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Newton-Wellesley Hospital
2014 Community Health Needs Assessment

Final Report

Submitted to:
NEWTON-WELLESLEY HOSPITAL

Health Resources in Action
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EXECUTIVE SUMMARY

Introduction

Newton-Wellesley Hospital (NWH) is a 313-bed comprehensive medical center affiliated with Partners Health care. In 2014, Newton-Wellesley Hospital sought to undertake a community health needs assessment (CHNA) of its primary service area: Natick, Needham, Newton, Waltham, Wellesley, and Weston. The purpose of the CHNA was to provide an empirical foundation for future health planning as well as fulfill the community health needs assessment mandate for non-profit institutions put forth by the MA Attorney General and IRS. The overarching goals of the 2014 Newton-Wellesley Hospital CHNA were to:

- Identify the health needs and assets of the Newton-Wellesley service area
- Understand how outreach activities can be more effectively coordinated and delivered across the institution and in collaboration with community partners

To this end, the CHNA report provides an overview of the key findings of the community health needs assessment, which explores a range of health behaviors and outcomes, social and economic issues, health care access, and gaps and strengths of existing resources and services.

Community Health Needs Assessment Methods

The community health needs assessment utilized a participatory, collaborative approach to look at health in its broadest context. The assessment process included synthesizing existing data on social, economic, and health indicators in the region as well as information from five focus groups conducted with community residents and leaders, and twelve interviews with community stakeholders. Focus groups and key informant interviews were conducted with individuals from across the six municipalities that comprise the Newton-Wellesley Hospital service area, and with a range of participants representing different audiences, including leaders in education, health care, and social service organizations. Ultimately, the qualitative research engaged approximately 40 participants.

Key Findings

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

<u>Demographics</u>

- **Population:** According to the U.S. Census, the population size of the Newton-Wellesley service area has experienced slight growth over the past decade, similar to that of the state. The town of Wellesley experienced the largest increase in its population size (5.6%), while the town of Weston had a small decrease in the size of its population (-0.3%).
- **Age Distribution:** With the exception of Waltham (14.4%), all cities/towns in the assessment have a higher percentage of youth under 18 years of age compared to Massachusetts overall (21.6%). Waltham and Wellesley have nearly double the percentage of 18-24 year olds (17.9%) compared to Massachusetts as a whole (10.3%). Only Needham has a larger percentage of residents aged 65 and over compared to the state.
- **Racial and Ethnic Diversity:** The Newton-Wellesley service area is predominantly White, yet participants noted that there has been an influx of immigrants in their community, particularly in Newton and Waltham. Waltham exceeds the statewide percentages of Asian residents, Hispanic/Latino residents, and residents who identify as "Other."

- **Educational Attainment:** Assessment participants repeatedly highlighted that the area has high quality public school systems, and perceived the population as highly educated. Quantitative data show that across all cities/towns in the NWH service area, there is a higher proportion of adults aged 25 and older who have earned a Bachelor's Degree or higher compared to Massachusetts overall; Wellesley has the highest percentage with 80.8% of adults 25 years and older who hold a Bachelor's Degree or higher.
- **Income, Poverty, and Employment:** Most focus group and interview participants commented that communities in the Newton-Wellesley service area were upper-middle to upper class; however, some participants also noted inequalities in the distribution of wealth. Quantitative data indicate that the median household income in each of the cities/towns in the area was above that of the state ($65,658), although the range was $100,000 between Waltham ($72,332) and Weston ($176,875). Compared to Massachusetts overall, these cities/towns also have lower percentages of families living below the federal poverty level and lower levels of unemployment.

Social and Physical Environment

- **Housing:** Many interview and focus group participants noted the high housing costs in the area. Quantitative data confirm the perceptions of high housing costs and limited affordable housing. Median home prices across all cities/towns in the NWH service area are above the statewide median ($335,500) and range from $408,700 in Waltham to $1,000,000+ in Weston. Although more residents of these cities/towns own their homes, renters spend a higher percentage of their household income on housing.
- **Transportation:** Transportation was an issue that emerged in numerous qualitative conversations during this assessment. Participants explained that public transportation was limited in their communities and specifically posed barriers for seniors, and people with disabilities and behavioral health issues accessing goods and services, including food and health care. Quantitative data depict a largely car-dependent region, although Newton, Needham, and Wellesley have a higher percentage of residents commuting to work via public transportation.
- **Crime and Safety:** Overall, participants described the Newton-Wellesley service area as a low crime area and reported that they felt safe. Quantitative data reinforce this feeling; except Natick, all towns in the assessment area experience lower rates of violent and property crimes compared to Massachusetts overall. The property crime rate in Natick is approximately 10% higher than the statewide rate.

Risk and Protective Lifestyle Behaviors

- **Healthy Eating, Physical Activity, and Overweight/Obesity:** Focus group participants cited several barriers across the service area to engaging in healthy lifestyles, such as unaffordable healthy food and physical activity opportunities. However, fruit and vegetable intake and physical activity were greater among CHNA 18 adults compared to adults statewide. Additionally, quantitative data show that adults and youth in the area have lower rates of obesity compared to Massachusetts overall. Waltham is the exception, with higher percentages of obese youth in both 7th (20.5%) and 10th (22.1%) grade compared to youth statewide (17.8% and 15.2%, respectively).
- **Substance Use and Abuse:** Many assessment participants expressed their concerns regarding alcohol and drug use in the community, noting that it is prevalent but not openly discussed. Participants were particularly concerned with the youth population and discussed how substance use is directly connected to mental health issues and suicide among youth. While rates among youth were generally lower in the NWH service area than statewide, youth in Waltham reported the highest use rates for most substances, including tobacco, marijuana, and prescription drugs.

- **Injury-Related Behaviors:** A few interview and focus group participants discussed the risk of injury among seniors, particularly from falls. Quantitative data illustrate that Needham experienced the highest rate of fall-related injury deaths among residents aged 60 years and older (51.3 deaths per 100,000 population) compared to the state (35.0 deaths per 100,000 population). Domestic violence was also a concern, and was mentioned as linked to substance abuse and mental health.

Health Outcomes

- **Mortality**: The age-adjusted mortality rates in the area vary by city/town, although all are lower than the statewide rate. Waltham had the highest mortality rate with 612.2 deaths per 100,000 population, compared to 667.8 deaths per 100,000 population in Massachusetts overall. The leading causes of death in the Newton-Wellesley service area are cancer and heart disease, consistent with the state.
- **Chronic Disease:** Chronic diseases were not heavily discussed as a pressing concern for the community. Two participants mentioned childhood asthma as a concern related to outdoor air quality as well as substandard housing. Quantitative data demonstrate that adults in the area are less likely to have heart disease, diabetes, and asthma compared to adults statewide.
- **Mental Health:** Nearly all assessment participants cited mental health as the top community health concern, specifically discussing issues of stress, anxiety, depression and suicide. Discussions focused on youth, who face pressure and stress in the "academically and athletically competitive environments found in these towns." Adults experience the stress of maintaining financial and social status, and seniors were described as facing mental health issues related to social isolation and hoarding. While youth and seniors were identified as particularly vulnerable populations, mental health was described as a community wide issue warranting attention.
- **Reproductive and Maternal Health:** Issues related to reproductive and maternal health were not mentioned in assessment discussions. Data show that mothers in Waltham were more likely to report receiving inadequate or no prenatal care compared to mothers statewide (10.8% vs. 8.5%).
- **Communicable Disease:** Communicable diseases did not emerge as a pressing health concern in the community. However, quantitative data show that Newton has a higher rate of Hepatitis B compared to the state (14.4 cases per 100,000 population vs. 11.3 per 100,000 population) and Waltham has a higher rate of HIV/AIDS than the state overall (320.7 cases per 100,000 population vs. 261.0 cases per 100,000 population).

Access to Care

Although rates of insurance are high in these communities, assessment participants did express concern about the high cost of health care and challenges navigating the system.

- **Cost and Insurance:** The majority of participants mentioned the high cost of health care and that paying for co-pays and deductibles can be challenging. Others discussed challenges with the limitations of providers not accepting the insurance coverage that they have.
- **Navigating the Health Care System:** Generally, participants discussed the difficulties they face in getting appointments with health care providers. Uncoordinated care, lack of communication between providers and culturally incompetent care were described as posing particular challenges for people with multiple health care needs, seniors and immigrants.
- **Special Pediatric Services:** Many parents discussed how difficult it was to get language therapy, neuropsychiatric testing that is necessary for the development of individualized education programs or plans (IEPs) and occupational therapy for their children on the autism spectrum. They cited long wait times or insurance not covering these services as the explanation for their limited access to these services.

Community Strengths and Assets

Participants in focus groups and interviews were asked to identify their communities' strengths and assets. The following key themes emerged from that discussion.

- **Strong Collaborative Spirit and Community Partnerships:** Interview participants in particular discussed the strong collaboration and partnerships that exist between many community organizations. "We work well with other groups and all of the agencies in town work well together. We build strong partnerships so when we need to call on these partners we can."
- **Community Cohesion:** Among many participants, social cohesion emerged as a key strength of their community. Many participants described having "community pride," which created a sense of identity that strengthened the fabric of the community. Other participants reinforced this notion, adding that the communities' greatest assets are the commitments that residents have to each other, noting particularly strong support for youth and families.
- **Focus on Youth and Education:** One of the most frequently mentioned assets of the NWH service area was the focus on youth and promoting positive youth development. Area schools were described as "wonderful educational systems" that drew many people to the area. As one participant summarized, "This is a place that highly values education. Families that want the best education for their children come here."
- **Community Resources:** Participants identified a wealth of community assets and programs in the area, including a variety of youth sports activities and leagues, community events and festivals, and places of worship. Health-related resources were also identified; these included Newton-Wellesley Hospital, as well as local health departments and social service agencies.

Key Themes

Several overarching themes emerged from the synthesis of data, including:

- **Cost of living and transportation.** Nearly all interviewees and focus group members discussed the high cost of living including housing costs among the NWH service area communities. This high cost of living has been responsible for families leaving their communities for more affordable alternatives and has also dictated population trends. The majority of assessment participants also discussed how the lack of reliable local public transportation is a serious barrier to accessing health care services for certain segments of the population including youth, the elderly and those with behavioral health issues.
- **Waltham is a unique community in this service area.** While the other cities and towns in the NWH service area tend to have similar demographic profiles, Waltham looks somewhat different. Waltham has a more affordable cost of living and has more racial and ethnic diversity. However, Waltham residents have lower median household incomes and educational attainment. Waltham also experiences disproportionately worse health outcomes compared to the other cities and towns in the area. Of note are the higher substance abuse and mental health rates among youth and fewer mothers getting adequate prenatal care.
- **Behavioral health is viewed as a critical and growing issue with a need for more resources and collective action to make change.** Assessment participants view mental health as the highest priority issue in the community. Stress, anxiety, and depression were mentioned as particularly prevalent, and these issues were often described as leading to substance use as a means of self-medication. Economic stress on adults and academic and social pressures on youth have taxed individuals and the mental health system. Access to and use of mental health and subspecialty providers and services is limited by multiple factors, including stigma, health insurance, and fragmentation of services.
- **Participants envision a healthier community that is built on collaborative efforts within and across communities.** A cohesive community and numerous resources along with recent collaborations

regarding suicide have demonstrated the power of community engagement and collaboration. Community members as well as health and human service providers offered many suggestions for how to support the creation and enhancement of community and health care environments for optimal health and well-being.

Community Suggestions for Future Programs and Services

Focus group and interview participants shared their suggestions around future programming and services, and emphasized the need for collaborative and sustainable solutions.

- **Transportation** - focus group and interview participants indicated that providing transportation for medical services was paramount, especially for seniors who are not able to drive, and suggested the Senior Shuttle in Boston as a good example of a program to be replicated.
- **Community Outreach and Partnership** - A theme repeatedly raised by participants was the importance of increased outreach to the community by educating and communicating with the public and partnering with community organizations. Participants recommended that the hospital "take a leadership role in community health," further suggesting that the hospital should "have more visibility and outreach at community events."
- **Communication** - An overarching theme was the importance of effective communication between the hospital and the community as well as between different organizations within the community. One specific issue noted was the challenge of maintaining current databases or lists of community resources so that both providers and consumers of services have the most up-to-date information on available resources in the community.
- **Culturally Competent Services** - Participants spoke of cultural competency in the context of not only providing services in appropriate languages, but also of understanding people of different life stages and physical and mental abilities. A suggested approach included providing training for front-line and ED staff in person-centered care as well as the provision of services in a variety of languages.
- **Care Coordination** - To address challenges that participants discussed related to navigating the health care system during and after care, several recommendations were made, including clustering of clinical services in one location, hiring a patient navigator, and collaborative discharge planning.
- **Leadership in Behavioral Health** - While schools and other institutions in the NWH service area have recently adopted new policies and programs to address behavioral health, assessment participants expressed the desire for additional resources and support from the hospital and community to address these broad issues. Specific recommendations included NWH hiring an addiction specialist and participating in community dialogues and coalitions regarding behavioral health.
- **Focus on Prevention** - Participants envisioned a greater emphasis on prevention as the hospital and community move forward to address health issues. Participants suggested that the hospital collect additional data on behavioral health in particular, and "dig deeper as to why people are having these issues." Hospital and community efforts could then focus on preventing associated risk factors.

Newton-Wellesley Hospital
2014 Community Health Needs Assessment

INTRODUCTION

About Newton-Wellesley Hospital

In 2014, Newton-Wellesley Hospital (NWH) sought to undertake a community health needs assessment (CHNA) of the communities it serves. The purpose of the CHNA was to provide an empirical foundation for future health planning as well as fulfill the community health needs assessment mandate for non-profit institutions put forth by the MA Attorney General and the IRS. NWH contracted with Health Resources in Action (HRiA), a non-profit public health organization in Boston, MA, to collect and analyze data to develop the CHNA report.

The 2014 NWH community health needs assessment was conducted to fill several overarching goals, specifically to:

- Identify the health needs and assets of the Newton-Wellesley service area
- Understand how outreach activities can be more effectively coordinated and delivered across the institution and in collaboration with community partners

This report discusses the findings from the community health needs assessment, which was conducted from August to December 2014.

Geographic and Population Scope of the NWH CHNA

The Newton-Wellesley Hospital Community Health Needs Assessment (CHNA) focused on the six towns that comprise the hospital's primary service area. These communities are Natick, Needham, Newton, Waltham, Wellesley, and Weston. While the CHNA process aimed to examine the health concerns across the entire service area, there was a particular focus on identifying the needs of the most underserved populations groups of the area and delving into the topical areas that arose during previous community health assessments.

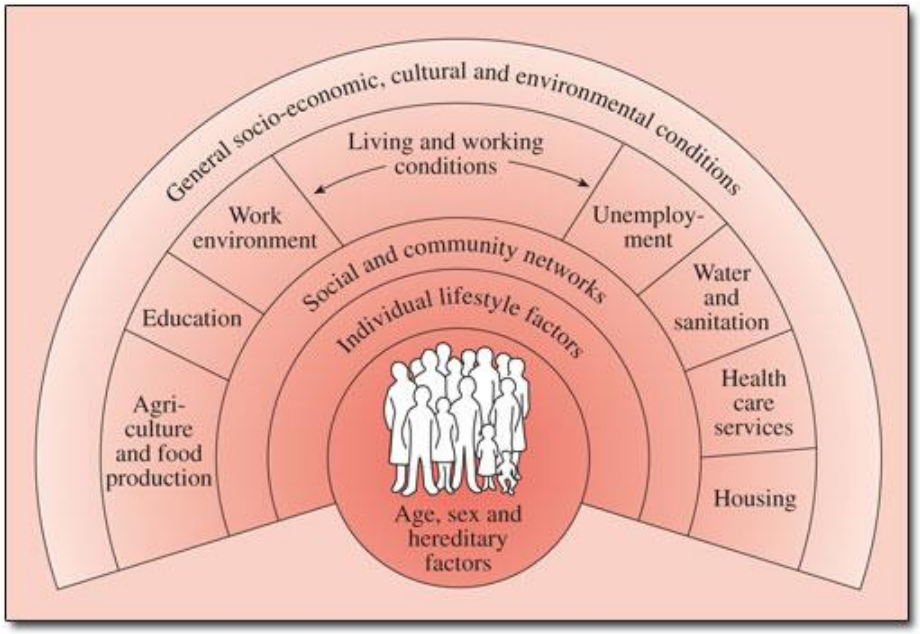
An advisory committee of community stakeholders as well as the Newton-Wellesley Hospital community benefits committee provided strategic oversight throughout the CHNA process. The advisory committee, which was comprised of approximately 15 members from local institutions in the hospital service area, provided guidance on each step of the assessment, including feedback on the CHNA methodology, recommendation of secondary data sources, and identification of key informant interviewees and focus group segments.

Community Health Needs Assessment Methods

The following section describes how the data for this community health needs assessment was compiled and analyzed. This section also provides context about the broad health lens used to guide the assessment process. Specifically, the community health needs assessment defines health in the broadest sense and recognizes 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) and the physical environment (e.g., transportation)—that all have an impact on the community's health. The beginning discussion of this section describes the larger social determinants of health framework that helped guide the assessment process.

The diagram in Figure 1 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 the Newton-Wellesley Hospital service area.

Figure 1: Social Determinants of Health Framework



SOURCE: World Health Organization, Commission on Social Determinants of Health. (2005)

Quantitative Data: Reviewing Existing Secondary Data

To develop a social, economic, and health portrait of the Newton-Wellesley Hospital service area through a social determinants of health framework, existing data were drawn from state, county, Community Health Network Area (CHNA) 18, and local sources. Sources of data included, but were not limited to, the U.S. Census, Centers for Disease Control and Prevention, Massachusetts Department of Public Health, F.B.I. Uniform Crime Reports, and NWH emergency department, urgent care center, and inpatient databases. Other types of data included self-report 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 that aside from population counts, age and racial/ethnic distribution, other data from the U.S. Census are derived from the American Community Survey comprised of data from a sample of a given geographic area. Per Census recommendations, aggregated data from the past five years was used for these indicators to yield a large enough sample size to look at results by city/town.

Much of the health data are not available at the city/town level; therefore, health data by county and/or community health network area (CHNA 18) are provided. CHNA 18 consists of Brookline, Dedham, Dover, Needham, Newton, Waltham, Wellesley, Weston, and Westwood, but does not include Natick.

Qualitative Data: Focus Groups and Interviews

Focus Groups

In total, five focus groups were conducted with individuals from across the NWH service area. Focus groups were conducted with representatives of priority populations, including: high school youth, parents of high school youth, parents of elementary school youth, affordable housing residents, and Council on Aging staff. Focus group discussions explored participants' perceptions of the community, priority health concerns, and suggestions for future programming and services to address these issues. A semi-structured moderator's guide was used across all focus groups to ensure consistency in the topics covered. Each focus group was facilitated by a trained moderator, and detailed notes were taken during each discussion. On average, focus groups lasted 90 minutes and included 5-8 participants. As an incentive, focus group participants received a $30 stipend to compensate them for their time. A list of focus group segments can be found in Appendix A that outlines all of the community engagement participants.

Key Informant Interviews

Interviews were conducted with twelve individuals representing a range of sectors, including leaders in health care, government, and social service organizations focusing on vulnerable populations (e.g., seniors, homeless). The interviews explored participants' perceptions of their communities and priority health concerns, and solicited suggestions for future programming and services to address their perceived health issues. Similar to the focus groups, a semi-structured interview guide was used across all discussions to ensure consistency in the topics covered. Interviews were approximately 45-60 minutes in length. A list of organizations that the key informant interviewees represented can be found in Appendix A that outlines all of the community engagement participants.

Analyses

The collected qualitative information was 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 town differences are noted where appropriate, analyses emphasized findings common across the Newton-Wellesley Hospital service area. 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, there are several limitations related to the assessment's research methods that should be acknowledged. It should be noted that for the secondary (quantitative) data analyses, in several instances, regional data could not be disaggregated to the city/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) 18 level are provided. CHNA 18 is a large geographic area comprised of Needham, Newton, Wellesley, Weston, and also includes Brookline and Dover, towns that are not part of NWH's primary service area. In some cases, data at the county level are also provided. Middlesex County includes Natick, Newton, Waltham, and Wellesley; Norfolk County includes Needham and Wellesley.

Additionally, several sources did not provide current data stratified by race/ethnicity, gender, or age – thus these data could only be analyzed by total population. It should also be noted that youth-specific and 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.

Likewise, data based on self-reports 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 qualitative data, it is important to recognize results are not statistically representative of a larger population due to non-random recruiting techniques and a small sample size. Recruitment for focus groups and interviews was conducted by HRiA, NWH, and community organizations, and participants may be more likely to be those already engaged in community organizations or initiatives. Because of this, it is possible that the responses received only provide one perspective of the issues discussed. While efforts were made to talk to a diverse cross-section of individuals, demographic characteristics were not collected from the focus group and interview participants, so it is not possible to confirm whether they reflect the composition of the region. 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.

FINDINGS

Demographics

The health of a community is associated with numerous factors including what resources and services are available (e.g., safe green space, access to healthy foods) as well as who lives in the community. The section below provides an overview of the population of the Newton-Wellesley Hospital service area. The demographics of a community are significantly related to the rates of health outcomes and behaviors of that area. While age, gender, race, and ethnicity are important characteristics that have an impact on an individual's health, the *distribution of these characteristics* in a community may affect the number and type of services and resources available.

Population

As seen in Table 1, all but one (Weston) of the towns in the NWH service area experienced total population growth between 2000 and 2012. During this same time period, however, only Wellesley experienced a higher percent change in population than the state's overall population increase (5.6% v. 3.2%). These findings validate the perception that the majority of community health assessment participants expressed that people were moving into their towns to access ample services including good public schools.

A common theme across the interviews and focus groups was the sense that the towns in the NWH service area are generally nice and friendly but people tend to keep to themselves. Individuals who have been residents of these communities for years discussed how there has been a shift in the communities toward being less open. One focus group member said, "It has changed. When I first moved here it was a lot closer. When someone first moved in they would introduce themselves to you but they don't do that anymore. People really don't come out." Some participants explained this behavior as a "Massachusetts thing." Participants in Waltham talked about feeling like outsiders, or what Waltham residents refer to as "breezers" because they were not originally from Waltham. They discussed how Waltham was a nice place to live but if you didn't know people it was difficult to break in.

Table 1: Total Population by State, County, and City/Town, 2000, 2012

Geography	2000	2012	% Change
Massachusetts	6,349,097	6,560,595	3.2
Middlesex County	1,465,396	1,507,558	2.8
Norfolk County	650,308	672,078	3.2
Natick	32,170	33,071	2.7
Needham	28,911	29,005	0.3
Newton	83,829	85,177	1.6
Waltham	59,226	60,836	2.6
Wellesley	26,613	28,188	5.6
Weston	11,469	11,430	-0.3

DATA SOURCE: US Department of Commerce, Bureau of the Census, 2000 Census, 5 year estimate American Community Survey, 2008-2012

Age Distribution

With the exception of Waltham, all towns focused upon in this assessment have a higher percentage of children under 18 years of age than the state percentage of youth (Table 2). Also of note are Waltham and Wellesley's percentage of 18-24 year olds which are nearly double the percentage of Massachusetts

overall (17.9% and 17.9% v. 10.3%). Only Needham has a larger percentage of residents aged 65 and over than the state percentage (16.7% v. 13.9%). Although the NWH service area towns do not deviate greatly from age distribution patterns across the state, key informant interviews and focus group participants were most likely to discuss community and health issues related to youth and elders when collecting qualitative data for this assessment process.

