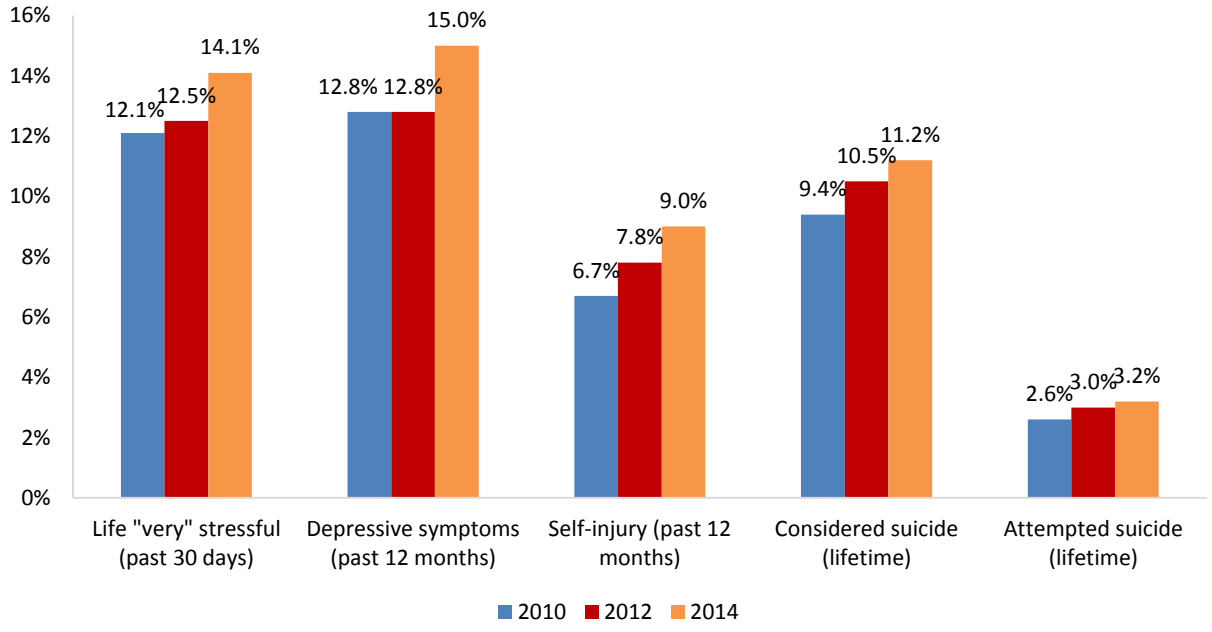
As with the 2012 CHA, youth mental health data stratified by cities/ towns were not available; thus updated youth data for the MetroWest region is provided. Figure 38 and Figure 39 indicate that stress, depression, and self-harming behaviors continue to be of concern, with percentages remaining either relatively steady or increasing between 2010-2014 for middle and high school students. Specifically, for middle school students, percentages increased across all measures between 2010-2014. For regional high school students, notably over one in three reported that life was "very" stressful in the past 30 days in 2014 (34.9%), up from 28.3% in 2010; furthermore, almost one in four reported depressive symptoms in the past 12 months.

Figure 37: Number of Behavioral Health Patients in Emergency Department at Milford Regional Medical Center, 2013-2015



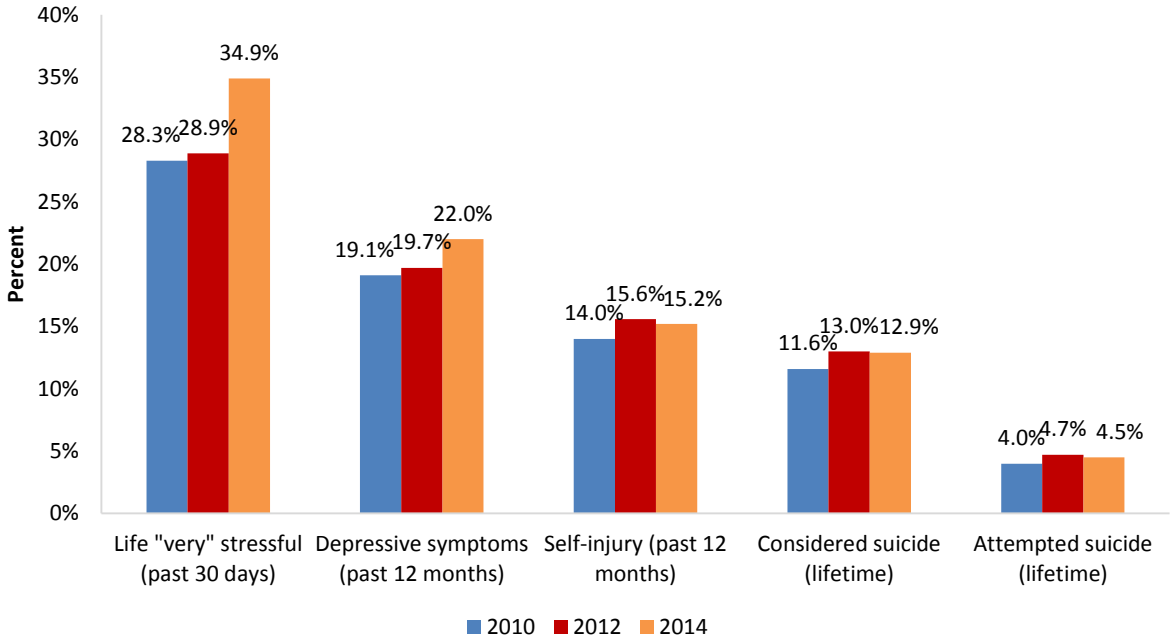
DATA SOURCE: EOHHS Grant Outcome Measures, Milford Regional Medical Center
NOTE: 2015 data only includes January 2015 to June 2015

Figure 38: Trends in Percent of Youth (Grades 7 and 8) Who Report Certain Mental Health Indicators in MetroWest Region, 2010-2014



DATA SOURCE: MetroWest Health Foundation, MetroWest Adolescent Healthy Survey Middle School Report, 2014

Figure 39: Trends in Percent of Youth (Grades 9 through 12) Who Report Certain Mental Health Indicators in MetroWest Region, 2010-2014



DATA SOURCE: MetroWest Health Foundation, MetroWest Adolescent Healthy Survey High School Report, 2014

Numerous interviewees identified the need for an increase in mental health services, particularly for individuals without health insurance. One interviewee described this gap, saying, *"There are 300 patients waiting for behavioral health services for over a year. They can't go anywhere because they are safety net patients. The community is working hard to get them into services, but it is a work in progress everywhere."* Other interviewees also mentioned that long wait times existed even for individuals with insurance due to the shortage of providers in the Greater Milford region.

