MetroWest Region, Massachusetts

2013 Community Health Assessment

Fall 2013

Submitted to:

MetroWest Health Foundation
MetroWest Medical Center
Marlborough Hospital
Edward M. Kennedy Community Health Center
Southboro Medical Group/Atrius Health
Community Health Coalition of MetroWest (CHNA 7)

Health Resources in Action
Advancing Public Health and Medical Research

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ACKNOWLEDGEMENTS

Welcome to the first collaborative Community Health Assessment (CHA) for the MetroWest area of Massachusetts. This assessment is a result of extensive primary and secondary research, which included input from citizens, organizations and stakeholders across 22 MetroWest communities.

In addition to satisfying a regulatory requirement of the new Affordable Care Act, this CHA represents an unprecedented effort and opportunity to bring together local health data and community input to provide a more detailed and complete profile of our region's health needs. The long-term goal of this activity is to achieve greater regional collaboration that will serve to leverage the resources, talent and expertise of our diverse stakeholders, and that of our communities to make the MetroWest area a healthy place to live and work.

We wish to thank the more than 20 community organizations that participated in this endeavor (see appendix A), and to all residents that completed our online survey or participated in one of the 18 focus groups held throughout the region.

The MetroWest Health Foundation managed the assessment, which included fundraising and securing the technical and research resources to complete the project. The foundation is a regional nonprofit whose mission is to, "Improve the health status of the community, its individuals and families through informed and innovative leadership." The foundation is grateful to the organizations listed below that provided core funding and leadership for this project.

Copies of this report can be downloaded from the foundation's website at www.mwhealth.org
We also invite your comments and feedback on this CHA, which can be sent to us at info@mwhealth.org

Marlborough Hospital
MetroWest Medical Center
Southboro Medical Group/Atrius Health
MetroWest Health Foundation

Edward M. Kennedy Community Health Center
Community Health Care Coalition of MetroWest

EXECUTIVE SUMMARY

Introduction

Understanding the current health status of the community is important to identify priorities for future planning and funding, existing strengths and assets upon which to build, and areas for further collaboration and coordination across organizations, institutions, and community groups. To this end, a collaborative group of organizational partners across the MetroWest region is leading a comprehensive community health assessment (CHA) process in 2013. The goals of the CHA are:

1. To examine the current health status of the MetroWest region (see figure)
2. To explore current health priorities—as well as new and emerging health concerns—among residents within the social context of their communities; and
3. To identify community strengths, resources, and gaps in services in order to help community partners set programming, funding, and policy priorities.

As a collaborative effort, the CHA process was led by an advisory committee comprising of a range of organizations and partners working across the MetroWest region. The CHA process used a participatory approach in that all members were engaged providing feedback on data collection instruments, guide the assessment methodology, organize data collection efforts such as focus groups, and conduct the focus groups themselves or engage with community partners to do so. The collaborative worked with Health Resources in Action (HRiA), a non-profit public health consulting organization, who provided technical assistance during the CHA process.

This report details the findings of the community health assessment conducted from March – August 2013.

Map of the MetroWest Region Communities

Methods

This CHA aims to identify the health-related needs and strengths of the MetroWest region through a social determinants of health framework, which defines health in the broadest sense and recognizes numerous factors—from employment to housing to access to care—that have an impact on the community's health. Social, economic, and health data were drawn from existing data sources, such as the U.S. Census U.S. Bureau of Labor Statistics, U.S. Department of Agriculture food desert mapping system, and the University of Wisconsin Population Health Institute's County Health Rankings, among others. Additionally, approximately 150 individuals from multi-sector organizations, community stakeholders, and residents were engaged in focus groups and interviews to gather their feedback on priority health concerns, community challenges to addressing these concerns, current strengths of the area, and opportunities for the future. Additionally, 673 respondents who either work or live in the 22 MetroWest region communities completed a community survey that was developed and administered online to gather quantitative data that were not provided by secondary sources and to understand public perceptions around health issues.

Key Findings

The following section provides a brief overview of the key findings from this community health assessment.

Demographics

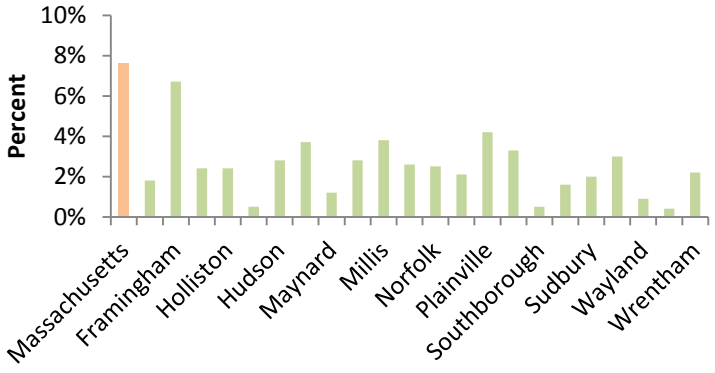
- **Population.** The 22 communities comprising the MetroWest region vary by size, growth patterns, wealth, and diversity of residents. In 2011, the total population of the region was estimated to be 385,901, up 3.1% from 2000 (374,478). The community of Framingham is the largest town, comprising 17.6% of the region's population.
- **Age Distribution.** Residents described the MetroWest region as multi-age including a combination of young families, middle age persons, and seniors. Quantitative data indicate that of the 22 communities in the region, Hopkinton and Sudbury had the highest proportions of youth while Wayland had the highest proportion of seniors.
- **Racial and Ethnic Diversity.** Residents reported that MetroWest communities varied in their levels of racial and ethnic diversity, but that diversity was seen as a strength of many communities. The communities of Wrentham, Plainville, Holliston, Hopkinton, Medfield, Foxborough, Stow, Sherborn, Walpole, Millis, Hudson, and Ashland are over 90% non-Hispanic White. By contrast, approximately one-third of Framingham's population is non-White, with Hispanic comprising 13.6%.

> *"Some [communities] are not very diverse culturally or economically."*
> —Community resident focus group participant
>
> *"There are a range of immigrants, from those who are well-established to those who are more recent and in need of a lot of help."*
> —Organizational staff focus group participant

Social and Physical Environment

- **Income and Poverty.** The MetroWest region is economically diverse with some communities considered higher income, while others were considered middle or lower income. According to the 2011 American Community Survey, eleven communities had a median household income of greater than $100,000, with the highest in Sudbury ($159,713). Framingham had the lowest median household income at $66,047. While the poverty rates across much of the region vary, the percentage of families in poverty in all of the region's communities is lower than that of the state (7.6%) (see figure).
- **Employment.** As elsewhere, the economic downturn has been felt in MetroWest. The lack of jobs was cited as a concern by many residents. County unemployment data indicate that Worcester County has been experiencing higher unemployment than the state, while Norfolk County and Middlesex County have had continuously lower rates of unemployment.
- **Educational Attainment.** Overall, focus group members generally viewed the schools in the MetroWest region as high quality and promoting academic

Percent of Families below Poverty by MA and MetroWest Communities, 2007-2011



DATA SOURCE: U.S. Department of Commerce, Bureau of the Census, 2007-2011 American Community Survey.

achievement. The proportion of residents with a college degree or more is higher in 19 of the 22 MetroWest communities than for the state overall (38.7%), and highest in Sherborn (83.3%) and Sudbury (76.1%). The proportion of adults with less than a high school diploma is very low in these towns as well –only 0.2% in Sherborn and 2.3% in Sudbury. Plainville, Marlborough, and Hudson however, have slightly lower levels of educational attainment than the state.

- **Urbanicity.** According to focus group members, the 22 towns comprising MetroWest differ somewhat in their geography and environment, with some communities seeming more vibrant, while others were considered fragmented and struggling. While Southborough, Hudson, and Millis were perceived as small, *"tight knit"* towns, Northborough was described as residential with a number of retail establishments including a large mall. Framingham was described as an area with a mix of old and new neighborhoods, convenient to many things, with a strong community feel but issues with litter containment and empty lots and Marlborough was generally described as a pleasant place to live

- **Housing.** Focus group respondents reported that housing in the MetroWest region is expensive and a challenge for many residents; they noted that the economic downturn in recent years has exacerbated these challenges. Median monthly housing costs with a mortgage or monthly rental costs are higher for most towns in the region than for the state as a whole.

- **Transportation.** Transportation emerged in focus groups as a key concern for the region with particular concerns that public transportation was not accessible in some communities, and affordability was problematic for seniors and low income residents.

- **Crime and Safety.** MetroWest residents voiced concerns about crime in the region, which many attributed to the downturn in the economy. They specifically mentioned robberies and gang-related violence as two areas of current concern. Quantitative data show substantial variation in crime rates across the communities. Marlborough had the highest violent crime rate in the region, while Plainville had the highest property crime rate.

> *"Safety is a factor in central Marlborough. Vandalism is a problem."*—Community resident focus group participant
>
> *"Certain parts of some communities feel unsafe."*—Organizational staff focus group participant

- **Environment around Healthy Foods and Recreation.** Focus group members generally spoke positively about their surroundings, noting that the many of the communities in the region have parks and recreational facilities. Access to healthy foods emerged as a concern among participants, with several noting the plethora of fast food restaurants in the area. Further, quantitative data suggest that areas around Ashland and Southborough are considered food deserts by the USDA's definition.

- **Environmental Quality.** Air quality is a growing concern in the region, particularly as a trigger for asthma which is disproportionately experienced by low-income residents and children. However, County Health Rankings data show that in 2008, each of the counties had a similar annual number of unhealthy air quality days due to fine particulate matter as the state (10.1).

Health Outcomes and Behaviors

- **Perceived Community and Individual Health Status**. In the 2013 MetroWest CHA survey, respondents were asked to describe the health of their overall community where they live and where they work. More than half (52.7%)of residents surveyed believed that their community was excellent or very good health.

- **Mortality and Hospitalization.** Quantitative data indicate that heart disease and cancer are the leading causes of death in the MetroWest region, similar to the state. Age-adjusted hospitalization rates for the region are overall slightly lower than what is seen statewide, although some specific

communities such as Framingham, Marlborough, Millis, and Westborough have higher hospitalization rates. Hospitalization data specific to Marlborough Hospital reveal that chest pain is the number one primary diagnoses for emergency department/outpatient visits.

- **Healthy Eating, Physical Activity, and Overweight/Obesity.** While several community resources exist to promote health and wellness, focus group members indicated that many of these are not necessarily used due to limited access, affordability, or residents' lack of time due to competing priorities and economic challenges. Quantitative data indicate that 76.2% of the region's adults are not consuming the recommended daily intake of fruits and vegetables, 16.5% are not engaging in regular physical activity, and 18.1% of the region's adults are obese.

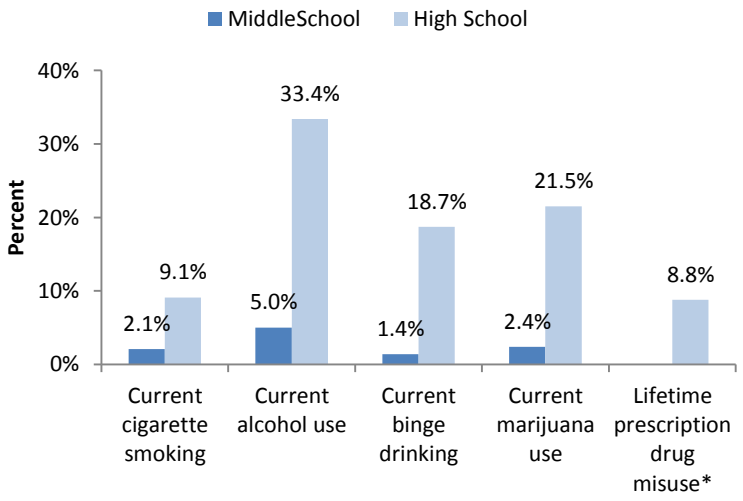
- **Chronic Disease.** When asked about health concerns in their communities, several focus group respondents and interviewees mentioned chronic diseases (e.g., cardiovascular disease, diabetes, cancer, asthma), which are the leading causes of death in the region and the state. While many focus group participants discussed heart disease and diabetes as key concerns, particularly since obesity is a major contributor to these, asthma was also mentioned as an issue disproportionately affecting low income populations and children.

> *"[People with] mental health issues also have to contend with the effects of stigma that can make it difficult to get good health care."*
> —Community resident focus group participant
>
> *"Psychiatric care is not covered by the health safety net, and all services are out-of-pocket."*
> —Stakeholder key informant interview

- **Mental Health.** Concerns around mental health focused on anxiety, depression, and the limited supply of mental health providers in the area. Respondents reported that due to these limitations, those who need services are unable to access them or must wait long periods in order to do so. In addition, the health safety net was said to not cover certain mental health services leading to out-of-pocket expenditures. Stigma was also cited as a significant barrier to addressing mental health issues in the region. Further, mental health among youth was singled out as a concern among many residents, particularly related to the effects of bullying and cyberbullying. Rates show that self-reported poor mental health symptoms and behaviors among middle school students have been generally decreasing while high school rates have been steadily increasing from 2006 to 2012.

- **Substance Use and Abuse.** In addition to obesity, substance use was mentioned in almost every focus group with participants concerned about a range of substances from tobacco to prescription drug abuse. Lack of substance use services was cited as a factor contributing to high substance abuse rates. Health department focus group members reported that recent cuts to state funding for substance abuse services has negatively affected the ability to address this issue. Further, focus group participants

Percent of Students Engaging in Substance Abuse Behaviors in MetroWest Region, 2012



*NOTE: This question not included on Middle School survey
DATA SOURCE: Education Development Center, Inc., Health and Human Development Divisions, MetroWest Adolescent Health Survey, Middle School and High School Reports, 2012

were particularly concerned about substance abuse among youth. Quantitative data indicate that among middle school students in the MetroWest region, students were most likely to engage in alcohol use (5.0%) followed by cigarette smoking (2.1%). Among high school students, 33.4% reported current alcohol use, with 18.7% reporting current binge drinking (Figure 4).

- **Reproductive and Sexual Health.** Overall reproductive and sexual health behaviors and outcomes are similar or lower in the MetroWest region compared to the state, but higher in a few communities. For example, Marlborough (25.4 per 1,000 births) and Framingham (22.8 per 1,000 births) were highest in the region in their rate of births to teen mothers, and slightly higher than the state rate (21.0 per 1,000 births).

- **Occupational Health.** An area of health concern that emerged in focus groups specifically with foreign-born residents or those that directly work with them was workplace hazards. These participants noted that many MetroWest immigrants work in low-wage factory, restaurant, and cleaning jobs that are physically taxing. As a result, workers experience repetitive motion injuries, exposure to harmful chemicals, and stress on joints.

- **Infectious Diseases.** While issues related to infectious disease rarely were discussed in focus groups, Framingham was shown to have higher Chlamydia and HIV rates than what is reported statewide.

> *"Sometimes smaller is better—I got fabulous care here."*—Community resident focus group participant
>
> *"As a senior, I feel very lucky to be living in this area because of the medical care."*—Community resident focus group participant

Health Care Access and Utilization

- **Resources and Use of Health Care Services.** Overall, the MetroWest region was viewed as providing high quality care in a number of different locations; however, challenges to accessing services still remained for more disadvantaged populations. Several health and medical resources in their region identified by participants MetroWest Medical Center, Marlborough Hospital, the Kennedy Community Health Center, and walk-in clinics at local drugstores. Lower income individuals reported relying on the free clinics such as the MetroWest Free Medical Program but noted that another free clinic, in Hudson, had recently closed. The MetroWest Medication Program (MetroWest Meds) was discussed as a source for lower-cost medications.

- **Challenges to Accessing Health Care Services.** When asked about access to health care services, respondents acknowledged that while the region has many medical services, barriers exist and services are not available equally to everyone; specific barriers were related to obtaining adequate insurance, high out-of-pocket costs for care, challenges to locating primary, after-hours, and specialty care, and language and transportation barriers

- **Health Information Sources.** As seen by the table on the right, health care providers and the Internet are the primary sources of health information for MetroWest residents who completed the CHA survey. Nearly half of respondents indicated that their main source of information was a doctor, nurse, or other health provider, while 31.4% cited the internet. All other sources were much less commonly used for health information.

CHA Survey Respondents' Majority Health Information Sources, 2013

	% MetroWest Survey
Doctor, nurse, or other health provider	47.2%
Website	31.4%
Magazine	3.3%
Employer	2.3%
Family members	1.9%
Social Media	1.4%

DATA SOURCE: MetroWest Region Community Health Assessment Survey, 2013

Community Strengths

- **Strengths of the Community.** As noted throughout this report, the MetroWest region has numerous strengths including quality health and medical services, an array of community and social service organizations, community cohesion in many areas, and strong partnerships across organizational entities. When asked about their community's strengths in focus groups, MetroWest residents typically brought up the cohesiveness of many of the communities and neighborhoods. They described the social climate in their communities as "friendly" and having a *"small town feel."* They discussed how neighbors helped each other out in times of need.

Vision for the Future

- **Perceived Priority Areas:** When survey respondents were asked about areas to focus on in the future, they largely spoke about healthy living, chronic disease prevention, and seniors as overarching high priorities.

- **More Opportunities for Healthy Eating and Physical Activity.** Many focus group members reported that they shared a vision of enhanced physical activity and better nutrition among the region's residents/ Participants saw t his as critical to reducing obesity and chronic disease rates in the region.

- **Improved Access to Quality Health Care.** Improved access to health care and better coordinated care were also key components of residents' vision for the future. Respondents described various aspects of this including greater affordability, more doctors and specialists, less wait time for appointments, support for medication costs, after hours care, as well as access to more physical therapy and alternative treatments.

- **More Engaged, Culturally Competent Health Education.** Focus group members were interested in having the public be provided with more information about important health topics, but to do so in an engaging, culturally appropriate way. A vision suggested by one focus group member was that *"people are more educated, have information and take care of their health."*

- **More Informed Health Care Consumers.** A prominent theme across focus groups was the need to break down barriers to navigating the complex health system. Focus group members spoke about the need to have, in the words of one resident, *"[a] more informed and educated healthcare consumer."* Suggestions included helping people to understand the opportunities and limitations of their health insurance coverage as well as their rights as patients.

- As discussed earlier, a prominent theme across focus groups was the need to break down barriers to navigating the complex health system. As a subset of the conversation on health education, focus group members spoke about the need to have, in the words of one resident, *"[a] more informed and educated healthcare consumer."* Suggestions included not just providing information about how to effectively access health care (such as do not use ER), but also helping people to understand the opportunities and limitations of their health insurance coverage as well as their rights as patients.

- **Supports for Youth.** Respondents frequently mentioned the importance of activities and services especially for youth, such as having more places for youth to go in their spare time. Respondents also reported a need for more youth education about mental health, healthy relationships and contraception, and substance abuse.

- **Supports for Seniors.** The aging of the population was recognized by many focus group members and therefore, the growing needs of the elderly population were cited as an area of concern and an opportunity for action in the future. Focus group respondents mentioned that they would like to see more services such as home visiting for homebound seniors, assisted living facilities, senior centers, as well as more outreach and programming to those who cannot leave their homes.

- **More Transportation Options.** Several focus group members saw enhanced transportation options as important to the future of the region. They wanted to see more public transportation, a return of some bus lines. Reliability and affordability were important.

- **Engaging Partners across the Region for Action.** When asked about who needs to be involved in realizing their future vision, focus group members named many individuals and organizational entities including community residents, youth, leaders and government officials, churches, schools, health care organizations and hospitals, business, and the media. Several focus group members mentioned the importance of collaboration to leverage resources and create change.

Conclusions

- **There is wide variation in the MetroWest region in terms of population composition, socioeconomic levels, and needs.** While the MetroWest region's risk factors related to health are generally at or better than the state's, rates do differ by community which is partly attributed to the wide variation in racial/ethnic composition, poverty rates, and educational opportunities across the region. Many towns are considered quite affluent, while others are more working class. These differences affect residents' access to healthy food, the availability of safe green and recreational space, as well as access to and use of health care and prevention services.

- **Obesity and access to physical activity and healthy food were concerns identified by focus group participants and survey respondents.** Walkability of communities, availability of healthy food options, and accessible and affordable recreational areas were all issues identified as important for changing the environmental landscape to support obesity prevention.

- **Mental health and substance use were identified as pressing needs by assessment participants, and current services were largely seen as inadequate.** Residents perceived depression and youth-related mental health issues as being a top concern. A closely-related issue is the perceived growing use of substances, including tobacco, alcohol, and prescription drugs. According to residents, the region needs more mental health providers especially those skilled at addressing the needs of children and teens, education and prevention programs, culturally competent care for non-English speaking patients, and greater integration of mental health into the primary care setting.

- **The aging of the region's population was noted by many, and concerns about seniors were prominent.** As Baby Boomers age, seniors are expected to comprise an ever increasing proportion of the population in the region which is expected to put great demands on the health and social service infrastructure.

- **Across all issue areas, transportation was identified as a challenge for many residents to accessing services.** For many, transportation and walkability were identified as a critical issue in the community having a severe impact on time, ease of getting to employment, appointments, or going about their daily lives (e.g., going to the grocery store) -especially for vulnerable populations such as the elderly and lower income.

- **The region is seen as having a strong health care infrastructure, but there are concerns about access.** While the region has many health assets including hospitals, community health centers, and social service agencies, residents expressed concerns about access to health care, including the cost of health care, finding providers willing to accept MassHealth, lack of transportation, and inconvenient office hours (not on weekends or evenings).