Table 2: Age Distribution by State, County, and City/Town, 2008-2012

Geography	Under 18 years	18-24 years old	25-44 years old	45-64 years old	65 and over	Median Age
Massachusetts	21.6%	10.3%	26.6%	27.7%	13.9%	39.1
Middlesex County	21.2%	9.5%	28.8%	27.3%	13.2%	38.5
Norfolk County	22.5%	8.2%	25.8%	28.9%	14.6%	40.6
Natick	24.5%	5.6%	26.4%	29.8%	13.8%	41.3
Needham	27.2%	6.1%	20.2%	29.8%	16.7%	43.1
Newton	21.9%	12.6%	22.7%	27.3%	15.4%	39.7
Waltham	14.4%	17.9%	33.0%	22.9%	11.9%	33.7
Wellesley	25.9%	17.9%	16.2%	26.1%	13.8%	37.8
Weston	28.2%	8.1%	15.1%	32.2%	16.3%	43.6

DATA SOURCE: US Department of Commerce, Bureau of the Census, 5 year estimate American Community Survey, 2008-2012

Racial and Ethnic Diversity

In examining the racial and ethnic composition of the six towns covered in this assessment, all towns but Waltham have a higher percentage of White residents as compared to the percentage of White residents in Massachusetts overall (82.0% - 88.4% v. 81.0%). Waltham exceeds the state's percentages of Asian residents (10.8% v. 5.4%), Hispanic/Latino residents (14.2% v. 9.6%) and residents who identify as "Other" (5.4% v. 4.0%). (Table 3)

Table 3: Racial/Ethnic Composition by State, County, and City/Town, 2008-2012

Geography	White	Black	Asian	Hispanic/Latino	Other
Massachusetts	81.0%	6.8%	5.4%	9.6%	4.0%
Middlesex County	80.7%	4.6%	9.5%	6.6%	2.6%
Norfolk County	82.4%	5.9%	8.8%	3.3%	1.3%
Natick	87.1%	3.0%	7.1%	3.2%	1.1%
Needham	88.4%	2.3%	6.8%	3.0%	0.9%
Newton	82.0%	2.4%	13.1%	4.3%	0.7%
Waltham	76.2%	5.2%	10.8%	14.2%	5.4%
Wellesley	83.7%	2.0%	10.3%	4.3%	1.5%
Weston	84.5%	2.3%	10.1%	2.8%	0.5%

DATA SOURCE: US Department of Commerce, Bureau of the Census, 5 year estimate American Community Survey, 2008-2012

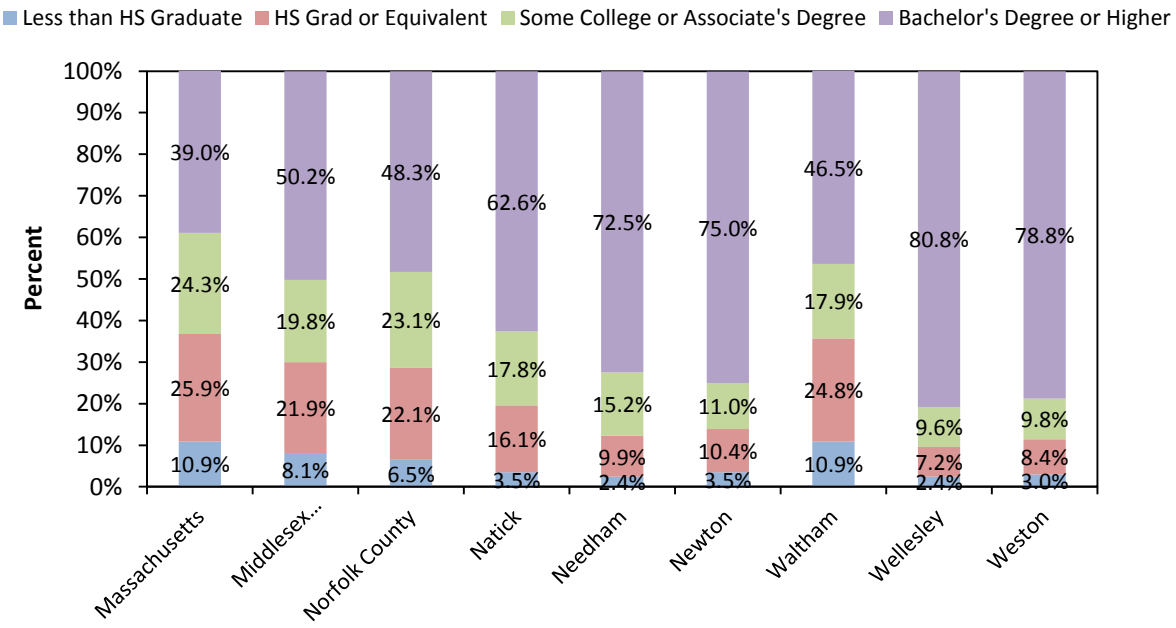
In discussing race and ethnicity with assessment participants, several thought it would be more meaningful to look at country of origin in order to ascertain a better understanding of the minority

groups who lived in their communities. Waltham residents said than many of the newer residents in their town are from South America, many of whom work in landscaping, restaurants and in nursing homes. A Newton resident offered that, "the African American community here is shrinking as the Asian community grows rapidly." Newton participants had mixed views on diversity in their town. One participant described Newton as a "melting pot" while another offered, "from my perspective Newton doesn't have enough diversity. When I go to the grocery market or the bank the people don't look like me." Some of the minority residents involved in this assessment process offered that they were always mindful that they were not White and memories of racism were real. One focus group member talked about wanting to enroll her son in a Boston school as opposed to the town she lived in because she didn't "want him to feel different from everyone else and like he sticks out." Another remembered of her town, "we were called niggers walking down the street. I was like 4 or 5. I was young."

Educational Attainment

The six assessment communities are very well educated. Compared to the state, there is a higher proportion of adults aged 25 and older who have earned a Bachelor's Degree or higher in all cities or towns in the catchment area. Of the six communities, Wellesley and Needham have the lowest percentage of citizens who are not high school graduates (2.4% for each town) and Wellesley has the highest percentage of residents who have earned a Bachelor's Degree or higher (80.8%) (Figure 2).

Figure 2: Educational Attainment of Adults Aged 25 years and older by State, County, and City/Town, 2008-2012



DATA SOURCE: US Department of Commerce, Bureau of the Census, 5 year estimate American Community Survey, 2008-2012

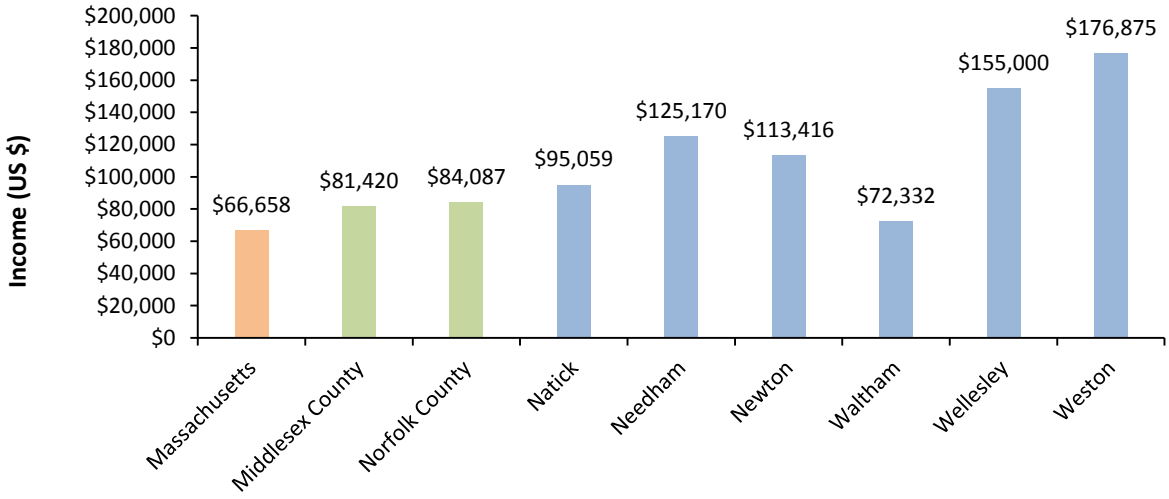
Given the high level of educational attainment in the NWH service area communities, it is not surprising that virtually all community assessment participants mentioned that the school systems are one of the main contributors to the appeal of moving to and residing in their cities and towns. As such, residents from Waltham spent a great deal of time discussing the overcrowding in their schools and the town's tentative plans for redistricting the schools, building a new high school and removing pre-school from

the two elementary school where there are pre-kindergarten programs. Given the importance placed on education in these communities, it may not be surprising that the high school students we heard from as part of the assessment process discussed how their entire lives revolved around school work. They also talked a great deal about the pressure they feel to get into an Ivy League school.

Income, Poverty, and Employment

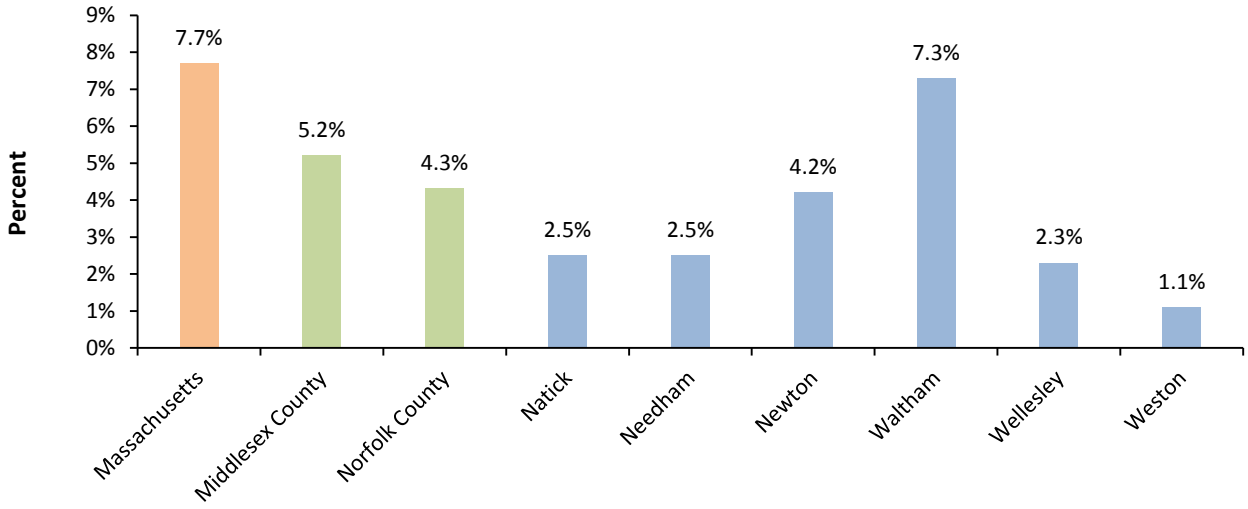
All of the communities in the NWH service area exceed the state's median household income with three of the towns having median household incomes that are double the state's median income (Figure 3). Consistent with the high median household incomes in the area, Figure 4 shows that the percent of families living below poverty level for each of these communities is lower than the percent of families living in poverty across Massachusetts. Additionally, the percentage of unemployed in each of the six service area cities/towns is lower than the state's unemployment rate of 8.5% (Figure 5).

Figure 3: Median Household Income by State, County, and City/Town, 2008-2012



DATA SOURCE: US Department of Commerce, Bureau of the Census, 5 year estimate American Community Survey, 2008-2012

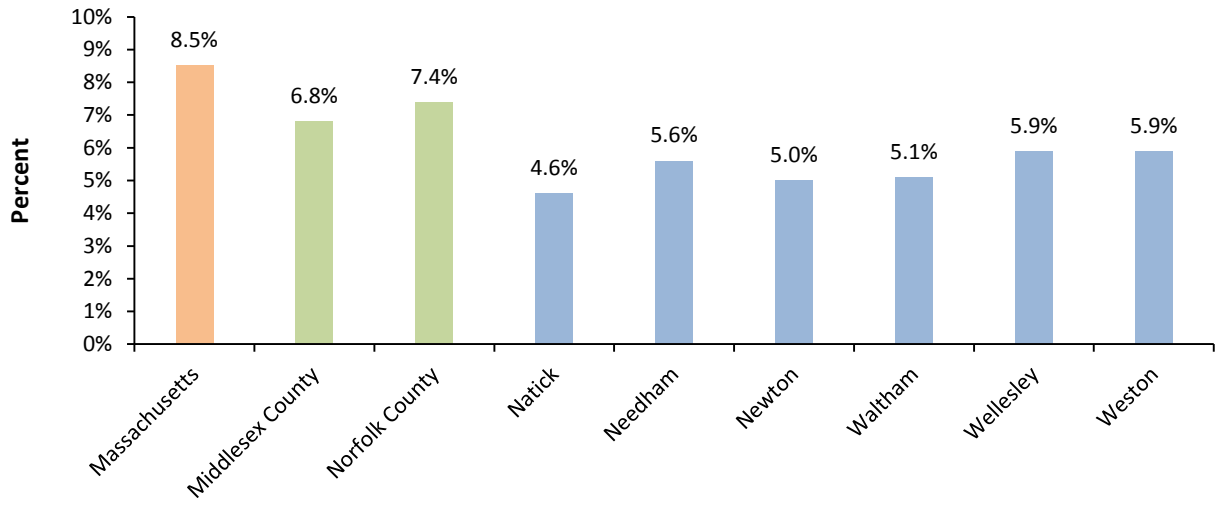
Figure 4: Percent of Families Below Poverty Level by State, County, and City/Town, 2008-2012



DATA SOURCE: US Department of Commerce, Bureau of the Census, 5 year estimate American Community Survey, 2008-2012

Nearly all of the interviewees and focus group members mentioned the high cost of living in all of the service area communities. Many participants discussed the trend of younger wealthier families moving to their cities/towns for the school systems while older people and/or people who had lived in their communities for generations have gotten priced out and have had to move away. Representatives of Wellesley, for example, discussed how there used to be a larger Italian and Greek population but they seem to have left because they couldn't afford the area anymore. Participants from Waltham however, said that although there seems to be an influx of people moving to their town for the schools, they did not have the impression that people were leaving because they no longer could afford the area. In fact, people from more expensive surrounding towns such as Lexington, Newton and Concord have been moving to Waltham because more affordable than the surrounding towns.

Figure 5: Unemployment by State, County, and City/Town, 2008-2012



DATA SOURCE: US Department of Commerce, Bureau of the Census, 5 year estimate American Community Survey, 2008-2012

Although unemployment was not one of the main issues raised by participants during the assessment process, it did not go unnoted. Several talked about how the economic downturn and the subsequent recession of several years ago are still affecting some residents. Although this service area is relatively wealthy, participants discussed how some people had lost jobs in the past and have not been able to find positions that pay them comparable salaries to their previously held positions. For some this economic stress has contributed to mental health issues including anxiety and depression.

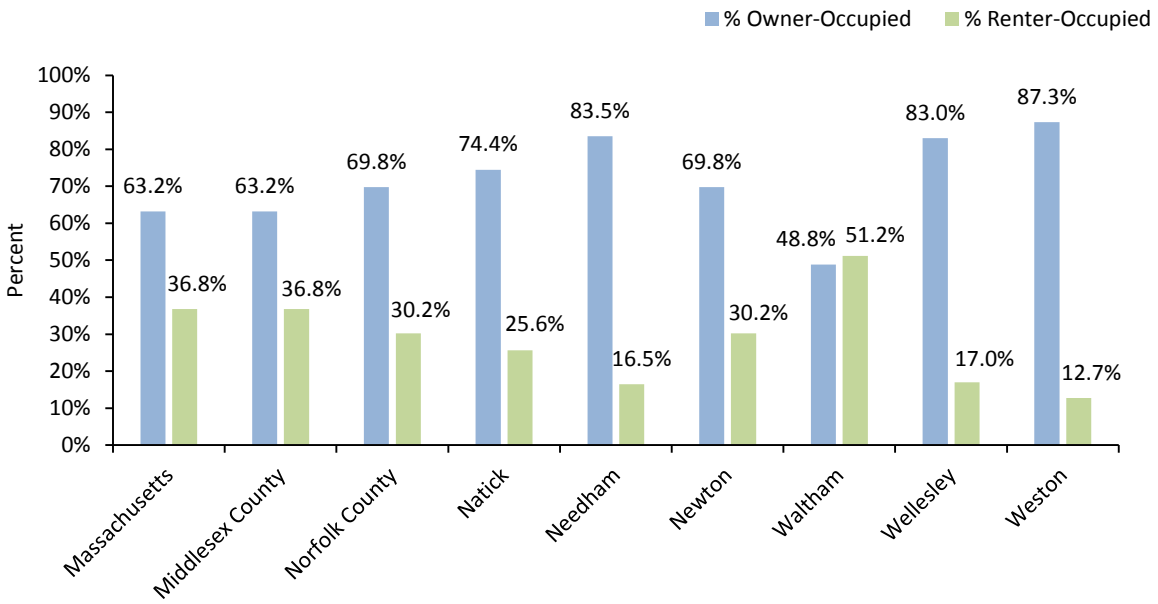
Social and Physical Environment

The social and physical environments are important contextual factors shown to have an impact on the health of individuals and the community as a whole. Understanding these issues will help in identifying how they may facilitate or hinder health at a community level. For example, residents may not engage in physical activity because of missing sidewalks, or healthy foods may not be accessible if there is limited public transportation. The section below provides an overview of the larger environment of the Newton-Wellesley Hospital service area to provide greater context when discussing the community's health.

Housing

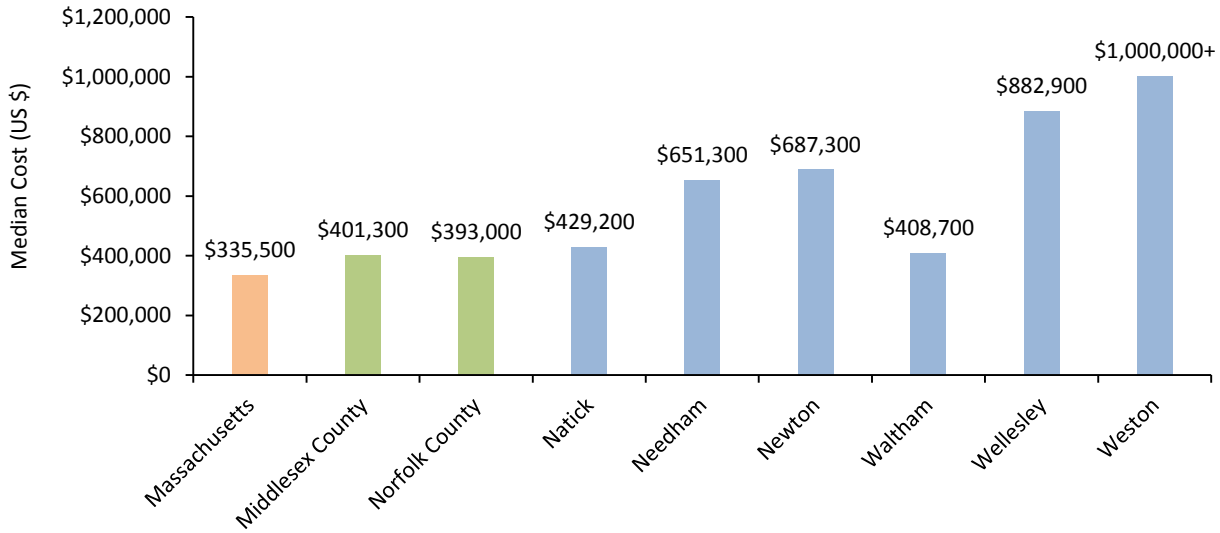
With the exception of Waltham, all cities/towns in the NWH service area have a higher percentage of home-owners and a lower percentage of renters as compared to the state percentages (Figure 6). For those who do rent their homes, in each of the six assessment communities, a higher percentage of them spend 35% or more of their household income on housing than do the home-owners in their communities (Figure 8). All of the assessment communities have median home ownership costs that are higher than the state's median cost (Figure 7).

Figure 6: Percent of Residents Who Own or Rent Homes by State, County, and City/Town, 2008-2012



DATA SOURCE: US Department of Commerce, Bureau of the Census, 5 year estimate American Community Survey, 2008-2012

Figure 7: Median Cost of Housing by State, County, and City/Town, 2008-2012



DATA SOURCE: US Department of Commerce, Bureau of the Census, 5 year estimate American Community Survey, 2007-2011

Figure 8: Percent of Residents Whose Housing Costs are 35% or More of Household Income by State, County, and City/Town, 2008-2012

DATA SOURCE: US Department of Commerce, Bureau of the Census, 5 year estimate American Community Survey, 2008-2012

Almost all assessment participants discussed housing challenges in their communities and all of these discussed the high costs of housing, in particular. Several participants felt that the high cost of living and housing costs were purposeful strategies to keep certain people out of their communities. One focus group participant said, “Taxes are so high. I think it’s deliberate so people can’t move in. They don’t want to really diversify.” Another participant told the story of building affordable housing, “We own property here but we had to go through the state to build affordable housing. When we had our public hearings you would not believe the people coming out of the woodwork just to oppose our efforts. It was down and out racist.”

In all of the conversations about community housing issues, concerns about appropriate housing for seniors were raised. Although area residents generally are wealthier than the rest of the state, it was common to hear that people are “house-rich and cash-poor.” Participants discussed that many seniors wanted to downsize because their children no longer lived with them, they no longer wanted the responsibility of home ownership or because they were now living on a fixed income and were finding it difficult to afford their homes. Although representatives of several of the communities discussed efforts in their communities to build smaller less expensive homes that were within walking distance to elder services, most participants talked about how there are limited homes for sale or for rent that are small and affordable. Public housing for seniors was also discussed but there are waiting lists in many of the communities. Also, several participants mentioned that one of the barriers to seniors accessing subsidized housing is that many of the seniors in their communities “don’t see themselves as someone who would live in low-income housing.” Many participants stressed the importance of deliberate development in the future where many “town centers” would be built so elders can easily access a pharmacy, medical care and a grocery store.

Affordable housing for all residents, not just seniors was also common topic among assessment participants. One participant discussed that many area lower-income residents live one paycheck away

from being evicted. In these situations "people do not want to leave their communities so they end up living on friend's couch or living in illegal boarding houses and in small apartments that are just rooms in houses." The cities/towns end up closing down these illegal housing options for health reason such as fire hazards or overcrowding. "Although this is the right thing to do" one interviewee explained, "You solve one problem of deplorable housing but cause them other problems in terms of stress and homelessness."

Public housing in general was also discussed by many of the assessment participants. In many of the communities, participants talked about how there is limited access to public housing and for those who do live in public housing it can be isolating. The Barton Road housing development in Wellesley, for example, has no or limited public transportation and is far away from any grocery store and health care services.

One participant was also concerned that there are no housing shelters in the area and how this lack of temporary housing creates a real problem for people with behavioral health issues. Once people facing behavioral health issues lose housing, "they wind up having to move and then become disconnected from social support and health care."

Homelessness was also raised as an issue in several communities. One interviewee said of his community, "not everybody's living the American Dream. We have over a hundred adults and children who are homeless. We have families living in hotels here." Among those who raised the issue of homelessness, they noticed that many of the homeless families in their cities/towns were also immigrants.

Transportation

Mirroring the trend in Massachusetts, the vast majority of commuters in each of the hospital service area communities drive to work. Newton, Needham and Wellesley however, have a higher percentage of residents commuting to work via public transportation as compared to the state (12.6% and 10.3% and 9.9% v. 9.2%), whereas Weston has the lowest percentage of public transportation commuting in the six assessment communities. A higher percentage of people walk to work in Wellesley than the other cities/towns in the catchment area and the state (Table 4).

Table 4: Mode of Transportation to Work by State, County, and City/Town, 2008-2012

Geography	Car, truck, or van	Public transportation (excluding taxi)	Walk
Massachusetts	80.3%	9.2%	4.7%
Middlesex County	77.7%	10.7%	4.8%
Norfolk County	78.0%	12.9%	3.5%
Natick	84.1%	8.1%	1.3%
Needham	78.0%	10.3%	2.5%
Newton	72.2%	12.6%	5.5%
Waltham	79.5%	6.6%	7.8%
Wellesley	64.7%	9.9%	15.4%
Weston	82.8%	3.6%	4.7%

DATA SOURCE: US Department of Commerce, Bureau of the Census, 5 year estimate American Community Survey, 2008-2012

The necessity of having a car and the inadequacy of the local public transportation was a common theme among key informant interviewees and focus group participants. Although all participants seemed to think that the majority of people living in their towns had cars, they recognized that there "probably are some people trying to rely solely on public transit and that would be a challenge." The lack of having access to a car coupled with spotty local public transportation was discussed by almost all participants as a barrier to maintaining health by limited access to healthy food in many cases and by preventing people from accessing health care. Seniors and people with disabilities or behavioral health issues were cited as the most vulnerable to the transportation barrier in their communities. Interviewees and focus group participants discussed that those without access to transportation may rely on relatives to get to health care appointments but without family members or friends to help they are left to rely on the Ride (the T) or unreliable community volunteer services, or pay for expensive cabs. Although the communities have come up with strategies (such as cab share programs, cab vouchers or funding local buses) to address these issues, these programs are difficult to maintain because they tend to be reliant on unstable funding sources such as grants. Assessment participants were very clear that sustainable transportation options need to be implemented in their communities.

Transportation into Boston was also a topic of conversation in most groups and interviews. Generally residents felt that the commuter rail offered reasonable access to the city as well as nearby access to I-90 or I-95 for driving into Boston. Again however, participants discussed how vulnerable segments of the population may have limited access to transportation and this may be a barrier to them accessing health care.

Many assessment participants discussed traffic and speeding issues in their communities. Residents of Natick and Waltham discussed how the "horrendous" traffic in their communities contributed to inefficiency in their lives because they have to add sometimes 30-45 minutes to their commuting time if they want to get somewhere. Speeding was also raised a problem in their communities. One focus group from Waltham mentioned that two people had recently been hit and killed by a speeding car in their town.

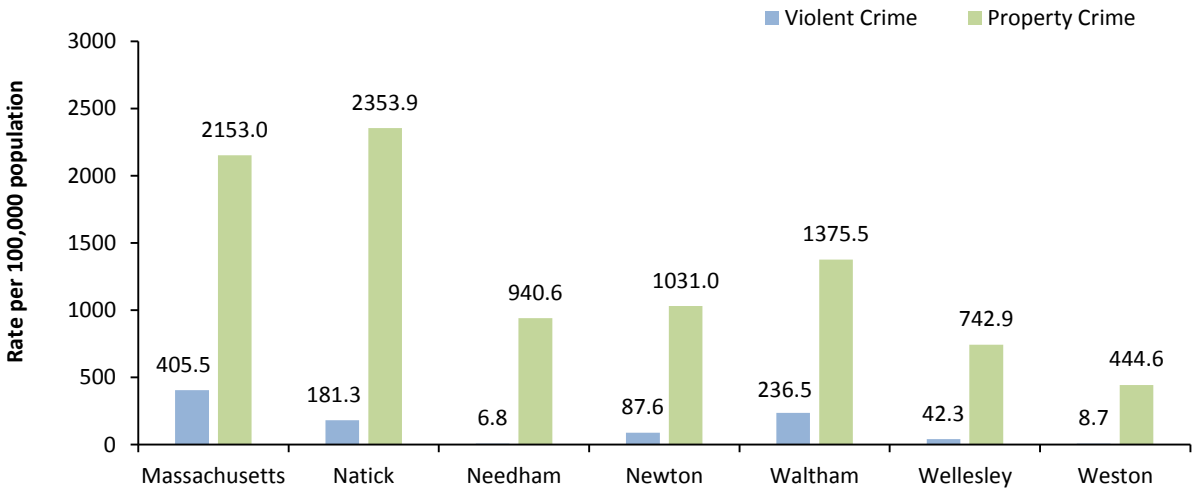
Despite the numerous conversations about driving as a means of transportation, only one participant voiced concern that there are "no incentives for residents of these communities to use more fuel efficient cars or use public transportation."

A few focus group participants discussed the barrier limited sidewalks in their communities caused for encouraging leisurely walks or to access services. One Waltham focus group member offered, "On Trapelo Road the sidewalk is only on one side. It's like Frogger trying to cross the street. Cars won't let you go. I was once there [trying to cross the street] with my baby, grandmother and dog and no one would stop."