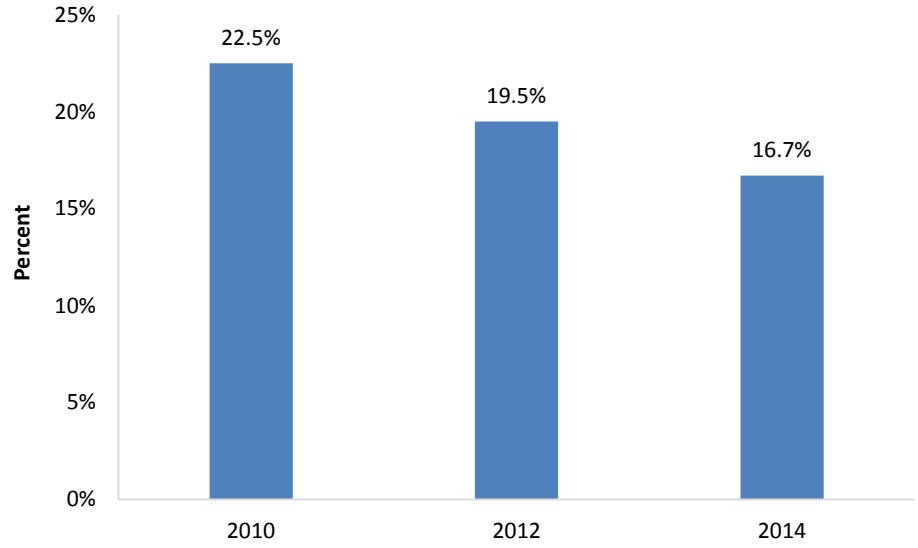
When asked where Greater Milford residents typically access mental health services, one interviewee said, *"There is nothing in town, nothing local."* A few interviewees mentioned that people in need of such services often had to travel to Boston or Worcester.

Beyond increasing the number and availability of mental and behavioral health providers, one interviewee specifically mentioned the importance of integrating behavioral health with primary care to help patients navigate and access resources more effectively. As this person stated, *"We need someone who can help people access resources. Having a behaviorist in a [primary care] office is a good solution… because a trusted relationship is already established between the practitioner and the patient so it's easier for the practitioner to bridge the patient with the behaviorist."*

Injury

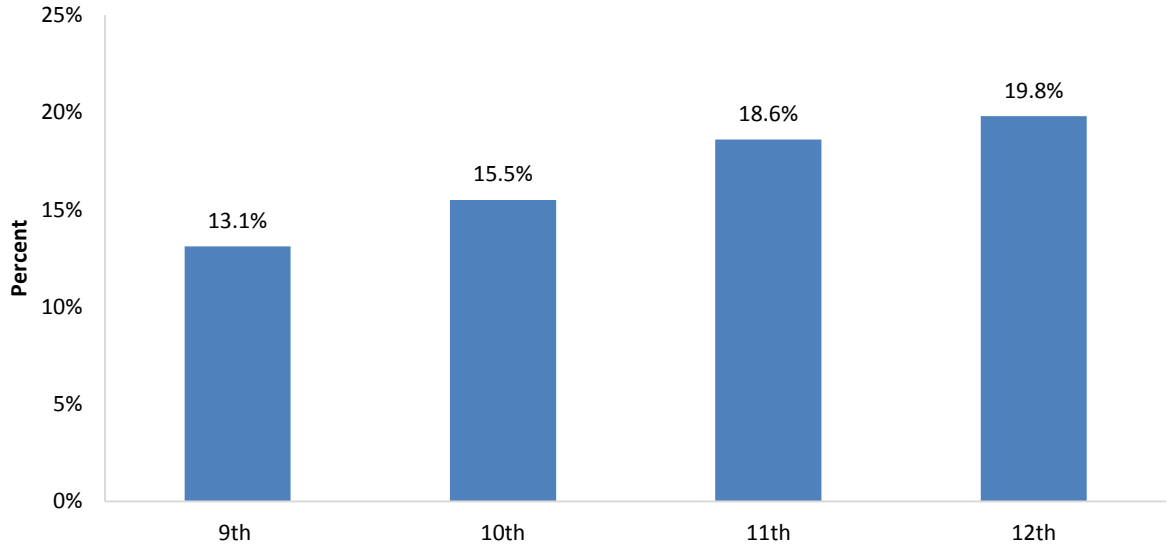
According to the most recent MetroWest Adolescent Healthy Survey High School Report, the percentage of MetroWest high school students that reported to have rode with a driver who had been drinking has steadily decreased, from 22.5% of students in 2010 to 16.7% of students in 2014 (Figure 40). As was also seen in the 2012 CHA, across the grade levels, 12th grade students were still the most likely to report riding in a car with a driver who had been drinking (19.8%), compared to 13.1% of 9th graders and 15.5% of tenth graders (Figure 41).