- **As the health system increasingly faces challenges and health reform is implemented, residents saw the great need for increased efforts focusing on prevention.** A focus on prevention and better lifestyle behaviors were seen as essential to improving the health of the region. More education relative to health, a stronger infrastructure that supports health (e.g., sidewalks, safe green space), and changes in how to navigate the health system were also seen as an important need. Future collaboration and coordination of efforts were viewed as critical, and an area in which the region currently has a strong foundation.

INTRODUCTION

Improving the health of a community is critical to ensuring the quality of life of its residents and fostering sustainability and future prosperity. Health is intertwined with the multiple facets of our lives, and yet, where we work, live, learn, and play all have an impact on our health. Understanding the current health status of a community—and the multitude of factors that influence health—is important in order to identify priorities for future planning and funding, the existing strengths and assets on which to build upon, and areas for further collaboration and coordination across organizations, institutions, and community groups.

To this end, a collaborative group of organizational partners in the MetroWest region—Marlborough Hospital, MetroWest Medical Center, Southboro Medical Group/Atrius Health, MetroWest Health Foundation, Edward M. Kennedy Community Health Center, and Community Health Care Coalition of MetroWest—is leading a comprehensive community health assessment (CHA) process in 2013. The goals of the CHA are:

1. To examine the current health status of the MetroWest region
2. To explore current health priorities—as well as new and emerging health concerns—among residents within the social context of their communities; and
3. To identify community strengths, resources, and gaps in services in order to help community partners set programming, funding, and policy priorities.

As a collaborative effort, the CHA process was spearheaded, funded, and managed by an advisory committee comprising of a range of organizations and partners working across the MetroWest region. A list of these organizational partners can be found in Appendix A. The CHA process used a participatory approach in that all members were engaged providing feedback on data collection instruments, guide the assessment methodology, organize data collection efforts such as the focus groups, and conduct the focus groups themselves or engage with community partners to do so.

In March 2013, the partners, via the MetroWest Health Foundation, hired Health Resources in Action (HRiA), a non-profit public health organization, as a consultant partner to provide strategic guidance and technical assistance for the community health assessment process including providing input on data collection instruments and administering a focus group facilitation training for community partners, analyzing the data, and developing the final CHA report deliverables.

This report details the findings of the MetroWest region community health assessment conducted from March – August 2013.

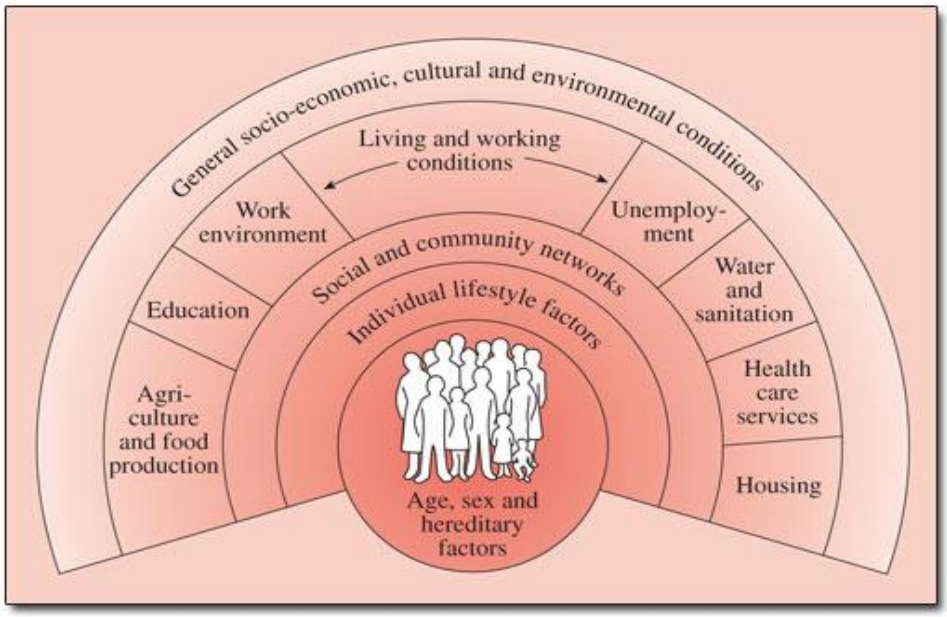
METHODS

The following section describes how the data for the MetroWest community health assessment were compiled and analyzed, as well as the broader lens used to guide this process. Specifically, the community health assessment defines health in the broadest sense and recognizes that numerous factors at multiple levels impact a community's health — from lifestyle behaviors (e.g., diet and exercise) to clinical care (e.g. access to medical services) to social and economic factors (e.g., employment opportunities) to the physical environment (e.g., air quality). The beginning discussion of this section discusses the larger social determinants of health framework which helped guide this overarching process.

SOCIAL DETERMINANTS OF HEALTH FRAMEWORK

Where we are born, grow, live, work, and age—from the environment in the womb to our community environment later in life—and the interconnections among these factors are critical to consider. Not only do people's genes and lifestyle behaviors affect their health, but health is also influenced by more upstream factors such as educational attainment and working conditions. The social determinants of health framework, shown in the visual in Figure 1, provides a visual representation of this relationship.

Figure 1: Social Determinants of Health Framework



DATA SOURCE: World Health Organization, Towards a Conceptual Framework for Analysis and Action on the Social Determinants of Health: Discussion paper for the Commission on the Social Determinants of Health, 2005.

DATA COLLECTION METHODS

Geographic Scope

The focus area for this community health assessment is 22 communities within the MetroWest region. These communities encompass several counties including Middlesex County, Norfolk County, and Worcester County, and all fall within the 7th Community Health Network Area (CHNA 7), the Community Health Coalition of MetroWest. These 22 communities vary by size, growth patterns, wealth, and diversity of residents. For ease of interpreting county-level data tables in this report, Table 1 identifies all towns that comprise the catchment area for this CHA with their corresponding county designations.

Table 1: Focus Communities for the MetroWest Community Health Assessment and Their Corresponding Counties

Town	County
Ashland	Middlesex
Framingham	Middlesex
Foxborough	Norfolk
Holliston	Middlesex
Hopkinton	Middlesex
Hudson	Middlesex
Marlborough	Middlesex
Maynard	Middlesex
Medfield	Norfolk
Millis	Norfolk
Natick	Middlesex
Norfolk	Norfolk
Northborough	Worcester
Plainville	Norfolk
Sherborn	Middlesex
Southborough	Worcester
Stow	Middlesex
Sudbury	Middlesex
Walpole	Norfolk
Wayland	Middlesex
Westborough	Worcester
Wrentham	Norfolk

Figure 2 illustrates where in the state of Massachusetts the 22 communities of focus are located. Further, this figure offers a visual representation of how the communities encompass the three aforementioned counties (Middlesex, Norfolk, and Worcester Counties). For a more detailed look at how the 22 communities border one another, please refer to Figure 3.

Figure 2: Geographic Scope of MetroWest Community Health Assessment in Relation to State of Massachusetts

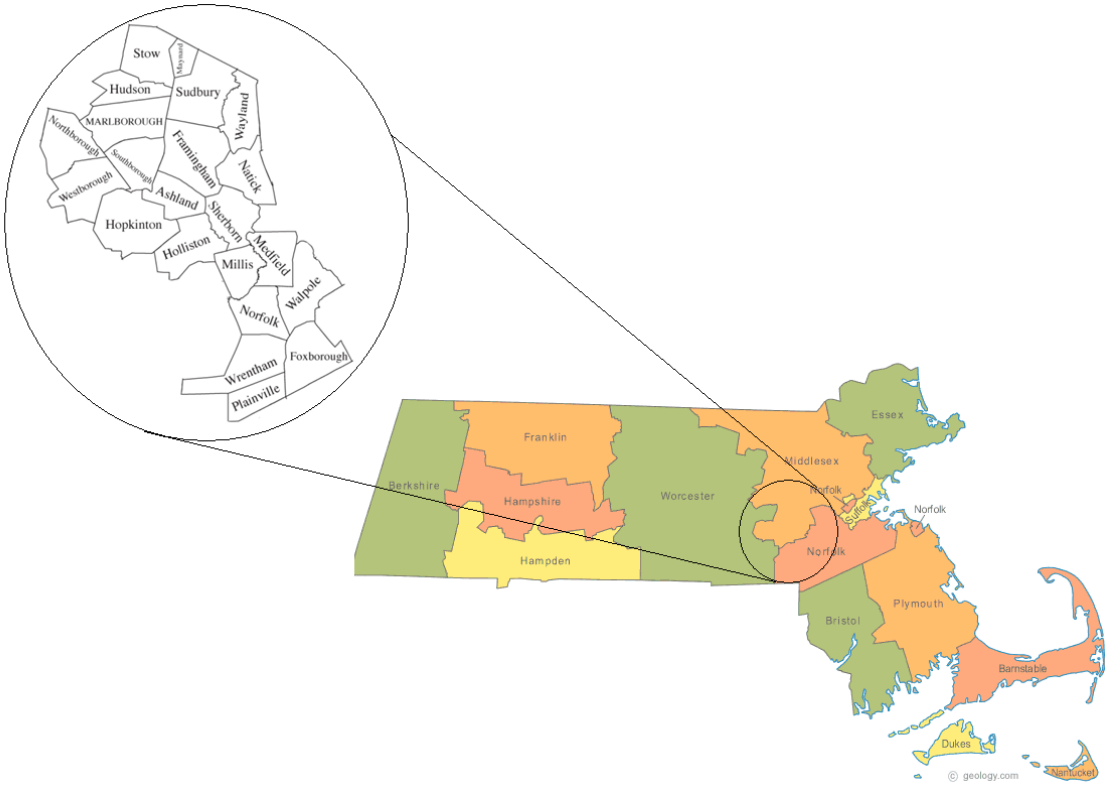


Figure 3: Detailed Map Representation of the Focus Communities for the MetroWest Community Health Assessment

Quantitative Data

Reviewing Existing Secondary Data

The MetroWest community health assessment builds off of the comprehensive local data warehouse developed by the MetroWest Health Foundation. Since 2002, the Foundation has been a resource to the region in providing health status data by community to help inform planning efforts. Data from the MetroWest Health Foundation resources are from a variety of sources including MA Department of Public Health, vital statistics, and U.S. Census. These data were incorporated into this report. Additional secondary data were also included in this report from sources such as Marlborough Hospital discharge statistics and interpreter services, U.S. Census, U.S. Bureau of Labor Statistics, U.S. Department of Agriculture food desert mapping system, and the University of Wisconsin Population Health Institute's County Health Rankings, among others.

Community Survey

To gather quantitative data that were not provided by secondary sources and to understand public perceptions around a range of health issues, a brief community survey was developed and administered online to residents throughout the 22 communities. The survey explored key health concerns of community residents, access to services, and their primary priorities for services and programming. The MetroWest community partners disseminated the survey link via their networks (e.g., sending an email announcement out to their contacts) as well as through local media. Staff from organizations were asked to send the survey on to their clients/community residents. The survey was available in English, Spanish, and Portuguese and was advertised through language-specific channels as well.

The final survey sample was restricted to survey respondents who either lived or worked in one of the 22 MetroWest communities that were the focus of the community health assessment process. A total of 673 respondents who either lived or worked in the region completed the survey and thus, were included in the final sample.

Table 2 shows the distribution of survey respondents in the final sample by key demographic characteristics. Survey analyses were also conducted by smaller geographic area within the MetroWest region, and findings are provided in the report and in the appendix. Due to small sample sizes of responses in some communities, analyses in the report grouped towns together by general clusters and for generally equal sub-sample sizes, resulting in four areas for further analyses: Framingham, Sub-Region A, Sub-Region B, and Sub-Region C. A description of the towns that fall into each of these groupings can be found in Table 3.

Table 2: MetroWest Region CHA Survey Respondent Characteristics by Total Service Area

	Total Service Area (N=673)
Age	
Under 18 years old	0.2%
18-29 years old	6.0%
30-49 years old	36.9%
50-64 years old	44.0%
65 years or older	12.9%
Gender	
Male	18.8%
Female	81.3%
Transgender	0.0%
Race/Ethnicity	
White, non-Hispanic	71.8%
Black, non-Hispanic	1.2%
Hispanic, any race	3.5%
Asian, non-Hispanic	2.2%
American Indian/Native American, non-Hispanic	0.6%
Brazilian, non-Hispanic	1.8%
Portuguese, non-Hispanic	0.7%
Other race, non-Hispanic	0.4%
2 or more	2.1%
Educational Attainment	
HS Diploma or Less	3.8%
Some College or Associate's Degree	20.2%
College graduate or more	76.0%
Town of Residence	
Ashland	7.7%
Framingham	20.5%
Foxborough	0.1%
Holliston	4.3%
Hopkinton	2.8%
Hudson	7.1%
Marlborough	6.5%
Maynard	0.6%
Medfield	0.0%
Millis	0.7%
Natick	7.9%
Norfolk	0.3%
Northborough	6.2%
Plainville	0.0%
Sherborn	1.0%
Southborough	3.7%
Stow	0.3%
Sudbury	3.6%
Walpole	1.0%
Wayland	3.3%
Westborough	2.4%
Wrentham	0.4%
Town of Employment	
Ashland	8.5%
Framingham	28.3%

Foxborough	0.6%
Holliston	1.3%
Hopkinton	1.8%
Hudson	9.0%
Marlborough	4.4%
Maynard	0.0%
Medfield	0.4%
Millis	0.3%
Natick	6.0%
Norfolk	0.0%
Northborough	8.5%
Plainville	0.0%
Sherborn	0.4%
Southborough	7.5%
Stow	0.0%
Sudbury	4.7%
Walpole	0.4%
Wayland	1.6%
Westborough	1.0%
Wrentham	0.1%
Role in Community	
Resident	72.6%
Health care provider	22.0%
Social service provider	14.8%
Municipal employee	19.8%
Faith leader	2.3%
Community leader	9.2%
Business employee	14.2%
Student	2.5%
Educator	4.0%
Other	10.4%
Insurance Status	
Private insurance (through employer/spouse's employer/parents)	73.0%
Medicare	10.0%
Private insurance (buy on your own)	6.2%
MassHealth/Medicaid	3.0%
Commonwealth Care	1.9%
Health Safety Net	0.7%
Veteran's Administration or TriCare	0.6%
No insurance, uninsured	0.6%
Where main medical care is provided:	
Private doctor's office or group practice	92.9%
Community health center	2.1%
Hospital-based clinic	1.7%
Walk-in medical clinic	0.7%
Free-medical program	0.5%
Emergency Room	0.5%
Veteran's Administration facility	0.3%
At a pharmacy	0.2%

DATA SOURCE: MetroWest Region Community Health Assessment Survey, 2013

As noted, for the purposes of the survey analysis, data were stratified into four sub-designations. These are detailed Table 3.

Table 3: MetroWest Community Health Assessment Survey Catchment Area Cities/Towns by Region, 2013

Geographic Sub-Area	Cities/Towns
Framingham	Framingham
Sub-Region A	Hudson Marlborough Maynard Stow Sudbury
Sub-Region B	Holliston Hopkinton Northborough Southborough Westborough
Sub-Region C	Ashland Foxborough Medfield Millis Natick Norfolk Plainville Sherborn Walpole Wayland Wrentham

Qualitative Data

During April-July 2012, 18 focus groups were conducted in the region for this CHA to gather feedback on people's priority health concerns, community challenges to addressing these concerns, current strengths of the area, and opportunities for the future. These qualitative discussions comprised 145 participants.

The focus groups spanned across age groups, geography, and role in the community. Groups represented a range of populations, including seniors, youth, parents, Spanish- and Portuguese-speaking residents, homeless residents, and social and health service professionals. A list of the types of focus groups conducted, as well as a list of the community organizations that helped to organize the focus groups can be found in Appendix B.

A semi-structured focus group guide was used across all focus groups to ensure consistency in the topics covered. Participants for the focus groups were recruited by and discussions were led by community partners with the goal of engaging a cross-section of residents and leaders.

In addition to the focus groups conducted specifically for the CHA, related qualitative data conducted for other similar initiatives were also incorporated into the CHA dataset. For example, the MetroWest Health Foundation undertook a strategic planning process in late 2012. As part of this effort, 51 key informant interviews were conducted with stakeholders and leaders in the MetroWest region. Additionally, focus groups with African American and Asian residents were conducted in late 2012 as part of a health care disparities initiative. To build off of earlier projects, qualitative data from both of these processes were included in this CHA.

Analyses

The secondary data, qualitative data from interviews and focus groups, and survey data were synthesized and integrated into this community health assessment report. 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 MetroWest region. Selected paraphrased quotes – without personal identifying information – are presented in the narrative of this report to further illustrate points within topic areas.

For the survey data, frequencies and cross-tabulations by town grouping were conducted using SPSS statistical software, Version 21. In most instances, response options from the survey were collapsed for ease of interpretation.

Limitations

As with all research efforts, there are several limitations related to the assessment's research methods that should be acknowledged.

Secondary Data

It should be noted that for the secondary data analyses, in several instances, county-level data could not be disaggregated into municipalities. Additionally, secondary data sources are not consistent with each other in the most recent year that data are available. Furthermore, 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. Despite these limitations, most of the self-report surveys here benefit from large sample sizes and repeated administrations, enabling comparison over time.

MetroWest Community Health Assessment Survey

Another limitation is the sampling methodology used by the CHA survey. This survey used a convenience sample rather than a random or probability sampling methodology; therefore, the sample that was yielded may not be representative of the larger population. Demographic characteristics of the survey respondents indicate that the CHA survey respondents were more likely to be older and more educated than the population overall. Additionally, because this was an online survey, respondents needed to have Internet accessibility to complete it. While the survey was available in Spanish and Portuguese and efforts were made to disseminate the survey via community-based organizations that work with lower income populations, the survey sample tended to skew higher educated, consistent with most online surveys.

Focus Groups

While the focus groups conducted for this assessment provide valuable insights, results are not statistically representative of a larger population due to non-random recruiting techniques and a small sample size. Recruitment for focus groups was conducted by community organizations, and participants were those individuals already involved in community programming. Due to 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. In addition, organizations did not exclude participants if they did not live in one of the communities that were the focus of this assessment, therefore participants in a specific community's focus group might not necessarily live in that area, although they did spend time there through the organization. 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

This section describes the population of the MetroWest region. Numerous factors are associated with the health of a community including what resources and services are available (for example, safe green space, access to healthy foods, transportation options) as well as who lives in the community. While individual characteristics such as age, gender, race, and ethnicity have an impact on people's health, the distribution of these characteristics across a community is also critically important and can affect the number and type of services and resources available as well as residents' access to them.

Population

The 22 communities comprising the MetroWest region vary by size, growth patterns, wealth, and diversity of residents. In 2011, the total population of the region was estimated to be 385,901, up 3.1% from 2000 (374,478). The area is comprised of communities across several counties including Middlesex County, Norfolk County, and Worcester County.

The community of Framingham is the largest town, comprising 17.6% of the region's population in 2011 (Table 4). The next largest towns in the area, Marlborough and Natick, comprised 9.7% and 8.5% of the service area's total population, respectively. The smallest community, Sherborn had a population of 4,102 in 2011. The town that reported the largest growth since 2000 was Ashland (+11.1%), followed by Hopkinton and Southborough (+10.1%), while Maynard experienced the largest decrease in population size (-3.4%) over the last decade.

Table 4: Population Change in Massachusetts and MetroWest Communities, 2000 and 2011

Geographic Location	2000 Population	2011 Population	% Change 2000 to 2011
Massachusetts	6,349,097	6,512,227	2.6
Ashland	14,674	16,305	11.1
Framingham	66,910	67,844	1.4
Foxborough	16,246	16,734	3.0
Holliston	13,801	13,512	-2.1
Hopkinton	13,346	14,691	10.1
Hudson	18,113	18,845	4.0
Marlborough	36,255	38,087	5.1
Maynard	10,433	10,083	-3.4
Medfield	12,273	12,004	-2.2
Millis	7,902	7,852	-0.6
Natick	32,170	32,729	1.7
Norfolk	10,460	11,151	6.6
Northborough	14,013	14,180	1.2
Plainville	7,683	8,176	6.4
Sherborn	4,200	4,102	-2.3
Southborough	8,781	9,671	10.1
Stow	5,902	6,488	9.9
Sudbury	16,841	17,482	3.8

Geographic Location	2000 Population	2011 Population	% Change 2000 to 2011
Walpole	22,824	23,862	4.5
Wayland	13,100	12,939	-1.2
Westborough	17,997	18,285	1.6
Wrentham	10,554	10,879	3.1

DATA SOURCE: U.S. Department of Commerce, Bureau of the Census, 2000 Census and American Community Survey 5-Year Estimates, 2007-2011

Age Distribution

Focus group participants described the MetroWest region as multi-age including a combination of young families, middle age persons, and seniors. However, they did note that there were some differences across communities. Natick was perceived to have a larger proportion of families with young children, while Hudson was described as having a larger senior population. However, quantitative data reveal that other communities actually have larger percentages of young children and seniors.

Quantitative data indicate that of the 22 communities in the region, Hopkinton (32.6%) and Sudbury (32.4%) had the highest proportions of youth under age 18 years, which was higher than the state average (21.8%) (Table 5). In fact, only Framingham and Marlborough had youth populations smaller than the state average (21.2% and 20.8%, respectively). Wayland had the highest proportion of residents age 65 and over (17.4%) while Hopkinton had the lowest (8.1%). The largest proportion of the populations in each of the towns is between the ages of 45 to 64 years.