<u>Crime and Safety</u>

Overall, participants described the area as a low crime area and reported that they felt safe. Quantitative data reinforce this feeling. Figure 9 indicates that, aside from Natick, all towns in the assessment experience lower rates of violent and property crime compared to Massachusetts overall. The rate of property crime in Natick is approximately 10% higher than the statewide rate.

Figure 9: Crime Rate per 100,000 Population by State and City/Town, 2012



DATA SOURCE: Federal Bureau of Investigation Uniform Crime Reports. Offenses Known to Law Enforcement, by State, by City/Town, 2012

Issues of electronic (cyber) and in-school bullying were noted as areas of concern, and will be discussed below as they relate to youth mental health.

Community Strengths and Assets

Participants in community dialogues and interviews were asked to identify their communities' strengths and assets. This section briefly highlights some of the key community strengths that community dialogue and interview participants identified.

Strong Collaborative Spirit and Community Partnerships

Interview participants in particular discussed the strong collaboration and partnerships that exist between many community organizations. "We work well with other groups and all of the agencies in the town work well together. We build strong partnerships so when we need to call on these partners we can," reported one participant. Others talked about collaborations between schools, health departments, and the hospital, which were seen as increasing in recent years. While participants mentioned that they have many natural partners in the community, they also expressed interest in enhancing and formalizing many of their partnerships, especially with the hospital.

Community Cohesion

Among assessment participants, social cohesion emerged as a key strength of the community. Many participants described having "community pride," which created a sense of identity that strengthened the fabric of the community. As one focus group participant mentioned, "there is a sense of identity of being in this community; you're part of schools, temples. There are lots of little communities, which create a sense of belonging." Others reinforced that the communities' greatest assets are the commitment that residents have to each other, noting particularly strong support to youth families in the community. Further highlighting the active volunteerism and generous spirit of many community

residents, one participant noted that "people volunteer and help each other, especially in times of need."

Focus on youth and education
One of the most frequently mentioned assets of the NWH service area was the focus on youth and promoting positive youth development. For many participants, youth were seen as the heart of the community and services and programs existed to support them. The area schools were described as "wonderful educational systems," and most focus group participants reported moving to the area specifically so that their children could attend schools. One participant summarized, saying "this is a place that highly values education. Families that want the best education for their children come here."

Community resources
Focus group and interview participants identified a wealth of community assets and programs in the NWH service area including a variety of youth sports activities and leagues, community events and festivals, and churches and synagogues. Numerous resources were discussed related to younger, school-age youth. However, there were fewer activities for older youth, particularly if they are not as connected to their schools' activities. Interview participants also identified health-related resources. Participants noted the hospital services, as well as those provided by the local health departments and social services agencies. Community coalitions were specifically acknowledged and suggested as an important area for growth. Several participants also highlighted community resources related to behavioral health- Project Interface, the SPARK program, and an initiative to improve systems integration for youth.

Risk and Protective Lifestyle Behaviors
This section examines lifestyle behaviors among the NWH service area's residents that support or hinder health, including individuals' personal health behaviors and risk factors (i.e., regarding physical activity, nutrition, and substance use) that result in the leading causes of morbidity and mortality among residents. Due to data constraints, many health behavior measures are available only at the county level or for Community Health Network Area (CHNA) 18 as a whole, not individual municipalities or subpopulations. When appropriate and available, municipal statistics are compared to the counties, CHNA and/or state as a whole.

<u>Healthy Eating, Physical Activity, and Overweight/Obesity</u>

- *I have to go to Somerville to Market Basket and spend $200 a month. That would barely last if I food shopped here.* – focus group participant

- *There are resources here if you can afford them. Gyms are expensive; I am trying to get a fitness group or something here. They have fitness for the elderly but what about everyone else? Why wait until we are elderly and out of shape?* – focus group participant

- *There's lots of fast food in our town. The food environment exacerbates the physical inactivity issues, and we're seeing more obesity, especially among youth.* – interview participant

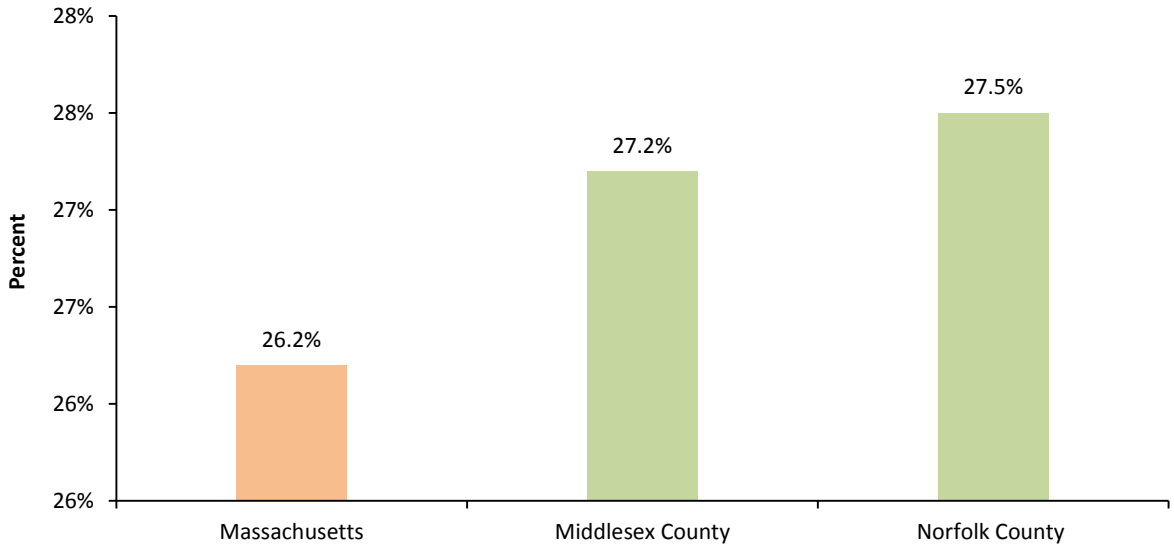
Several focus group and interview participants discussed the importance of healthy eating and physical activity to maintaining weight and overall health. Additionally, in one town, focus group participants commented that there is "social pressure to exercise and be fit," which they said is motivating but also adds to feelings of stress among youth and pressure for adults to find time for exercise in their busy

lives. As one youth participant mentioned, “people are expected to be in shape, and are especially judgmental about weight and being healthy.”

Participants also noted several barriers that exist in their communities – such as unaffordable prices of healthy foods, lack of affordable physical activity opportunities for youth and adults, and limited transportation – to achieving a healthy lifestyle. According to the United States Department of Agriculture, 3.0% of Middlesex County residents are low-income and do not live close to a grocery store. This is slightly less than the percentage of residents in Norfolk County (4.0%) and Massachusetts overall (4.0%) who are low-income and do not live close to a grocery store. In discussing other issues related to food access, one community resident noted that a large, affordable grocery store in Wellesley had been replaced by a more expensive store, making it hard to buy the quantity and quality of food that she was accustomed to purchasing. Shopping for more affordable groceries outside their hometown was discussed among several focus group participants.

Quantitative data indicate that adults in the NWH service area have similar healthy eating behaviors compared to adults statewide. As seen in Figure 10, 27.2% of adult residents in Middlesex County and 27.5% of adult residents in Norfolk County reported eating fruits and vegetables five or more times per day (the recommended guideline) compared to 26.2% of adults statewide.

Figure 10: Percent of Adults with Fruit or Vegetable Intake of 5 or More per Day by State and County, 2009

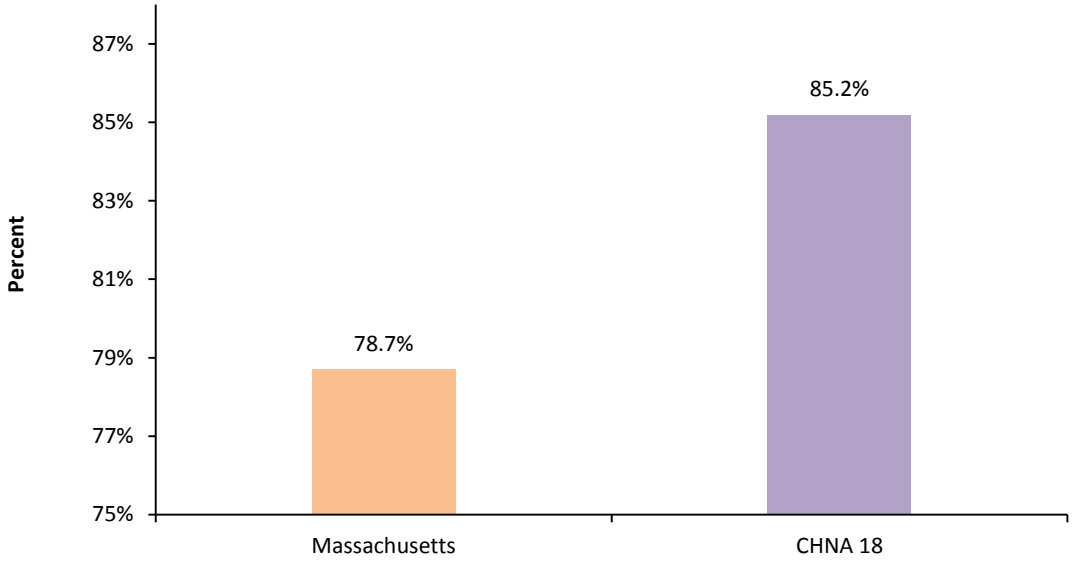


DATA SOURCE: Behavioral Risk Factor Surveillance System, United States, as cited by Centers for Disease Control and Prevention Morbidity and Mortality Weekly Report

In discussing healthy lifestyle behaviors, many assessment participants also commented on the cost of sports leagues, gyms, and other physical activity opportunities. While they noted that some opportunities exist, a few of which are affordable, these varied by municipality in the NWH service area. As one focus group participant mentioned, “Because they are here in Newton they think that people can pay to keep themselves healthy. Yes, the community is full of affluent people but there are some who aren’t. They need to make it affordable.” Lack of physical infrastructure, for example sidewalks, was also

mentioned as a barrier to engaging in physical activities. This was of particular concern in Waltham, where residents expressed worry about safety from traffic.

Figure 11: Percent of Adults Reporting Any Leisure Time Physical Activity by State and CHNA, 2007-2009



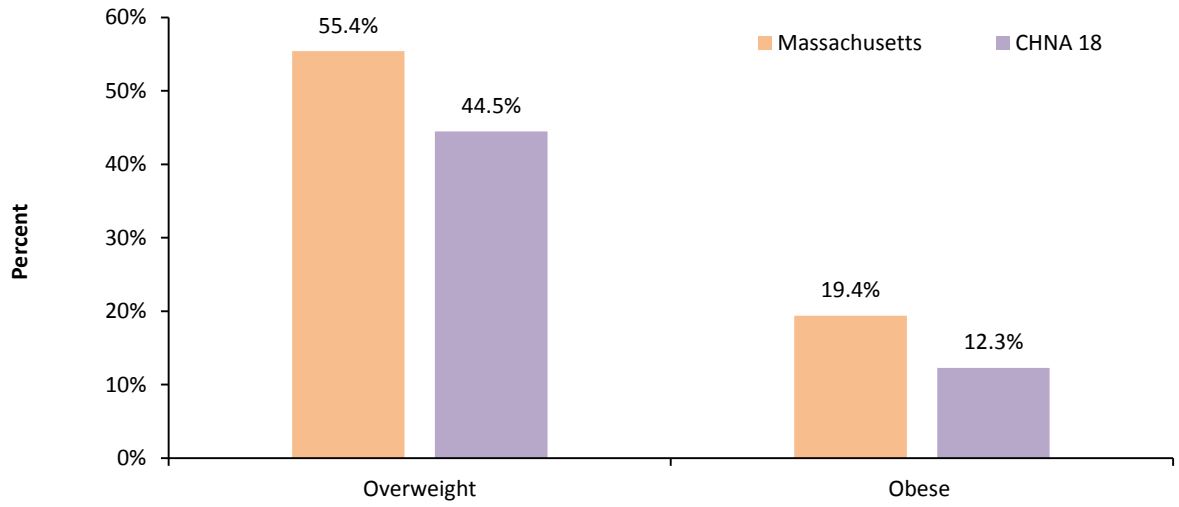
DATA SOURCE: Massachusetts Department of Public Health (2007-2009), MassCHIP

Despite reported challenges, Figure 11 shows that adults in CHNA 18 report were more likely to report engaging in leisure time physical activity than adults in Massachusetts as a whole (85.2% vs. 78.7%). In 2013, 77.0% of middle school students in Massachusetts exercised for 60 or more minutes per day for five or more days per week. High school students in Massachusetts reported exercising considerably less with only 44.0% exercising an hour or more per day for five or more days per week. Physical activity data are available for several towns within the NWH service area. In 2010, 77.6% of Natick middle school students, 81.7% of Needham middle school students, and 79.1% of Waltham middle school students engaged in 20 minutes or more of exercise on three or more days per week.

Healthy eating and physical activity are important predictors of obesity. While obesity was not extensively discussed in this assessment, several participants expressed concerns related to obesity, and the increasing rates among younger children, though this was not a pressing health concern cited by many participants. Obesity was seen as linked to unaffordable healthy food and limited physical activity opportunities as well as towns whose physical infrastructure (sidewalks, walkable town centers) do not support optimal physical activity.

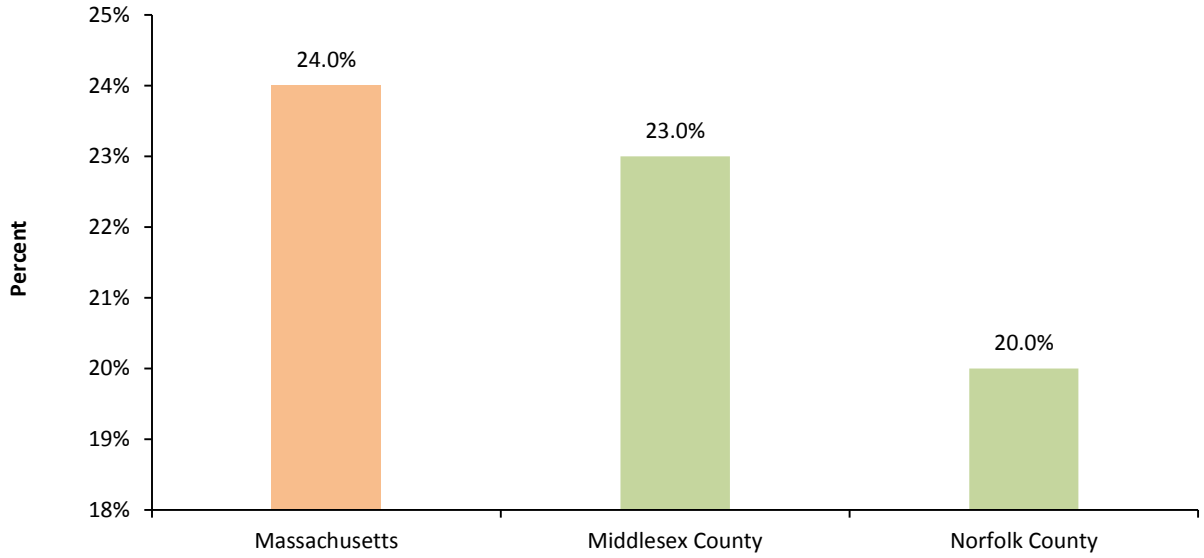
Figure 12 shows that lower percentages of CHNA 18 adult residents are overweight and obese compared to residents statewide. Figure 13 contains more current data at the county level, which indicates that while obesity rates are increasing, slightly fewer adults in Middlesex and Norfolk Counties are obese (23.0% and 20.0%, respectively) compared to adults in Massachusetts overall (24.0%). Interestingly, when looking at hospital data for Newton-Wellesley, morbid obesity is the fourth most common inpatient diagnosis among patients ages 45 to 64 years old (See Appendix C).

Figure 12: Percent of Obese and Overweight Adults by State and CHNA, 2007-2009



DATA SOURCE: Massachusetts Department of Public Health (2007-2009), MassCHIP
NOTE: Overweight includes adults that report a BMI=26-30; Obese includes adults that report a BMI >=30

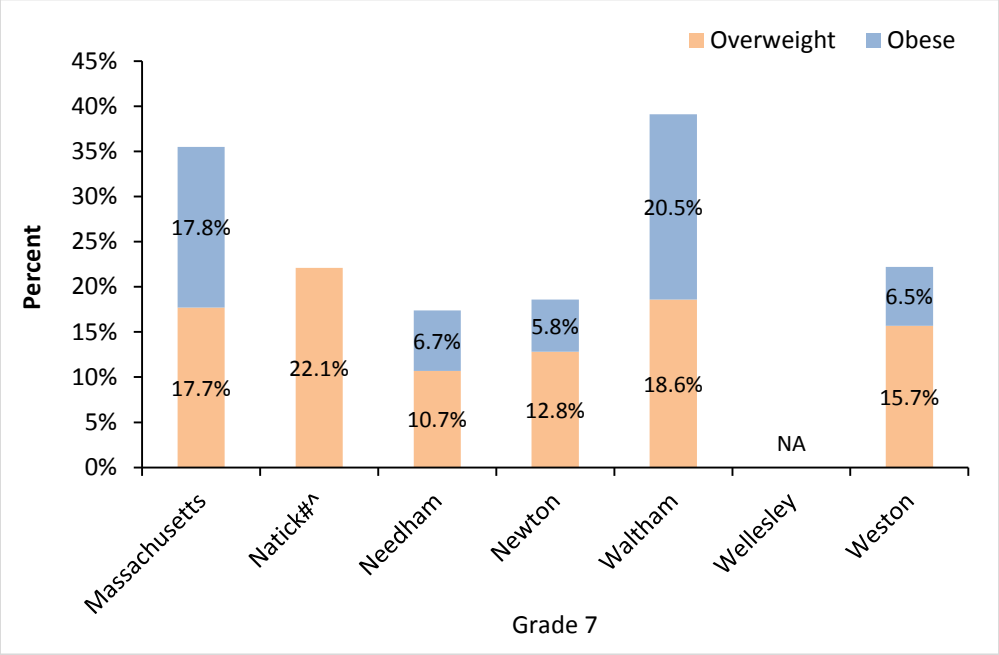
Figure 13: Percent of Obese Adults by State and County, 2010



DATA SOURCE: National Center for Chronic Disease Prevention and Health Promotion, Division of Diabetes Translation (2010), as cited by County Health Rankings
NOTE: Obese includes adults that report a BMI >=30

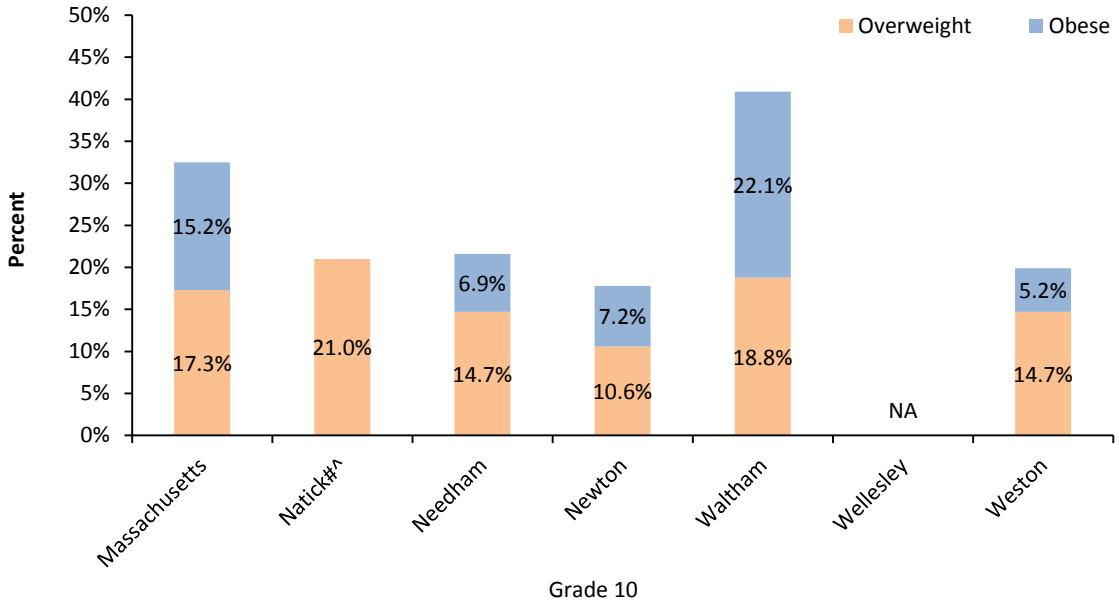
Overweight/obesity rates among youth vary widely within the NWH service area. However, Waltham is the only town in the area with a higher rate of youth who are overweight/obese (39.1% of 7th grade students and 40.9% of 10th grade students) compared to the state overall (35.5% of 7th grade students and 32.5% of 10th grade students) (Figure 14 and Figure 15).

Figure 14: Percent of Students (Grade 7) that are Overweight or Obese by Region and City, 2010



DATA SOURCE: MetroWest Adolescent Health Survey, 2010; Essential School Health Service (2010), Massachusetts Department of Public Health, MassCHIP
NOTE: NA indicates data were not available
Overweight includes students that report a BMI=26-30; Obese includes students that report a BMI >=30
^Grades 7-8
#Overweight and obese were combined

Figure 15: Percent of Students (Grade 10) that are Overweight or Obese by Region and City, 2010



DATA SOURCE: MetroWest Adolescent Health Survey, 2010; Essential School Health Service (2010), Massachusetts Department of Public Health, MassCHIP

NOTE: NA indicates data were not available
Overweight includes adults that report a BMI=26-30; Obese includes adults that report a BMI >=30
#Overweight and Obese were combined
^Grades 9-12

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

- *"There is still a lot of stigma, even though substance abuse is so common here."* – focus group participant
- *"The opiate problem is bigger than we know. We've lost four young people in the past year."* – interview participant
- *"People are using alcohol to numb their mental health problems."* – interview participant

Assessment participants expressed many concerns regarding to substance abuse in their communities, including alcohol use and community acceptance of use, an increase in prescription drug and heroin use, and the link between substance abuse and mental health issues.

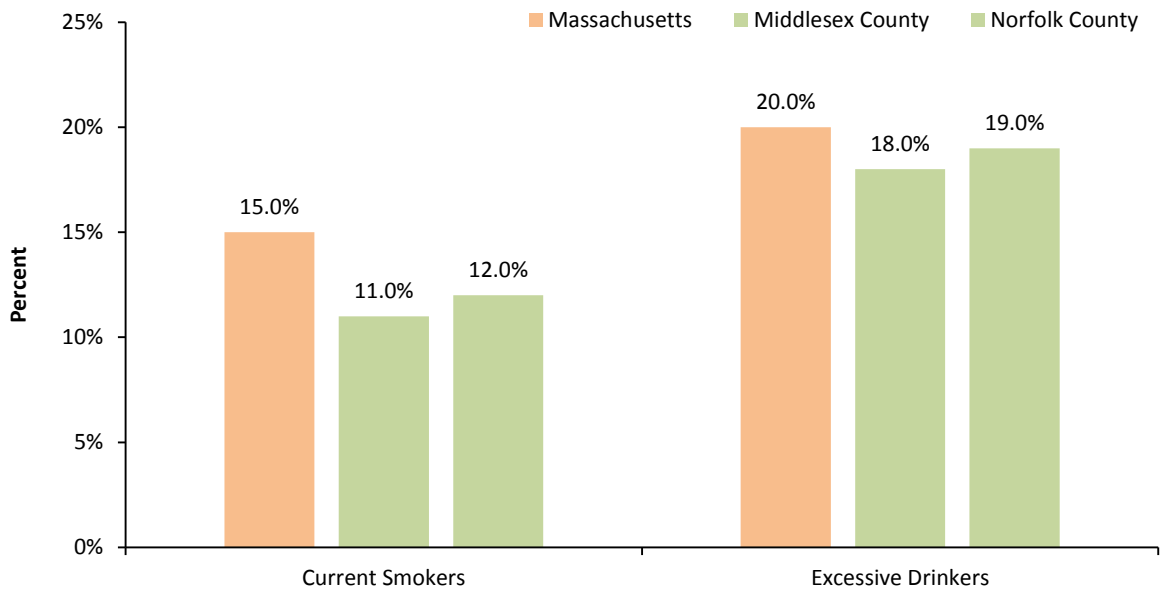
Table 5: Rate of Admissions to DPH Funded Treatment Programs per 100,000 Population by State, County, and City/Town, 2009, 2011

Geography	Admissions to DPH Funded Treatment Programs	Injection Drug User Admissions to DPH Funded Treatment Program	Alcohol and other Drug-Related Hospital Discharges
MA	1532.4	621.2	344.7
Middlesex County	1005.9	421.9	272.5
Norfolk County	1198.4	558.7	345.3
Natick	567.5	125.4	247.7
Needham	298.8	70.3	147.7
Newton	448.7	123.6	153.6
Waltham	821.0	238.4	387.8
Wellesley	237.3	60.0	122.3
Weston	86.3	0.0	86.3

DATA SOURCE: Bureau of Substance Abuse Services, DPH funded program utilization (2011); Calendar Year Hospital Discharges, Uniform Hospital Discharge Data Set (2009); Massachusetts Department of Public Health, MassCHIP

Table 5 shows the rate of admissions to Department of Public Health funded treatment programs and hospital discharges for substance abuse. The NWH service area experiences a lower rate of admission to DPH funded treatment programs across all cities and towns as compared to the state. Waltham reported the highest rate at 821.0 per 100,000 population for all causes and 238.4 per 100,000 for admissions due to injection drug use.