Figure 40: Trends in High School Students Reported to have Rode with Driver who had been Drinking in MetroWest Region, 2010-2014



DATA SOURCE: MetroWest Health Foundation, MetroWest Adolescent Healthy Survey High School Report, 2014

Figure 41: Percent of Youth by Grade Level that Reported to have Rode in a Car with Driver who had been Drinking in MetroWest Region, 2014



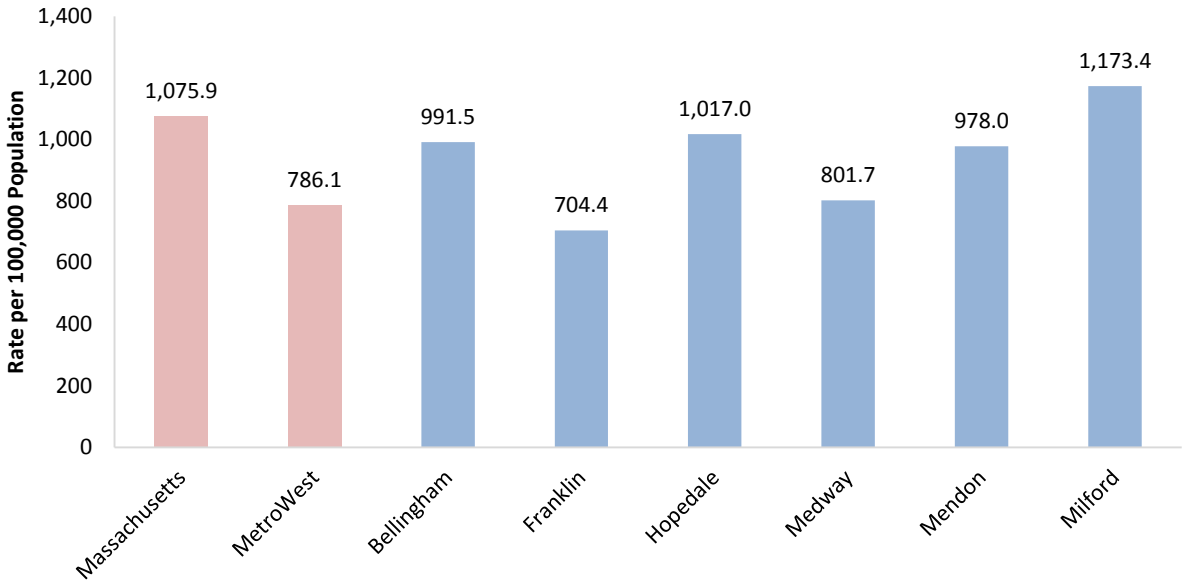
DATA SOURCE: MetroWest Health Foundation, MetroWest Adolescent Healthy Survey High School Report, 2014

While riding as a passenger in a car with a driver impaired by alcohol has decreased steadily, the 2014 MetroWest Adolescent Health Survey's MetroWest Region High School Report revealed that in 2014, one in three youth (30%) rode in a car driven by a high school student who was texting or e-mailing while driving in the past 30 days. In addition, approximately two in five students (38%) reported driving while texting in the past 30 days. While this number has decreased overall since 2010 when the

percentage was 44%, when stratified by grade level, reports of texting while driving doubled between 11th grade (25%) and 12th grade (51%).

Between 2007 and 2011, Milford reported the highest rate of motor vehicle-related emergency visits (1,173.4 per 100,000 population) among the region's cities/towns for which data were available, and was the only city/town to exceed the rate of the state (1,075.9 per 100,000 population) (Figure 42). Milford's rate also exceeded the rate of the state and had the highest rate of motor vehicle-related emergency visits in the region.

Figure 42: Rate of Motor Vehicle-Related Emergency Visits per 100,000 Population in the MetroWest Region, 2007-2011



DATA SOURCE: Massachusetts Department of Public Health MassCHIP as cited by MetroWest Health Foundation, 2007-2011
NOTE: Data not available for Blackstone, Northbridge-Whitinsville, and Uxbridge

Reproductive and Maternal Health

Data from 2010 indicate that Blackstone had the highest percentage of teen pregnancies in the region, at 6.9% of all births (Table 14). This percentage is higher than the statewide percentage of 5.4%.

Table 14: Percent of Births to Teenage Mothers (under 20 years old) by State and Cities/Towns, 2010

Geography	Percent (2010)
Massachusetts	5.4%
Bellingham	NA
Blackstone	6.9%
Franklin	2.5%
Hopedale	NA
Medway	NA
Mendon	0.0%
Milford	2.9%
Northbridge-Whitinsville	3.9%
Uxbridge	NA

NOTE: MA DPH describes a result as NA when cell sizes are too small for calculations to produce a reliable result or should be suppressed due to confidentiality purposes.
DATA SOURCE: Massachusetts Department of Public Health, 2010 Births Vital Records, as cited in MassCHIP

Table 15 provides an overview of birth characteristics in MRMC's service area by state and cities/towns for which estimates were available. Northbridge (10.1%), Uxbridge (9.3%), Milford (8.4%), and Hopedale (8.2%) have a higher percentage of low birth weight when compared to the state (7.6%). Franklin had the lowest percentage of low birth weight at 6.3%.

All communities in the MRMC service area reported lower percentages of inadequate prenatal care, when compared to the state percentage (7.5%). While Milford's percentage (7.2%) is still lower than that of the state, Milford has the highest percentage among the rest of the communities.

Table 15: Birth Characteristics by State and Cities/Towns, 2011-2013

Geography	% Low birth weight	% Inadequate prenatal care
Massachusetts	7.6%	7.5%
Bellingham	7.3%	3.9%
Blackstone	7.1%	4.4%
Franklin	6.3%	3.2%
Hopedale	8.2%	NA
Mendon	6.6%	NA
Milford	8.4%	7.2%
Northbridge	10.1%	3.9%
Uxbridge	9.3%	4.0%

DATA SOURCE: Massachusetts Department of Public Health, MassCHIP, 2011-2013
NOTE: Data for Medway not available

NOTE: MA DPH describes a result as NA when cell sizes are too small for calculations to produce a reliable result or should be suppressed due to confidentiality purposes.
NOTE: Low birthweight is defined as less than 2,500 grams
NOTE: Inadequate prenatal care is based on the adequacy of prenatal care utilization (e.g., number of prenatal care visits, etc.), not the adequacy of the quality of care