Table 5: Age Distribution by Massachusetts and MetroWest Communities, 2007-2011

Geographic Location	Under 18 yrs old	18 to 24 yrs old	25 to 44 yrs old	45 to 64 yrs old	65 yrs old and over
Massachusetts	21.8%	10.3%	26.8%	27.4%	13.7%
Ashland	25.4%	6.1%	27.0%	31.2%	10.3%
Framingham	21.2%	9.6%	30.4%	25.5%	13.3%
Foxborough	24.4%	7.7%	25.8%	29.2%	12.9%
Holliston	26.1%	5.6%	20.7%	34.8%	12.7%
Hopkinton	32.6%	5.1%	23.5%	30.8%	8.1%
Hudson	22.6%	5.5%	27.8%	29.7%	14.5%
Marlborough	20.8%	7.0%	32.4%	27.5%	12.4%
Maynard	22.8%	5.9%	29.2%	29.5%	12.7%
Medfield	29.9%	6.0%	19.1%	35.8%	9.2%
Millis	23.7%	5.0%	25.7%	34.1%	11.6%
Natick	24.5%	5.1%	27.5%	28.9%	14.0%
Norfolk	23.4%	6.2%	27.5%	34.1%	8.7%
Northborough	27.1%	7.0%	23.5%	31.0%	11.4%
Plainville	24.1%	8.2%	27.9%	27.1%	12.6%
Sherborn	28.6%	5.7%	17.4%	34.7%	13.8%
Southborough	29.8%	4.0%	22.3%	32.6%	11.3%
Stow	26.0%	4.3%	25.4%	31.7%	12.5%
Sudbury	32.4%	4.7%	18.5%	32.1%	12.3%

Geographic Location	Under 18 yrs old	18 to 24 yrs old	25 to 44 yrs old	45 to 64 yrs old	65 yrs old and over
Walpole	24.6%	6.0%	23.9%	30.1%	15.5%
Wayland	26.4%	5.1%	15.9%	35.3%	17.4%
Westborough	26.4%	6.3%	25.8%	28.1%	13.3%
Wrentham	25.4%	6.1%	22.6%	35.4%	10.6%

DATA SOURCE: U.S. Department of Commerce, Bureau of the Census, American Community Survey 5-Year Estimates, 2007-2011

Racial and Ethnic Diversity

> *"Some [communities] are not very diverse culturally or economically."*—Community resident focus group participant
>
> *"There are a range of immigrants—from those who are well-established to those who are more recent and in need of a lot of help."*—Organizational staff focus group participant

Residents reported that MetroWest communities varied in their levels of racial and ethnic diversity*, *but that diversity was seen as a strength of many communities. The communities of Framingham and Marlborough were described as very racially and ethnically diverse. Framingham, in the words of one focus group member, is a *"very diverse [town] with many people with many customs."* Residents reported that both communities have a large number of Brazilians and Spanish-speaking residents, who contribute to a strong and vibrant Latino culture in those communities. By contrast, focus group members described the communities of Southborough and Natick as largely white and homogenous.

While focus group members recognized the strength that comes from having a diverse population, several members from diverse backgrounds reported experiencing discrimination and racism. They shared that they or family members have experienced bias in social interactions, in interactions with law enforcement, and in health care services. Others commented that community members from different ethnic groups do not necessarily interact with each other, which can create additional challenges.

Table 6 confirms substantial variation in the levels of racial, ethnic, and linguistic diversity across the MetroWest municipalities. The communities of Wrentham, Plainville, Holliston, Hopkinton, Medfield, Foxborough, Stow, Sherborn, Walpole, Millis, Hudson, and Ashland are over 90% non-Hispanic White. Hispanics and Asians comprise the largest proportion of the non-White population in these communities. By contrast, approximately one-third of Framingham's population and over one-fourth of Westborough's population is non-White, with Hispanics comprising 13.6% of the population in Framingham and non-Hispanic Asians comprising 16.9% of the population in Westborough. Lastly, Framingham is the community in the region with the highest proportion of the population self-identifying as Black, at 6.4%.

Table 6: Racial/Ethnic Composition by Massachusetts and MetroWest Communities, 2007-2011

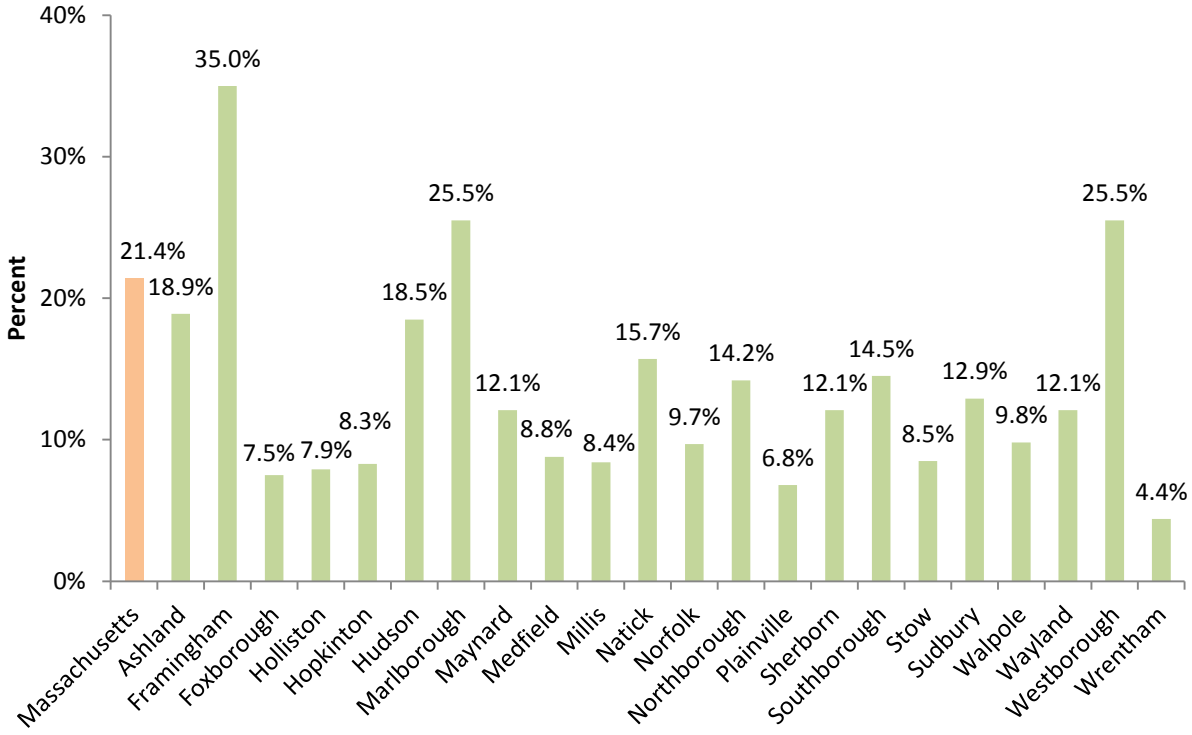
Geographic Location	White	Black	Asian	Hispanic/ Latino	Other
Massachusetts	76.9%	6.1%	5.3%	9.3%	2.4%
Ashland	90.4%	2.5%	4.2%	1.4%	1.5%
Framingham	66.7%	6.4%	7.2%	13.6%	6.1%
Foxborough	92.3%	1.8%	3.9%	1.4%	0.6%
Holliston	93.2%	0.8%	2.6%	1.1%	2.3%
Hopkinton	93.0%	0.0%	4.7%	1.3%	1.0%
Hudson	90.5%	0.5%	2.5%	3.2%	3.3%
Marlborough	79.2%	2.3%	5.6%	9.2%	3.7%
Maynard	88.0%	0.8%	2.7%	6.4%	2.1%
Medfield	92.6%	0.6%	3.0%	2.4%	1.4%
Millis	90.6%	0.0%	5.1%	3.2%	1.1%
Natick	85.4%	2.6%	7.1%	3.0%	1.9%
Norfolk	87.2%	5.8%	1.0%	4.7%	1.3%
Northborough	85.2%	0.6%	7.6%	3.9%	2.7%
Plainville	94.0%	0.8%	2.1%	1.3%	1.8%
Sherborn	90.9%	0.0%	6.1%	2.5%	0.5%
Southborough	82.8%	1.0%	11.9%	1.6%	2.7%
Stow	91.1%	0.4%	3.2%	3.2%	2.1%
Sudbury	88.9%	0.6%	6.0%	1.8%	2.7%
Walpole	90.9%	2.4%	2.8%	3.6%	0.3%
Wayland	87.1%	0.9%	10.2%	0.8%	1.0%
Westborough	72.8%	4.3%	16.9%	4.1%	1.9%
Wrentham	97.4%	1.2%	0.7%	0.6%	0.1%

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

DATA SOURCE: U.S. Department of Commerce, Bureau of the Census, American Community Survey 5-Year Estimates, 2007-2011

Framingham (35.0%), Marlborough (25.5%), and Westborough (25.5%) are the three communities in the MetroWest region with the greatest percent of their populations who speak a language other than English at home (Figure 4). Further, these three communities are the only cities/towns in the region to exceed the percentage in the state. Reflective of this growing diversity in the region, Marlborough Hospital Interpreter Services continues to monitor and expand the number of languages that they cover to meet the needs of their patients. While in the past Portuguese-speaking interpreters have been in the highest demand, the Hospital has reported an increase of 40.0% in Spanish and 123.0% in Other Languages, including Arabic, American Sign Language, Greek, Gujarati, Hindi, Russian, and Vietnamese.

Figure 4: Percent of Population Who Speak Language Other Than English at Home by Massachusetts and MetroWest Communities, 2007-2011



DATA SOURCE: U.S. Department of Commerce, Bureau of the Census, American Community Survey 5-Year Estimates, 2007-2011

SOCIAL AND PHYSICAL ENVIRONMENT

Income and poverty are closely connected to health outcomes. A higher income makes it easier to live in a safe neighborhood with good schools and many recreational opportunities. Higher wage earners are better able to buy medical insurance and medical care, purchase nutritious foods, and obtain quality child care than those earning lower wages. Lower income communities have shown higher rates of asthma, obesity, diabetes, heart disease, and child poverty. Those with lower incomes also experience lower life expectancies.

Income, Poverty, and Employment

> *"The region is expensive."*—Community resident focus group participant
>
> *"There is a diversity of economic levels and people in the community."*—Organizational staff focus group participant

The MetroWest region is economically diverse with some communities considered higher income, while others were considered middle or lower income. In focus groups, Southborough specifically was described as a higher income community, while Northborough was seen as predominantly working class. A higher proportion of lower income individuals and families were reported to live in Framingham, while other communities such as Marlborough were seen as having more economic diversity. Perceptions about the cost of living in the region were mixed—some focus group members reported that living in the region is expensive, while others stated that it was reasonable.

According to the 2011 American Community Survey, household median income in all MetroWest region communities was higher than that for Massachusetts as a whole (Table 7). Eleven communities had a median household income of greater than $100,000, with the highest in Sudbury ($159,713). Framingham had the lowest median household income at $66,047.

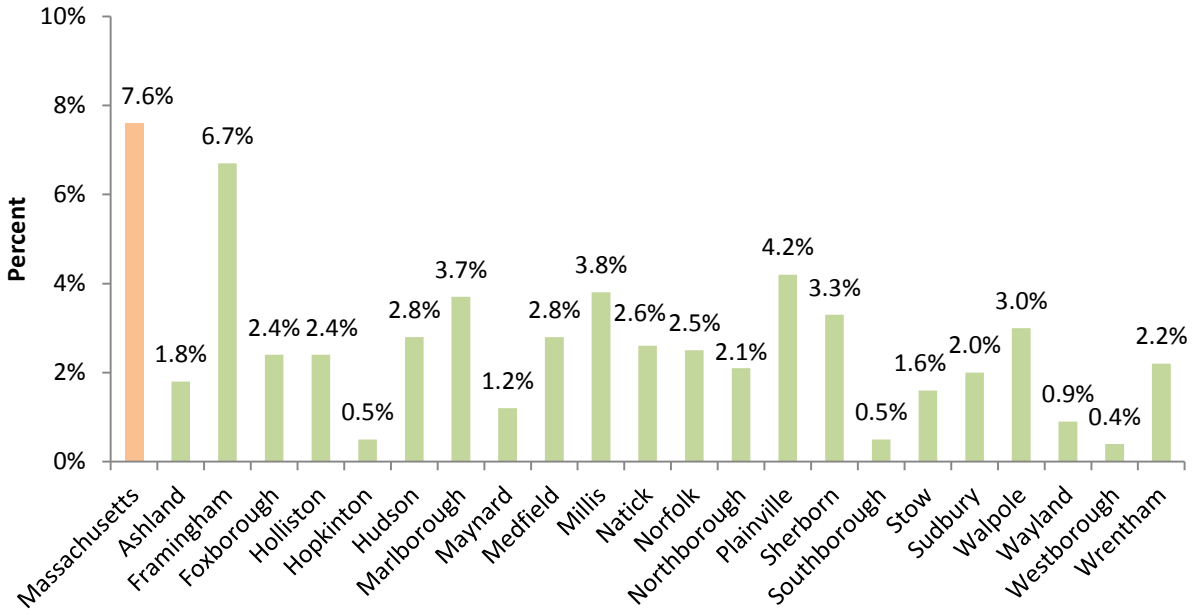
Table 7: **Median Household Income by Massachusetts and MetroWest Communities, 2007-2011**

Geographic Location	US Dollars ($)
Massachusetts	$65,981
Ashland	$93,770
Framingham	$66,047
Foxborough	$92,370
Holliston	$107,374
Hopkinton	$126,350
Hudson	$76,714
Marlborough	$72,853
Maynard	$77,255
Medfield	$128,446
Millis	$90,360
Natick	$90,046
Norfolk	$118,809
Northborough	$104,420
Plainville	$81,371
Sherborn	$152,083
Southborough	$142,520
Stow	$112,130
Sudbury	$159,713
Walpole	$90,763
Wayland	$125,076
Westborough	$99,394
Wrentham	$100,938

DATA SOURCE: U.S. Department of Commerce, Bureau of the Census, American Community Survey 5-Year Estimates, 2007-2011

While the poverty rates across much of the region vary, the percentage of families in poverty in all of the region's communities is lower than that of the state (7.6%) (Figure 5). Among the MetroWest communities, families in Framingham and Plainville had the highest poverty rate (6.7% and 4.2%, respectively). Westborough had the lowest poverty rate at 0.4%.

Figure 5: Percent of Families below Poverty Level by Massachusetts and MetroWest Communities, 2007-2011



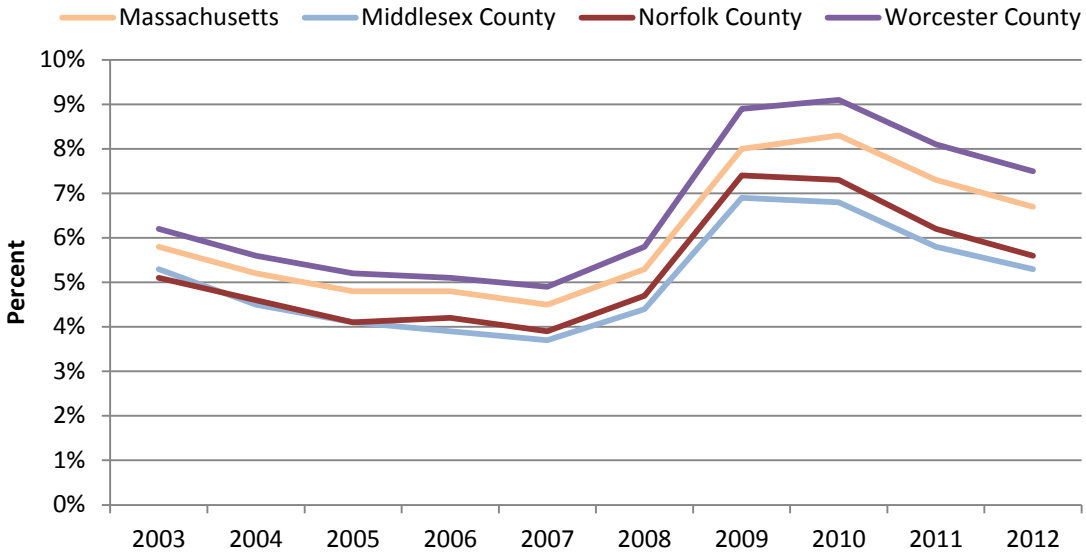
DATA SOURCE: U.S. Department of Commerce, Bureau of the Census, American Community Survey 5-Year Estimates, 2007-2011

As elsewhere, the economic downturn has been felt in MetroWest. Some focus group members commented that the region lacks jobs. As one young worker explained, *"[it is] hard to find a job; the economy is still bad."* A few respondents mentioned that a lack of child care in the area is a barrier to employment. Others disagreed about the challenges of the economy and noted that even as low wage workers, they and their friends did not have trouble finding work.

Figure 6 illustrates the annual unemployment rate data by county from 2003 to 2012 by state and county. These data indicate that Worcester County has been experiencing higher unemployment than the state, while Norfolk County and Middlesex County have had continuously lower rates of unemployment. However, over time the state and all three counties experienced parallel ebbs and flows in unemployment. The unemployment rate was highest in Norfolk County, in Worcester County, and across the state in 2010 (7.3%, 9.1%, and 8.3%, respectively. Middlesex County reported its highest unemployment rate in 2009 (6.9%).

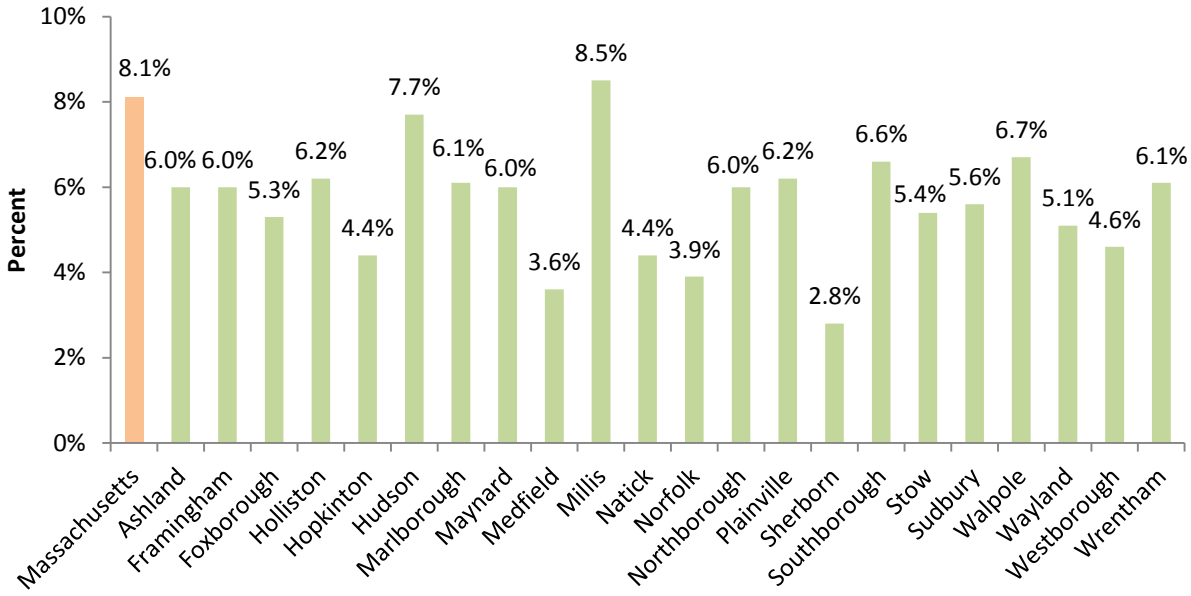
As shown in Figure 7, the percent of residents unemployed by community aggregated 2007-2011 was highest in Millis (8.5%), which was the only community higher than Massachusetts overall (8.1%). Sherborn had the lowest percentage of population unemployed (2.8%) during this time period.