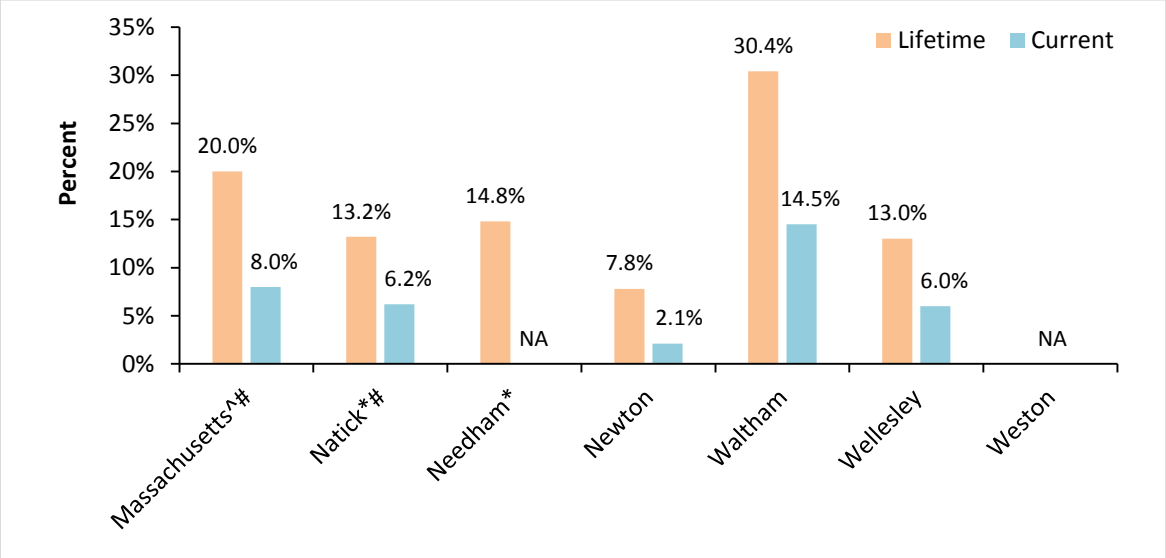
Figure 16: Percent of Adults who Report Current Smoking Status or Excessive Drinking by State and County, 2006-2012



DATA SOURCE: Behavioral Risk Factor Surveillance System, Massachusetts Department of Public Health (2006-2012), as cited by County Health Rankings

Figure 16 illustrates rates of current smoking and excessive drinking among adults in the area. Fewer adults in Middlesex and Norfolk Counties reported being excessive drinkers compared to adults across Massachusetts.

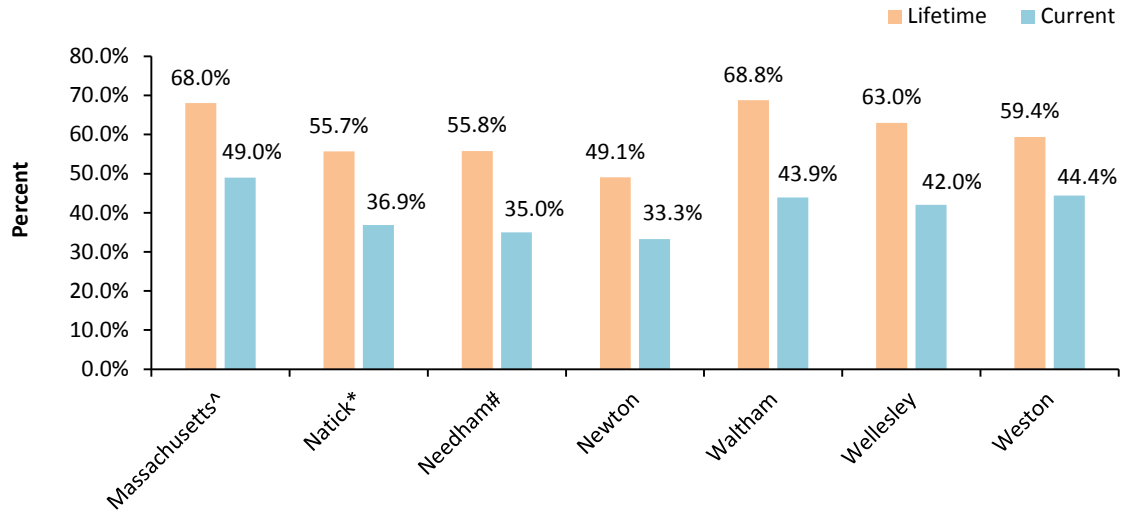
Figure 17: Percent of Students (Grades 7-8) Reporting Current and Lifetime Alcohol Use by State and City/Town, 2012



DATA SOURCE: Massachusetts Youth Health Survey, 2011; MetroWest Adolescent Health Survey, 2010, 2012; Newton Youth Risk Behavior Survey, 2012-2013; Waltham Public Schools Youth Risk Behavior Survey, 2012
NA indicates data were not available

#Grades 6-8
*2010 data
^2011 data

Figure 18: Percent of Students (Grades 9-12) Reporting Current and Lifetime Alcohol Use by State and City/Town, 2012



DATA SOURCE: Massachusetts Youth Risk Behavior Survey, 2011; MetroWest Adolescent Health Survey, 2010, 2012; Newton Youth Risk Behavior Survey, 2012-2013; Waltham Public Schools Youth Risk Behavior Survey, 2012; Weston Youth Risk Behavior Survey, 2011-2012
NOTE: "Current" is defined as last 30 days prior to survey administration
*2010 data
^2011 data
#2010 data for Lifetime Alcohol Use and 2012 data for Current Alcohol Use

Youth focus group participants discussed parties where drinking occurred and the pressure they feel to be popular. However, the youth engaged in this assessment noted that they do not feel direct peer pressure to use substances, but rather a lack of knowledge regarding the health effects of substance use. Additionally, they discussed seeing their peers or role models (upper classmen) using substances, which "challenges their perceptions of what is right and the norm." Many of these youth reported that the idea of potential academic and social consequences "ruining their lives" was often enough to deter them from using substances. They recognized that this is not necessarily true of youth in all parts of the NWH service area. Adult focus group participants mentioned the lack of activities for high school youth as contributing to substance use.

Quantitative data indicate that rates of lifetime (ever tried a sip) and current use (within the past 30 days) of alcohol among middle and high school youth are lower in the NWH service area than in the state as a whole. Among middle school youth, Waltham is the exception with 10% more youth having reported lifetime alcohol use than their peers across the state (30.4% vs. 20.0%). Waltham middle school youth also reported the highest rate of current alcohol use (14.5%) among towns in the NWH service area (Figure 17).

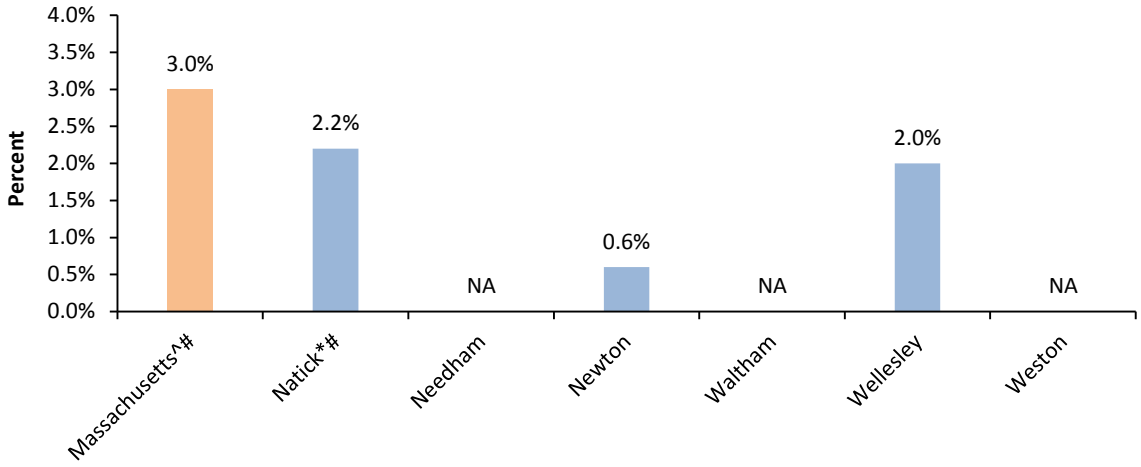
Alcohol use among high school youth in the area was more prevalent than among middle schools, although consistent with use across the state, as seen in Figure 18. Waltham (68.0%) and Wellesley

(63.0%) high school youth reported the highest rates of lifetime alcohol use. Waltham, Wellesley, and Weston high school youth also reported the highest rates of current alcohol use. Across all cities and towns in the NWH service area, less than half of high school students reported currently using alcohol.

However, Figure 20 shows that more high school youth in the area reported binge drinking compared to their peers statewide. The highest rate was reported by high school youth in Weston (29.7%) and the lowest in Newton (17.8%).

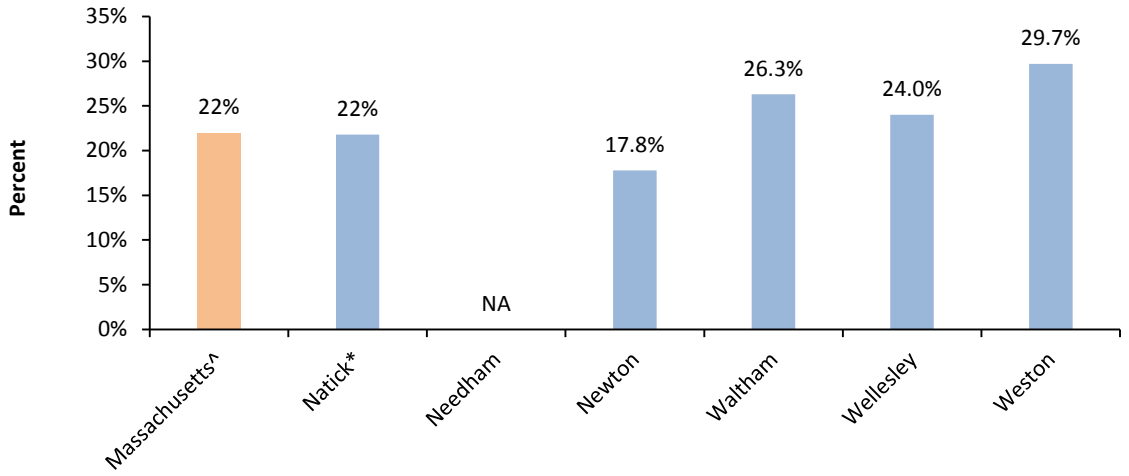
Figure 19 indicates that few middle school youth in the area reported binge drinking.

Figure 19: Percent of Students (Grades 7-8) Reporting Current Binge Alcohol Use by State and City/Town, 2012



DATA SOURCE: Massachusetts Youth Health Survey, 2011; MetroWest Adolescent Health Survey, 2010, 2012; Newton Youth Risk Behavior Survey, 2012-2013
NOTE: NA indicates data were not available; "Current" is defined as last 30 days prior to survey administration
#Grades 6-8
*2010 data
^2011 data

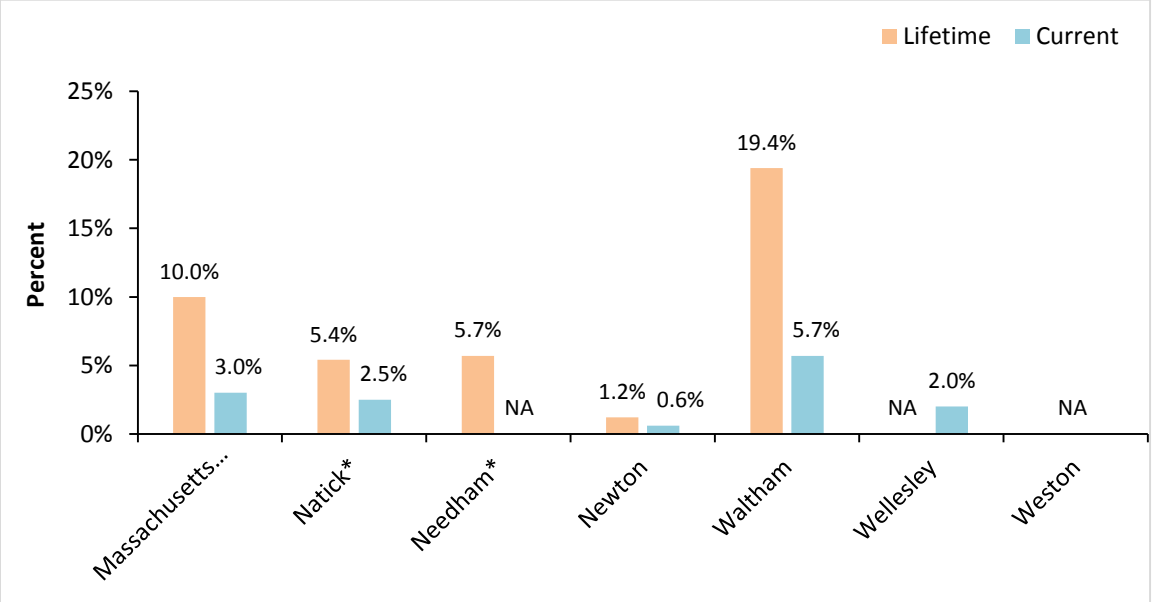
Figure 20: Percent of Students (Grades 9-12) Reporting Current Binge Alcohol Use by State and City/Town, 2012



DATA SOURCE: Massachusetts Youth Risk Behavior Survey, 2011; MetroWest Adolescent Health Survey, 2010, 2012; Newton Youth Risk Behavior Survey, 2012-2013; Waltham Public Schools Youth Risk Behavior Survey, 2012; Weston Youth Risk Behavior Survey, 2011-2012
NOTE: NA indicates data were not available; "Current" is defined as last 30 days prior to survey administration
*2010 data
^2011 data

Tobacco was also a concern among several interview participants, including smokeless tobacco and alternative tobacco products. As seen above in Figure 16, fewer adults in Middlesex and Norfolk Counties reported being current smokers than adults in Massachusetts overall.

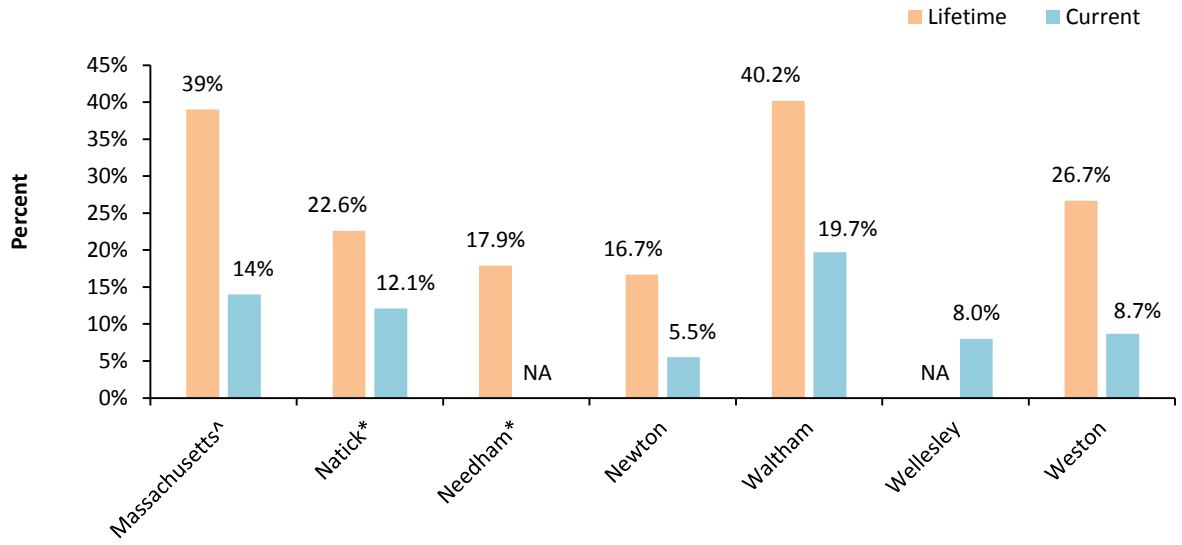
Figure 21: Percent of Students (Grades 7-8) Reporting Current and Lifetime Cigarette Use by State and City/Town, 2012



DATA SOURCE: Massachusetts Youth Health Survey, 2011; MetroWest Adolescent Health Survey, 2010, 2012; Newton Youth Risk Behavior Survey, 2012-2013; Waltham Public Schools Youth Risk Behavior Survey, 2012

NA indicates data were not available
#Grades 6-8
*2010 data
^2011 data

Figure 22: Percent of Students (Grades 9-12) Reporting Current and Lifetime Cigarette Use by State and City/Town, 2012

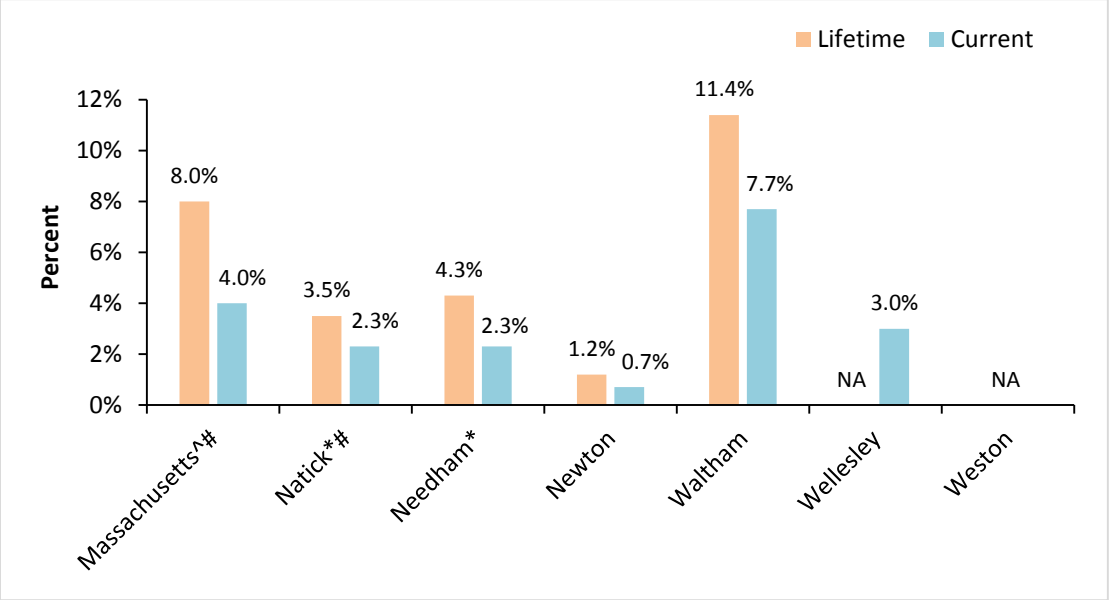


DATA SOURCE: Massachusetts Youth Risk Behavior Survey, 2011; MetroWest Adolescent Health Survey, 2010, 2012; Newton Youth Risk Behavior Survey, 2012-2013; Waltham Public Schools Youth Risk Behavior Survey, 2012; Weston Youth Risk Behavior Survey, 2011-2012
NOTE: NA indicates data were not available; "Current" is defined as last 30 days prior to survey administration
*2010 data
^2011 data

Youth tobacco data reveal that compared to the state overall fewer high school youth in the NWH service area reported ever having smoked or currently smoking cigarettes. The exception is Waltham, where 40.2% of high school youth reported having smoked ever in their lifetime and 19.7% reported being current smokers (Figure 22). Data on middle school cigarette use indicate that rates in Waltham are higher than surrounding towns and the state overall. 19.4% of Waltham middle school students reported ever having smoked, while 5.7% reported currently smoking compared to their peers across Massachusetts (Figure 21).

Youth and parent focus group participants were more concerned about marijuana use and youth noted that they are unsure about the dangers of marijuana, particularly given the rise of legalization across the country.

Figure 23: Percent of Students (Grades 7-8) Reporting Current and Lifetime Marijuana Use by State and City/Town, 2012



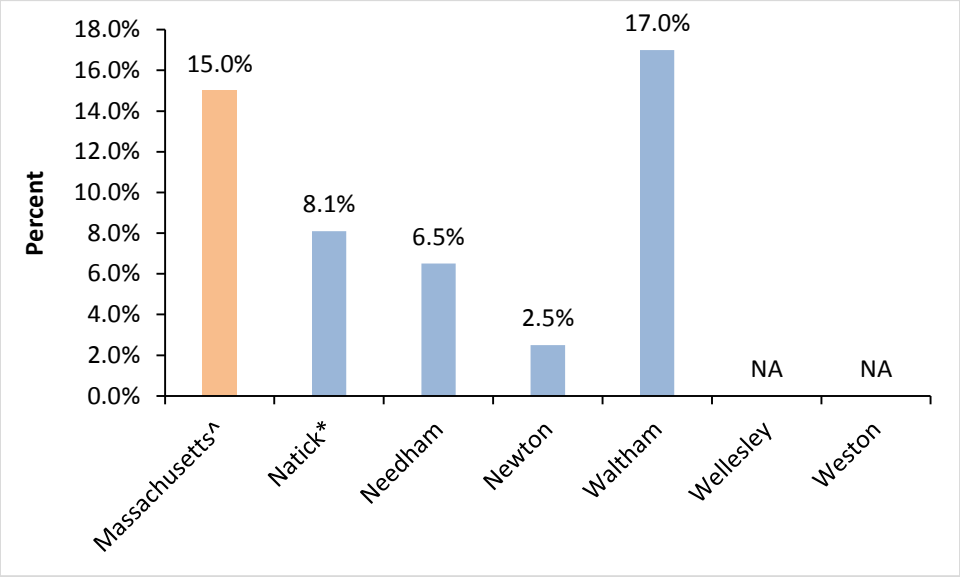
DATA SOURCE: Massachusetts Youth Health Survey, 2011; MetroWest Adolescent Health Survey, 2010, NA indicates data were not available
#Grades 6-8
*2010 data
^2011 data
2012; Newton Youth Risk Behavior Survey, 2012-2013; Waltham Public Schools Youth Risk Behavior Survey, 2012

Figure 24: Percent of Students (Grades 9-12) Reporting Current and Lifetime Marijuana Use by State and City/Town, 2012

DATA SOURCE: Massachusetts Youth Risk Behavior Survey, 2011; MetroWest Adolescent Health Survey, 2010, 2012; Newton Youth Risk Behavior Survey, 2012-2013; Waltham Public Schools Youth Risk Behavior Survey, 2012; Weston Youth Risk Behavior Survey, 2011-2012
NOTE: NA indicates data were not available; "Current" is defined as last 30 days prior to survey administration
*2010 data
^2011 data

Figure 24 shows that lifetime and current use of marijuana among high school youth in the NWH service area is consistent with or lower than statewide use. Waltham high school youth were most likely to report having ever smoked marijuana (42.5%) and Weston high school youth were most likely to report currently smoking marijuana (28.2%). Among middle school youth, Waltham youth again reported higher lifetime (11.4%) and current use (7.7%) of marijuana than nearby cities and towns and the state overall (Figure 23).

Figure 25: Percent of Students (Grades 9-12) Reporting Lifetime Prescription Drug Misuse by State and City/Town, 2012



DATA SOURCE: Massachusetts Youth Risk Behavior Survey, 2011; MetroWest Adolescent Health Survey, 2010, 2012; Newton Youth Risk Behavior Survey, 2012-2013; Waltham Public Schools Youth Risk Behavior Survey, 2012
NA indicates data were not available
*2010 data
^2011 data

Other interviewees discussed a perceived increase in youth misusing prescription drugs, expressing concern that youth are stealing these from parents and grandparents. Two interview participants conveyed worry that residents in the area start using drugs prescribed to them or a family member, and that then the cost of maintaining use of these gets too much and leads to heroin use, which is often less expensive. Opiate use and overdoses were noted as pressing issues among assessment participants in several towns. Quantitative data show that for the cities/towns with available data, few high school youth reported misusing prescription drugs in their lifetime. Waltham high school students again were the exception, with 17.0% reporting lifetime drug misuse, which is slightly higher than the statewide rate (15.0%) (Figure 25). Quantitative data on heroin use among youth and adults were not available,

although qualitative accounts from assessment participants emphasize that heroin is a growing community concern.

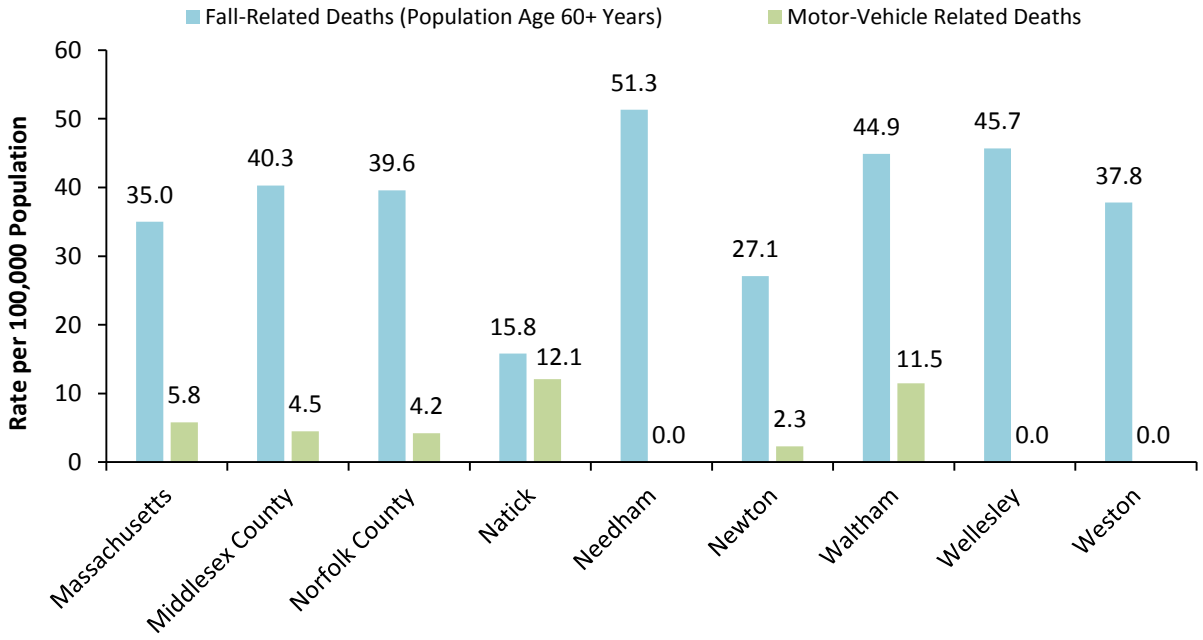
Despite how prevalent substance abuse is among the cities and towns in the NWH service area, several interview and focus group participants noted that the community still struggles to accept and discuss substance abuse. This stigma was often viewed as a barrier to community residents actively seeking existing substance abuse services. Additionally, it is important to note that participants emphasized the connection between substance abuse and mental health, seen as the most pressing health concern within the NWH service area. As one interviewee summarized, "People are using alcohol to numb their mental health problems."