Communicable / Infectious Disease

While communicable or infectious disease was infrequently mentioned among interview and survey participants, two interviewees mentioned that community health centers were seeing an increase in patients with active tuberculosis (TB), particularly among immigrant populations. This observation resulted in an active campaign to promote TB screening. As one interviewee stated, *"There's a sub-population here who are illegal and are scared to get tested. They are skeptical about the intentions [of health care providers]. But, the community is getting the word out and doing a great job of educating them."*

No new local data has been released on communicable diseases since the 2012 CHNA; thus, using previously reported data, the crude rate for communicable diseases including HIV, hepatitis, Gonorrhea, and Chlamydia is lower for the CHNA 6 region in comparison to the state's rates (Table 16). However, when stratifying by age, the Chlamydia rate for 15-19 year olds is approximately four times higher than the overall Chlmaydia rate among all ages.

Table 16: Infectious Disease Rates per 100,000 Population by State and CHNA 6, 2009

	MA Crude Rate	CHNA 6 Crude Rate
HIV Incidence	8.6	NA
HIV/AIDS Prevalence	261.0	49.2
Tuberculosis	3.7	0.0
Pertussis	5.8	NA
Hepatitis-B	11.3	0.0
Syphilis*	9.4	NA
Gonorrhea*	37.9	8.1
Chlamydia (all ages)*	322.1	127.1
Chlamydia, ages 15-19*	1310.9	583.0

*2010 data
DATA SOURCE: Massachusetts Department of Public Health, 2009 Births Vital Records, as cited in MassCHIP, 2012

Oral Health

While no local data were available for oral health, numerous key informants expressed concern for the availability of affordable preventative oral health services. One interviewee mentioned that patients often are referred out to Worcester in order to access dental care, while another interviewee mentioned that many patients are seen for dental services in the emergency room. As this person stated, *"We have a gap in dental coverage. We see this in the [emergency room] all the time. There's an expectation that dental should be free, so people don't get dental care and wait until there is a big issue."*

PRIORITIZING FOR THE FUTURE

To inform and strengthen the community health improvement planning (CHIP) process that is currently underway by Milford Regional Medical Center and its coalition of community partners, survey and interview participants were specifically asked how they would prioritize resources for health issues within the larger domains of health promotion and chronic disease prevention; health care access; behavioral health (mental health and substance abuse); and violence prevention. The following sections discuss broad themes that emerged from both the survey and interviews.

Health Care Access

Table 17 outlines the perceptions of survey respondents in regard to how resources should be spent for issues regarding health care access. Four out of five respondents ranked access to primary care providers as high priority, surpassing all other issues. Three out of five respondents also ranked access to specialty care providers and providers of dental and oral health services as high priority. These rankings were consistent with a number of key informant interviewees, who identified the dearth of health care providers as one of the most pressing health concerns in the community.

One in two ranked prescription drug assistance as high priority. Numerous interviewees echoed this as a high priority, due to the high cost of medication. One interviewee stated, *"Access to pharmacies for health safety net patients are limited. They can't get medication. Our patients have day to day issues with paying for rent, so they really can't afford medication."*

Almost half (46.5%) of survey respondents identified services to help people navigate the health system as a high priority area, with 85% ranking this issue as a medium or high priority area. Interviewees frequently identified patient outreach, navigation, and follow-up services as gaps in the health system. By focusing on patient navigation, interviewees believed that there would be increased use of preventive services and decreased usage of the emergency room as the primary source of health care. Mass 2-1-1 and the Family Continuity Program in Whitinsville were identified as resources for health and social services resource navigation; however, one interviewee mentioned that it was still critical to have on-the-ground support to help individuals even know that such resources exist. In addition, through more systematic follow-up, individuals would be less likely to be readmitted as patients. One interviewee said, *"I'd like to see more outreach. We see too many people coming to the emergency room over and over again. When that happens, you wonder why and what makes people come back. There aren't enough one-on-one follow-ups with people… they go back into the community, and no one is calling them up asking about them."*

Almost 30% of survey respondents ranked bilingual health services as a low priority area for future resources. While most interviewees did not speak directly about this issue, MRMC's mandate to provide interpreter services to all patients may alleviate the urgency to highly prioritize bilingual health services. In addition, numerous interviewees named Edward M. Kennedy Community Health Center (EMKCHC) as an effective site for serving low-income and ethnically diverse populations. With approximately 55% of the patient population described as non-English speaking, EMKCHC's services were described as being provided in languages such as Spanish, Portuguese, and Quechua. Finally, community and faith-based organizations were mentioned as providing English as a Second or Other Language (ESOL) classes and translation resources for community members.

Table 17: Respondents' Priority Areas for Future Resources - Health Care Access, 2015

HEALTH CARE ACCESS PRIORITY AREAS	Low Priority	Medium Priority	High Priority
Access to primary care providers	3.6%	16.3%	80.1%
Access to specialty care providers	4.3%	32.9%	62.8%
Access to dental providers/oral health services	6.2%	33.8%	60.0%
Prescription drug assistance	11.8%	38.8%	49.5%
Providers who accept Medicaid	15.3%	37.5%	47.1%
Services to help people navigate the health system	14.9%	38.5%	46.5%
Access to affordable public transportation	18.5%	35.9%	45.6%
Health insurance enrollment assistance	20.2%	39.4%	40.4%
Bilingual health services	29.6%	43.7%	26.7%

DATA SOURCE: Greater Milford Community Health Assessment Survey, 2015

The Edward M. Kennedy Community Health Center in Milford was one highlighted resource that numerous interviewees mentioned as instrumental in improving access to care, particularly for the uninsured and for diverse populations. Opened in June of 2014, one interviewee described the center as *"a welcoming health center to all people. It takes all insurance, no insurance, or patients with low-income. It is accepting and community oriented."* By acting as a medical home for patients, *"[The Center] tries to identify with patients and ask what barriers are keeping them from accessing care or getting medication. Then, it tries to connect them with services."*

Health Promotion and Chronic Disease Prevention

As previously mentioned, almost nine out of ten (87.4%) survey participants reported that the health or social services in their community should focus more on prevention of diseases or health conditions (Table 18). Table 17 outlines the perceptions of survey respondents in regard to how resources should be spent for issues regarding health promotion and chronic disease prevention. Approximately 70% of survey respondents ranked the following as "high priority":

- Programs that help people prevent chronic disease (e.g., diabetes, heart disease); and
- School-based programs that promote physical activity and healthy eating.