Figure 6: Annual Unemployment Rate by Massachusetts and County, 2003-2012



DATA SOURCE: United States Department of Labor, Bureau of Labor Statistics, Local Area Unemployment Statistics, 2003-2013

Figure 7: Percent of Population Age 16+ years Unemployed by Massachusetts and MetroWest Communities, 2007-2011



DATA SOURCE: U.S. Department of Commerce, American Community Survey 5-Year Estimates, 2007-2011

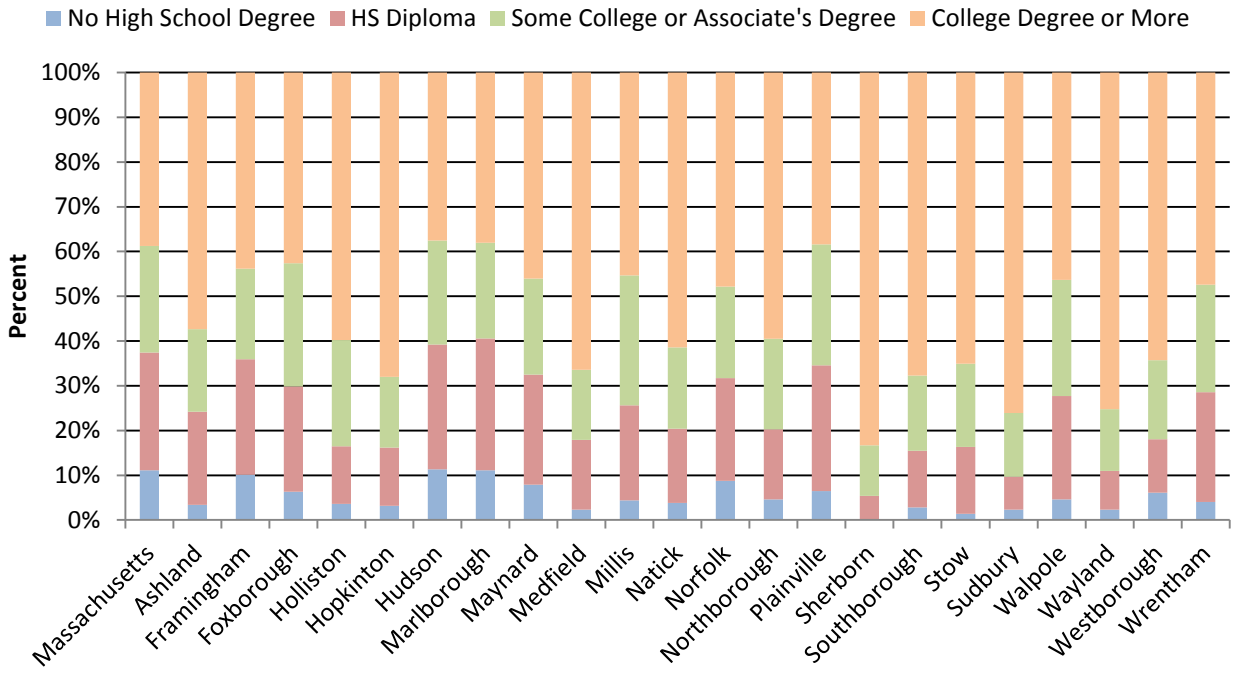
Educational Attainment

Overall, focus group members generally viewed the schools in the MetroWest region as high quality and promoting academic achievement. Focus group participants overall noted that the region had high quality schools, although this viewpoint was more pronounced in higher income areas. Concerns about education and the school system were more often expressed by non-English speaking focus group

members who worried about the quality of education their children were receiving and the low level of parent involvement in the schools.

Quantitative results show high educational attainment among many of the area's communities (Figure 8). The proportion of residents with a college degree or more is higher in 19 of the 22 MetroWest communities than for the state overall (38.7%), and highest in Sherborn (83.3%) and Sudbury (76.1%). The proportion of adults with less than a high school diploma is very low in these towns as well –only 0.2% in Sherborn and 2.3% in Sudbury. Plainville, Marlborough, and Hudson however, have slightly lower levels of educational attainment than the state.

Figure 8: Educational Attainment of Adults 25 Years and Older by Massachusetts and MetroWest Communities, 2007-2011



DATA SOURCE: U.S. Department of Commerce, Bureau of the Census, American Community Survey 5-Year Estimates, 2007-2011

Urbanicity

> *"MetroWest has a small town feel, though it has grown a lot."*—Community resident focus group participant
>
> *"[This area is] Uniquely positioned geographically which lends itself to growth."—Organizational staff focus group participant*

According to focus group members, the 22 towns comprising MetroWest differ somewhat in their geography and environment, with some communities seeming more vibrant, while others were considered fragmented and struggling. For example, Southborough, Hudson, and Millis were perceived as small, *"tight knit"* towns. Northborough was described as residential with a number of retail establishments including a large mall. Framingham was described as an area with a mix of old and new neighborhoods, convenient to many things, with a strong community feel. However, some areas of Framingham were described by focus group members as having issues around litter containment in the neighborhoods and empty lots and buildings. Marlborough was generally described as a pleasant place

to live –as one focus group member shared, *"Marlborough is clean. The streets are in good condition. Pleasant when you come in."*

Housing

> *"More affordable housing is needed."—Organizational staff focus group participant*
>
> *"[There is an] epidemic level of homelessness."*—Community resident focus group participant

Focus group respondents reported that housing in the MetroWest region is expensive and a challenge for many residents; they noted that the economic downturn in recent years has exacerbated these challenges. However, quantitative data reveal that housing affordability varies widely in the region. As shown in Table 8, median monthly mortgage expenditures or monthly rental costs are higher for several towns in the region than for the state as a whole. Monthly mortgage costs range from $2,139/month in Hudson to $3,899/month in Sherborn. This compares to $2,145/month on average for the state. Monthly rental costs range from $675/month in Sudbury to over $2,000/month in Sherborn. This compares to $1,037/month on average for the state.

Table 8: **Monthly Median Housing Costs for Owners and Renters by Massachusetts and MetroWest Communities, 2007-2011**

Geographic Location	Monthly Rent Costs ($)	Monthly Mortgage Costs ($)
Massachusetts	$1,037	$2,145
Ashland	$1,095	$2,433
Framingham	$1,094	$2,362
Foxborough	$1,153	$2,279
Holliston	$885	$2,478
Hopkinton	$1,133	$3,049
Hudson	$1,104	$2,139
Marlborough	$1,064	$2,220
Maynard	$1,045	$2,259
Medfield	$933	$3,075
Millis	$1,234	$2,267
Natick	$1,214	$2,440
Norfolk	$817	$2,670
Northborough	$1,049	$2,420
Plainville	$1,090	$2,210
Sherborn	$2,000	$3,899
Southborough	$1,268	$2,849
Stow	$1,354	$2,782
Sudbury	$675	$3,390
Walpole	$1,239	$2,526
Wayland	$1,167	$3,199
Westborough	$1,311	$2,726
Wrentham	$944	$2,434

DATA SOURCE: U.S. Department of Commerce, Bureau of the Census, American Community Survey 5-Year Estimates, 2007-2011

While absolute housing costs are important to consider, they do not necessarily speak to how housing prices compare to the overall cost of living. Table 9 illustrates the percentage of renters and owners whose housing costs comprise 35% or more of their household income. Generally, this proportion is lower for home owners with a mortgage than for renters. Wayland has the highest proportion of its population that spends 35% or more of household income on housing costs (33.4%), followed by Framingham (31.7%), and Millis (31.0%), which are higher than the statewide value (30.6%). Among renters, Ashland (44.7%) and Framingham (40.6%) have the largest proportion whose housing costs are 35% or more of their household income, exceeding the state value of 40.4%.

Table 9: Percent of Residents Whose Housing Costs are 35% or More of Household Income by Massachusetts and MetroWest Communities, 2007-2011

Geographic Location	% Renter	% Owner with Mortgage
Massachusetts	40.4%	30.6%
Ashland	44.7%	23.8%
Framingham	40.6%	31.7%
Foxborough	31.9%	26.8%
Holliston	27.4%	24.0%
Hopkinton	37.0%	20.6%
Hudson	32.7%	26.1%
Marlborough	34.1%	27.9%
Maynard	26.9%	28.9%
Medfield	32.8%	23.6%
Millis	29.2%	31.0%
Natick	32.5%	27.0%
Norfolk	37.9%	20.8%
Northborough	36.8%	20.0%
Plainville	28.0%	25.1%
Sherborn	16.8%	26.8%
Southborough	25.9%	22.1%
Stow	18.7%	24.3%
Sudbury	30.2%	21.6%
Walpole	36.8%	29.2%
Wayland	33.7%	33.4%
Westborough	22.6%	26.6%
Wrentham	30.5%	25.5%

DATA SOURCE: U.S. Department of Commerce, Bureau of the Census, American Community Survey 5-Year Estimates, 2007-2011

Transportation

> *"The [public] transportation system in Framingham is inadequate."*—Community resident focus group

> *"Transportation is a big issue– if you do not qualify for The Ride, it can be very expensive to go to medical appointments"*—Key informant interview

Transportation emerged in focus groups as a key concern for the region with particular concerns that public transportation was not accessible in some communities, and affordability was problematic for seniors and low income residents. In addition to the CHA focus groups, transportation was also identified as a key concern for the region during a needs assessment process carried out as part of the MetroWest Health Foundation's strategic planning process.

Accessibility of public transportation options was one specific concern. Although focus group members from Framingham reported that public transportation exists in the community (The RIDE, ITN, Busy Bee), residents reported that most other communities (Hudson, Marlborough, Natick) lack public transportation options. Seniors mentioned that transportation offered by senior centers has also been reduced in recent years. According to MetroWest residents, limited hours of operation of some transportation services also limits access for those who need to work earlier or later in the evening. So participants noted that there have been efforts in recent years to address this issue, but concerns still remain. As one focus group member stated, *"it's hard to get around, despite advancements in [public] transportation."*

Affordability of transportation was also noted as a challenge, particularly for seniors and low-income individuals. As one focus group member stated, *"the cost of The RIDE can add up if someone uses it frequently."*

Quantitative data indicate that residents of the MetroWest catchment area have a higher percentage of access to a vehicle than at the state level (Table 10). That is, percentages of individuals with access to a vehicle for commuting to work (alone) varies from 74.3% in Wayland to 86.2% in Wrentham, compared to 72.3% across the state. Residents in Norfolk and Medfield are the most likely among the MetroWest catchment area to take public transit when commuting to work (13.1% and 9.8%, respectively).

Table 10: Means of Transportation to Work for Workers Aged 16+ by Massachusetts and MetroWest Communities, 2007-2011

Geographic Location	Car, truck, or van (alone)	Car, truck, or van (carpool)	Public Transit (excluding Taxis)	Walk
Massachusetts	72.3%	8.2%	9.1%	4.6%
Ashland	80.1%	6.1%	6.2%	1.3%
Framingham	74.9%	12.1%	3.6%	3.8%
Foxborough	81.4%	6.6%	4.2%	1.7%
Holliston	83.1%	6.1%	2.6%	0.8%
Hopkinton	80.0%	2.4%	6.8%	2.1%
Hudson	84.1%	8.2%	0.5%	3.2%
Marlborough	77.7%	13.8%	1.7%	2.8%
Maynard	85.0%	4.9%	1.0%	3.3%
Medfield	74.9%	2.3%	9.8%	1.5%
Millis	85.4%	3.0%	2.5%	2.4%
Natick	80.1%	4.9%	7.3%	1.1%
Norfolk	74.8%	5.3%	13.1%	0.5%
Northborough	84.5%	5.5%	1.8%	1.6%
Plainville	85.7%	5.7%	3.5%	1.4%
Sherborn	77.6%	4.5%	3.2%	0.0%
Southborough	85.8%	3.9%	3.6%	1.9%
Stow	84.6%	4.7%	1.6%	0.1%
Sudbury	80.8%	5.6%	2.4%	2.3%
Walpole	79.6%	6.3%	8.6%	0.6%
Wayland	74.3%	8.1%	3.5%	2.6%
Westborough	78.4%	8.4%	2.7%	1.8%
Wrentham	86.2%	4.0%	3.9%	0.7%

DATA SOURCE: U.S. Department of Commerce, Bureau of the Census, American Community Survey 5-Year Estimates, 2007-2011

Crime and Safety

> *"Safety is a factor in central Marlborough. Vandalism is a problem."*—Community resident focus group participant
>
> *"Kids don't have money, so they steal what they want."*—Community resident focus group participant
>
> *"Certain parts of some communities feel unsafe."*—Organizational staff focus group participant

MetroWest residents voiced concerns about crime in the region, which many attributed to the downturn in the economy. Residents specifically mentioned robberies and gang-related violence as two areas that they have heard much more about recently. Domestic violence was also singled out as an area of concern.

Quantitative data show substantial variation in crime rates across the MetroWest region (Table 11). Among the communities for which crime rate data were available, Marlborough had the highest violent crime rate (472.5 per 100,000 population) and was the only community to exceed the state rate of 428.4 per 100,000 population. Though each of the 22 MetroWest communities had a lower property crime rate than the state (2258.7 per 100,000 population), Wayland had the lowest at 214.2 per 100,000 population, while Plainville had the highest 2044.7 per 100,000 population).

Table 11: Offenses Known to Law Enforcement per 100,000 Population by Massachusetts and MetroWest Communities, 2011

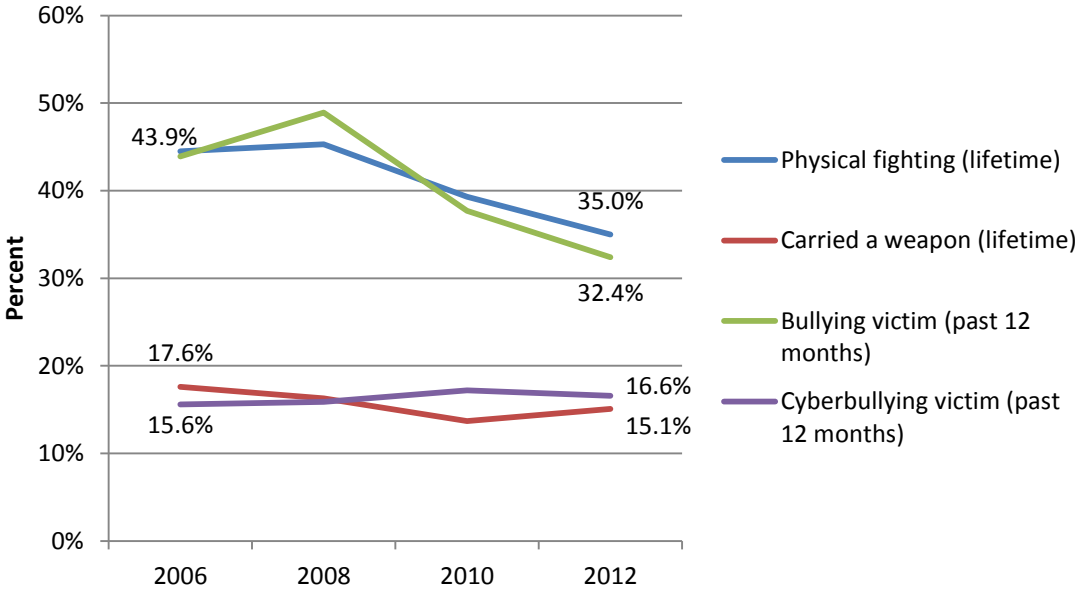
Geographic Location	Violent Crime Rate*	Property Crime Rate**
Massachusetts	428.4	2258.7
Ashland	113.8	958.4
Framingham	272.1	1638.2
Foxborough ǂ	-	-
Holliston	44.0	623.6
Hopkinton	0.0	632.7
Hudson	52.1	1089.7
Marlborough	472.5	1995.7
Maynard	245.9	914.6
Medfield	57.9	471.2
Millis ǂ	-	-
Natick	135.5	1918.3
Norfolk	8.9	708.3
Northborough	105.3	912.9
Plainville	132.3	2044.7
Sherborn	120.7	723.9
Southborough	20.4	702.1
Stow	60.3	588.2
Sudbury	11.3	720.4
Walpole	86.7	1457.7
Wayland	15.3	214.2
Westborough ǂ	-	-
Wrentham	36.3	1814.6

ǂ Crime data were not available for Foxborough, Millis, and Westborough
* Violent crime includes: murder and non-negligent manslaughter; forcible rape; robbery; and aggravated assault
**Property crime includes: burglary; larceny-theft; motor vehicle theft; and arson
DATA SOURCE: Federal Bureau of Investigation (2011), Uniform Crime Reports, Offenses Known to Law Enforcement, by State, by City, 2011

Youth, in particular, are a vulnerable population when it comes to crime, as both victims and perpetrators, and the effects of crime on youth may manifest in negative health outcomes and trauma in the future. Figure 9 and Figure 10 illustrate the percent of students reporting violent behavior or bullying victimization across the MetroWest region. In 2012, 35.0% of middle school students reported that they had engaged in physical fighting at some point in their lifetime, down from 39.3% in 2010. Further, while 13.7% of middle school students reported carrying a weapon with them at some point in their lifetime in 2010, 15.1% reported the same in 2012. By contrast, almost one-third of middle school

students reported being the victim of bullying in the past year (32.4%), while 16.6% reported cyberbullying victimization.

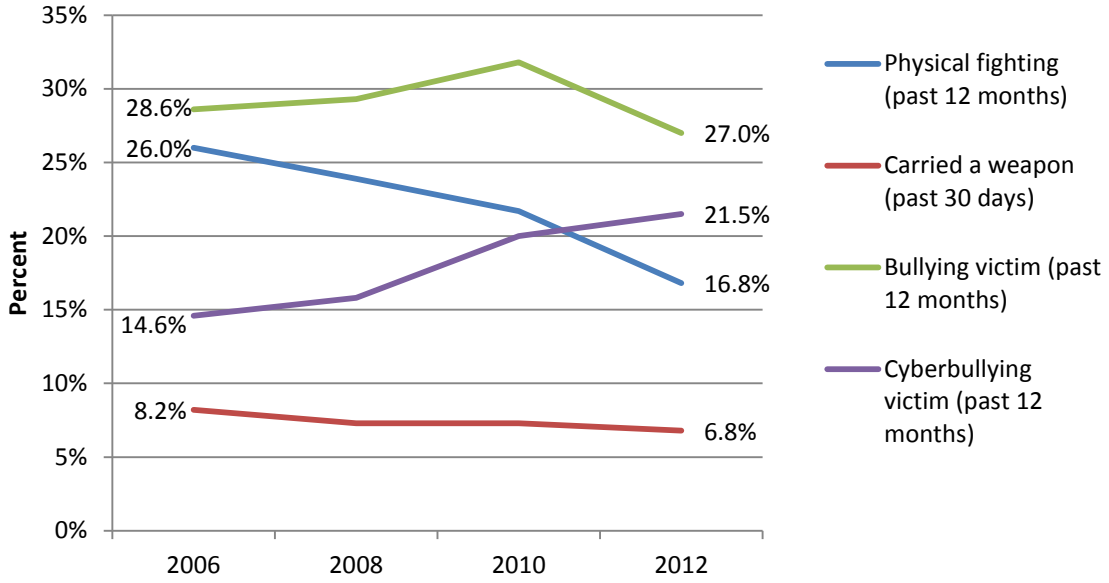
Figure 9: Percent of Middle School Students (Grades 6-8) Reporting Violent Behavior or Bullying Victimization in MetroWest Health Foundation Service Area*, 2006-2012



DATA SOURCE: Education Development Center, Inc., Health and Human Development Divisions, MetroWest Adolescent Health Survey, Middle School Report, 2012
*It should be noted that the MetroWest Adolescent Health Survey is conducted with a census of adolescents from the MetroWest Health Foundation service area, which mainly overlaps but includes some slightly different towns than the focus for this CHA initiative.

The patterns reported among high school students varied somewhat from that of the middle school students (Figure 10). While 16.8% of high school students reported engaging in physical fighting over the past 12 months in 2012, which was down from 21.7% in 2010, 6.8% reported carrying a weapon with them. In the past year, while 27.0% of high school students reported being the victim of in-person bullying, there has been an overall downward trend from 26.0% in 2006. By contrast, cyberbullying victimization among high school students has seen an increase from 14.6% in 2006 to 21.5% in 2012.

Figure 10: Percent of High School Students (Grades 9-12) Reporting Violent Behavior or Bullying Victimization in MetroWest Health Foundation Service Area*, 2006-2012



DATA SOURCE: Education Development Center, Inc., Health and Human Development Divisions, MetroWest Adolescent Health Survey, High School Report, 2012
*It should be noted that the MetroWest Adolescent Health Survey is conducted with a census of adolescents from the MetroWest Health Foundation service area, which mainly overlaps but includes some slightly different towns than the focus for this CHA initiative.