Injury-Related Behaviors

Several interviewees discussed the risk of injury among seniors, particularly from falls. Injuries among seniors were primarily noted in the context of aging in place and the challenges presented when seniors choose to stay in their homes. Injuries were also discussed related to driving under the influence of alcohol. One interviewee noted that there had been a recent cluster of DUIs in Needham.

As illustrated in Figure 26, rates of motor-vehicle related deaths are highest in Natick and Waltham, with rates approximately twice that of the state as a whole. Across all geographies, there are higher rates of fall-related injury deaths among individuals aged 60 years and older than motor vehicle-related deaths. Needham experienced the highest rate at 51.3 deaths per 100,000 population and Natick experienced the lowest rate at 15.8 deaths per 100,000 population. Examining overall injury data, age-adjusted death rates due to injury are lower for Middlesex and Norfolk Counties (37.0 per 100,000 population and 40.0 per 100,000 respectively) compared to Massachusetts overall (45.0 per 100,000).

Figure 26: Age-Adjusted Death Rate per 100,000 Population due to Injury by State, County, and City/Town, 2008-2010



DATA SOURCE: 2010 Mortality (Vital Records) ICD-10 Based, Massachusetts Department of Public Health, MassCHIP
NOTE: A rate of 0.0 indicates that there were no motor-vehicle related injury deaths in the data years 2008-2010

Domestic violence was also discussed by a number of interview participants. One participant commented that the "prevalence of domestic violence is enormous," and another individual reinforced this, stating that "there is so much stigma surrounding [domestic violence]; people don't talk about it in these towns." Domestic violence was linked to both substance abuse and mental health, and seen as "leading to disproportionate health outcomes on all health issues."

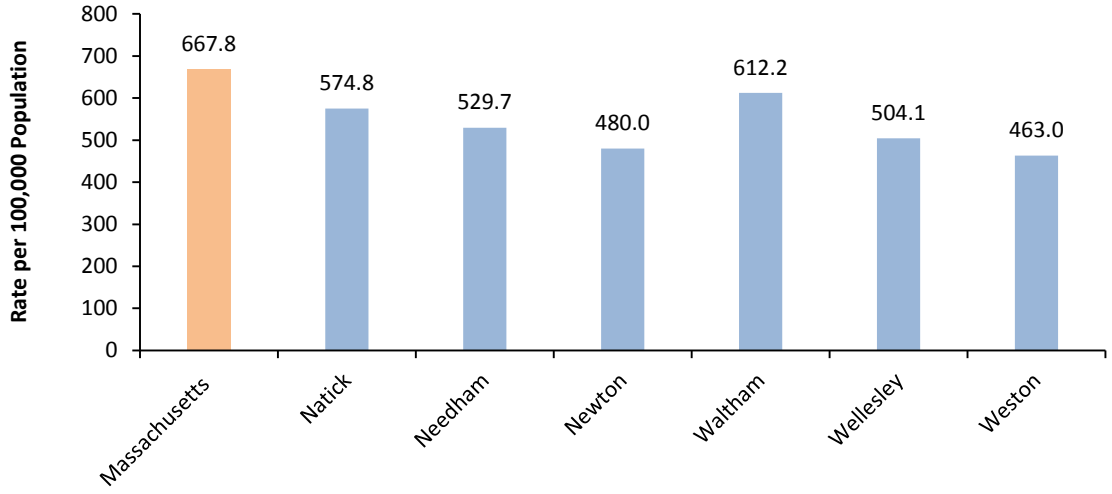
Health Outcomes

This section of the report provides a primarily quantitative overview of leading health conditions in the NWH service area from an epidemiological perspective of examining incidence, prevalence, and mortality data, while also discussing pressing concerns that assessment participants identified during in-depth conversations.

Mortality

As seen in Figure 27, the age-adjusted mortality rate in the hospital service area is lower than that of the state; however rates vary by city/town. Waltham has the highest mortality rate with 612.2 deaths per 100,000 population, compared to 667.8 deaths per 100,000 population in Massachusetts overall. Weston has the lowest mortality rate in the area. The leading causes of death in the NWH service area are heart disease, cancer (particularly lung cancer), and stroke, which are consistent with Massachusetts as a whole. Chronic lower respiratory disease and diabetes are also leading causes of death in the area, although less common.

Figure 27: Age-Adjusted Mortality Rate per 100,000 Population by State and City/Town, 2010



DATA SOURCE: Massachusetts Department of Public Health, Vital Records, 2010 as cited by MassCHIP

Table 6: Top 5 Causes of Death (Number of Deaths) by State and City/Town 2010

Rank	Massachusetts	Natick	Needham	Newton	Waltham	Wellesley	Weston
1	Total Cancer (12, 973)	Heart Disease (67)	Heat Disease (61)	Total Cancer (159)	Total Cancer (126)	Total Cancer (45)	Heart Disease (23)
2	Heart Disease (11,996)	Total Cancer (53)	Total Cancer (49)	Heart Disease (132)	Heart Disease (90)	Heart Disease (32)	Total Cancer (21)
3	Lung Cancer (3,546)	Lung Cancer (15)	Stroke (16)	Lung Cancer (45)	Lung Cancer (36)	Lung Cancer (13)	Stroke (6)
4	Stroke (2,504)	Stroke (12)	CLRD* (15)	Stroke (28)	Stroke (21)	Influenza & Pneumonia (4)	Lung Cancer (5)
5	CLRD* (2,380)	CLRD* (8)	Lung Cancer (11)	CLRD* (15)	CLRD* (16)	CLRD* and Diabetes** (3)	Diabetes (4)

DATA SOURCE: Massachusetts Deaths 2010, Massachusetts Department of Public Health
*Chronic Lower Respiratory Disease
**During data year 2010, in Wellesley, there were 3 deaths attributable to CLRD and 3 deaths attributed to Diabetes

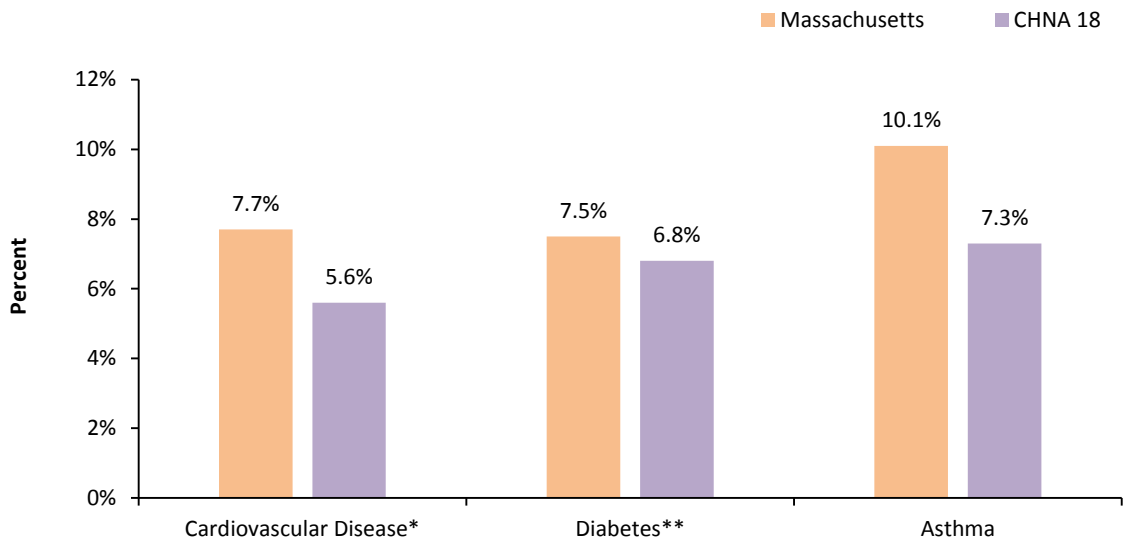
Chronic Disease

Focus group and interview participants reported chronic disease as a significant health issue in the NWH service area – particularly asthma and obesity-related conditions (diabetes and heart disease).

Asthma, specifically among youth, was considered a big health concern by several interview participants. One participant noted that there are some air quality issues in Waltham, which she attributed to traffic from commuters as well as areas of mixed residential and industrial use. Asthma was also seen as related to poor housing conditions within older apartments and houses. Participants were unaware of any resources in the area that focus on asthma prevention.

While local data on asthma prevalence among youth are not available, Figure 28 shows that adults in the area reported less asthma than adults across the state. Similarly, cardiovascular disease and diabetes were less prevalent among adults in the NWH service area than their peers statewide.

Figure 28: Chronic Disease Among Adults by State and CHNA, 2007-2009



DATA SOURCE: Behavioral Risk Factor Surveillance System (2007-2009), Health Survey Program, Massachusetts Department of Public Health

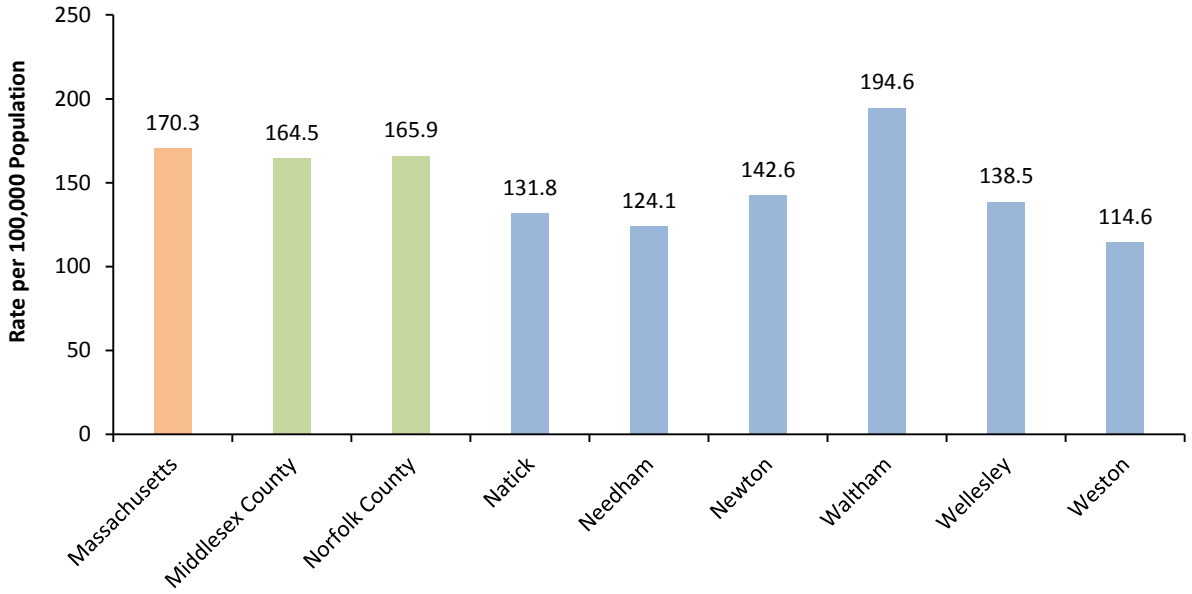
Hospital data from Newton-Wellesley indicate that chest pain is the top diagnosis in the emergency department across all towns included in this assessment. These data can be found in Appendix C.

Cancer

As Table 6 shows, cancer is the leading cause of death across the state and in several cities and towns of the hospital service area. While cancer affects many individuals in the NWH service area, it was infrequently mentioned among assessment participants, except for one participant who speculated about a recent breast cancer cluster in Newton.

Examining the age-adjusted cancer mortality rate in the region demonstrates that residents in Waltham experienced the highest mortality rate due to all cancers (196.4 deaths per 100,000 population), the only city or town in the area that had a higher rate than Massachusetts overall (170.3 deaths per 100,000 population). Residents of the other 5 cities and towns in NWH service area experienced lower cancer mortality rates than the statewide rate. (Figure 29)

Figure 29: All-Site Age-Adjusted Cancer Death Rate per 100,000 Population by State, County, and City/Town, 2010



DATA SOURCE: 2010 Mortality (Vital Records) ICD-10 based, Massachusetts Department of Public Health, MassCHIP

Mental Health

- "*Mental health is connected to so many other issues- lost productivity at work, other physical health issues."* – interview participant

- *"There is pressure to be perfect in every aspect [of life]. Parents are expected to shop organic, attend exercise classes, purchase things. And, people are expected to be stoic about their problems."* – focus group participant

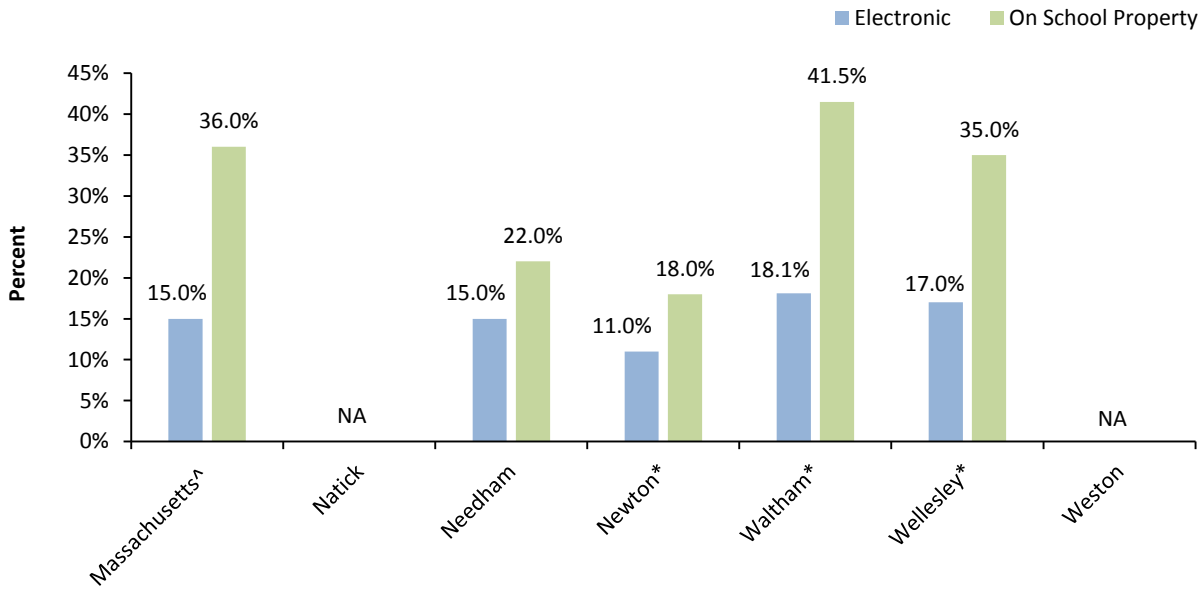
- *"Parents are ashamed and think it's their fault, so makes it hard for them to speak up and look for good care or advocate for their kids."* – focus group participant

Nearly all assessment participants cited mental health as the top community health concern, specifically issues of stress, anxiety, depression, and suicide. Most discussions of mental health focused on the youth population, who face stress and pressure in "academically and athletically competitive environments found in these towns." Focus group participants discussed how school-age youth feel overwhelmed with the pressure to participate in many activities while maintaining high academic achievement and social status. As one youth focus group participant mentioned, "there is an expectation that you always have things together… you don't want to be perceived as falling behind and you're expected to be good at what you do." Youth also mentioned that social media contributed to feelings of stress and anxiety, noting that they felt they had to be constantly connected to and communicating with their peers to maintain their social status.

The following figures illustrate rates of behaviors and outcomes related to mental health among youth in the hospital service area. While youth focus group participants did not cite bullying as an issue,

parents in focus groups as well as several interview participants suggested that bullying is common among young people and has worsened with increasing use of social media. As seen in Figure 30, among middle school students, Newton has a lower rate of electronic bullying compared to surrounding towns and Massachusetts overall. Middle school youth in Waltham reported the highest rates of both electronic and in-school bullying, and these rates exceed those reported among middle school youth statewide.

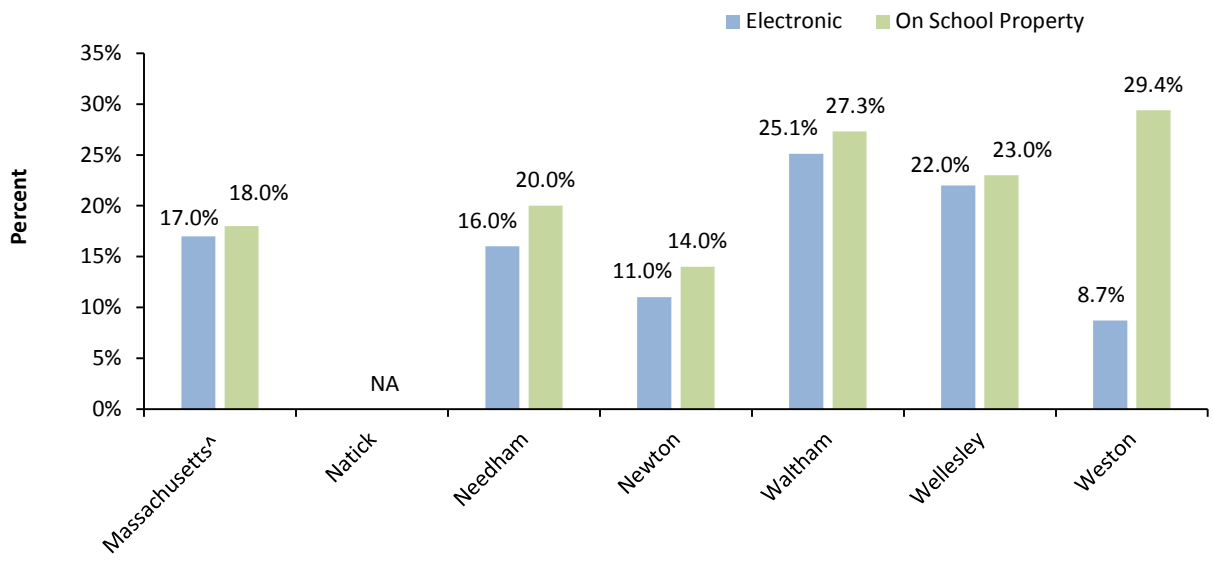
Figure 30: Percent of Students (Grades 6-8) Bullied Electronically and On School Property



DATA SOURCE: Massachusetts Youth Health Survey, 2011; MetroWest Adolescent Health Survey, 2012; Newton Youth Risk Behavior Survey, 2012-2013; Waltham Public Schools Youth Risk Behavior Survey, 2012
NOTE: NA indicates data were not available
*Grades 7-8
^2011 data were used when 2012 data were not available

Among high school students, Newton youth reported lower rates of electronic and in-school bullying compared to most of their peers in neighboring towns and statewide. Similar to the experiences reported by middle school students, high school youth in Waltham reported high rates of electronic and in-school bullying. Notably, Weston high school youth reported the lowest rate of electronic bullying but the highest rate of in-school bullying (Figure 31).

Figure 31: Percent of Students (Grades 9-12) Bullied Electronically and On School Property in the Past 12 Months by State and City/Town, 2012

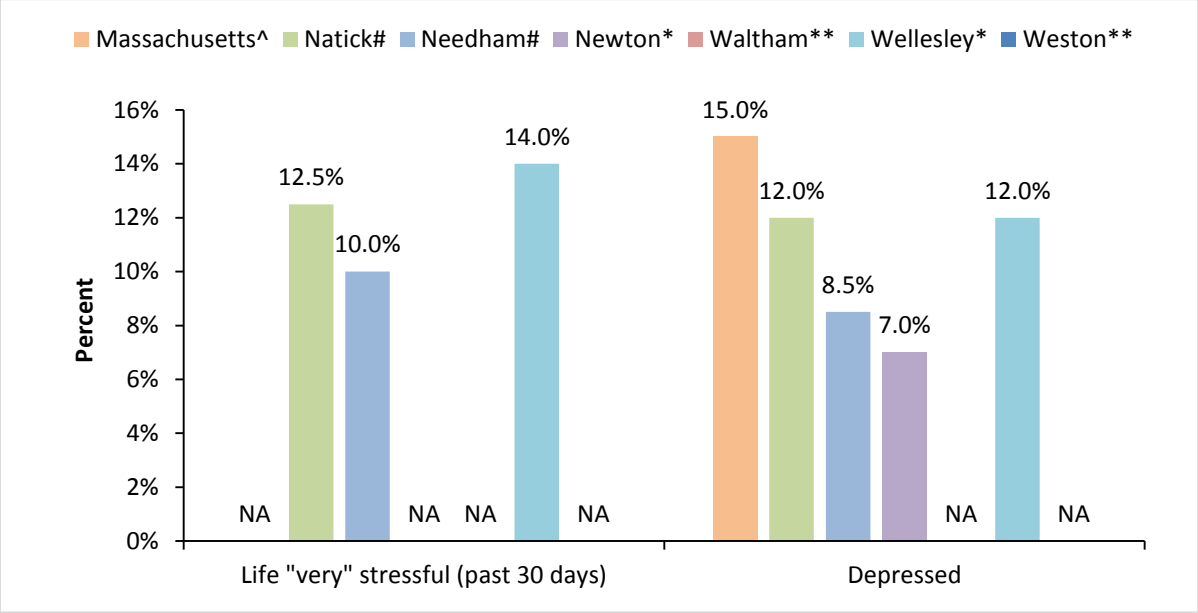


DATA SOURCE: Massachusetts Youth Risk Behavior Survey, 2011; MetroWest Adolescent Health Survey, 2012; Newton Youth Risk Behavior Survey, 2012-2013; Waltham Public Schools Youth Risk Behavior Survey, 2012; Weston Youth Risk Behavior Survey, 2011-2012
NOTE: NA indicates data were not available
^2011 data were used when 2012 data were not available

As shown above, bullying is a common experience among area youth. In-school bullying is more prevalent than electronic bullying, particularly among middle school students.

Middle school youth in Natick and Wellesley reported the highest rates of depression among the cities and towns that have data for this indicator. However, these rates are still lower than the state overall (Figure 32). Hospital data for Newton-Wellesley also indicate that depression is a serious community concern. For youth under age 18, 64% of behavioral health diagnoses in the emergency department are related to depressive disorders.

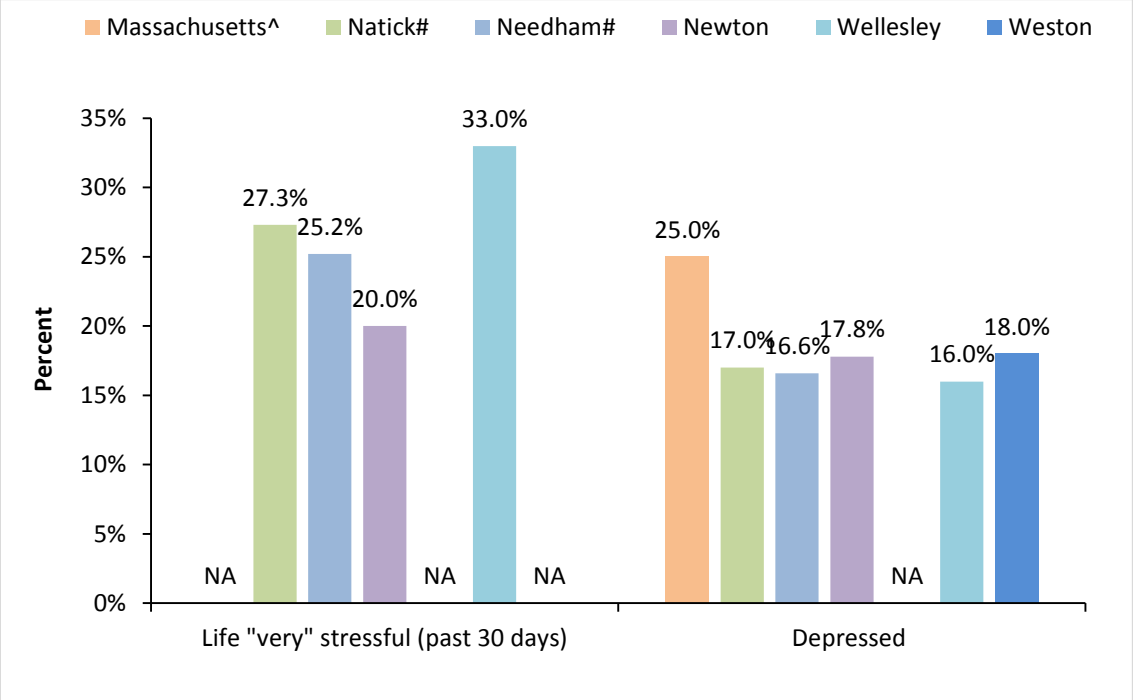
Figure 32: Percent of Students (Grades 6-8) Reporting Stress and Depression Issues by State and City/Town, 2012



DATA SOURCE: Massachusetts Youth Health Survey, 2011; MetroWest Adolescent Health Survey, 2012; Newton Youth Risk Behavior Survey, 2012-2013; Waltham Public Schools Youth Risk Behavior Survey, 2012
NOTE: NA indicates data were not available
*Grades 7-8
#2010 data
^2011 data
**Data were not available for Waltham or Weston

Reported rates of stress and depression are higher among high school students in the area compared to middle school students. Approximately one-third of high school youth in Wellesley reported that life was very stressful in the past 30 days, which represents the highest rates of stress compared to surrounding towns. However, high school youth across all cities and towns in the hospital service area experienced lower rates of depression than their peers statewide (Figure 33).