These two priority areas coincide with concerns about the rising cost of health care, and the increased community emphasis upon chronic disease prevention for both adolescents and adults.

While almost four in five respondents ranked "policy changes that make it easier to walk or bike in your community" as medium or high priority, this priority area also received the highest low priority percentage, at 21.1%. Interestingly, numerous survey respondents commented about the inadequate infrastructure for active transportation in the Greater Milford region. It is possible that this priority area was the lowest priority for respondents due to efforts that have been made in the region already, as described in the Healthy Eating, Active Living, and Obesity section of the report. It is also possible that such an upstream policy change intervention may have felt far removed from the topic of chronic disease prevention and health promotion for survey respondents, in comparison to the other priority areas, thus resulting in the lower priority ranking.

The Whitinsville Community Center (WCC) was named by a number of interviewees as an important community resource that provides adolescents with opportunities to exercise, connect with their community, receive cooking lessons, and receive academic support. By providing youth with structured learning that integrates academics and health, WCC was seen by interviewees as an important partner in chronic disease prevention and health promotion.

Table 18: Respondents' Priority Areas for Future Resources - Chronic Disease and Health Promotion, 2015

CHRONIC DISEASE AND HEALTH PROMOTION PRIORITY AREA	Low Priority	Medium Priority	High Priority
Programs that help people prevent chronic disease (e.g., diabetes, heart disease)	4.4%	25.1%	70.5%
School-based programs that promote physical activity and healthy eating	5.1%	25.0%	69.9%
Policy changes to improve access to healthy foods (e.g., using SNAP benefits for farmer's markets, more community gardens)	12.9%	34.5%	52.6%
Programs to educate community members about nutrition	9.3%	43.8%	46.9%
Policy changes that make it easier to walk or bike in your community	21.1%	39.4%	39.5%

DATA SOURCE: Greater Milford Community Health Assessment Survey, 2015

Behavioral Health (Mental Health and Substance Abuse)

Table 19 outlines the perceptions of survey respondents in regard to how resources should be spent for issues regarding behavioral health services. Services focused upon youth were ranked as high priority, with almost three in four (72.5%) survey respondents highly prioritizing youth mental health screening and counseling for issues such as depression and suicide, and two in three (66.2%) highly prioritizing school-based prevention and counseling on mental health and substance abuse. This is consistent with the data and key informant observations reported in the Mental Health section, indicating that percentages for all mental health indicators remained either steady or increased between 2010-2014 for both middle and high school students.

Interestingly, over 90% of survey participants ranked all of the listed health programs and issues as medium or high priority, possibly indicating the importance of behavioral health to the MRMC region overall. This is consistent with interviewees' observations that behavioral health services (including both mental health and substance abuse services) are difficult to access due to geographic distance, and the availability and affordability of providers and services.

Table 19. Respondents' Priority Areas for Future Resources – Behavioral Health, 2015

BEHAVIORAL HEALTH PRIORITY AREAS	Low Priority	Medium Priority	High Priority
Mental health screening (depression, suicide) and counseling for youth	4.2%	23.3%	72.5%
School-based prevention and counseling on mental health and substance abuse	6.0%	27.7%	66.2%
Alcohol or substance abuse treatment programs	6.3%	31.4%	62.3%
Programs to educate community members (e.g., parents, educators, providers) about substance use, opiates such as heroin and prescription painkillers	8.9%	33.3%	57.8%
Programs to educate community members (e.g., parents, educators, providers) about mental illness/help reduce stigma	9.4%	32.8%	57.8%
Greater integration of behavioral health services in primary care	7.6%	37.2%	55.3%

DATA SOURCE: Greater Milford Community Health Assessment Survey, 2015

A few resources were highlighted as contributing significantly to improving adolescent behavioral health in the region. Specifically, the Juvenile Advocacy Group, which aims to "promote healthy development for youth and families by reducing substance use, lowering risk factors, and strengthening protective factors" through youth-adult collaboration, was highlighted by a few interviewees as an important multi-sector convener (e.g. community agencies, health providers, schools, police, faith communities, etc.) to discuss behavioral health approaches in the Greater Milford community (Juvenile Advocacy Group, n.d.). The Center for Adolescent and Young Adult Health, and its resource website, YourTeen.org, were also highlighted as important resources to address adolescent behavioral health in the region. Interviewees also highlighted Riverside Community Care as an important provider of integrated behavioral healthcare and human services.

Violence Prevention

School-based programs to prevent bullying and dating violence were both ranked as high priority areas for the MRMC region, at 69.9% and 64.5%, respectively (Table 20). Similarly, two in three respondents (67.1%) ranked counseling and advocacy to support victims of domestic and sexual violence as a high priority area. This is consistent with key informant interviewees concerns regarding adolescent bullying, cyber bullying, domestic violence, and sexual violence, as mentioned in the Crime and Violence section of the report.

Of all issue and program areas, outreach and education to specific populations such as seniors, LGBTQ, persons with disabilities, and non-English speaking victims of domestic and sexual violence received the lowest prioritization of all priority areas, though one in two (49.0%) still ranked this as a high priority and only 14.5% of respondents ranked this item as a low priority. Violence impacting these populations was not explicitly mentioned in key informant interviews. However, interviewees identified many of these populations as being socially isolated; this could imply susceptibility to violence that remains under the radar.