Facilitator and Barriers of the Social and Physical Environment

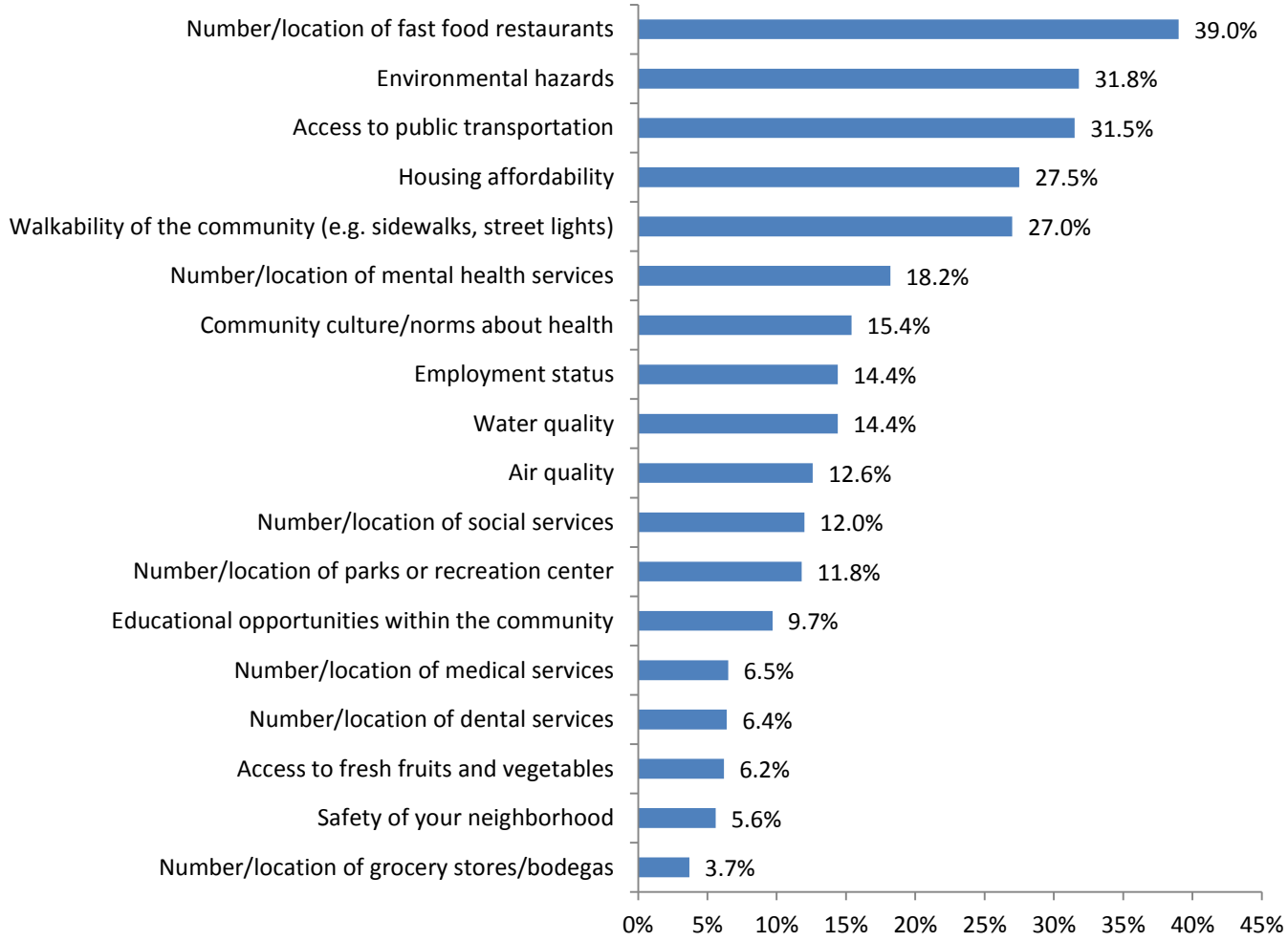
As discussed in more detail later in this section, survey respondents noted that many facilities and resources in their community make it easier to be healthy, while issues around transportation, the built environment, and the prevalence of fast food restaurants challenge community health. Figure 11 shows that survey respondents in the MetroWest catchment area cited the location and availability of the following as the services and resources in their community that make it easier to be healthy: access to fresh fruits and vegetables (79.3% of respondents), neighborhood safety (73.8%), medical services (61.3%), parks or recreation centers (60.7%), and dental services (59.6%)

Figure 11: Percent CHA Survey Respondents Citing Community Aspects that Make it Easier to be Healthy, 2013

DATA SOURCE: MetroWest Region Community Health Assessment Survey, 2013

Top factors that survey respondents believed made it harder to be healthy in their community included the number/location of fast food restaurants (39.0% of respondents), environmental hazards (e.g., hazardous waste sites, well water concerns) (31.8%), access to public transportation (31.5%), housing affordability (27.5%), and walkability of the community (27.0%) (Figure 12).

Figure 12: Percent Survey Respondents Citing Community Aspects that Make It Harder to be Healthy, 2013

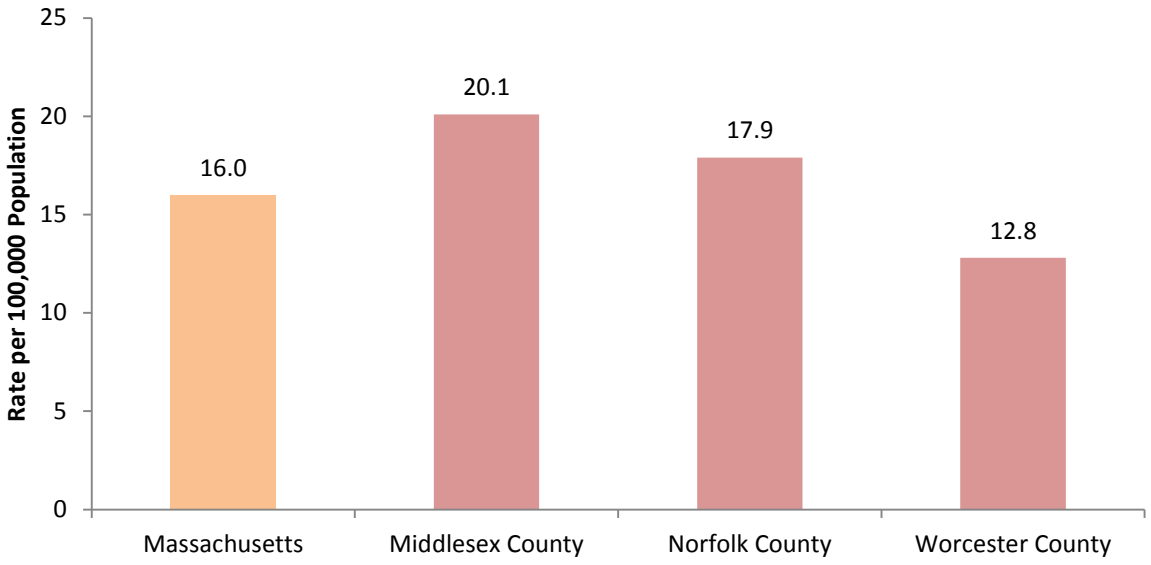


Environment around Healthy Foods and Recreation

Focus group members generally spoke positively about their surroundings, noting that the many of the communities in the region have parks and recreational facilities. Callahan State Park and Cushing Memorial Park in Framingham were specifically mentioned. Figure 13 represents the rate of recreational facilities per 100,000 population in Massachusetts and by county. According to the University of Wisconsin Population Health Institute's County Health Rankings, recreational facilities are defined as establishments primarily engaged in operating fitness and recreational sports facilities, featuring exercise and other active physical fitness conditioning or recreational sports activities such as swimming, skating, or racquet sports. The availability of recreational facilities can influence an individual's and a community's choices around engaging in physical activity. The statewide rate of recreational facilities is 16.0 per 100,000 population, but by county there is notable variation in the data. Middlesex County had the highest rate of recreational facilities (20.1 per 100,000 population), which

was nearly twice as many as in Worcester County (12.8 per 100,000 population). Norfolk County had a slightly higher rate of recreational facilities than the state.

Figure 13: Rate of Recreational Facilities per 100,000 Population by Massachusetts and County, 2010



DATA SOURCE: U.S. Department of Commerce, US Census Bureau, County Business Patterns, as cited by the University of Wisconsin Population Health Institute, County Health Rankings, 2013

Table 12 illustrates limited access to healthy food and recreational parks by state and county. Limited access to recreational parks is defined as the percentage of the population that does not live within half a mile of a park. Again, Worcester County had the highest proportion of limited access to recreational parks (62.0%) as compared to 51.0% statewide. Limited access to healthy food captures the percent of the population who are low-income and do not live close to a grocery store. Worcester County (5.0%) had the highest percent of limited access to healthy food, which exceeded the statewide percent (4.0%).

Table 12: Percent of Population with Limited Access to Healthy Food and Recreational Parks by Massachusetts and County, 2010/2012

	Limited Access to Healthy Food*	Limited Access to Recreational Parks**
Massachusetts	4.0%	51.0%
Middlesex County	3.0%	42.0%
Norfolk County	4.0%	50.0%
Worcester County	5.0%	62.0%

NOTE: Limited access to healthy foods captures the proportion of the population who are low income and do not live close to a grocery store. Living close to a grocery store is defined differently in rural and nonrural areas; in rural areas, it means living less than 10 miles from a grocery store whereas in nonrural areas, it means less than 1 mile. Low income is defined as having an annual family income of less than or equal to 200 percent of the federal poverty threshold for the family size.

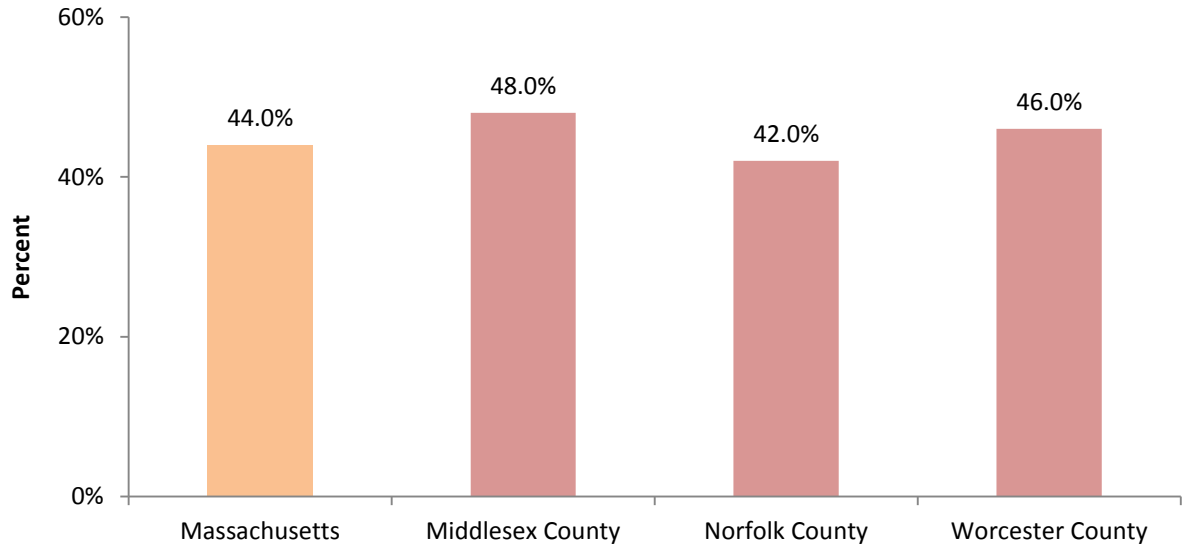
*DATA SOURCE: U.S. Department of Agriculture (USDA), Food Environment Atlas, as cited by the County Health Rankings, 2012

**DATA SOURCE: Centers for Disease Control and Prevention, Environmental Public Heath Tracking Network, as cited by the University of Wisconsin Population Health Institute, County Health Rankings, 2013.

Access to healthy foods (discussed in greater detail in the healthy eating, physical activity, and obesity section) emerged as a concern among participants, with several noting the plethora of fast food

restaurants in the area. Quantitative data illustrate that more than 4 in 10 of all restaurants in MA and in the focused counties are fast food establishments. Norfolk County had the lowest percent of fast food establishments (42.0%) which was lower than the state (44.0%). By contrast, Middlesex County had the highest percent of fast food establishments among the catchment area (48.0%), which was also the highest across all Massachusetts counties.

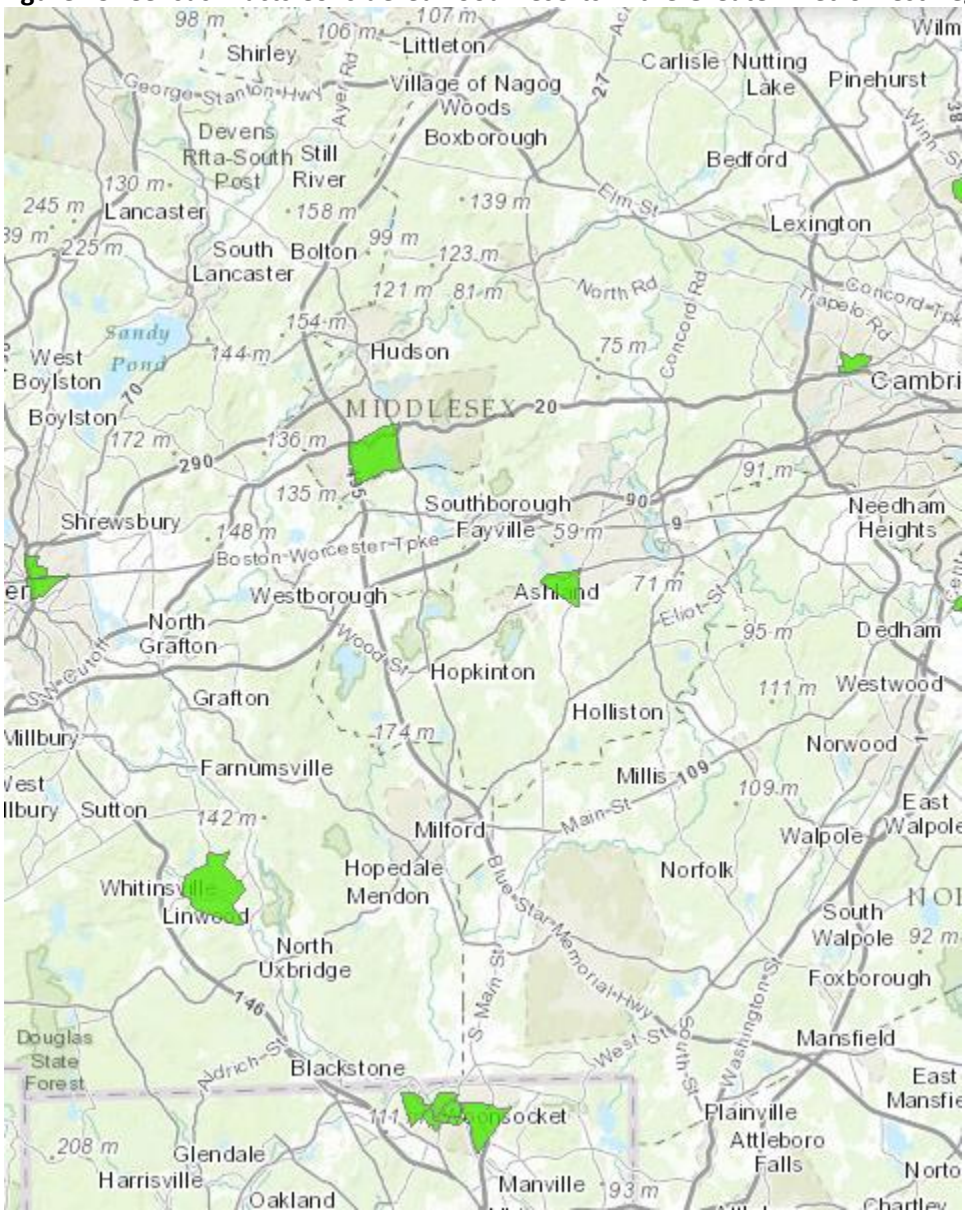
Figure 14: Percent of All Restaurants that are Fast-Food Establishments by Massachusetts and County, 2010



DATA SOURCE: U.S. Department of Commerce, US Census Bureau, County Business Patterns, as cited by the University of Wisconsin Population Health Institute, County Health Rankings, 2010.

Figure 15 presents a map with the census tracts in the region (in green) identified as food deserts. The U.S. Department of Agriculture defines food deserts as low-income neighborhoods (poverty rate at least 20%) where a substantial number of residents do not have easy access to a supermarket or large grocery store (typically within 1 mile for an urban area). As the map shows, areas in and around Ashland and Southborough are considered food deserts by the USDA's definition.

Figure 15: Census Tracts Considered Food Deserts in the Greater MetroWest Region, 2010

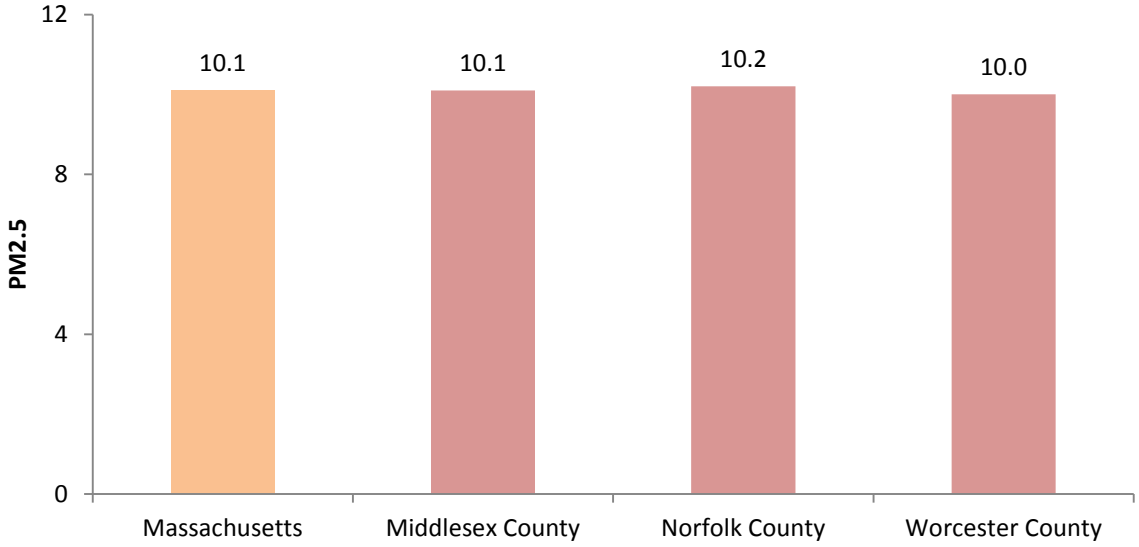


DATA SOURCE: United States Department of Agriculture (USDA), Economic Research Service, Food Desert Locator, using 2010 data, at http://www.ers.usda.gov/data-products/food-desert-locator/go-to-the-locator.aspx, retrieved August 4, 2013.

Environmental Quality

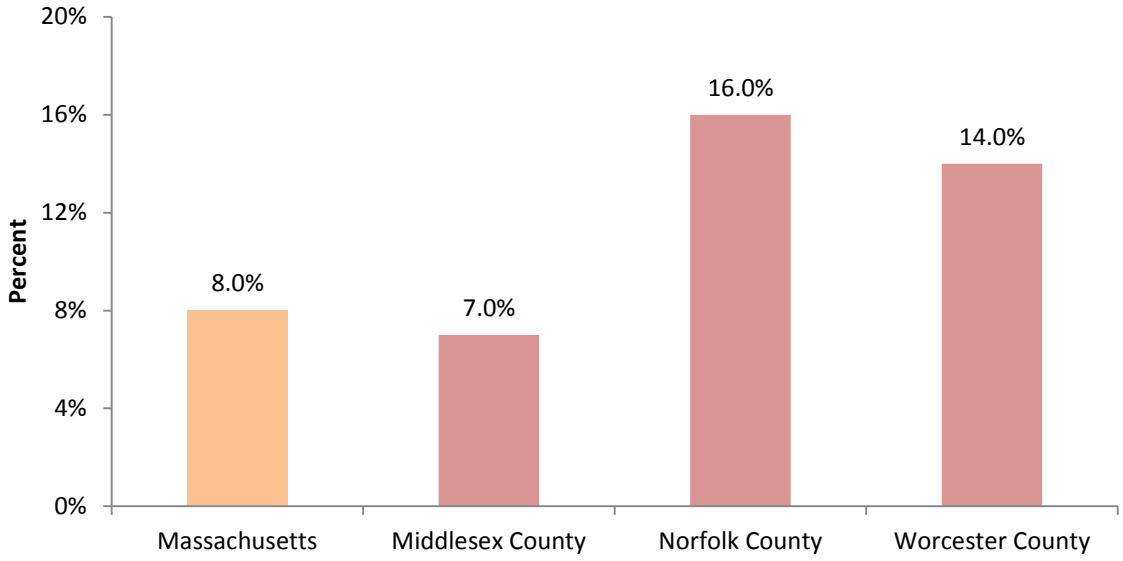
Air quality is a growing concern in the region, particularly as a trigger for asthma which is disproportionately experienced by low-income residents and children. County Health Rankings data show that in 2008, each of the counties had a similar annual number of unhealthy air quality days due to fine particulate matter as the state (10.1) (Figure 16). In Figure 17, there is more variability by state and county in the percent of the population exposed to water exceeding a violation limit -such as Maximum Contaminant Level, Maximum Residual Disinfectant Level and Treatment Technique violations. While Middlesex County (7.0%) had a percent slightly lower than that recorded statewide (8.0%), Norfolk and Worcester Counties experienced percentages that were approximately twice as large as the state (16.0% and 14.0%, respectively).