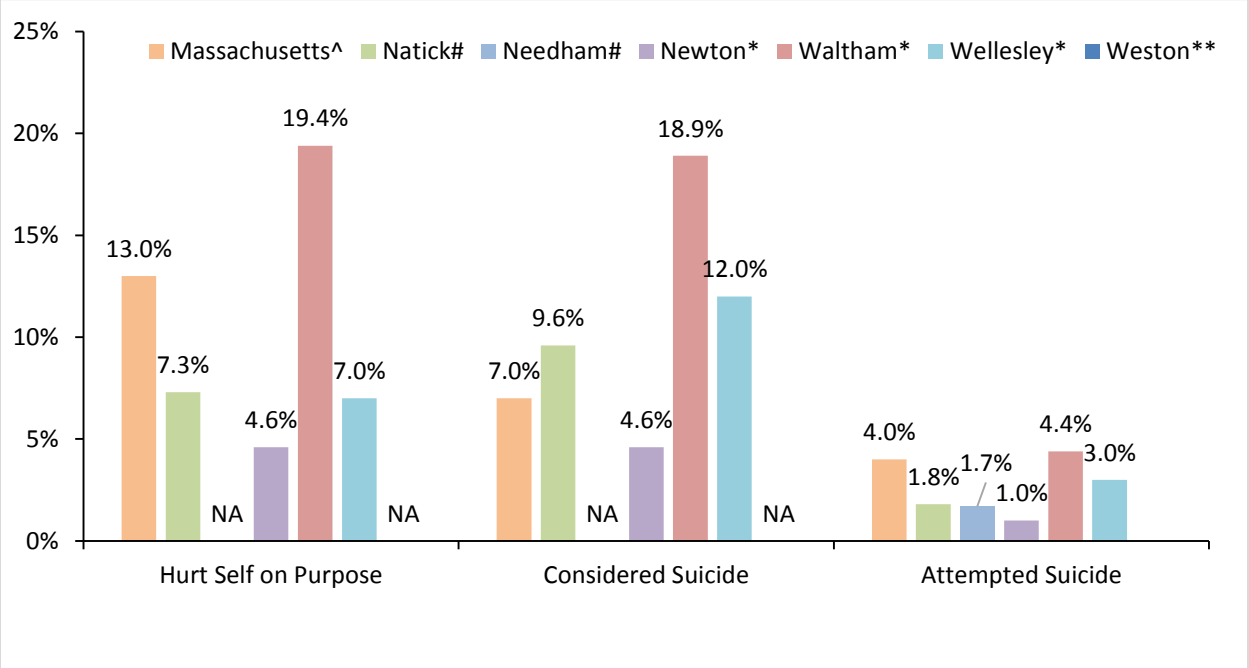
Figure 33: Percent of Students (Grades 9-12) Reporting Stress and Depression by Region and City/Town, 2012



DATA SOURCE: Massachusetts Youth Risk Behavior Survey, 2011; MetroWest Adolescent Health Survey, 2012; Newton Youth Risk Behavior Survey, 2012-2013; Waltham Public Schools Youth Risk Behavior Survey, 2012; Weston Youth Risk Behavior Survey, 2011-2012
NOTE: NA indicates data were not available
#2010 data
^2011 data

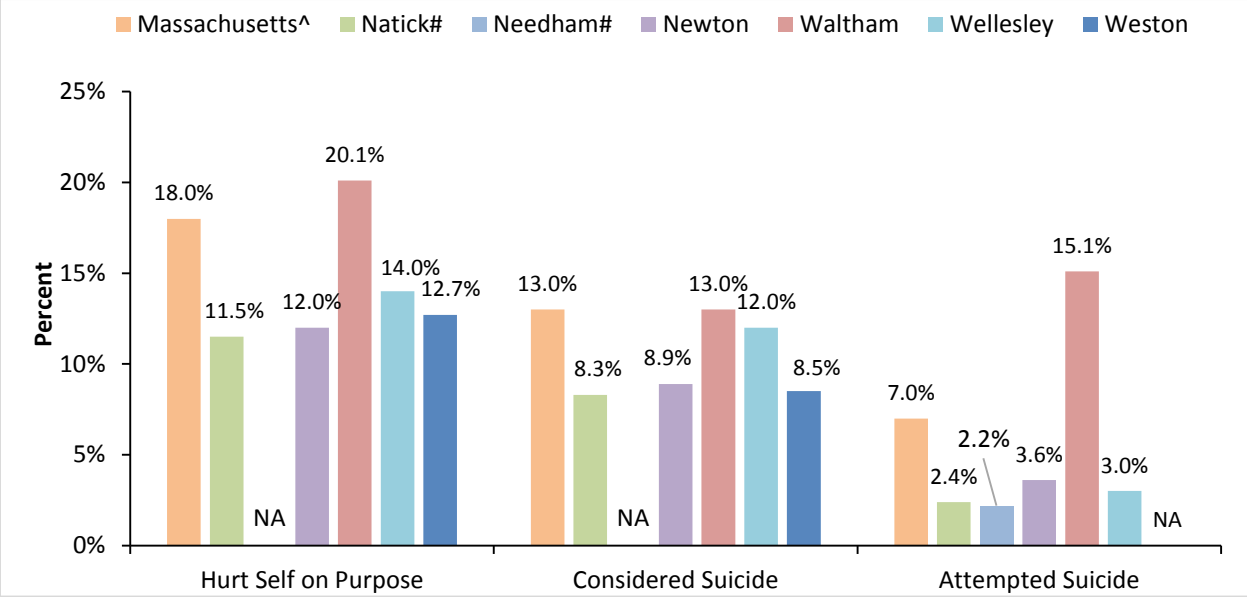
Interview and focus group participants mentioned the recent suicides among high school students in Newton, which were seen as linked to stress and bullying. Figure 34 and Figure 35 indicate that youth in the area generally demonstrate less self-harming behavior as well as suicidal ideation and attempts. Youth in Waltham, however, were more likely to report these behaviors compared to their peers in surrounding towns and statewide. Nearly 1 in 5 middle school youth in Waltham reported hurting themselves on purpose and a similar percentage considered suicide (Figure 34). Waltham high school youth were more likely to report self-harming behavior than their peers. Remarkably, 15% of high school youth in Waltham reported attempting suicide, more than double the statewide rate and approximately five times the rate of other cities and town nearby (Figure 35).

Figure 34: Percent of Students (Grades 6-8) Reporting Self Harm, Suicide Ideation and Attempt, by State and City/Town, 2012



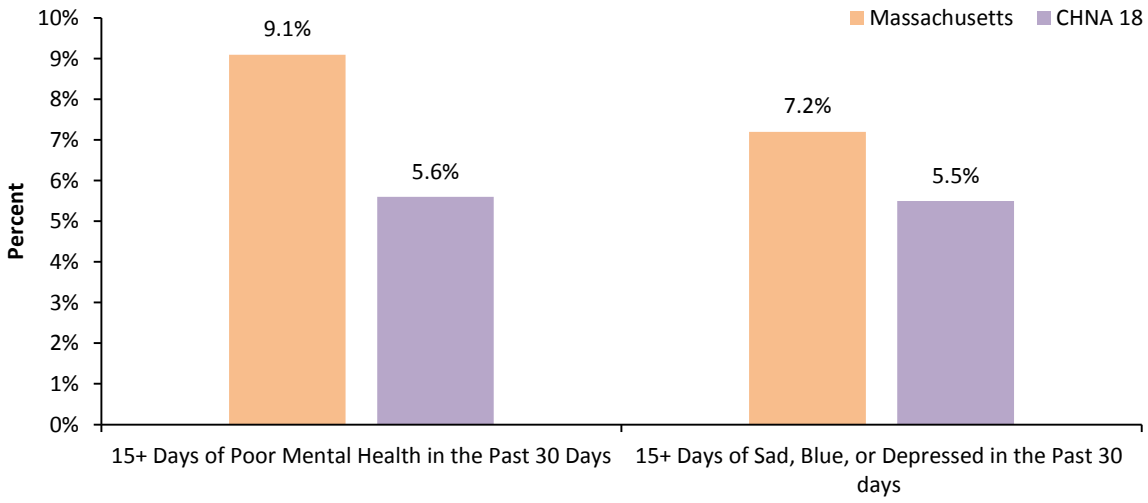
DATA SOURCE: Massachusetts Youth Health Survey, 2011; MetroWest Adolescent Health Survey, 2012; Newton Youth Risk Behavior Survey, 2012-2013; Waltham Public Schools Youth Risk Behavior Survey, 2012
NOTE: NA indicates data were not available
*Grades 7-8
#2010 data
^2011 data
**Data were not available for Weston

Figure 35: Percent of Students (Grades 9-12) Reporting Self-Harm, Suicide Ideation and Attempt, by State and City/Town, 2012



DATA SOURCE: Massachusetts Youth Risk Behavior Survey, 2011; MetroWest Adolescent Health Survey, 2012; Newton Youth Risk Behavior Survey, 2012-2013; Waltham Public Schools Youth Risk Behavior Survey, 2012; Weston Youth Risk Behavior Survey, 2011-2012
NOTE: NA indicates data were not available
#2010 data
^2011 data

Figure 36: Percent of Adults Reporting Poor Mental Health by State and CHNA, 2002-2007



DATA SOURCE: Behavioral Risk Factor Surveillance System, Massachusetts Department of Public Health, MassCHIP

To gauge mental health status among adults, the Behavioral Risk Factor Surveillance System survey asks respondents whether they experienced poor mental health, or feelings or sadness and depression for 15 or more days in the past month. These data are illustrated in Figure 36. CHNA 18 residents were less likely to report experiencing poor mental health of sadness and depression (5.6% and 5.5%, respectively) than residents statewide (9.1% and 7.2%, respectively).

Despite low rates of self-reported poor mental health, 2013 hospital data for Newton-Wellesley highlight the behavioral health issues among area adults who use Newton-Wellesley Hospital. For young adults aged 18 to 24 years old, the top two emergency department diagnoses were alcohol abuse and depressive disorders. Similarly, affective psychosis and depressive disorders were the top two inpatient diagnoses among this same age group. Among middle aged adults (45 – 64 years old), behavioral health diagnoses represent 3 of the top 10 inpatient diagnoses, and include depressive disorders, affective psychosis, and schizoaffective disorder (schizophrenia). When examining these hospital data by town, Waltham is unique in having 2 of its top 5 inpatient diagnoses be related to behavioral health- affective psychosis and depressive disorders. For all adults, 78% of behavioral health diagnoses in the emergency department are related to chronic pain, which is associated with depression and can lead to prescription drug misuse.

Qualitative data confirm that mental health issues among adults are a major community concern. Stressors experienced by adults included economic pressures to maintain an expensive lifestyle and social pressure to "maintain status". Assessment participants indicated that in some families they lost their jobs during the recession but they had enough money in the bank that they could survive without work. "Now they cannot find jobs that will pay them as well as their previous positions, and these individuals are depressed and remain unemployed," shared one participant. Interview participants also discussed economic stress for working families trying to afford the high cost of living in the NWH service area. High rents and mortgages, in addition to high costs for basic goods in services, were seen as causing anxiety. One interview participant also noted that families who seek food or fuel assistance experience stress from the shame associated with needing support.

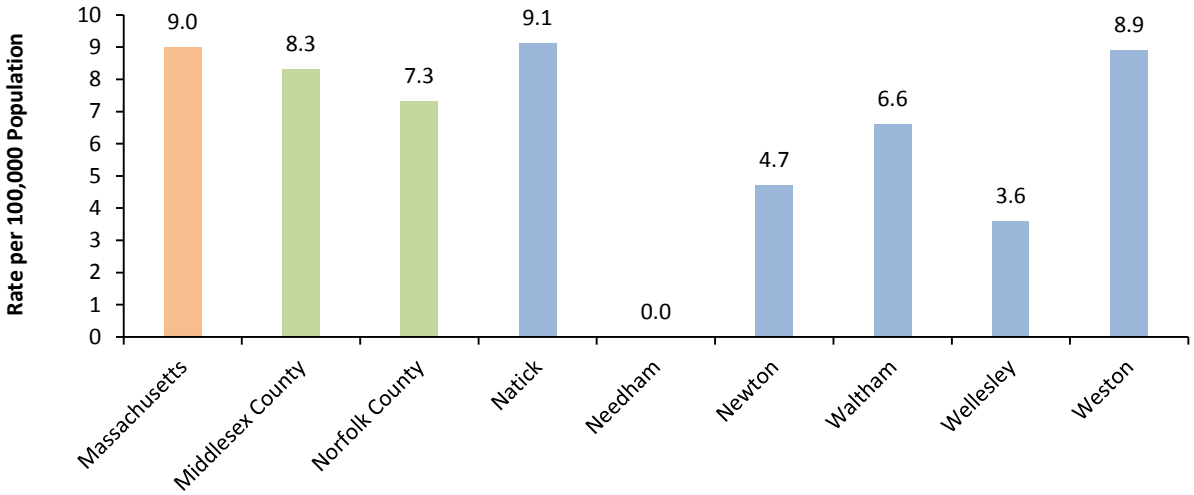
Pressure for adults to maintain social status was also discussed by several participants. As one commented, "There is pressure to be perfect in every aspect [of life]. Parents are expected to shop organic, attend exercise classes, purchase things. And, people are expected to be stoic about their problems." One focus group participant described how she felt as though she did not "fit in educationally" in her community; even though she has a master's degree, she felt undereducated. "People flaunt their credentials here," she commented.

Specific to seniors, the issues of social isolation and hoarding emerged as primary concerns related to mental health. As discussed regarding housing, many seniors in the area are choosing to stay in their homes as they age. Interview participants noted that as seniors become less mobile, both in terms of physical activity and transportation options, they become more socially isolated. Several focus group participants shared existing resources available through health departments and Councils on Aging. However, these groups lamented that they do not have enough to support all the seniors in the area who struggle with social isolation.

Hoarding among seniors is an issue that emerged from conversations with assessment participants. An obsessive compulsive-related disorder, hoarding has increased in the area in recent years, according to focus group and interview participants from local health departments and Councils on Aging. While these organizations each reported seeing approximately ten cases per year, they believe the issue is

more prevalent. Participants commented that while seniors who live in assisted living centers or other facilities have their living spaces inspected, private homes are not necessarily visible to other people. One interview participant shared that in a nearby town an individual died in their home due an extreme case of hoarding, which has brought some attention to the issue. Participants emphasized that each hoarding case is very time-intensive to resolve and often involves many municipal resources, including fire and public health.

Figure 37: Suicide Rate per 100,000 Population by State, County, and City/Town, 2010



DATA SOURCE: Compressed Mortality File, 2010, Centers for Disease Prevention and Control
NOTE: A rate of 0.0 indicates that were no suicide deaths in the data year 2010

Suicide among adults and seniors was not a concern mentioned during the assessment. Quantitative data reinforce that suicide rates in the hospital service area are comparable or lower than the statewide rate. Natick and Weston experienced the highest rates with 9.1 suicides per 100,000 population and 8.9 suicides per 100,000 respectively.

Across all issues of mental health, numerous assessment participants discussed the challenge of stigma. Despite how prevalent mental health issues are in the area, and the recent attention given the three youth suicides in Newton, participants shared concerns that communities in the NWH service area are not as open to community dialogue as would be helpful. One interview participant suggested a reason why the community hesitates to discuss these issues, saying “mental health and substance abuse issues make the community sad and shocked. It creates a feeling that the community failed.” This stigma was viewed as a barrier to residents seeking help for themselves and their family members.

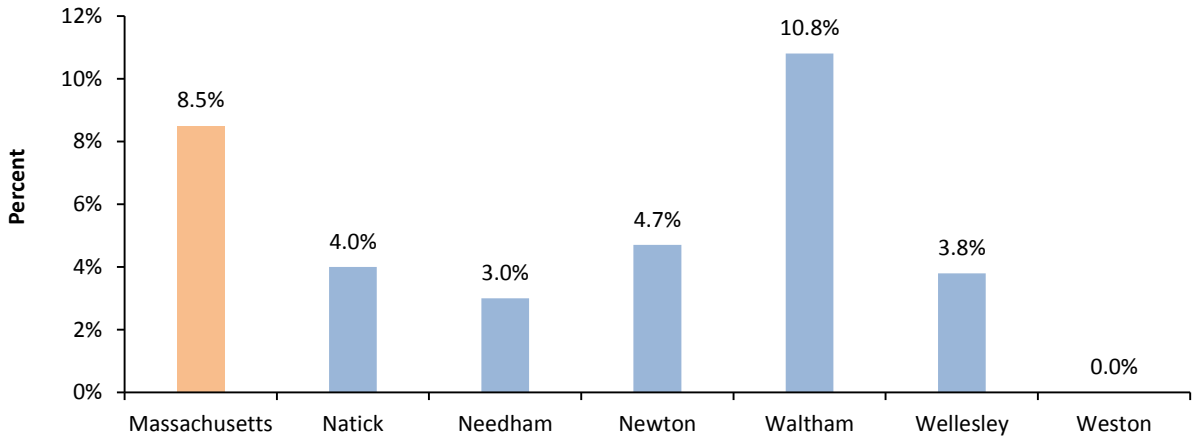
While participants discussed mental health issues across the population, youth, seniors, and immigrant populations were seen as being disproportionately affected by mental health issues in the NWH service area. Several towns (Newton and Waltham) have large immigrant population. As one interview participant described, “Parents are first generation but have worked hard to put their kids on a good path. Adolescent children of immigrant parents are at significantly higher risk than non-immigrant children. Often there is a cultural chasm between children and parents. Lack of connection with peers and adults is major risk factor for suicide, and immigrant children are less likely to talk to parents about symptoms because they would feel ashamed. They also feel less connected to peers or community

resources because they feel 'other' in home and school." Parent focus group participants echoed this last sentiment, emphasizing that it was extremely important for every child to have someone at home or in the school whom they trust and can confide in. Finally, as noted above, the senior population faces several unique challenges regarding mental health, and are harder to reach when they face decreased mobility and increased social isolation.

Reproductive and Maternal Health

Reproductive and maternal health issues did not arise during focus group or interview discussions for this assessment. Quantitative data indicate that approximately 1 in 10 mothers in Waltham reported receiving inadequate or no prenatal care. This is higher than the statewide percentage and more than double that experienced by mothers in nearby cities and towns (Figure 38).

Figure 38: Percent of Mothers with Inadequate or No Prenatal Care by State and City, 2010

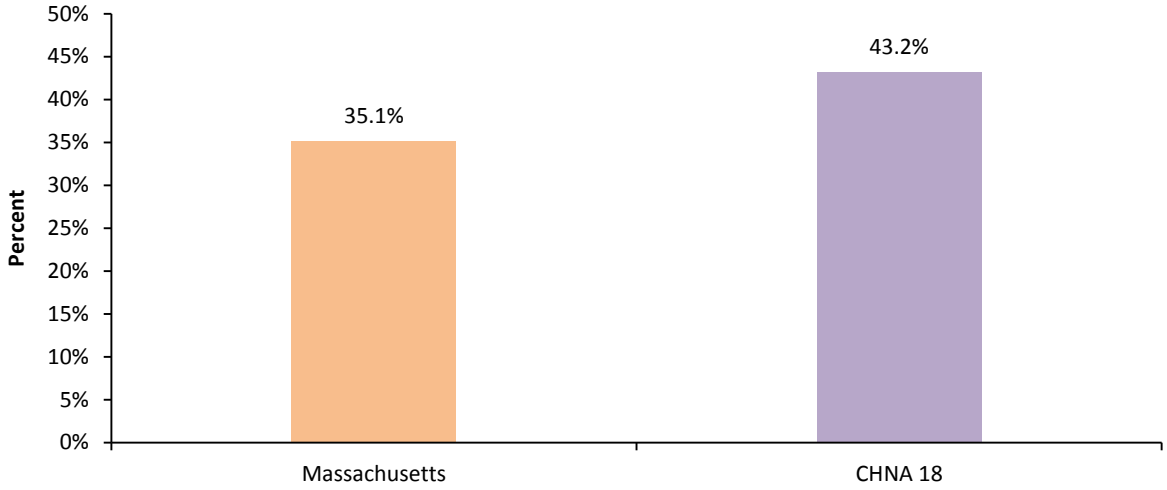


DATA SOURCE: Vital Records 2010, Massachusetts Department of Public Health, MassCHIP
NOTE: NA indicates no data were available

Communicable Disease

Communicable diseases did not emerge as a pressing health concern in the community. However, health department interviewees noted that they offer flu vaccines as one of their primary activities, which are often administered in schools and other community settings. Figure 39 shows that more adults in CHNA 18 reported receiving a flu vaccine than adults statewide.

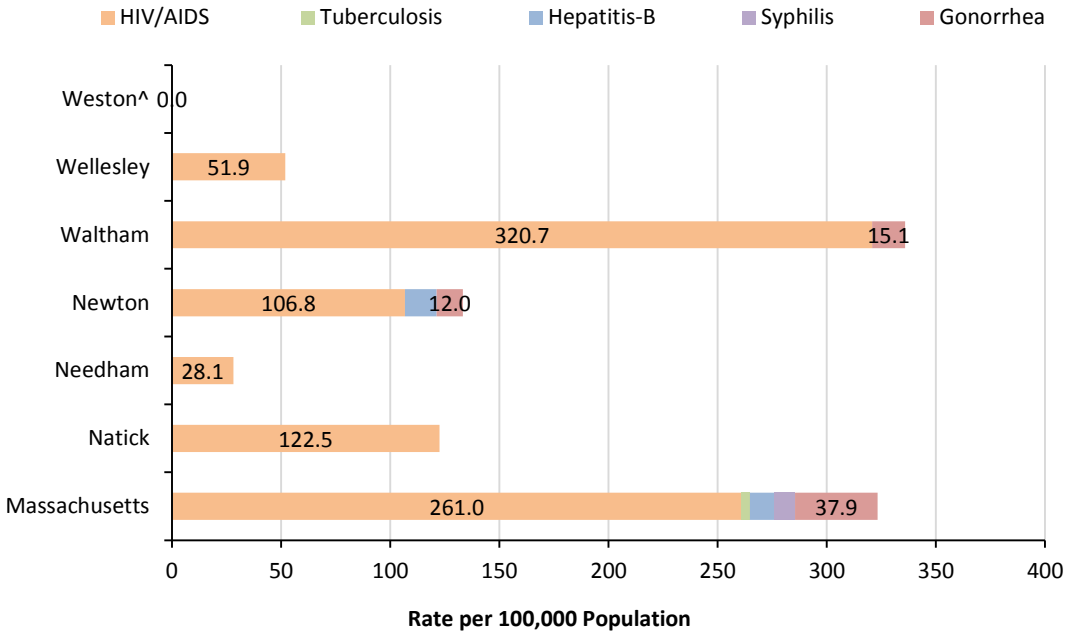
Figure 39: Percent of Adults Who Received a Flu Vaccine by State and CHNA, 2002-2007



DATA SOURCE: Behavioral Risk Factor Surveillance System (2002-2007), Massachusetts Department of Public Health, MassCHIP

Examining the data on other infectious diseases, the hospital service area has lower rates across most conditions. Two notable exceptions are the higher rate of Hepatitis B in Newton compared to the state (14.4 cases per 100,000 population and 11.3 per 100,000 population, respectively) and the higher rate of HIV/AIDS in Waltham compared to the state (320.7 cases per 100,000 population and 261.0 cases per 100,000 population, respectively) (Figure 40).

Figure 40: Infectious Disease Rates per 100,000 Population by State and City/Town, 2009 and 2010*



DATA SOURCE: 2009 AIDS Surveillance Program; 2009 Division of Epidemiology and Immunization; 2009 Division of Tuberculosis Prevention and Control; 2010 Division of Sexually Transmitted Disease Prevention; Massachusetts Department of Public Health, MassCHIP
NOTE: NA indicates data were not available
*Year varies by indicator
^Tuberculosis=0.0; other disease rates not available

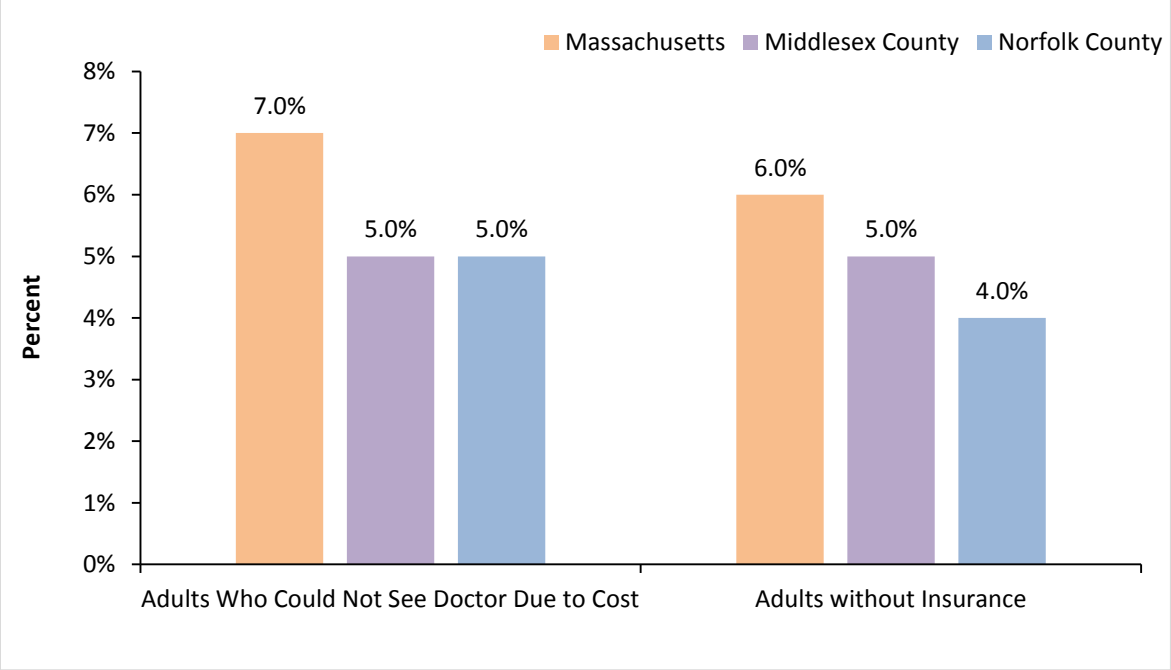
Access to Care

- *"The majority of the community is well-connected, high-achieving, very outspoken in general. There is a small but growing population who need additional assistance through schools, social service providers and health services."* – interview participant

- *"Most families have private insurance which is notoriously bad at paying for mental health coverage."* – interview participant

In terms of access to health care, Figure 41 below illustrates that only 4.5% of adults living in CHNA 18 were unable to see a doctor due to cost as compared to 7.7% of adults in the state overall. Adults in CHNA 18 were also less like to be uninsured compared to adults living in Massachusetts (3.2% v. 7.6%).