Table 20: Respondents' Priority Areas for Future Resources – Violence Prevention, 2015

VIOLENCE PREVENTION PRIORITY AREAS	Low Priority	Medium Priority	High Priority
School based programs to prevent bullying	6.7%	23.3%	69.9%
Counseling and advocacy to support victims of domestic and sexual violence	4.1%	28.8%	67.1%
School- based programs to prevent dating violence	6.3%	29.2%	64.5%
Outreach and education to specific populations: Seniors, LGBTQ, persons with disabilities, non-English speaking victims of domestic and sexual violence	14.5%	36.5%	49.0%

DATA SOURCE: Greater Milford Community Health Assessment Survey, 2015

CONCLUSION

> *"There is a lot of work being done in Milford. I'm impressed by how quickly the community is responding… If it seems like we need to start something, there are people who will start running things."* – Interview participant

Through a review of the secondary social, economic, and epidemiological data in the region, surveys with community residents, and discussions with community leaders, this assessment report affirms that chronic disease prevention and health promotion, health care access, behavioral health, and violence prevention continue to resonate as community priorities. Yet, as is reflected in the above quote, much has already been done to make strides in each of these areas through the community health improvement planning (CHIP) process. The 2015 Milford Regional Medical Center Community Health Assessment will continue to build upon the previous and current work to guide the CHIP process for overall community health improvement.

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APPENDIX A: 2015 COMMUNITY HEALTH ASSESSMENT SURVEY INSTRUMENT

Health and wellness matters to everyone. That's why health care and community organizations in the Greater Milford region are coming together to develop a new vision of how health and wellness programs can best serve area residents, and we want you to be part of that planning.

We are asking you, as someone who lives in the communities listed below to give us your feedback and suggestions about health services in the region by completing this 10 minute survey by Friday, May 29, 2015. All responses are anonymous. There are no right or wrong answers; it is your opinion that matters!

Communities: Bellingham, Blackstone, Douglas, Franklin, Hopedale, Medway, Mendon, Milford, Millville, Northbridge, Sutton, Upton, and Uxbridge.

Your feedback is valuable since the information gathered from this survey will be used to inform future health programming.

Thank you for your participation.

Lead Organization:
Milford Regional Medical Center

Partner Organizations:
Center for Adolescent & Young Adult Health
Edward M. Kennedy Community Health Center
Family Continuity Inc.
CHNA 6
Hockomock Area YMCA
Tri County Medical Associates
Milford Public Schools
Tri River Family Health Center

Introduction

1. In which city/town do you live?

- ☐ Bellingham
- ☐ Blackstone
- ☐ Douglas
- ☐ Franklin
- ☐ Hopedale
- ☐ Medway
- ☐ Mendon
- ☐ Milford
- ☐ Millville
- ☐ Northbridge
- ☐ Sutton
- ☐ Upton
- ☐ Uxbridge
- ☐ None of the above

2. In which city/town do you work?

- ☐ Bellingham
- ☐ Blackstone
- ☐ Douglas
- ☐ Franklin
- ☐ Hopedale
- ☐ Medway
- ☐ Mendon
- ☐ Milford
- ☐ Millville
- ☐ Northbridge
- ☐ Sutton
- ☐ Upton
- ☐ Uxbridge
- ☐ None of the above

3. Describe your type of employment? (Please check all that apply.)

- ☐ Not employed or retired
- ☐ Stay-at-home parent
- ☐ Student
- ☐ Health or social service provider
- ☐ Municipal employee (e.g., work for local government, town employee, teacher, law)
- ☐ Clergy
- ☐ Employed in business, retail, food service, or other sector
- ☐ Other: _____

Community Health

4. Please select the TOP 3 HEALTH ISSUES that have the biggest impact on you or your family and the community that you live from the list in Questions 1 and 2 (Blackstone, Douglas, Franklin, Hopedale, Medway, Mendon, Milford, Millville, Northbridge, Sutton, Upton, and Uxbridge). Please select 3 health issues FOR EACH column below. You can select the same or different issues for each.

	You/Your family	Your community
Access to health care (transportation, health insurance, cost, etc.)	☐	☐
Asthma	☐	☐
Chronic disease (diabetes, heart disease, cancer)	☐	☐
Overweight or obesity	☐	☐
Mental health issues	☐	☐
Alcohol or substance use or abuse (e.g., marijuana, heroin, opiates, prescription drug misuse)	☐	☐
Smoking	☐	☐
Interpersonal violence (domestic violence, sexual violence, bullying, cyber-bullying, etc.)	☐	☐
Oral/dental health	☐	☐
Health concerns related to aging (Alzheimer's, arthritis, dementia, falls, etc.)	☐	☐
Teen pregnancy	☐	☐
Infectious/contagious disease (tuberculosis, pneumonia, flu, etc.)	☐	☐
Other (please specify) _____	☐	☐

COMMENTS:

Access to Services

5. Please think about the different services in your community. How easy or hard is it to access the following services in your community?

	Easy	Not easy or hard	Hard	Don't know/not applicable
Hospital services, including emergency care	☐	☐	☐	☐
Primary care physicians	☐	☐	☐	☐
Alcohol or drug treatment services for adults	☐	☐	☐	☐
Alcohol or drug treatment services for youth	☐	☐	☐	☐
Counseling or mental health services for youth	☐	☐	☐	☐
After-school activities for youth	☐	☐	☐	☐
Affordable public transportation	☐	☐	☐	☐
Legal services	☐	☐	☐	☐
Dental/oral health services	☐	☐	☐	☐
Services to address domestic violence	☐	☐	☐	☐
Programs to help people quit smoking	☐	☐	☐	☐
Affordable health insurance	☐	☐	☐	☐
Health or medical providers that accept your insurance	☐	☐	☐	☐
Health providers that speak your language	☐	☐	☐	☐
Interpreter services during medical visits or when receiving health care	☐	☐	☐	☐
Grocery stores	☐	☐	☐	☐
Parks or recreation centers	☐	☐	☐	☐
Affordable gym memberships	☐	☐	☐	☐
Walkable streets (e.g., sidewalks, bike paths, street lights)	☐	☐	☐	☐
Fresh fruits and vegetables	☐	☐	☐	☐
Affordable housing	☐	☐	☐	☐
Employment or job opportunities	☐	☐	☐	☐