Figure 16: Average Daily Measure of Fine Particulate Matter by Massachusetts and County, 2008



DATA SOURCE: Centers for Disease Control, CDC Wonder, as cited by the University of Wisconsin Population Health Institute, County Health Rankings, 2008

Figure 17: Percent of Population Exposed to Water Exceeding a Violation Limit during the Past Year by Massachusetts and County, 2012



DATA SOURCE: Safe Drinking Water Information System, as cited by the University of Wisconsin Population Health Institute, County Health Rankings, 2012

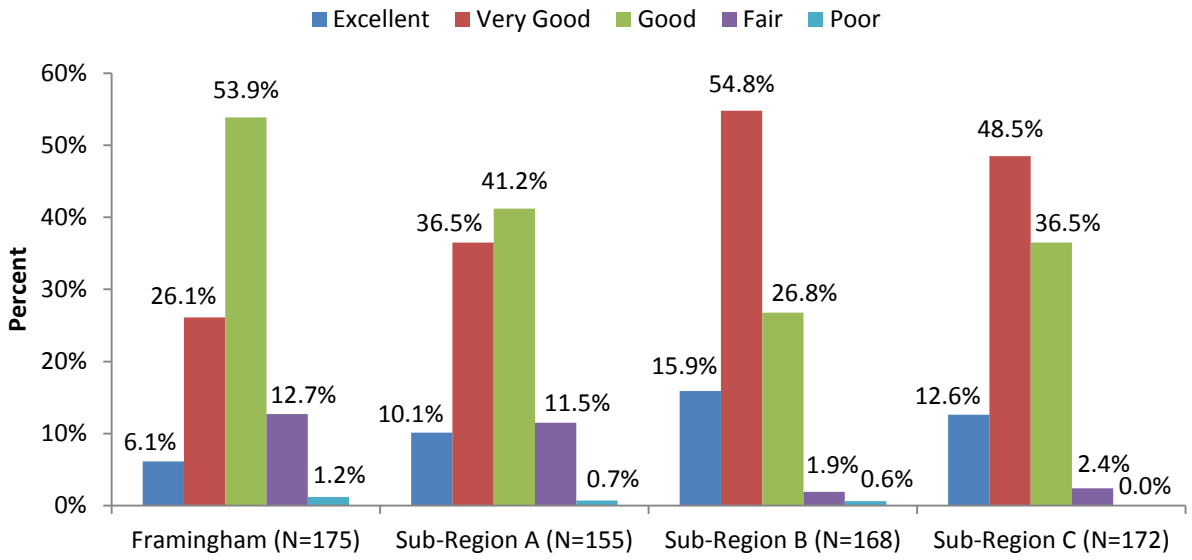
HEALTH OUTCOMES AND BEHAVIORS

This section provides an overview of leading health conditions and behaviors in the MetroWest region by examining self-reported behaviors, incidence, hospitalization, and mortality data in addition to discussing the pressing concerns that residents and leaders identified during focus groups and interviews. Due to data constraints, some measures are available only for some communities and/or by county as a whole, and not individual towns.

Perceived Community and Individual Health Status

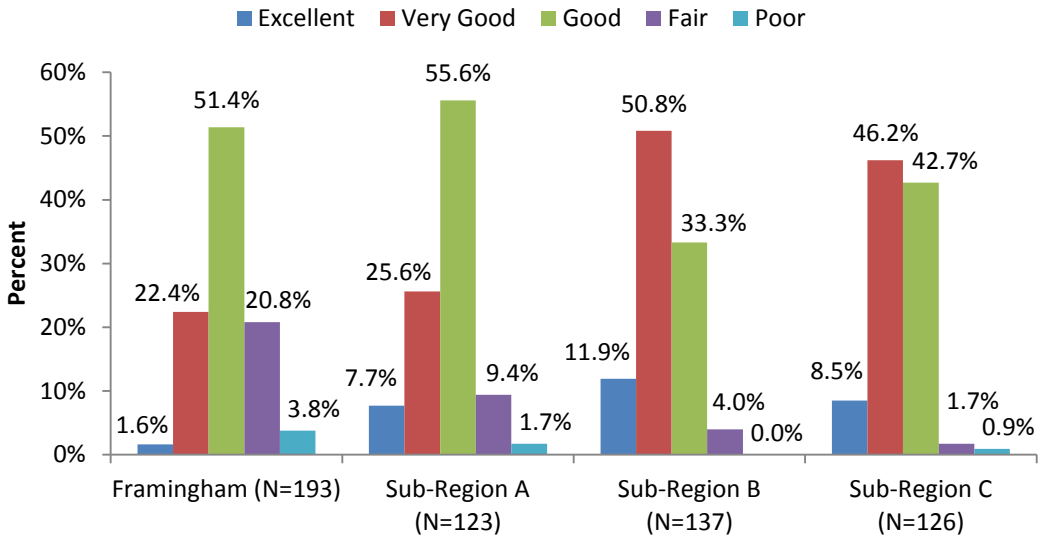
Most residents believed that their community was in overall good health. In the 2013 MetroWest CHA survey, respondents were asked to describe the health of their overall community where they live and where they work. Among respondents across all communities, 92.4% described their health of their resident community as good (39.7%) or excellent/very good (52.7%), while only 7.6% said their community's health was fair or poor (Figure 18). However, responses varied by town or town clusters. Overall, 13.9% of Framingham respondents and 12.2% of respondents Sub-Region A (mainly northern) reported that their community's health was fair or poor, compared to less than 3% in Sub-Region B or Sub-Region C (generally corresponding to communities in the West or South-East, respectively). A similar pattern emerged among those who work in the region, except with stronger numbers in Framingham. Nearly 1 in 4 (24.6%) survey respondents who work in Framingham cited the community's health as a fair or poor (Figure 19).

Figure 18: Perceived Community Health Status of Where Survey Respondents Lives, 2013



DATA SOURCE: MetroWest Region Community Health Assessment Survey, 2013

Figure 19: Perceived Community Health Status of Where Survey Respondents Works, 2013

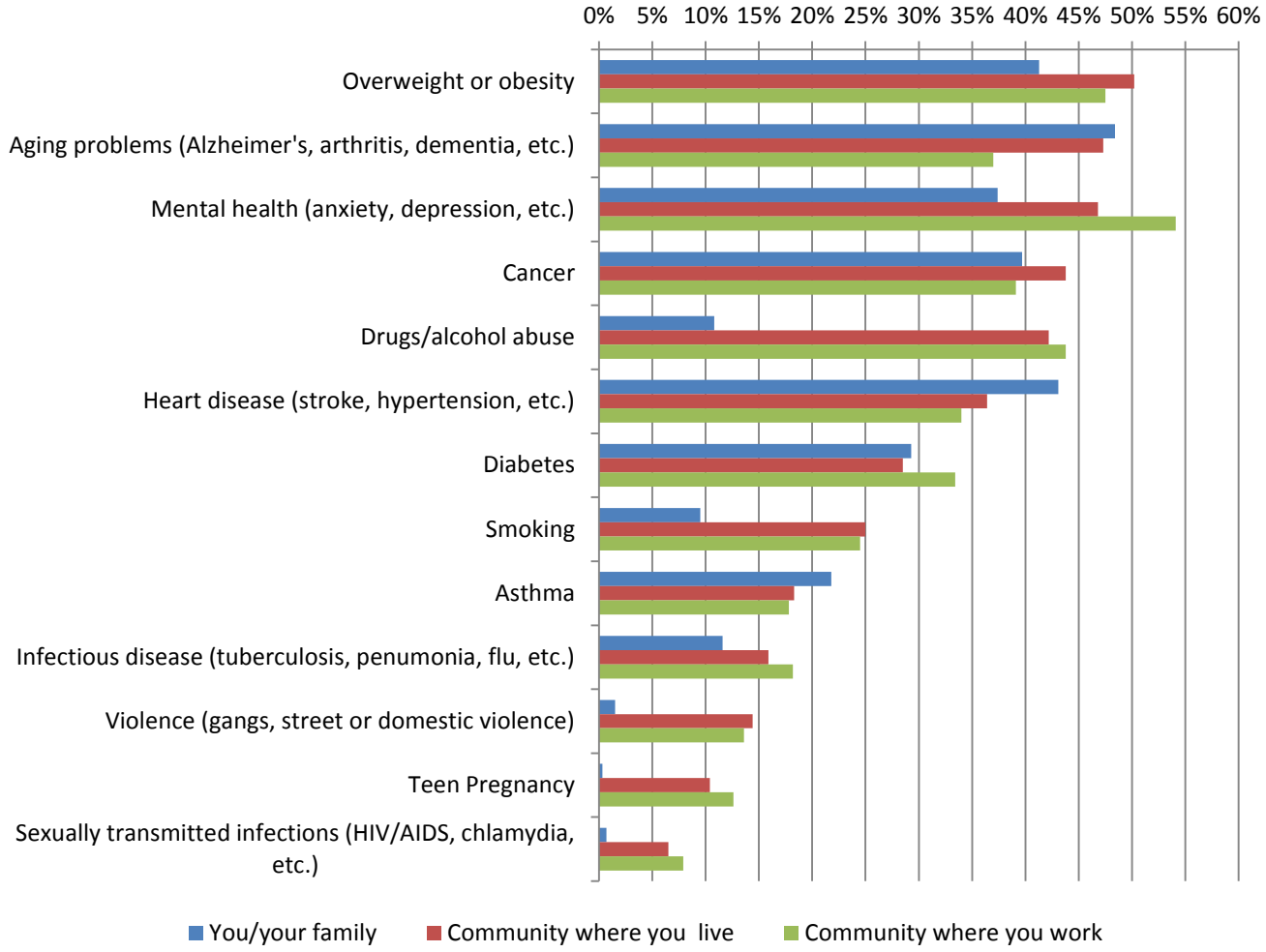


DATA SOURCE: MetroWest Region Community Health Assessment Survey, 2013

Survey respondents were asked about their primary issues that have the largest impact on their community of residence, community of employment, and themselves/their family (Figure 20). There were some differences between respondents' personal health issues and perceived community health issues. While some topics such as mental health and drug and alcohol abuse were key concerns at the community level, other health issues—such as aging, heart disease, and cancer—were more likely to be personal concerns. Overall, top community health concerns across the region for survey respondents were obesity, aging issues, mental health, cancer, and drugs and alcohol abuse.

Several of the health issues that survey respondents noted as having a large impact on community health, namely obesity, mental health, and drugs/alcohol, were also ones that focus group participants commented were more community-oriented. These were the issues that focus group participants cited had far-reaching rippling effects into their community, ranging from impacts on workforce productivity to crime to the community economic vitality.

Figure 20: Top Health Issues with the Largest Impact on the Community of Residence and Employment for the Survey Respondent/Family, 2013



NOTE: "Community where you work" measurements are according to a different sample size (see Appendix B)
NOTE: Represented in descending order by "Community where you live"
DATA SOURCE: MetroWest Region Community Health Assessment Survey, 2013

Top community health concerns differed slightly by specific area. Appendix C provides the detailed breakdown of percentage of survey respondents by geographic area selecting which issues were perceived to affect their community and them personally. Table 13 on the next page shows the top five community issues by geographic sub-group and reveals that the top five community health issues of concern were similar across all sub-sectors in the region, although the specific order varied slightly. Framingham and the Sub-Region C noted overweight and obesity as top community health concerns, with overweight and obesity identified as the number two or three concern among Sub-Region A and Sub-Region B survey respondents. Other top community health issues of concerns were mental health (Sub-Region A survey respondents, generally northern towns) and aging problems (among Sub-Region B survey respondents, generally those in the western part of MetroWest.)

Table 13: Top Health Concerns Perceived to Have Largest Impact on the Community of Residence by Region, 2013

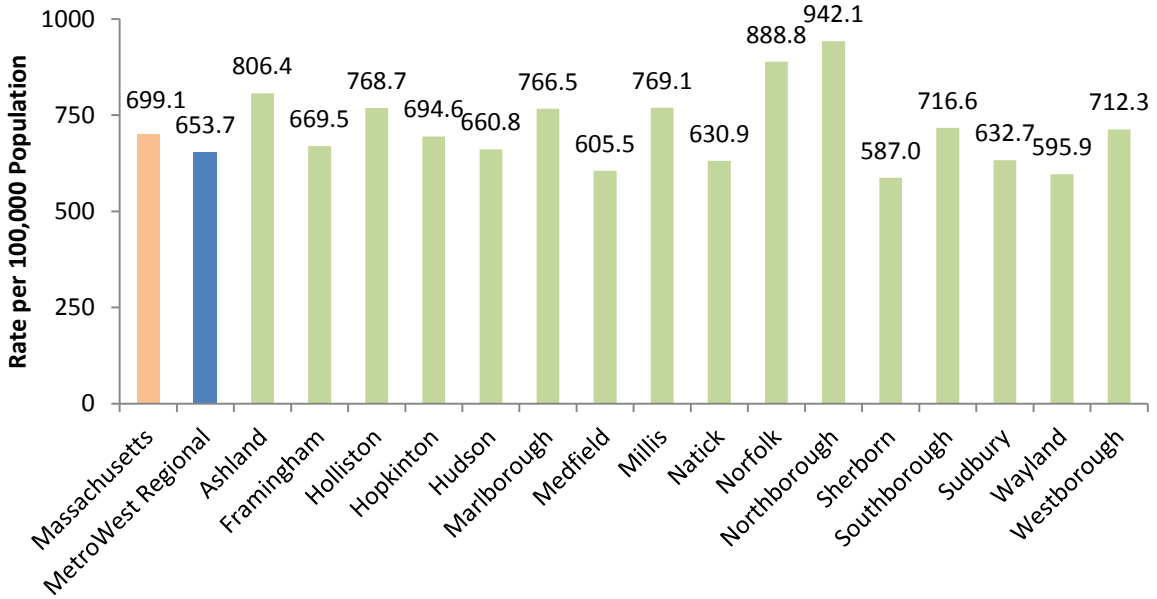
Rank	Framingham	Sub-Region A	Sub-Region B	Sub-Region C
1	Overweight or obesity	Mental health (anxiety, depression, etc.)	Aging problems (Alzheimer's, arthritis, dementia, etc.)	Overweight or obesity
2	Aging problems (Alzheimer's, arthritis, dementia, etc.)	Overweight or obesity	Cancer	Cancer
3	Drugs/alcohol abuse	Drugs/alcohol abuse	Overweight or obesity	Mental health (anxiety, depression, etc.)
4	Mental health (anxiety, depression, etc.)	Aging problems (Alzheimer's, arthritis, dementia, etc.)	Mental health (anxiety, depression, etc.)	Aging problems (Alzheimer's, arthritis, dementia, etc.)
5	Heart disease (stroke, hypertension, etc.)	Cancer	Heart disease (stroke, hypertension, etc.)	Drugs/alcohol abuse

DATA SOURCE: MetroWest Region Community Health Assessment Survey, 2013

Mortality and Hospitalization

Many communities in the MetroWest region had similar or lower mortality and hospitalization rates as the state, although some communities experienced disproportionately higher rates. When taking age into account, the communities of Ashland, Holliston, Marlborough, Millis, Norfolk, Northborough, Southborough, and Westborough all have higher age-adjusted mortality rates than the state and MetroWest region overall. As discussed in their specific sections, heart disease and cancer are the leading causes of death in the MetroWest region, similar to the state.

Figure 21: Age-Adjusted Mortality Rate per 100,000 Population by Massachusetts, Region, and Community, 2005-2009

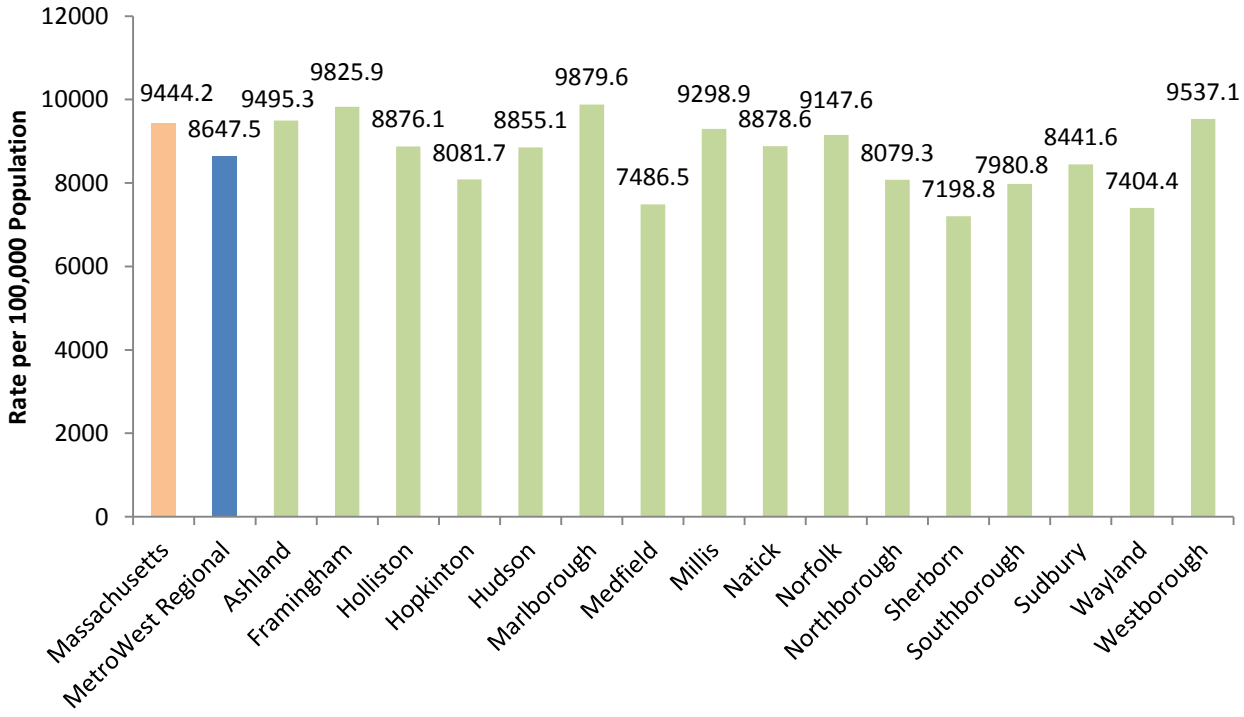


DATA SOURCE: MetroWest Health Foundation, MetroWest Health Data Search, Mortality, 2005-2009
Note: The MetroWest Regional bar includes all communities in the service area of the MetroWest Health Foundation, which differ very slightly from the communities that are the focus of the CHA.

Figure 22 and Table 14 provide an overview of hospitalization statistics for the region. As seen in Figure 22, age-adjusted hospitalization rates for the region are overall slightly lower than what is seen statewide, although some specific communities such as Framingham, Marlborough, Millis, and Westborough have higher hospitalization rates.

Table 14 on the next page examines deeper the hospitalizations for Marlborough Hospital in Fiscal Year 2011 and Fiscal Year 2012 in three specific communities that are included in this CHA—Framingham, Hudson, and Marlborough. Data reveal that chest pain is the number one primary diagnosis for emergency department/outpatient visits to the hospital, while urinary tract infections and open finger wounds are also report a number of admissions. For inpatient admissions, other than surgery, pneumonia and bronchitis rank high for number of primary diagnoses among inpatient admissions. Episodic mood disorders and depressive symptoms are the most common psychiatric admission diagnoses.

Figure 22: Age-Adjusted All Hospitalization Rate per 100,000 Population by Massachusetts, Region, and Catchment Area, 2005-2009



DATA SOURCE: MetroWest Health Foundation, MetroWest Health Data Search, Hospitalization, 2005-2009
Note: The MetroWest Regional bar includes all communities in the service area of the MetroWest Health Foundation, which differ very slightly from the communities that are the focus of the CHA.