Figure 41: Access to Care by State and CHNA, 2006-2012



DATA SOURCE: Behavioral Risk Factor Surveillance System, as cited by County Health Rankings 2006-2012

Despite the area having a smaller percentage of uninsured individuals and a smaller percentage of residents for whom cost was a barrier for seeing a physician and although interview and focus group participants mentioned numerous health care and related services in their communities, they were also quick to discuss a multitude of barriers to these services.

Cost and Insurance

Although the cities/towns in the NWH service area generally tend to have more economic resources as compared to the rest of the state, the majority of participants mentioned the high cost of health care as a challenge to accessing services. In particular, interviewees and focus group participants discussed how the added costs of co-pays and deductibles can be a burden. They voiced particular concern however, for certain segments of their communities such as seniors living on fixed incomes and lower income families trying to cover out of pocket health care expenses.

Many assessment participants discussed the challenges of dealing with insurance whether it be private or public. For those with employer-based insurance, focus group members talked about how the insurance company may present challenges to finding a physician, as they will only cover services provided by specific providers and within particular networks. One participant discussed the obstacles her family faced trying to find area physicians to accept her health insurance that was provided by an out of state employer. Another talked about the many complications of changing jobs and therefore changing employer-based insurance including completing complicated paperwork, locating in-network providers with open panels and making the transitions to new co-pay and coverage policies.

Several participants talked about the challenges they themselves or their clients have had trying to apply for and then navigate the complexities of MassHealth and Medicare. Participants discussed how there is a lot of web-based information about MassHealth and Medicare but they worried that community elders who may not be as savvy using computers as their younger counterparts may not be able to access information using this medium or they may find incorrect information.

Navigating the Health Care System

Many assessment participants talked about how the health care system is challenging to navigate. They discussed how it was not only difficult to get appointments with providers in the first place but then it was difficult to communicate directly with providers. Participants had concerns about the continuity of their care and the lack of care coordination and communication between providers. In particular, many social service providers were concerned with discharge planning at the hospitals and cited many cases where they had clients released into less than optimal home situations without any kind of support. Several participants talked about having volunteers or professional patient navigators available for patients to help them manage their care. Additionally, one focus group member suggested that the electronic medical record system needs to be more streamlined so that patients can have better continuity of care within and across health care systems. Other participants discussed how it is particularly difficult for people who speak other languages and who are from other cultures to navigate our health care system. They stressed the importance of culturally competent care.

Competing Priorities

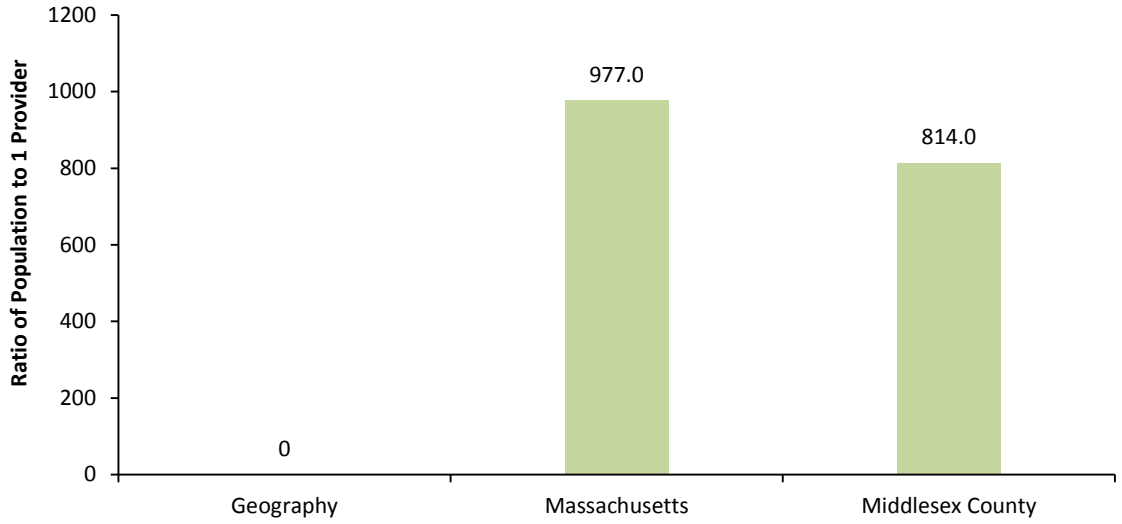
Another barrier to health care that was discussed was all of the competing priorities many individuals have to attending health care appointments. Parents discussed how it can be challenging for working parents to make trips to the doctor's office with their children especially when the practice does not offer evening or weekend hours. Some assessment participants noted that many people have more immediate needs such as housing and accessing food that may take priority over attending health care appointments.

Physician Access

According to Figure 42, the ratio of the population to primary care physicians in Middlesex and Norfolk counties is lower than the state's ratio overall and many participants talked about how it was difficult to access a primary care providers. Some said it was challenging to find providers accepting new patients

and others talked about long waits for appointments. Other participants had also experienced difficulties accessing specialists because of long wait times for appointments.

Figure 42: Ratio of Population to Primary Care Physicians by State and County, 2011

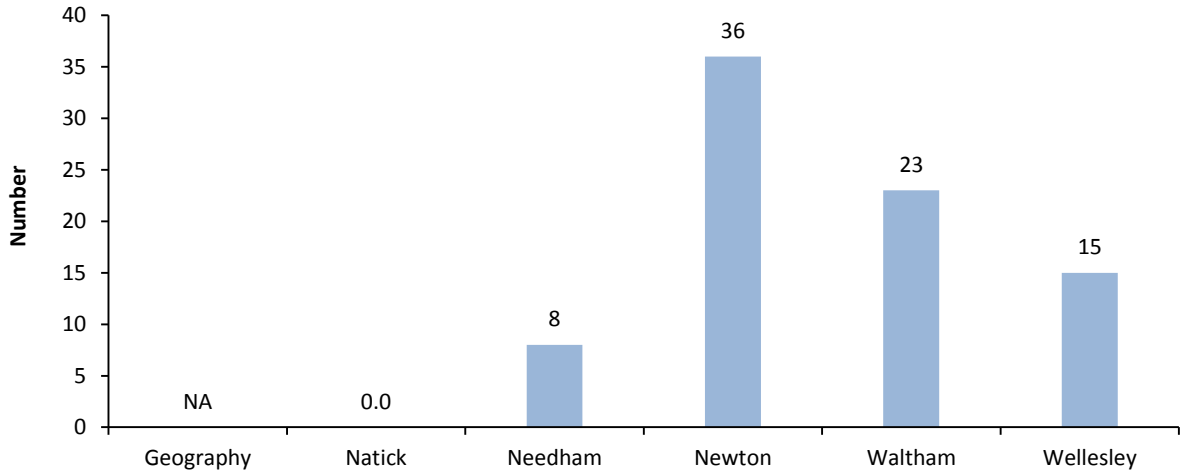


DATA SOURCE: United States Department of Health and Human Services, Area Health Resource File, as cited by County Health Rankings

Figure 43 shows the number of registered pediatricians for each city/town in the NWH service area. Focus group participants and interviewees had mixed impressions of challenges in assessing pediatricians. Several service providers who were interviewed felt there might be a challenge in accessing pediatricians in Waltham as a notable number of children have been seen in the emergency department for issues that could be addressed at a pediatrician's office visit. One interviewee talked about how many families take their children to Joseph M. Smith Community Health Center because they will enroll them in MassHealth and because they speak Spanish. The health center does, though, have months-long waiting lists. Assessment participants from Waltham, however, did not express challenges in accessing their children's pediatricians. Although they were Waltham residents they all had pediatricians outside of Waltham in surrounding towns because their insurance dictated which physicians they or because of loyalty to providers with whom they had a relationship prior to moving to Waltham. Parents attributed improved access to their children's pediatricians with evening and weekend office hours or the ability to go to Doctor's Express. As one parent noted, these are nice options because "your kids don't always get sick between 8 and 5, Monday to Friday."

At the other side of the age spectrum, those working older residents raised concern that there is complete lack of geriatric doctors in their communities to meet the complex needs of older patients. They also discussed how physicians no longer make home visits and that many elders could benefit from this service.

Figure 43: Number of Registered Pediatricians by City/Town, 2009



DATA SOURCE: Physicians Registered and Working in Massachusetts, MassCHIP

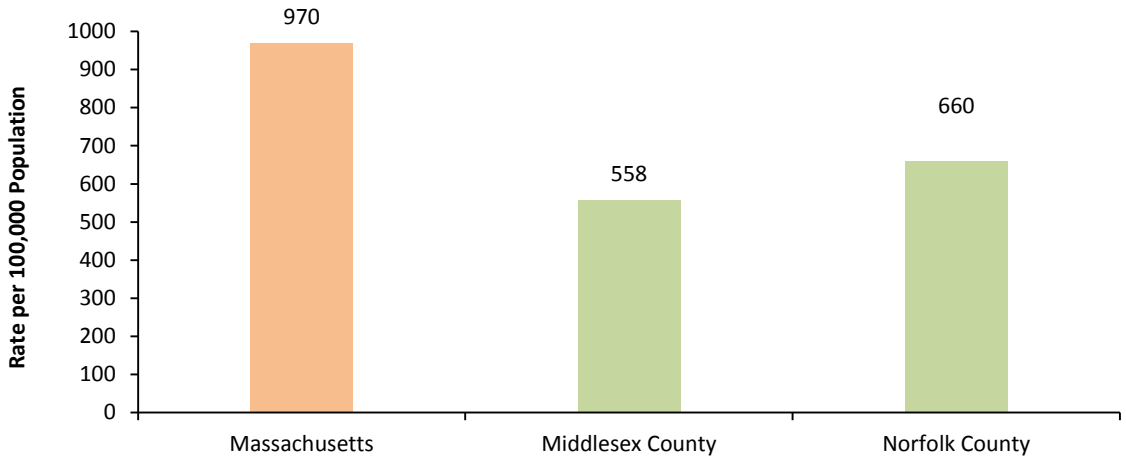
Special Services for Children

Parent participants in the assessment process discussed at the great length the challenges they faced getting ancillary services for their children. In particular, a few talked about how difficult it was to get occupational therapy for their children on the autism spectrum speech or language therapy due to long wait times or insurance not covering these services. Focus group members discussed how it can take months to get the neuropsychiatric testing that is necessary for the development of individualized education programs or plans (IEPs). Many parents end up electing to pay out of pocket for these services either because their health insurance won't cover it or because the wait is too long for insurance-approved providers. Additionally, schools do not target sensory issues and are not required to pay for occupational therapy that would address fine occupational therapy issues.

Behavioral Health

As Figure 44 depicts, Middlesex and Norfolk counties have fewer mental health providers per 100,000 population compared to the Massachusetts overall (558 and 660 v. 970).

Figure 44: Ratio of Population to Mental Health Providers by State and County, 2011-2012



DATA SOURCE: United States Department of Health and Human Services, HRSA Area Resource File, as cited by County Health Rankings

Assessment participants talked a lot about barriers to accessing behavioral health services in their communities. They discussed how stigma and shame prevent individuals who are facing mental health and substance abuse challenges from reaching out for appropriate services. Even when individuals try to access behavioral services there they face obstacles such as insurance complexities and clinician shortages. Interview participants discussed how insurance typically does not sufficiently cover necessary behavioral health services such as family-focused treatment because they have restrictions on what can be covered and they often require burdensome administrative requirements for reimbursement. Parent focus group participants discussed the need for more mental health providers such as psychologists and social workers who specialize in working with children and adolescents.

KEY THEMES

Through a review of the secondary social, economic, and epidemiological data in the NWH service area as well as NWH data and discussions with community residents and leaders, this assessment report provides an overview of the social and economic environment of the NWH service area, and the health conditions and behaviors that most affect the population. Several overarching themes emerged from this synthesis:

Nearly all interviewees and focus group members discussed the high cost of living including housing costs among the NWH service area. This high cost of living has been responsible for families leaving their communities for more affordable alternatives and has also dictated who can move into these communities.

The majority of assessment participants discussed how the lack of reliable local public transportation is a serious barrier for certain segments of the population including youth, the elderly and those with behavioral health issues to accessing health care services.

Although assessment participants offered a great amount of insight into the barriers to accessing services and health care services in particular, they also discussed that their communities were rich in

resources and services. Almost all participants noted how the good school systems and wealth of community services were the reasons their communities were highly sought after.

While the other five cities and towns in the NWH service area tend to have similar demographic profiles, Waltham looks markedly different. On the one hand, Waltham has a more affordable cost of living and has more diversity, however, Waltham has disproportionately worse health outcomes as compared to its neighboring communities.

Behavioral health is viewed as a critical and growing issue with a need for more resources and collective action to make change. Assessment participants view mental health as the highest priority issue in the community. Stress, anxiety, and depression were mentioned as particularly prevalent, and these issues were often described as leading to substance use as a means of self-medication. Economic stress on adults and academic and social pressures on youth have taxed individuals and the mental health system. Access to and use of specialty providers and services is limited by multiple factors including stigma, health insurance, and fragmentation of services.

Participants envision a healthier community that is built on collaborative efforts within and across communities. A cohesive community and numerous resources along with recent collaborations regarding suicide have demonstrated the power of community engagement and collaboration. Community members as well as health and human service providers offered many suggestions for how to support the creation and enhancement of community environments for optimal health and well-being.

Community Suggestions for Future Programs and Services

Although participants identified a wealth of resources in the community, they reported several gaps in programs and services and made recommendations to fill these. When thinking about the future, assessment participants recommended several key areas for action, and emphasized the need for collaborative and sustainable solutions.

Transportation

Focus group and interview participants indicated that providing transportation for medical services was paramount, especially for seniors who are not able to drive. One interview participant suggested that "Newton-Wellesley Hospital has an opportunity to help with transportation to health care services. Could there be a model where NWH would be able to transport people and have it be reimbursable?" One person shared that the Council on Aging can arrange transportation during the day so the hospital should start offering more programs during that time, which would also appeal to people who do not like to drive at night. Another recommendation was a transportation service from housing developments or central locations in towns to the hospital. Many of the NCDF residents use The Ride through MBTA, which takes a long time, and stops residents from going to the doctor. So they'd like another option, especially if there are multiple people from a housing development going to the doctors' offices at same time. The Senior Shuttle in Boston would be a good example of a program to be replicated.

Community Outreach and Partnership

A repeated theme raised by participants was the importance of increased outreach to the community by educating and communicating with the public and partnering with community organizations. One interview participant suggested that the hospital "take a leadership role in community health," further suggesting that the hospital should "have more visibility and outreach at community events." Focus

group and interview participants noted that there have been some collaborations between the hospital and community-based providers of other health services, they expressed that there should be increased collaboration between the hospital and other community partners (such as the schools and health departments/boards of health) concerning health care, awareness, and education.

Communication

An overarching theme was the importance of effective communication between the hospital and the community as well as between different organizations within the community. One specific issue noted was the challenge of maintaining current databases or lists of community resources so that both providers and consumers of services have the most up-to-date information on available resources in the community. Assessment participants suggested that more funding and human resources are needed to continually update these resources, and recommended that there be one centralized place where people can find information on existing resources. Also related to communication, participants indicated that there were opportunities for improvement concerning hospital policies, partnerships with community organizations, and communication with the larger community through flyers, newsletters, and social media. Participants highlighted the need for improved communication between emergency room physicians and public health professionals in the community. For example, one interview participant shared, "If the police department sends someone 16 times to the ED, is there some way for the health department to know? The hospital has a new program for high utilizers in ED, and every once in a while the health department will get a call from someone on that team, but communication is fragmented."

Culturally Competent Services

Similar to outreach and partnership, cultural competency was viewed as a critical aspect of health promotion in the community and quality clinical care in the hospital. As one participant stated, "we as health care providers need to be able to meet the needs of all populations, regardless of where they come from. We need to meet patients where they're at." Participants spoke of cultural competency in the context of not only providing services in appropriate languages, but also of understanding people of different life stages and physical and mental abilities. A suggested approach included providing training for frontline and ED staff in person-centered care as well as the provision of services in a variety of languages. As one interview participant summarized, "the hospital should be more proactive with people who do not speak English as their first language. They need to provide access to language interpretation services with the care they provide as well as share those services with the local community in general."

Care Coordination

To address challenges that participants discussed related to navigating the health care system during and after care, several recommendations were made. Various interview and focus group participants suggested clustering of clinical services so that patients can be in one location for their health care. The suggestion was also made to have a patient navigator or care coordinator to help patients and families find and access health resources that exist not only through the hospital but also in community settings. Finally, discharge planning was an issue that arose in several conversations and prompted a recommendation to have a case manager to support patients' transitions back into the community. Participants were particularly interested in this role as someone who could help elderly patients and other vulnerable populations who might be returning to precarious living situations.

Leadership in Behavioral Health

While schools and other institutions in the NWH service area have recently adopted new policies and programs to address mental health, assessment participants expressed the desire for additional resources and support from the hospital and community to address these broad issues. Participants viewed the hospital's role both as a leader and as a partner. Recognizing the interconnectedness of substance abuse and mental health, one participant recommended that the hospital hire an addiction specialist who could holistically address needs of patients experiencing both issues. Participants mentioned mental health coalitions that exist in several communities in the NWH service area, and recommended that the hospital have a seat at these tables to facilitate communication between both sides.

Given the stigma and shame surrounding behavioral health issues, participants urged more public education and dialogue around mental health and substance abuse. Youth and adults were interested in seeing the community be open about discussing these issues and be proactive about finding collaborative solutions. Additionally, many health departments and social service agencies in the area have educational resources and programming as well as counseling that focus on behavioral health issues. Participants suggested that these resources could be built upon and combined with hospital and school-based behavioral health initiatives to have greater impact in the community.

Overall, participants called for the hospital to play a larger role in addressing behavioral health in its service area. As one interview participant summarized, "health care costs for physical health issues decrease when behavioral health issues are addressed," suggesting that it is in the financial best interest of the hospital to address this important community health issue.

Focus on Prevention

Participants envisioned a greater emphasis on prevention in the future. As one interview participant stated, "we don't focus enough on a prevention and wellness model. Our focus needs to be on keeping people healthy." Another person concurred, stating, "we have to swim upstream and do primary prevention work. It's not well funded, but it's so necessary." Included in the desire to focus on prevention was the need for health care providers and the community to think about the underlying causes of the most pressing health concerns. Participants suggested that the hospital collect additional data on behavioral health in particular, and "dig deeper as to why people are having these issues." Hospital and community efforts could then focus on preventing associated risk factors.

Participants offered a myriad of other programmatic suggestions, including: offering free stress management workshops, providing language interpretation services, holding parenting groups, and partnering with schools to offer curricula on youth resilience.

APPENDIX A: Community Engagement Participants

Advisory Committee

1. Judge Gregory Flynn (Waltham), Overseer
2. Marie DeSisto, Waltham Public Schools
3. Josephine McNeil (Can Do) (Non-profit housing) Newton
4. Margaret Hannah (MA School of Professional Psychology) Newton/Waltham
5. Jo White, Springwell
6. Shep Cohen, Wellesley Board of Health
7. John P. Zuppe,
8. David Fleishman, Supt of Schools, City of Newton
9. Judy Fallows, Ex. Dir. Healthy Waltham
10. Connie Braceland, Watertown Savings
11. Paul Hattis, Tufts School of Public Health and Community Medicine
12. Jhana Wallace, CHNA 18
13. Anne Steer , Overseer

Key Informant Interviews

1. Carol Read, Needham Health Dept., Substance Abuse Prevention & Education Coordinator
2. Marie De Sisto, Waltham Public Schools
3. Cheryl Lefman and Leonard Izzo, Director, Wellesley Health Department
4. Jim White, Natick Health Department
5. Linda Walsh and Teresa Kett, Newton Health and Human Services Department
6. Laurie Hutcheson, Riverside Community Care
7. Jeanne Strickland and Marissa Wheeler, Newton Community Development Foundation,
8. Erin C. Miller, Newton-Wellesley Hospital Domestic Violence/Sexual Assault Coordinator
9. Dr. Mary Christine Bailey, NWH Assoc. Chief Pediatric Emergency Medicine
10. Dr. Susan Swick, NWH Chief of Adolescent Psychiatry
11. Judi Lipton, Health Care for the Homeless, VA Boston Health care System

Focus Groups

1. Councils on Aging Directors
2. Newton High School Youth
3. Waltham parents of elementary school-aged children
4. Newton parents of high school students
5. Newton residents living in affordable housing

APPENDIX B: Discussion Guides

Newton-Wellesley Hospital Community Health Needs Assessment
General Focus Group Guide – Community Residents
Current version: July 28, 2014

Goals of the focus group:
- To determine perceptions of the health strengths and needs of the community
- To explore how these issues can be addressed in the future
- To identify the gaps, challenges, and opportunities for addressing community needs more effectively

[NOTE: QUESTIONS IN THE FOCUS GROUP 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 health organization. Thank you for taking the time to speak with me today.

- We're going to be having a focus group today. Has anyone here been part of a focus group before? You are here because we want to hear your opinions. I want everyone to know there are no right or wrong answers during our discussion. We want to know your opinions, and those opinions might differ. This is fine. Please feel free to share your opinions, both positive and negative.

- Newton-Wellesley Hospital is undertaking a community health needs assessment to gain a greater understanding of the health of residents and how health needs are currently being addressed. As part of this process, we are having discussions like these around the community with a wide range of people - community members, government officials, health care and social service providers, and staff from a range of community organizations. We are interested in hearing people's feedback on the strengths and needs of the community and suggestions for the future.

- We will be conducting several of these discussion groups around the area in Natick, Needham, Newton, Waltham, Wellesley, and Weston. After all of the discussions are done, we will be writing a summary report of the general opinions that have come up. In that report, we might provide some general information on what we discussed today, but we will not include any names or identifying information. Your responses will be strictly confidential. In the report, nothing you say here will be connected to your name.

- Lastly, please turn off your cell phones, beepers, or pagers or at least put them on vibrate mode. The group will last only about 80-90 minutes. If you need to go to the restroom during the discussion, please feel free to leave, but we'd appreciate it if you would go one at a time.

- Any questions before we begin our introductions and discussion?

II. INTRODUCTIONS (5 minutes)

Now, first let's spend a little time getting to know one another. Let's go around the table and introduce ourselves. Please tell me: 1) Your first name; 2) how long you've lived in (insert town); and 3) something

about yourself you'd like to share– such as how many children you have or what activities you like to do in your spare time. [AFTER ALL PARTICIPANTS INTRODUCE THEMSELVES, MODERATOR TO ANSWER INTRO QUESTIONS]

III. COMMUNITY ISSUES (15 minutes)

1. Today, we're going to be talking a lot about the community that you live in. How would you describe your community?

2. If someone was thinking about moving into your community, what would you say are some of its biggest strengths or the most positive things about it? [PROBE ON COMMUNITY AND ORGANIZATIONAL ASSETS/STRENGTHS]

    a. What are some of the biggest problems or concerns in your community? [PROBE ON ISSUES IF NEEDED – HEALTH, ECONOMIC, SOCIAL, SAFETY, ETC.]

3. What do you think are the most pressing *health* concerns in your community?

    a. How have these health issues affected your community? In what way?

    b. What specific population groups are most at-risk for these issues?

IV. PERCEPTIONS OF PUBLIC HEALTH/PREVENTION SERVICES AND HEALTH CARE (25 minutes)

4. Let's talk about a few of the health issues you mentioned. [SELECT TOP HEALTH CONCERNS] What programs, services, and policies are you aware of in the community that currently focus on these health issues?

    a. What's missing? What programs, services, or policies are currently not available that you think should be?

5. What do you think the community should do to address these issues? [PROBE SPECIFICALLY ON WHAT THAT WOULD LOOK LIKE AND WHO WOULD BE INVOLVED TO MAKE THAT HAPPEN]

6. I'd like to ask specifically about health care in your community. If you or your family had a general health issue that needed a doctor's care or prescription medicine – such as the flu or a child's ear infection– where would you go for this type of health care? [PROBE IF THEY GO TO PRIVATE PRACTICE, ED, ETC]

    a. What do you think of the health care services in your community? [PROBE ON POSITIVE AND NEGATIVE ASPECTS OF THE HEALTH CARE SERVICES]

    b. Have you or someone close to you ever experienced any challenges in trying to get health care? What specifically? [PROBE FOR BARRIERS: INSURANCE ISSUES, LANGUAGE BARRIERS, LACK OF TRANSPORTION, ETC.]

        i. [NAME BARRIER] was mentioned as something that made it difficult to get health care. What do you think would help so that people don't experience the

same type of problem that you did in getting health care? What would be needed so that this doesn't happen again? [REPEAT FOR OTHER BARRIERS]

V. VISION OF COMMUNITY AND PROGRAM/SERVICE ENVIRONMENT (10 minutes)

7. I'd like you to think ahead about the future of your community. When you think about the community 3-5 years from now, what would you like to see? What is your vision for the future?

    a. What is your vision specifically related to people's <u>health</u> in the community?

        i. What do you think needs to happen in the community to make this vision a reality?

        ii. Who should be involved in this effort?

VI. PERCEPTIONS OF NEWTON-WELLESLEY HOSPITAL COMMUNITY WORK (20 minutes)

8. What have you heard about Newton-Wellesley Hospital and its work in the community? Are you aware of any of their community outreach activities/programming? [PROBE FOR SPECIFICS]

    a. What is your perception of Newton-Wellesley Hospital and its community outreach activities/programming (if known)?

        i. [PROBE] What do you see as its strengths?

        ii. [PROBE] What do you see as its challenges/limitations?

    b. What do you consider Newton-Wellesley Hospital's role to be in the community?

    c. To what extent do you think Newton-Wellesley Hospital is currently meeting the health concerns of the community?