COMMENTS:

6. Based on your experience, do you agree or disagree with the following:

	Agree	Disagree	Not applicable
If I need medical services, I know where to go to receive them.	☐	☐	☐
If I need dental services, I know where to go to receive them.	☐	☐	☐
If I need mental health services, I know where to go to receive them.	☐	☐	☐
It's hard to use public transportation to get to medical/dental services.	☐	☐	☐
The health or social services in my community should focus more on prevention of diseases or health conditions.	☐	☐	☐
I or someone in my household has not received care needed because the cost was too high.	☐	☐	☐
When trying to get medical care, I have felt discriminated against because of my race, ethnicity or language.	☐	☐	☐
When trying to get medical care, I have felt discriminated against because of my gender, age or sexual orientation.	☐	☐	☐
When trying to get medical care, I have felt discriminated against because of my income.	☐	☐	☐

7. Have any of these issues made it difficult for you to get needed health services within the last two years? (Please check all that apply.)

- ☐ Lack of transportation
- ☐ Have no regular source of health care (primary care provider)
- ☐ Cost of care
- ☐ Lack of specialists
- ☐ Lack of providers who accept Medicaid
- ☐ Lack of evening or weekend services
- ☐ Insurance problems/lack of coverage
- ☐ Language problems/could not communicate with health provider or office staff
- ☐ Unfriendly provider or office staff
- ☐ Felt discriminated against
- ☐ Afraid to get care
- ☐ Don't know what types of services are available
- ☐ No provider available near me
- ☐ Long wait for an appointment
- ☐ Office not accepting new patients
- ☐ Health information is not kept confidential
- ☐ I have never experienced any difficulty in getting care

Community Priorities

8. Community Health Needs Assessments have identified access to health services, chronic disease prevention, behavioral health (mental health and substance use), and violence prevention as key health concerns for the region. The following questions ask for your perceptions about these health concerns. When deciding how resources should be spent, what PRIORITY do you think should be given to the following issues?

Health Access	Low Priority	Medium Priority	High Priority
Access to primary care providers	☐	☐	☐
Access to specialty care providers	☐	☐	☐
Access to dental providers/oral health services	☐	☐	☐
Providers who accept Medicaid	☐	☐	☐
Bilingual health services	☐	☐	☐
Health insurance enrollment assistance	☐	☐	☐
Services to help people navigate the health system	☐	☐	☐
Access to affordable public transportation	☐	☐	☐
Prescription drug assistance	☐	☐	☐

Chronic Disease Prevention and Health Promotion	Low Priority	Medium Priority	High Priority
Programs that help people prevent chronic disease (e.g., diabetes, heart disease)	☐	☐	☐
Programs to educate community members about nutrition	☐	☐	☐
School-based programs that promote physical activity and healthy eating	☐	☐	☐
Policy changes to improve access to healthy foods (e.g., using SNAP benefits for farmer's markets, more community gardens)	☐	☐	☐
Policy changes that make it easier to walk or bike in your community	☐	☐	☐

Behavioral Health and Substance Use/Abuse	Low Priority	Medium Priority	High Priority
Mental health screening (depression, suicide) and counseling for youth	☐	☐	☐
Alcohol or substance abuse treatment programs	☐	☐	☐
Greater integration of behavioral health services in primary care	☐	☐	☐
School-based prevention and counseling on mental health and substance abuse	☐	☐	☐
Programs to educate community members (e.g., parents, educators, providers) about substance use, opiates such as heroin and prescription painkillers	☐	☐	☐
Programs to educate community members (e.g., parents, educators, providers) about mental illness/help reduce stigma	☐	☐	☐

Violence Prevention	Low Priority	Medium Priority	High Priority
Counseling and advocacy to support victims of domestic and sexual violence	☐	☐	☐
School based programs to prevent bullying	☐	☐	☐
School- based programs to prevent dating violence	☐	☐	☐
Outreach and education to specific populations: Seniors, LGBTQ, persons with disabilities, non-English speaking victims of domestic and sexual violence	☐	☐	☐

Other priority issue, please specify: _____

Health Coverage and Information

9. Do you have health care insurance?

- ☐ Yes, private insurance (through employer/spouse's employer/parents or buy your own)
- ☐ Yes, Medicare
- ☐ Yes, MassHealth/Medicaid or other public insurance
- ☐ No insurance, uninsured

10. Is your main medical care provided by: (Please check one.)

- ☐ Private doctor's office or group practice
- ☐ Community health center
- ☐ Walk-in medical clinic
- ☐ Free medical program
- ☐ Emergency Room
- ☐ Veteran's Administration facility
- ☐ Other (please specify) _____

11. Of the following sources, which 3 sources do you get most of your health information from? (Please check 3.)

- ☐ Doctor, nurse or other health provider
- ☐ Pharmacy
- ☐ Family members
- ☐ Friends
- ☐ Neighbors
- ☐ School
- ☐ Religious or spiritual advisor
- ☐ Employer
- ☐ Library
- ☐ Television
- ☐ Local newspaper
- ☐ Radio
- ☐ Magazine
- ☐ Websites
- ☐ Social Media
- ☐ Other (please specify)_____

Demographic Information

12. How old are you?

- ☐ Under 18 years old
- ☐ 18-29 years old
- ☐ 30-39 years old
- ☐ 40-49 years old
- ☐ 50-64 years old
- ☐ 65-74 years old
- ☐ 75+ years old

13. What is your gender?

- ☐ Male
- ☐ Female
- ☐ Transgender

14. How would you describe your ethnic/racial background? (Please check all that apply.)

- ☐ African American/Black
- ☐ American Indian/Native American
- ☐ Asian/Pacific Islander
- ☐ Brazilian
- ☐ Portuguese
- ☐ Caucasian/White
- ☐ Hispanic/Latino(a)
- ☐ Middle Eastern
- ☐ Other (please specify) _____

15. What is the primary language you speak at home?

- ☐ English
- ☐ Spanish
- ☐ Portuguese
- ☐ Arabic
- ☐ Other (please specify) _____

16. What is the highest level of education that you have completed?

- ☐ Less than high school
- ☐ High school graduate or GED
- ☐ Some college
- ☐ Associate or technical degree/certification
- ☐ College graduate
- ☐ Graduate or professional degree
- ☐ Other (please specify) _____

17. Are you the parent of a child/children under the age of 18? ☐ Yes ☐ No

Thank you for your feedback on this important survey to help inform future programs and services in the region.