Table 14: Number of Marlborough Hospital Outpatient and Inpatient Admissions, by Primary Diagnosis, Fiscal Year 2011 and Fiscal Year 2012

	FY2011			2011 total	FY2012			2012 total	Grand total
	Framingham	Hudson	Marlborough		Framingham	Hudson	Marlborough		
Outpatient									
Chest pain	6	78	218	302	4	93	272	369	**671**
Urinary tract infection	2	80	202	284	1	88	217	306	**590**
Open wound on finger	3	79	175	257	5	93	197	295	**552**
Lumbago/lower back pain	9	71	182	262	5	62	173	240	**502**
Headache	6	61	195	262	1	71	167	239	**501**
Acute pharyngitis	4	59	203	266	4	62	149	215	**481**
Head injury	6	68	158	232	1	66	148	215	**447**
Inpatient									
Surgery	21	553	1501	2075	26	591	1439	2056	**4131**
Pneumonia	1	38	94	133	1	32	94	127	**260**
Chronic bronchitis	1	29	55	85	-	13	65	78	**163**
Urinary tract infection	-	15	50	65	2	13	45	60	**125**
Acute renal failure	2	15	38	55	-	23	31	54	**109**
Septicimia	-	7	39	46	-	18	33	51	**97**
Cellulitis of the leg	-	5	32	37	-	17	29	46	**83**
Acute pancreatis	-	19	32	51	-	17	27	44	**95**
Psych Inpatient									
Unspecific episodic mood disorder	8	12	35	55	7	10	49	66	**121**
Depressive disorder, unspecified	3	5	18	26	4	3	24	31	**57**
Recurrent depressive disorder - severe	2	5	19	26	2	8	15	25	**51**
Schizoaffective disorder, unspecified	-	1	9	10	4	6	12	22	**32**
Bipolar disorder, unspecified	8	3	10	21	4	2	12	18	**39**

DATA SOURCE: Marlborough Hospital, discharge statistics, 2013

Healthy Eating, Physical Activity, and Overweight/Obesity

> *"The community has many quick and inexpensive food options, which lead to weight gain."* —Organizational staff focus group participant
>
> *"Limited financial resources prohibit access to healthy food choices."* —Community resident focus group participant
>
> *"Fresh vegetables are costly."*—Community resident focus group participant
>
> *"Needs exist around hunger and food security- trying to get people to grow their own produce, trying to help people make healthier choices."—Stakeholder key informant interview*

While several community resources exist to promote health and wellness, focus group members indicated that many of these are not necessarily used due to limited access, affordability, or residents' lack of time due to competing priorities and economic challenges. Some respondents reported that the region's colder weather contributes to less physical activity among residents and that there are few

convenient locations for indoor walking in winter. Affordability of local gyms or exercise programs was also reported to be a constraint to physical activity. Others observed that people lack the time or motivation to be physically active. Community members did note that there have been recent efforts to encourage more physical activity. One focus group member shared that the community has been successfully implementing a Mass in Motion initiative.[i]

MetroWest residents also expressed concerns about the availability of healthy food options in communities. Some reported a prevalence of fast food establishments in the region and a lack of establishments selling healthy items. The higher cost of healthy food was another barrier to better nutrition mentioned in focus groups. A few residents noted that lack of transportation also played a role. Finally, a lack of time was also reported to be a barrier to healthy eating. As one immigrant resident shared, *"people are focused on working and not on taking care of themselves. [They are] too tired to cook healthy."*

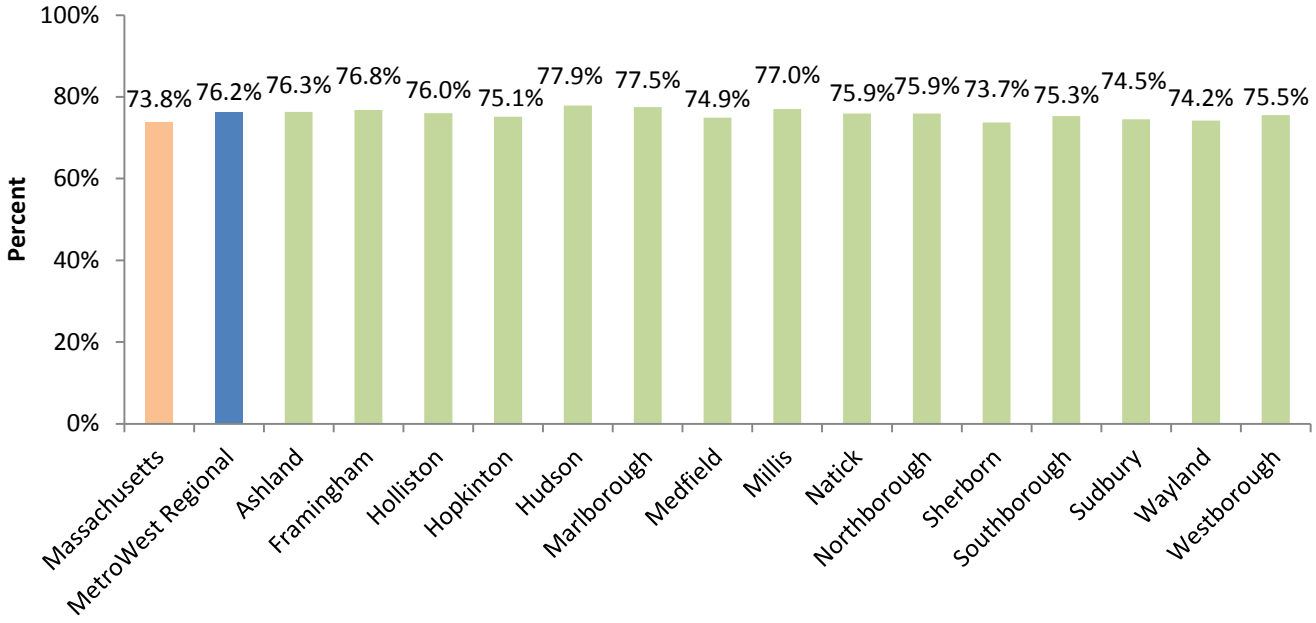
Several focus group members acknowledged that poor eating habits also have cultural roots. As one Brazilian resident reported, *"[Brazilians] eat a lot of salty and fried food."* Others reported that poor eating habits stem from a desire among some immigrants and refugees to be more like Americans.

One area in which residents saw some positive change was in school nutrition. As one focus group member from the medical community reported, *"[schools] have started to eliminate junk food and offer healthier options."* A college-age focus group member echoed this, stating, *"from my time to my younger siblings', [there has been a] big push for healthy foods in schools. No soda, healthy snacks only."* Respondents were less positive, however, about schools' efforts to enhance physical activity. They shared that not all schools offered physical education in the school day. As one focus group member stated, *"there should be a more demanding requirement for physical education."*

Quantitative data from the Behavioral Risk Factor Surveillance System Survey, a national and Massachusetts telephone survey of self-reported behaviors, show that like at the state level (73.8%), the majority of adults in the region were not getting the recommended intake of fruits and vegetables in 2010 (Figure 23). Inadequate fruit and vegetable consumption was highest in Hudson (77.9%) and Millis (77.0%), and lowest in Wayland (74.2%).

[i] MetroWest Moves initiative in Framingham, Hudson, and Marlborough was funded through the statewide Mass in Motion initiative.

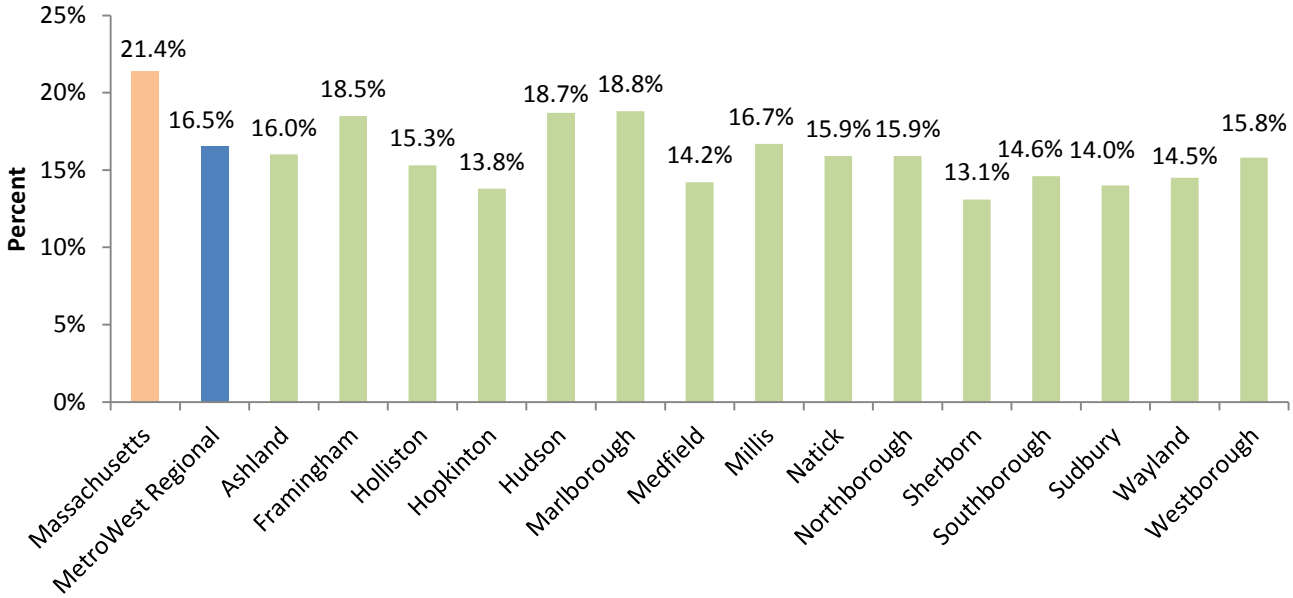
Figure 23: Percent of Adults Eating Fewer than 5 Servings of Fruits and Vegetables Daily by Massachusetts, Region, and Catchment Area, 2010



DATA SOURCE: MetroWest Health Foundation, MetroWest Health Data Search, Behavioral Risk Factor Survey Statistical Estimates, Clinical Tests and Care, 2010

Quantitative data illustrate some variability in the daily physical activity among area adults although all were below the statewide average (21.4%). Figure 24 illustrates the percent of adults lacking regular exercise in the MetroWest area for which data were available. Adults were least likely to engage in daily physical activity in Marlborough (18.8%), Hudson (18.7%), and Framingham (18.5%). By contrast, 13.1% of Sherborn adults were lacking in daily exercise.

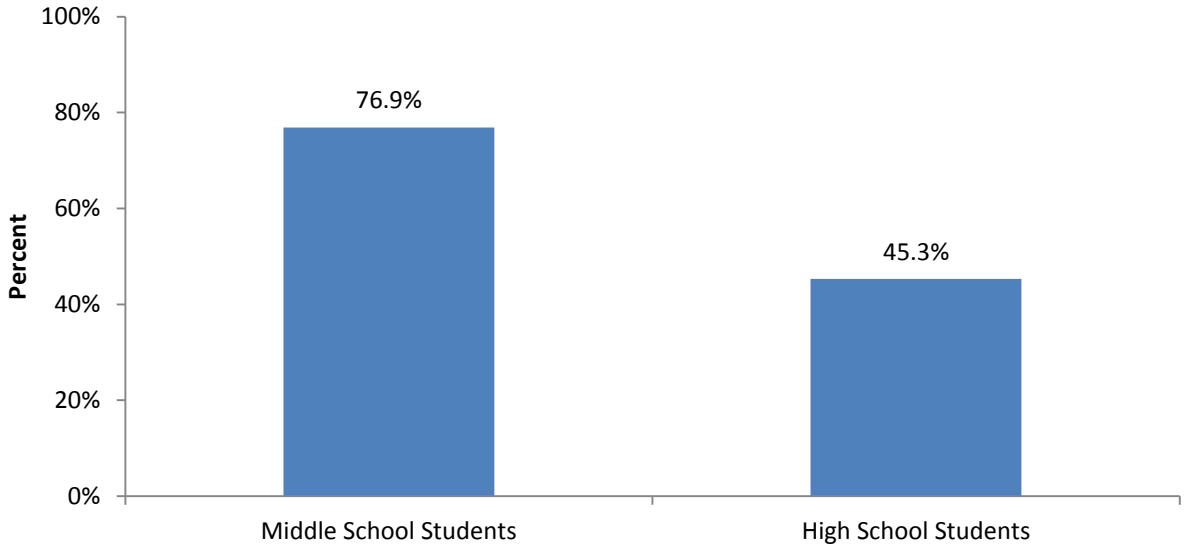
Figure 24: Percent of Adults Lacking Regular Physical Activity by Massachusetts, Region, and Community, 2010



DATA SOURCE: MetroWest Health Foundation, MetroWest Health Data Search, Behavioral Risk Factor Survey Statistical Estimates, Clinical Tests and Care, 2010

The MetroWest Adolescent Health Survey asked middle and high School respondents in the MetroWest Health Foundation service area (slightly different than the geographic focus of this CHA) to report on whether they engage in regular physical activity, defined as exercising for at least 60 minutes on 5 or more days per week for high school students and exercising for at least 20 minutes on 3 or more days per week for middle school students. As illustrated in Figure 25, 76.9% of MetroWest middle school students were adequately engaging in physical activity, while less than half of high school students were (45.3%).

Figure 25: Percent of Students Engaging in Regular Physical Activity by MetroWest Region, 2010



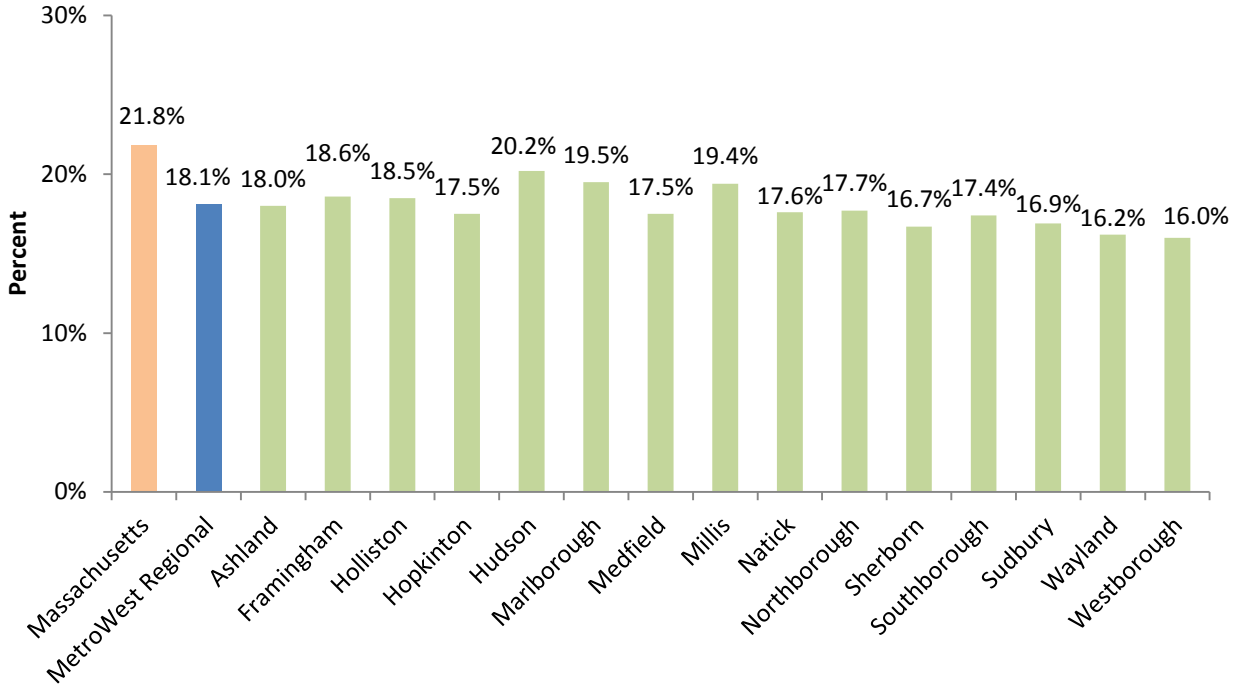
DATA SOURCE: Education Development Center, Inc., Health and Human Development Divisions, MetroWest Adolescent Health Survey, High School and Middle School Reports, 2011

Adult Obesity

Obesity and related chronic diseases such as diabetes and heart disease were the most commonly-mentioned health concerns for the MetroWest region. These issues were raised in nearly every focus group. Obesity also emerged as a key issue in the needs assessment conducted for the MetroWest Health Foundation. As one interviewee in that needs assessment process stated, *"the whole area of obesity and youth obesity has been a problem increasing over time…look at the district BMI data – those are hard numbers about the problem."*

According to quantitative data, there is some variability in the percent obese in the MetroWest region, although all were below the statewide average (21.8%). Figure 26 illustrates that Hudson (20.2%), Marlborough (19.5%), and Millis (19.4%) had the highest percent of obese adults. By contrast, Westborough (16.0%) had the lowest proportion of adults reporting being obese. For the entire MetroWest region, 18.1% of adult residents are considered obese.

Figure 26: Percent of Obese Adults by Massachusetts, Region, and Community, 2010



DATA SOURCE: MetroWest Health Foundation, MetroWest Health Data Search, Behavioral Risk Factor Survey Statistical Estimates, Clinical Tests and Care, 2010

Youth Obesity

Table 15 details the percent of obese youth in the MetroWest region that attend public schools stratified by grade. In the 2010-2011 school year, nearly half of Marlborough's Grade 1 students were obese (42.6%), which was substantially higher than the state and region average (28.3% and 21.5%, respectively). Among Grade 4 students, Hudson had the highest percent of those reported as obese (44.9%) followed by Marlborough (40.6%). In Grade 7, 40.5% of Framingham's students were obese, which was notably higher than the state and region average (34.1% and 28.8%, respectively). Finally, in Grade 10, Framingham had the highest percent of obese youth at 41.0%.

Table 15: Percent of Overweight or Obese Youth by Public School Grade, State, and School District, 2010-2011

Geographic Location	Grade 1	Grade 4	Grade 7	Grade 10
Massachusetts	28.3%	34.9%	34.1%	32.1%
MetroWest Regional	21.5%	27.2%	28.8%	23.0%
Ashland	11.4%	24.9%	31.2%	28.7%
Framingham	32.5%	40.6%	40.5%	41.0%
Holliston	23.6%	24.2%	23.9%	23.7%
Hopkinton	11.5%	14.8%	22.8%	18.9%
Hudson	34.8%	44.9%	31.6%	26.8%
Marlborough	42.6%	40.6%	52.2%	32.0%
Medfield	15.8%	16.9%	25.4%	17.5%
Millis*	19.3%	25.0%	33.3%	-
Natick	19.1%	24.3%	31.2%	27.0%

Geographic Location	Grade 1	Grade 4	Grade 7	Grade 10
North/Southborough	14.6%	23.4%	24.0%	25.9%
Dover-Sherborn	8.7%	19.5%	17.3%	19.4%
Lincoln-Sudbury	17.5%	26.0%	22.1%	20.7%
Wayland	7.1%	18.2%	21.6%	19.5%
Westborough	17.9%	25.5%	27.7%	27.2%

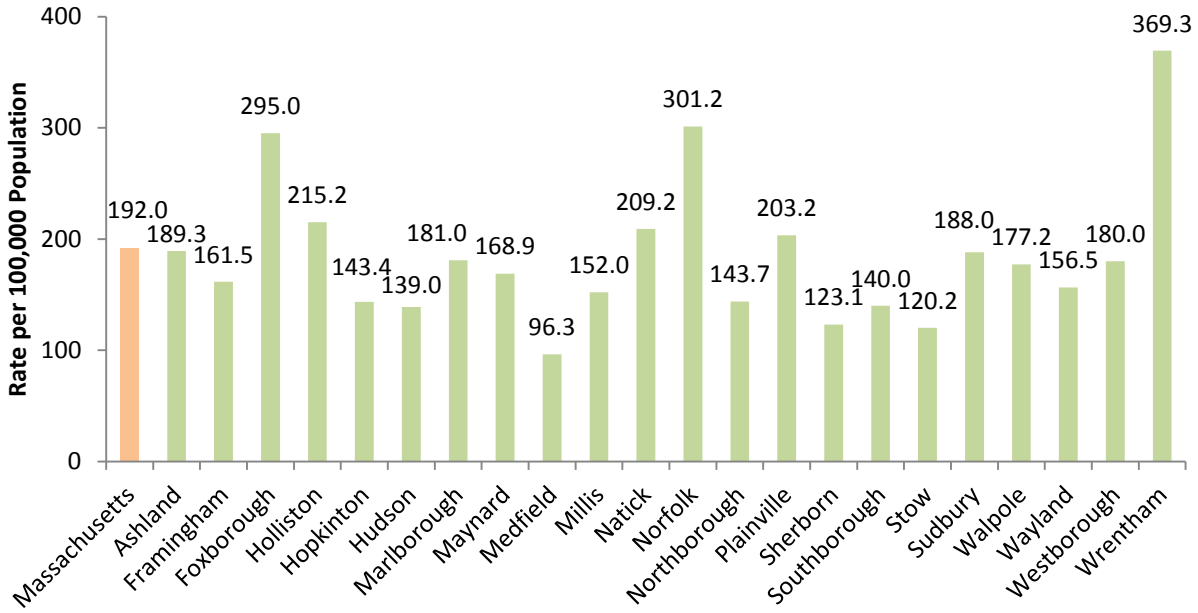
*NOTE: Grade 10 overweight and obesity data for Millis were not available
DATA SOURCE: MetroWest Health Foundation, MetroWest Health Data Search, Overweight and Obesity, 2010

Chronic Disease

When asked about health concerns in their communities, several focus group respondents and interviewees mentioned chronic diseases (e.g., cardiovascular disease, diabetes, cancer, asthma), which are the leading causes of death in the region and the state. While many focus group participants discussed heart disease and diabetes as key concerns, particularly since obesity is a major contributor to these, asthma was also mentioned as an issue disproportionately affecting low income populations and children.

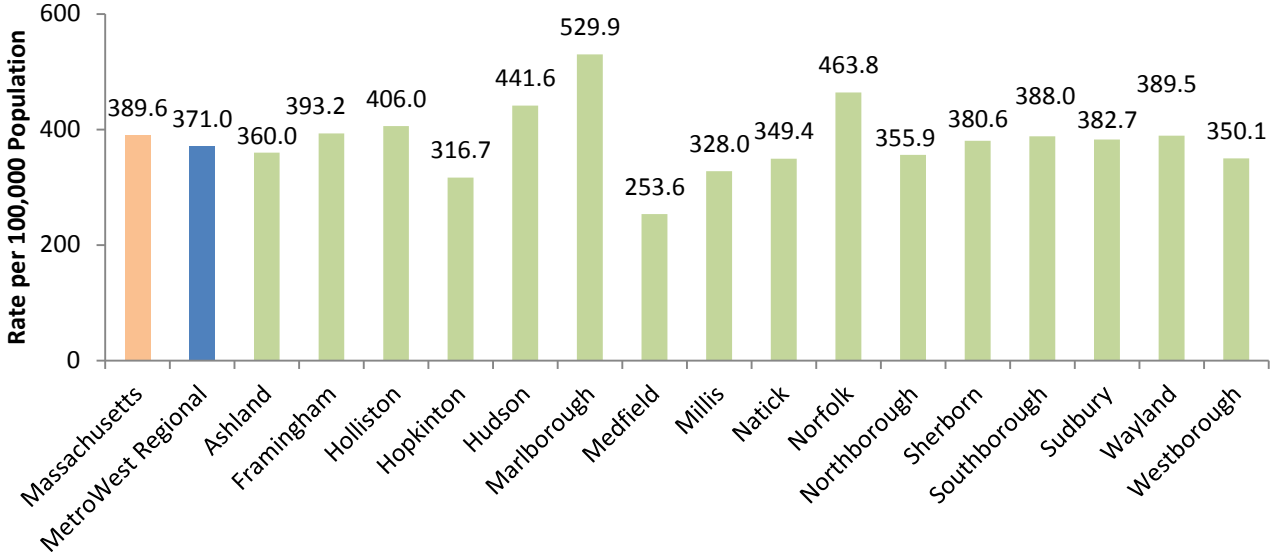
Figure 27 and Figure 28 show the cardiovascular mortality rate and emergency visit rate for many of the communities in the MetroWest region. Age-adjusted cardiovascular mortality rates in 2010 were highest in Wrentham, Norfolk, and Foxborough, while cardiovascular emergency room visits were highest in Marlborough and Norfolk.