9. How do you see Newton-Wellesley Hospital becoming more engaged in the community to address these concerns?

    a. Are there specific health issues in the community in which the Hospital should take a lead in addressing? Which ones?

VII. CLOSING

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 afternoon. [TALK ABOUT NEXT STEPS OF THE PROCESS, SPECIFICALLY HOW PARTICIPANTS CAN GET INVOLVED FURTHER OR RECEIVE THE FINAL REPORT OR SUMMARY OF THE REPORT.]

Newton-Wellesley Hospital Community Health Needs Assessment
Key Informant Interview Guide
Current Version: September 15, 2014

Goals of the key informant interview:

- To determine perceptions of the health strengths and needs of the community
- To explore how these issues can be addressed in the future
- To identify the gaps, challenges, and opportunities for addressing community needs more effectively

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

I. BACKGROUND (5 minutes)

- Hello. My name is _____, and I am with Health Resources in Action, a non-profit public health organization in Boston. Thank you for speaking with me today.

- Newton-Wellesley Hospital is undertaking a community health needs assessment to gain a greater understanding of the health of residents and how health needs are currently being addressed. As part of this process, we are having discussions like these around the community with a wide range of people - community members, government officials, health care and social service providers, and staff from a range of community organizations. We are interested in hearing people's feedback on the strengths and needs of the community and suggestions for the future.

- We will be conducting several focus groups and interviews around the area in Natick, Needham, Newton, Waltham, Wellesley, and Weston. After all of the discussions are done, we will be writing a summary report of the general opinions that have come up. In that report, we might provide some general information on what we discuss today, but we will not include any names or identifying information. Your responses will be strictly confidential. In the report, nothing you say here will be connected to your name.

- Our interview will last about 45-60 minutes [EXPECTED RANGE FROM 30-60 MINUTES, DEPENDING ON INTERVIEWEE].

- Any questions before we begin our discussion?

II. THEIR AGENCY/ORGANIZATION (5 minutes)

2. 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/programs/services? 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?

b. Do you currently partner with any other organizations or institutions in any of your programs/services?

III. COMMUNITY ISSUES (20 minutes)

3. How would you describe the community which your organization serves?

   a. 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?

   b. What do you think are the most pressing <u>health</u> concerns in the community? Why? [PROBE ON SPECIFICS]

      i. How have these health issues affected your community? In what way?

      ii. Who do you consider to be the populations in the community most vulnerable or at risk for these conditions/issues?

   c. From your experience, what are residents' biggest challenges to addressing these health issues?

      i. [PROBE ON RANGE OF CHALLENGES: E.g., Various barriers to accessing to medical and/or preventive care and services, socioeconomic factors, lack of community resources, social/community norms, etc.]

IV. PERCEPTIONS OF HEALTH CARE AND PUBLIC HEALTH/PREVENTION SERVICES (15 minutes)

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

   a. What challenges do residents in your community face in accessing health care?

      i. What do you think needs to happen in your community to help residents overcome or address these challenges?

5. In general, what do you see as the overall strengths and limitations related to the public health/prevention-related programs, services, or policies in your community?

   a. What challenges do residents in your community face in accessing prevention services or programs?

      i. What do you think needs to happen in your community to help residents overcome or address these challenges?

6. Let's talk about a few of the health issues you mentioned previously. [SELECT TOP HEALTH CONCERNS] What programs, services, or policies are you aware of in the community that currently focus on these health issues? [PROBE FOR SPECIFICS]

a. In your opinion, how effective have these programs, services, or policies been at addressing these issues? Why?

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

c. What do you think needs to be done to address these issues?

i. Do you see opportunities currently out there that can be seized upon to address these issues? For example, are there some "low hanging fruit" – current collaborations or initiatives that can be strengthened or expanded?

V. VISION OF COMMUNITY AND PROGRAM/SERVICE ENVIRONMENT (10 minutes)

7. I'd like you to think ahead about the future of your community. When you think about the community 3-5 years from now, what would you like to see? What is your vision for the future?

a. What is your vision specifically related to people's <u>health</u> in the community?

i. What do you think needs to happen in the community to make this vision a reality?

ii. Who should be involved in this effort?

VI. PERCEPTIONS OF NEWTON-WELLESLEY HOSPITAL COMMUNITY WORK

8. What have you heard about Newton-Wellesley Hospital and its work in the community? Are you aware of any of their community outreach activities/programming? [PROBE FOR SPECIFICS]

a. What is your perception of Newton-Wellesley Hospital and its community outreach activities/programming (if known)?

i. [PROBE] What do you see as its strengths?

ii. [PROBE] What do you see as its challenges/limitations?

b. What do you consider Newton-Wellesley Hospital's role to be in the community?

c. To what extent do you think Newton-Wellesley Hospital is currently meeting the health concerns of the community?

9. How do you see Newton-Wellesley Hospital becoming more engaged in the community to address these concerns?

a. Are there specific health issues in the community in which the Hospital should take a lead in addressing? Which ones?

b. Are there any specific organizations in the community in which you see as being a good fit for partnership with Newton-Wellesley Hospital to address these health concerns?

i. With whom? Around which programs or issues?

VII. CLOSING (5 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 afternoon. [TALK ABOUT NEXT STEPS OF THE PROCESS, SPECIFICALLY HOW PARTICIPANTS CAN GET INVOLVED FURTHER OR RECEIVE THE FINAL REPORT OR SUMMARY OF THE REPORT.]

APPENDIX C: Newton-Wellesley Hospital Data

Top 10 Emergency Department Diagnoses by Town, 2013

Natick	N	%	Needham	N	%	Newton	N	%
CHEST PAIN NEC	53	15%	CHEST PAIN NEC	69	16%	CHEST PAIN NEC	252	15%
FEVER, UNSPECIFIED	41	12%	HEAD INJURY UPSPECIFIED	60	14%	OPEN WND FINGER/S COMP	237	14%
URIN TRACT INFECTION NOS	41	12%	OPEN WOUND OF FOREHEAD	41	9%	HEAD INJURY UPSPECIFIED	204	12%
HEAD INJURY UPSPECIFIED	39	11%	URIN TRACT INFECTION NOS	41	9%	URIN TRACT INFECTION NOS	195	12%
ABDOMINAL PAIN-SITE NOS	32	9%	DEPRESSIVE DISORDER NEC	41	9%	SYNCOPE AND COLLAPSE	179	11%
HEADACHE	28	8%	OPEN WND FINGER/S COMP	40	9%	PNEUMONIA, ORGANISM NOS	133	8%
PNEUMONIA, ORGANISM NOS	28	8%	FEVER, UNSPECIFIED	39	9%	SPRAIN OF ANKLE NOS	130	8%
OPEN WND FINGER/S COMP	27	8%	SYNCOPE AND COLLAPSE	38	9%	OPEN WOUND OF FOREHEAD	119	7%
PAIN IN LIMB	27	8%	HEADACHE	37	8%	PAIN IN LIMB	117	7%
LUMBAGO	26	8%	DIZZINESS AND GIDDINESS	30	7%	LUMBAGO	116	7%
Waltham	**N**	**%**	**Wellesley**	**N**	**%**	**Weston**	**N**	**%**
CHEST PAIN NEC	274	15%	CHEST PAIN NEC	87	13%	CHEST PAIN NEC	39	14%
FEVER, UNSPECIFIED	217	12%	OPEN WND FINGER/S COMP	83	13%	HEAD INJURY UPSPECIFIED	36	13%
HEAD INJURY UPSPECIFIED	192	11%	HEAD INJURY UPSPECIFIED	82	13%	URIN TRACT INFECTION NOS	34	12%
URIN TRACT INFECTION NOS	180	10%	SYNCOPE AND COLLAPSE	70	11%	OPEN WND FINGER/S COMP	31	11%
ALCOHOL ABUSE-UNSPEC	179	10%	URIN TRACT INFECTION NOS	67	10%	OPEN WOUND OF FOREHEAD	29	10%
DEPRESSIVE DISORDER NEC	169	9%	SPRAIN OF ANKLE NOS	56	9%	FEVER, UNSPECIFIED	26	9%
HEADACHE	162	9%	FEVER, UNSPECIFIED	53	8%	SEPTICEMIA NOS	26	9%
LUMBAGO	153	8%	ATRIAL FIBRILLATION	51	8%	SYNCOPE AND COLLAPSE	23	8%
PNEUMONIA, ORGANISM NOS	140	8%	OPEN WOUND OF FOREHEAD	50	8%	PNEUMONIA, ORGANISM NOS	20	7%
AC ALCOHOL INTOX-UNSPEC	138	8%	HEADACHE	46	7%	CELLULITIS OF LEG	20	7%

DATA SOURCE: Newton-Wellesley Hospital EPSI data

Top 10 Emergency Department Diagnoses by Age, 2013

<18	N	%	18-24	N	%	25-44	N	%
FEVER, UNSPECIFIED	533	20%	ALCOHOL ABUSE-UNSPEC	152	16%	OTH CURR COND-ANTEPARTUM	319	14%
HEAD INJURY UPSPECIFIED	373	14%	DEPRESSIVE DISORDER NEC	114	12%	CHEST PAIN NEC	319	14%
OPEN WOUND OF FOREHEAD	296	11%	SPRAIN OF ANKLE NOS	113	12%	OPEN WND FINGER/S COMP	276	12%
CROUP	295	11%	HEAD INJURY UPSPECIFIED	94	10%	HEADACHE	243	11%
OTITIS MEDIA NOS	257	10%	SPRAIN OF NECK	84	9%	LUMBAGO	219	10%
PNEUMONIA, ORGANISM NOS	198	7%	URIN TRACT INFECTION NOS	82	9%	SPRAIN OF NECK	183	8%
OPEN WOUND OF JAW	192	7%	SYNCOPE AND COLLAPSE	82	9%	ABDOMINAL PAIN-SITE NOS	180	8%
ASTHMA, NOS, W/ACT EXACERBA	191	7%	NAUSEA WITH VOMITING	81	8%	DEPRESSIVE DISORDER NEC	172	8%
OPEN WOUND OF SCALP	183	7%	ACUTE PHARYNGITIS	81	8%	SPRAIN OF ANKLE NOS	155	7%
SPRAIN OF ANKLE NOS	169	6%	EPISODIC MOOD DISORD NOS	81	8%	HEAD INJURY UPSPECIFIED	150	7%

45-64	N	%	65+	N	%
CHEST PAIN NEC	520	24%	URIN TRACT INFECTION NOS	413	17%
OPEN WND FINGER/S COMP	293	14%	CHEST PAIN NEC	324	14%
LUMBAGO	212	10%	SEPTICEMIA NOS	274	12%
CALCULUS OF URETER	185	9%	SYNCOPE AND COLLAPSE	267	11%
SYNCOPE AND COLLAPSE	174	8%	PNEUMONIA, ORGANISM NOS	221	9%
DIZZINESS AND GIDDINESS	160	7%	HEAD INJURY UPSPECIFIED	214	9%
HEADACHE	157	7%	ATRIAL FIBRILLATION	205	9%
PAIN IN LIMB	152	7%	DIZZINESS AND GIDDINESS	177	7%
HEAD INJURY UPSPECIFIED	151	7%	OTHER MALAISE AND FATIGUE	140	6%
DEPRESSIVE DISORDER NEC	139	6%	ACUTE RENAL FAILURE, UNSPECIFIED	135	6%

DATA SOURCE: Newton-Wellesley Hospital EPSI data

Top 10 Urgent Care Center Diagnoses by Town, 2013

Natick	N	%	Needham	N	%	Newton	N	%
ACUTE URI NOS	21	30%	ACUTE URI NOS	15	22%	ACUTE URI NOS	112	24%
ACUTE PHARYNGITIS	10	14%	OTITIS MEDIA NOS	10	15%	ACUTE PHARYNGITIS	67	14%
PNEUMONIA, ORGANISM NOS	7	10%	URIN TRACT INFECTION NOS	9	13%	URIN TRACT INFECTION NOS	55	12%
URIN TRACT INFECTION NOS	6	9%	SPRAIN OF ANKLE NOS	7	10%	OTITIS MEDIA NOS	53	11%
OTITIS MEDIA NOS	5	7%	PNEUMONIA, ORGANISM NOS	7	10%	CHRONIC SINUSITIS NOS	33	7%
CONTUSION OF HAND(S)	5	7%	ACUTE PHARYNGITIS	5	7%	PNEUMONIA, ORGANISM NOS	33	7%
ACUTE NASOPHARYNGITIS	4	6%	NONSPECIF SKIN ERUP NEC	4	6%	STREP SORE THROAT	33	7%
DERMATITIS NOS	4	6%	CELLULITIS OF LEG	4	6%	OPEN WND FINGER/S COMP	30	6%
HORDEOLUM EXTERNUM	4	6%	FLU W RESP MANIFEST NEC	4	6%	BRONCHITIS NOS	27	6%
STREP SORE THROAT	4	6%	FX METATARSAL-CLOSED	3	4%	COUGH	25	5%
Waltham	**N**	**%**	**Wellesley**	**N**	**%**	**Weston**	**N**	**%**
ACUTE URI NOS	276	23%	ACUTE URI NOS	12	15%	ACUTE URI NOS	18	20%
ACUTE PHARYNGITIS	176	15%	ACUTE PHARYNGITIS	10	13%	ACUTE PHARYNGITIS	11	13%
OTITIS MEDIA NOS	149	13%	ACUTE BRONCHITIS	9	12%	OPEN WND FINGER/S COMP	10	11%
URIN TRACT INFECTION NOS	128	11%	OPEN WND FINGER/S COMP	8	10%	CONJUNCTIVITIS NOS	9	10%
SPRAIN OF ANKLE NOS	92	8%	OTITIS MEDIA NOS	8	10%	SPRAIN OF ANKLE NOS	8	9%
OPEN WND FINGER/S COMP	80	7%	ACUTE TONSILLITIS	7	9%	COUGH	7	8%
CHRONIC SINUSITIS NOS	73	6%	URIN TRACT INFECTION NOS	7	9%	OTITIS MEDIA NOS	7	8%
COUGH	70	6%	PAIN IN LIMB	6	8%	DERMATITIS NOS	6	7%
CONJUNCTIVITIS NOS	68	6%	SPRAIN OF ANKLE NOS	6	8%	DERMATITIS DUE TO PLANT	6	7%
STREP SORE THROAT	63	5%	NONSPECIF SKIN ERUP NEC	5	6%	URIN TRACT INFECTION NOS	6	7%

DATA SOURCE: Newton-Wellesley Hospital EPSI data

Top 10 Urgent Care Center Diagnoses by Age, 2013

<18	N	%	18-24	N	%	25-44	N	%
OTITIS MEDIA NOS	210	27%	ACUTE PHARYNGITIS	92	19%	Acute upper respiratory infection NOS	247	23%
ACUTE URI NOS	144	18%	ACUTE URI NOS	79	17%	ACUTE PHARYNGITIS	185	17%
ACUTE PHARYNGITIS	102	13%	URIN TRACT INFECTION NOS	65	14%	URIN TRACT INFECTION NOS	130	12%
FEVER, UNSPECIFIED	69	9%	SPRAIN OF ANKLE NOS	49	10%	CHRONIC SINUSITIS NOS	98	9%
SPRAIN OF ANKLE NOS	66	8%	STREP SORE THROAT	48	10%	Open wound of finger(s), complicated	82	8%
VIRAL INFECTION NOS	50	6%	ACUTE TONSILLITIS	39	8%	OTITIS MEDIA NOS	81	8%
CONJUNCTIVITIS NOS	40	5%	OTITIS MEDIA NOS	30	6%	STREP SORE THROAT	67	6%
STREP SORE THROAT	39	5%	ACUTE NASOPHARYNGITIS	27	6%	ACUTE NASOPHARYNGITIS	63	6%
DERMATITIS NOS	30	4%	CHRONIC SINUSITIS NOS	26	5%	SPRAIN OF ANKLE NOS	62	6%
SPRAIN OF HAND NOS	30	4%	OPEN WND FINGER/S COMP	22	5%	FLU W RESP MANIFEST NEC	61	6%

45-64	N	%	65+	N	%
ACUTE URI NOS	147	23%	ACUTE URI NOS	62	20%
URIN TRACT INFECTION NOS	81	13%	URIN TRACT INFECTION NOS	58	19%
OPEN WND FINGER/S COMP	77	12%	COUGH	33	11%
ACUTE PHARYNGITIS	61	10%	PNEUMONIA, ORGANISM NOS	29	10%
CHRONIC SINUSITIS NOS	54	8%	BRONCHITIS NOS	27	9%
PNEUMONIA, ORGANISM NOS	49	8%	OPEN WND FINGER/S COMP	21	7%
BRONCHITIS NOS	49	8%	IMPACTED CERUMEN	21	7%
SPRAIN OF ANKLE NOS	44	7%	CELLULITIS OF LEG	20	7%
OTITIS MEDIA NOS	38	6%	DERMATITIS NOS	18	6%
COUGH	36	6%	PAIN IN LIMB	16	5%

DATA SOURCE: Newton-Wellesley Hospital EPSI data

Top 10 Inpatient Diagnoses by Town, 2013

Natick	N	%	Needham	N	%	Newton	N	%
SINGLE LB IN-HOSP W/O CS	162	43%	SINGLE LB IN-HOSP W/O CS	101	35%	SINGLE LB IN-HOSP W/O CS	198	29%
SINGLE LB IN-HOSP W CS	62	16%	SINGLE LB IN-HOSP W CS	43	15%	SEPTICEMIA NOS	105	16%
DEL W 2 DEG LACERAT-DEL	40	11%	DEL W 2 DEG LACERAT-DEL	32	11%	SINGLE LB IN-HOSP W CS	65	10%
DEL W 1 DEG LACERAT-DEL	30	8%	PREV C-DELIVERY-DELIVRD	27	9%	DEL W 2 DEG LACERAT-DEL	61	9%
PREV C-DELIVERY-DELIVRD	22	6%	DEL W 1 DEG LACERAT-DEL	20	7%	PNEUMONIA, ORGANISM NOS	55	8%
OTH CURR COND-DELIVERED	16	4%	SEPTICEMIA NOS	18	6%	URIN TRACT INFECTION NOS	52	8%
POST TERM PREG-DEL	14	4%	ATRIAL FIBRILLATION	12	4%	ACUTE RENAL FAILURE NOS	40	6%
URIN TRACT INFECTION NOS	11	3%	ACUTE RENAL FAILURE NOS	12	4%	ATRIAL FIBRILLATION	33	5%
DVRTCLI COLON W/O HMRHG	10	3%	POST TERM PREG-DEL	11	4%	DEL W 1 DEG LACERAT-DEL	32	5%
ABN FTL HRT RATE/RHY-DEL	10	3%	URIN TRACT INFECTION NOS	10	3%	AC ON CHR DIAST HRT FAIL	31	5%
Waltham	**N**	**%**	**Wellesley**	**N**	**%**	**Weston**	**N**	**%**
SINGLE LB IN-HOSP W/O CS	156	23%	SINGLE LB IN-HOSP W/O CS	67	26%	SEPTICEMIA NOS	26	24%
SEPTICEMIA NOS	89	13%	SEPTICEMIA NOS	41	16%	FOOD/VOMIT PNEUMONITIS	15	14%
SINGLE LB IN-HOSP W CS	85	13%	SINGLE LB IN-HOSP W CS	27	11%	SINGLE LB IN-HOSP W CS	13	12%
AFFECTIVE PSYCHOSIS NOS	64	10%	ATRIAL FIBRILLATION	26	10%	PNEUMONIA, ORGANISM NOS	9	8%
DEPRESSIVE DISORDER NEC	53	8%	DEL W 2 DEG LACERAT-DEL	20	8%	CRBL ART OCL NOS W INFRC	9	8%
PNEUMONIA, ORGANISM NOS	52	8%	PNEUMONIA, ORGANISM NOS	18	7%	SINGLE LB IN-HOSP W CS	8	7%
DEL W 2 DEG LACERAT-DEL	48	7%	DVRTCLI COLON W/O HMRHG	16	6%	ATRIAL FIBRILLATION	8	7%
ACUTE RENAL FAILURE NOS	42	6%	ACUTE RENAL FAILURE NOS	15	6%	URIN TRACT INFECTION NOS	8	7%
ALCOHOL WITHDRAWAL	41	6%	DEL W 1 DEG LACERAT-DEL	15	6%	SUBENDO INFARCT, INITIAL	6	6%
OBS CHRI BRNC W ACT EXA	40	6%	OBS CHRI BRNC W ACT EXA	11	4%	TRANS CEREB ISCHEMIA NOS	6	6%

DATA SOURCE: Newton-Wellesley Hospital EPSI data

Top 10 Inpatient Diagnoses by Age, 2013

<18	N	%	18-24	N	%	25-44	N	%
SINGLE LB IN-HOSP W/O CS	2738	63%	AFFECTIVE PSYCHOSIS NOS	58	24%	DEL W 2 DEG LACERAT-DEL	752	28%
SINGLE LB IN-HOSP W CS	1245	29%	DEPRESSIVE DISORDER NEC	39	16%	DEL W 1 DEG LACERAT-DEL	514	19%
TWIN-MATE LB-IN HOS W/O CS	141	3%	DEL W 1 DEG LACERAT-DEL	35	15%	PREV C-DELIVERY-DELIVRD	485	18%
FETAL/NEONATAL JAUND NOS	54	1%	DEL W 2 DEG LACERAT-DEL	28	12%	POST TERM PREG-DEL	295	11%
ASTHMA, NOS, W/ACT EXACERBA	35	1%	PSYCHOSIS NOS	23	10%	LOC OSTEOARTH NOS-L/LEG	184	7%
TWIN-MATE LB-IN HOS W CS	34	1%	POST TERM PREG-DEL	16	7%	OTH CURR COND-DELIVERED	134	5%
ACU BRONCHOLITIS D/T RSV	25	1%	OTH CURR COND-DELIVERED	14	6%	AFFECTIVE PSYCHOSIS NOS	95	3%
PNEUMONIA, ORGANISM NOS	21	0%	ANOREXIA NERVOSA	10	4%	BREECH PRESENTAT-DELIVER	92	3%
ACUTE APPENDICITIS NOS	20	0%	PREV C-DELIVERY-DELIVRD	9	4%	SEC UTERINE INERT-DELIV	91	3%
AC APPEND W PERITONITIS	15	0%	OLIGOHYDRAMNIOS-DELIVER	8	3%	TRANS HYPERTEN-DELIVERED	90	3%

45-64	N	%	65+	N	%
LOC OSTEOARTH NOS-PELVIS	162	19%	SEPTICEMIA NOS	292	21%
OSTEOARTHROS NOS-PELVIS	107	13%	PNEUMONIA, ORGANISM NOS	158	11%
DVRTCLI COLON W/O HMRHG	85	10%	URIN TRACT INFECTION NOS	150	11%
MORBID OBESITY	85	10%	ACUTE RENAL FAILURE NOS	141	10%
SEPTICEMIA NOS	82	10%	ATRIAL FIBRILLATION	132	10%
LOC OSTEOARTH NOS-L/LEG	79	9%	LOC OSTEOARTH NOS-L/LEG	117	8%
DEPRESSIVE DISORDER NEC	69	8%	AC ON CHR DIAST HRT FAIL	114	8%
AFFECTIVE PSYCHOSIS NOS	67	8%	LOC OSTEOARTH NOS-PELVIS	112	8%
SCHIZOAFFECTIVE-UNSPEC	60	7%	FOOD/VOMIT PNEUMONITIS	85	6%
SPINAL STENOSIS-LUMBAR	57	7%	INTERTROCHANTERIC FX-CL	79	6%

DATA SOURCE: Newton-Wellesley Hospital EPSI data

Top 10 Emergency Department Behavioral Health Diagnoses by Age, 2013

<18	N	%	18+	N	%
depressive disorder not otherwise classified	146	64%	lumbago	608	31%
neck pain	20	9%	depressive disorder not otherwise classified	466	24%
cervicalgia	20	9%	Backache, unspecified	189	10%
lumbago	16	7%	cervicalgia	149	8%
attention deficit hyperactivity disorder	10	4%	neck pain	149	8%
Backache, unspecified	9	4%	sciatica	144	7%
pain in thoracic spine	4	2%	Other acute pain	111	6%
thoracic or lumbosacral neuritis or radiculitis, unspecified	2	1%	cervical radiculopathy	67	3%
sciatica	1	0%	pain in thoracic spine	52	3%
Other symptoms referable to back	1	0%	thoracic or lumbosacral neuritis or radiculitis, unspecified	42	2%

DATA SOURCE: Newton-Wellesley Hospital EPSI data

Top 10 Urgent Care Center Behavioral Health Diagnoses by Age, 2013

<18	N	%	18+	N	%
lumbago	3	27%	lumbago	85	30%
neck pain	2	18%	Backache, unspecified	36	13%
cervicalgia	2	18%	neck pain	28	10%
Backache, unspecified	2	18%	cervicalgia	28	10%
pain in thoracic spine	1	9%	Other chronic pain	24	8%
depressive disorder not otherwise classified	1	9%	sciatica	20	7%
			Other symptoms referable to back	18	6%
			cervical facet syndrome	18	6%
			cervical radiculopathy	16	6%
			Other acute pain	10	4%

DATA SOURCE: Newton-Wellesley Hospital EPSI data

Top 10 Inpatient Behavioral Health Diagnoses by Age, 2013

<18	N	%	18+	N	%
depressive disorder not otherwise classified	5	83%	depressive disorder not otherwise classified	200	52%
Other acute postoperative pain	1	17%	cervical spondylosis w/ myelopathy	45	12%
			Paranoid type schizophrenia	39	10%
			cirrhosis of liver	30	8%
			Schizoaffective disorder	23	6%
			lumbago	15	4%
			Neoplasm related pain	9	2%
			Other acute pain	8	2%
			Schizophrenic disorder, residual type	8	2%
			Other chronic pain	4	1%

DATA SOURCE: Newton-Wellesley Hospital EPSI data