APPENDIX B: KEY INFORMANT INTERVIEW GUIDE

Milford Regional Medical Center
Community Health Assessment
Key Informant Interview Guide
Current version: June 18, 2015

Goals for key informant interviews

- To determine perceptions of the health-related strengths and needs of MRMC's primary service area and specifically related to current CHIP priorities
- To explore how these issues can be addressed in the future
- To identify the gaps, challenges, and opportunities for addressing community needs via the CHIP planning process

[NOTE: QUESTIONS FOR THE INTERVIEW GUIDE ARE INTENDED TO SERVE AS A GUIDE, NOT A SCRIPT.]

I. BACKGROUND (5 minutes)

- Hi, my name is _____ and I am with Health Resources in Action, a non-profit public health organization. Thank you for taking the time to speak with me today.

- As I mentioned previously, we are working with Milford Regional Medical Center on their community health assessment. This effort aims to gain a greater understanding of the health of area residents, how these health needs are currently being addressed, and opportunities to facilitate successful implementation of activities for the future.

- We are conducting interviews with leaders in the community to understand different people's perspectives on these issues as well on the current CHIP planning process. We greatly appreciate your feedback, insight, and honesty.

- Our interview will last about ____ minutes [EXPECTED RANGE FROM 30-60 MINUTES, DEPENDING ON INTERVIEWEE]. After all of the discussions are completed, we will be writing a summary report of the general themes that have emerged during the discussions. We will not connect any names or identifying information to any specific response. Nothing sensitive that you say here will be connected to directly to you in our report.

- Any questions before we begin our introductions and discussion?

II. THEIR AGENCY/ORGANIZATION

1. Can you tell me a bit about your organization/agency? [TAILOR PROBES DEPENDING ON AGENCY]

    a. [PROBE ON ORGANIZATION: What is your organization's mission? What communities do you work in? Who are the main clients/audiences for your programs?]

        i. What are some of the biggest challenges your organization faces in providing these programs/services in the community?

        ii. What have been some of the most successful efforts in the community?

III. COMMUNITY ISSUES

How would you describe the community which your organization serves?

b. What do you consider to be the community's strongest assets/strengths?

   i. What are some of its biggest concerns/issues in general? What challenges do residents face day-to-day?

c. What do you think are the most pressing health concerns in the community? Why? [PROBE ON SPECIFICS]

ASK SET OF QUESTIONS ABOUT EACH OF THE TOP HEALTH ISSUES IDENTIFIED, AND SPECIFICALLY ON: CHRONIC DISEASE (RISK FACTORS AND CONDITIONS), VIOLENCE (INTERPERSONAL, BULLYING, COMMUNITY), AND BEHAVIORAL HEALTH (MENTAL HEATLH AND SUBSTANCE ABUSE):

   i. How has [HEALTH ISSUE] affected your community?

   ii. Who do you consider to be the populations in the community most vulnerable or at risk for [THIS CONDITION / ISSUE]?

   iii. From your experience, what are community residents' biggest challenges to addressing [THIS ISSUE]?

   iv. From your experience, what are organizations' biggest challenges to addressing [THIS ISSUE]?

   v. What programs, services, or policies are you aware of in the community that address [THIS HEALTH ISSUE]? [PROBE FOR SPECIFICS]

   vi. Where are the gaps? What program, services, or policies are currently not available that you think should be?

[REPEAT SET OF QUESTIONS FOR NEXT HEALTH ISSUE IDENTIFIED]

2. In general, what is occurring or has recently occurred that affects the health of the community you serve? [PROBE ON EXTERNAL FACTORS: Built environment, physical environment, economy, political environment, resources, organizational structures, etc.]

   a. What are some factors that make it easier to be healthy in your community?

   b. What are some factors that make it harder to be healthy in your community?

IV. ACCESS TO CARE

3. What do you see as the strengths of the health care and social services in your community? What do you see as its limitations?

4. What challenges/barriers do residents in your community face in accessing health care and social services? What specifically? [PROBE IN DEPTH FOR BARRIERS TO CARE: INSURANCE ISSUES, LANGUAGE BARRIERS, LACK OF TRANSPORTION, CHILD CARE, ETC.]

5. What programs, services, or policies are you aware of in the community that address access to care?

    a. Where are the gaps? What program, services, or policies are currently not available that you think should be?

V. CHIP PLANNING PROCESS AND ADDRESSING COMMUNITY NEEDS

6. Have you been involved in the CHIP planning process?

7. What has been your role in the CHIP planning process and its work groups?

    a. How has the process been going?

8. From your experience, what have been the successful aspects of this process so far?

    a. What has helped facilitate this success? Why do you think it has gone well?

9. From your experience, what have been the least successful aspects of the process? What have been the challenges?

    a. What do you think has contributed to these challenges? Why have these aspects of the process not gone as well?

10. Thinking about the future, what would you like to see the CHIP and its planning and implementation process accomplish in the next year? What does success look like?

    a. What resources or supports are needed to facilitate this success? What needs to be in place as planning and implementation move forward?

11. What would be the <u>1 thing</u> that you think needs to be done in the next year that would help make the biggest difference in improving community health?

VI. CLOSING (2 minutes)

Thank you so much for your time. That's it for my questions. Is there anything else that you would like to mention that we didn't discuss today? Thank you again. Have a good day.