Figure 27: Age-Adjusted Cardiovascular Disease Mortality Rate per 100,000 Population by Massachusetts and MetroWest Communities, 2010



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

Figure 28: Age-Adjusted Rate of Major Cardiovascular Disease Emergency Visits per 100,000 Population by Massachusetts, Region, and Community, 2005-2009



DATA SOURCE: MetroWest Health Foundation, MetroWest Health Data Search, Behavioral Risk Factor Survey Statistical Estimates, Respiratory, 2010

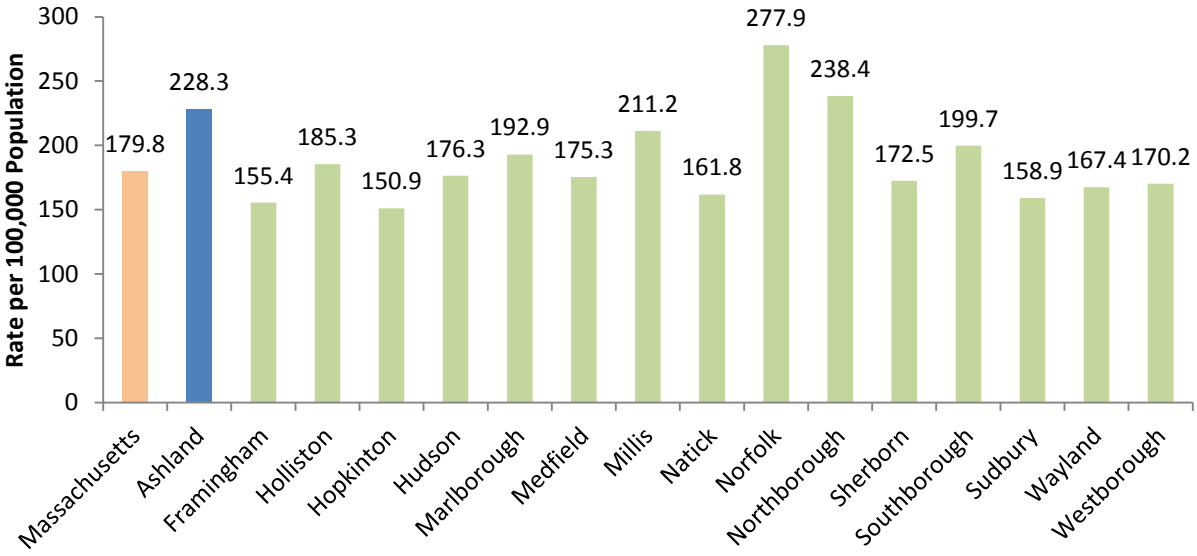
Diabetes was an issue mentioned a few times in focus group discussions, particularly as it related to the growing trend of obesity. However, communities in the MetroWest region have a markedly lower diabetes rate than the state overall. In MA, 7.5% of adults have reported being diagnosed with diabetes, while in the MetroWest communities this ranges from 3.9% in Hopkinton to 4.9% in Wayland (Figure 29).

Figure 29: Percent of Adults Who Reported Having Been Diagnosed with Diabetes by Massachusetts, Region, and Community, 2010

DATA SOURCE: MetroWest Health Foundation, MetroWest Health Data Search, Behavioral Risk Factor Survey Statistical Estimates, Clinical Tests and Care, 2010

As noted earlier from the CHA survey, cancer was an issue noted as a concern among several community residents. All-site cancer mortality rates are highest in Norfolk and Northborough (Figure 30). Yet, when looking at site-specific cancer mortality rates, Medford experiences the highest breast cancer mortality rates, while Norfolk, Northborough, and Sherborn have the highest colorectal cancer mortality rates (Figure 30). Millis, Northborough, and Southborough have the highest lung cancer mortality rates, while Holliston and Ashland have the highest prostate cancer mortality rates.

Figure 30: Age-Adjusted All-Site Cancer Mortality Rate per 100,000 Population by Massachusetts, Region, and Community, 2005-2009



DATA SOURCE: MetroWest Health Foundation, MetroWest Health Data Search, Cancer, 2005-2009

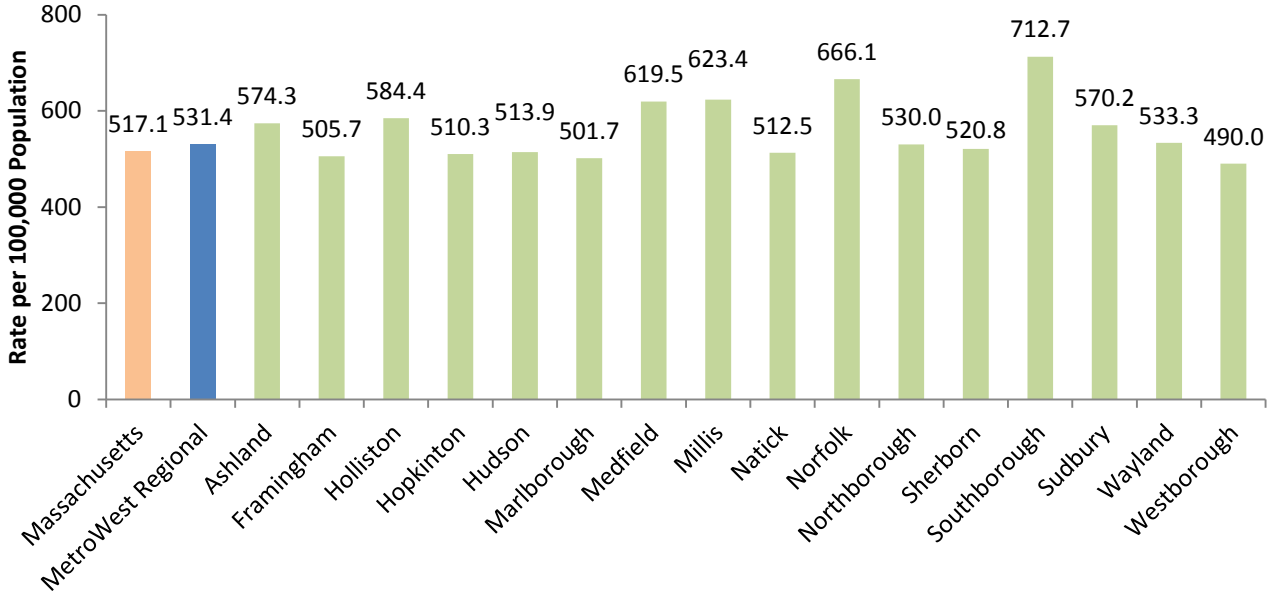
Table 16: Age-Adjusted Cancer Mortality Rates per 100,000 Population by Massachusetts, Region, and Community, 2005-2009

Geographic Location	Breast	Colorectal	Lung	Prostate
Massachusetts	21.9	16.2	50.7	22.7
MetroWest Regional	21.5	15.9	45.1	21.9
Ashland	36.2	19.6	42.5	51.6
Framingham	19.2	13.8	42.5	23.1
Holliston	24.5	19.0	30.6	63.3
Hopkinton	10.8	15.8	33.9	38.6
Hudson	10.7	19.8	54.6	24.3
Marlborough	20.0	12.2	54.2	25.2
Medfield	43.6	23.2	37.3	16.3
Millis	37.5	27.7	75.4	3.8
Natick	19.6	17.3	42.1	18.4
Norfolk	24.4	25.6	48.5	30.8
Northborough	30.3	25.8	65.8	42.7
Sherborn	19.0	25.9	30.6	35.0
Southborough	14.4	9.3	64.3	10.1
Sudbury	29.8	18.4	22.3	18.6
Wayland	24.0	18.6	43.9	8.8
Westborough	26.9	10.8	56.0	23.0

DATA SOURCE: MetroWest Health Foundation, MetroWest Health Data Search, Cancer, 2005-2009

Cancer incidence rates (rate of new cases of the disease) follow a somewhat similar pattern as mortality rates in the MetroWest region, although there are differences by town. Highest all-site cancer incidence is in Southborough and Norfolk. For site-specific rates, breast cancer incidence is highest in Ashland and Wayland, while colorectal cancer incidence is highest in Southborough, Northborough, and Medfield. Hudson, Marlborough, and Millis have the highest lung cancer incidence rates, while Norfolk and Ashland have the highest prostate cancer incidence rates.

Figure 31: Age-Adjusted All-Site Cancer Incidence Rate per 100,000 Population by Massachusetts, Region, and Community, 2004-2008



DATA SOURCE: MetroWest Health Foundation, MetroWest Health Data Search, Cancer, 2004-2008

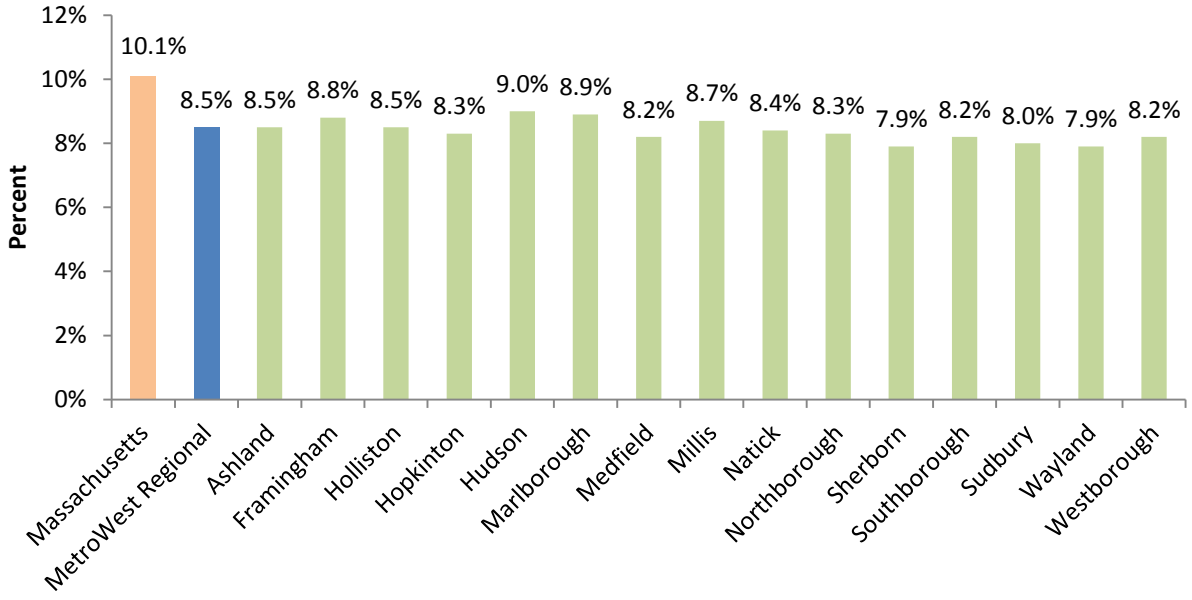
Table 17: Age-Adjusted Cancer Incidence Rates per 100,000 Population by Massachusetts, Region, and Catchment Area, 2004-2008

Geographic Location	Breast	Colorectal	Lung	Prostate
Massachusetts	134.5	48.9	72.2	163.8
MetroWest Regional	145.9	49.5	66.7	184.2
Ashland	191.5	45.0	62.4	206.2
Framingham	147.3	51.5	66.5	163.1
Holliston	120.4	51.8	62.1	230.2
Hopkinton	176.2	46.5	57.1	173.2
Hudson	144.2	55.6	87.8	161.4
Marlborough	125.6	35.0	80.2	153.2
Medfield	168.8	73.9	74.5	189.9
Millis	184.9	57.2	80.7	183.5
Natick	133.7	46.6	64.5	181.8
Norfolk	175.9	36.9	67.0	215.7
Northborough	131.0	72.5	69.5	198.5
Sherborn	161.9	58.2	44.2	158.7
Southborough	146.1	82.3	109.3	183.7
Sudbury	170.9	59.7	64.0	174.0
Wayland	192.0	49.5	61.2	161.9
Westborough	139.5	57.2	55.6	154.3

DATA SOURCE: MetroWest Health Foundation, MetroWest Health Data Search, Cancer, 2004-2008

Asthma was discussed in a few focus groups as an issue of concern; however, data indicate that the percentage of adults who report asthma in the MetroWest region is 7.9%- 9.0%, lower than what is seen statewide (10.1%) (Figure 32). Similarly, the age-adjusted rate of asthma specific (primary diagnosis) emergency room visits is lower in the MetroWest region (378.8 per 100,000 population) than in MA overall (586.9 rate per 100,000 population), but higher in Framingham (702.9 per 100,000 population).

Figure 32: Percent of Adults Who Reported Current Asthma by Massachusetts, Region, and Community, 2010



DATA SOURCE: MetroWest Health Foundation, MetroWest Health Data Search, Behavioral Risk Factor Survey Statistical Estimates, Respiratory, 2010

Mental Health

> *"Counseling outside of school really doesn't exist…[there is] no real support for children and mental health."*—Organizational staff focus group participant
>
> *"[People with] mental health issues also have to contend with the effects of stigma that can make it difficult to get good health care."*—Community resident focus group participant
>
> *"Psychiatric care is not covered by the health safety net, and all services are out-of-pocket."*—Stakeholder key informant interview

Concerns around mental health focused on anxiety, depression, and the limited supply of mental health providers in the area. Overall, mental health was cited as a key concern among MetroWest CHA participants as well as during the assessment process conducted for the MetroWest Health Foundation strategic planning process. Focus group members reported rising rates of anxiety and depression as well as other mental health issues among people in the region.

Respondents also reported that the region lacks enough mental health providers to address the need, the result being that those who need services are unable to access them or must wait long periods to access them. As one interviewee during the MetroWest Health Foundation strategic planning process stated, *"one of the hardest things is finding a Spanish speaking psychiatrist."* In addition, the health safety net often does not cover certain mental health services, leading to out-of-pocket expenditures. Stigma was also cited as a significant barrier to addressing mental health issues in the region. Finally, a few focus group members reported that many primary care providers do not recognize mental illness, especially depression, by primary providers, which further delays care or leaves patients untreated.

As seen in Table 18, residents in the MetroWest region were less likely than in the state overall to report that they had poor mental health for more than 15 days or that they felt sad, depressed, or blue during that time. Hudson and Marlborough were the communities in the region with the highest rates of both, where 7% of Hudson and Marlborough residents indicated that they had poor mental health for more than 15 days and 3.3% felt sad, depressed, and blue.

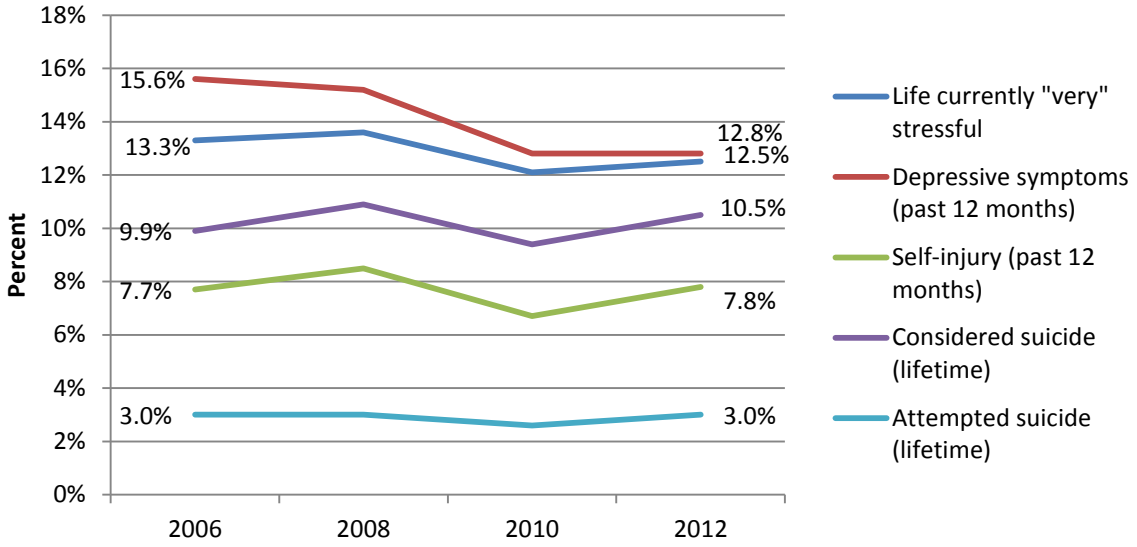
Table 18: Percent of Adults Reporting Poor Mental Health Symptoms by Massachusetts, Region, and Community, 2010

Geographic Location	Poor Mental Health More Than 15 Days	Feel Sad, Depressed, or Blue More Than 15 Days
Massachusetts	8.9%	6.4%
MetroWest Regional	6.1%	2.7%
Ashland	6.1%	2.6%
Framingham	6.7%	3.1%
Holliston	5.8%	2.5%
Hopkinton	5.5%	2.3%
Hudson	7.0%	3.3%
Marlborough	7.0%	3.3%
Medfield	5.3%	2.3%
Millis	6.5%	2.9%
Natick	5.8%	2.5%
Northborough	5.8%	2.5%
Sherborn	4.7%	2.0%
Southborough	5.4%	2.3%
Sudbury	5.0%	2.1%
Wayland	4.8%	2.0%
Westborough	5.6%	2.3%

DATA SOURCE: MetroWest Health Foundation, MetroWest Health Data Search, Behavioral Risk Factor Survey Statistical Estimates, Health Status, 201

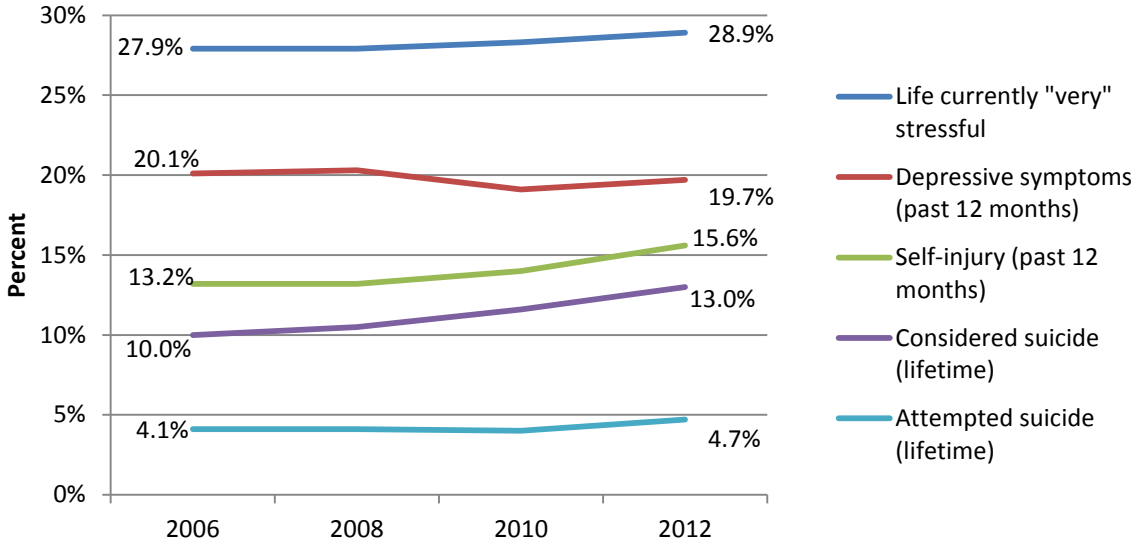
While mental health among youth is a concern among many residents, particularly related to the effects of bullying and cyberbullying, rates show that self-reported poor mental health symptoms and behaviors among middle school students have generally decreased between 2006 and 2010, with a slight increase in the most recent data from 2012 (Figure 33). However, among high school students in the area, the trend has been steadily increasing from 2006 to 2012 (Figure 34). Among all mental health indicators on the survey, middle school students were most likely to indicate that they had experienced depressive symptoms in the past 12 months (12.8% in 2012), which was down from 15.8% in 2006. High school students were most likely to indicate that life is currently "very" stressful (28.9% in 2012) which was up from 27.9% in 2006. For other indicators, in 2012, 10.5% of middle school students and 13.0% of high school students reported that they considered suicide and 7.8% of middle school students and 15.6% of high school students reported that they had engaged in self-injury in the past 12 months. These rates have increased for both middle and high school students since 2010.

Figure 33: Percent of Middle School Students (Grades 6-8) Reporting Mental Health Issues in MetroWest Region, 2006-2012



NOTE: 'Current' is defined as within the past 30 days
DATA SOURCE: Education Development Center, Inc., Health and Human Development Divisions, MetroWest Adolescent Health Survey, Middle School Report, 2011

Figure 34: Percent of High School Students (Grades 9-12) Reporting Mental Health Issues in MetroWest Region, 2006-2012



NOTE: 'Current' is defined as within the past 30 days
DATA SOURCE: Education Development Center, Inc., Health and Human Development Divisions, MetroWest Adolescent Health Survey, High School Report, 2011

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

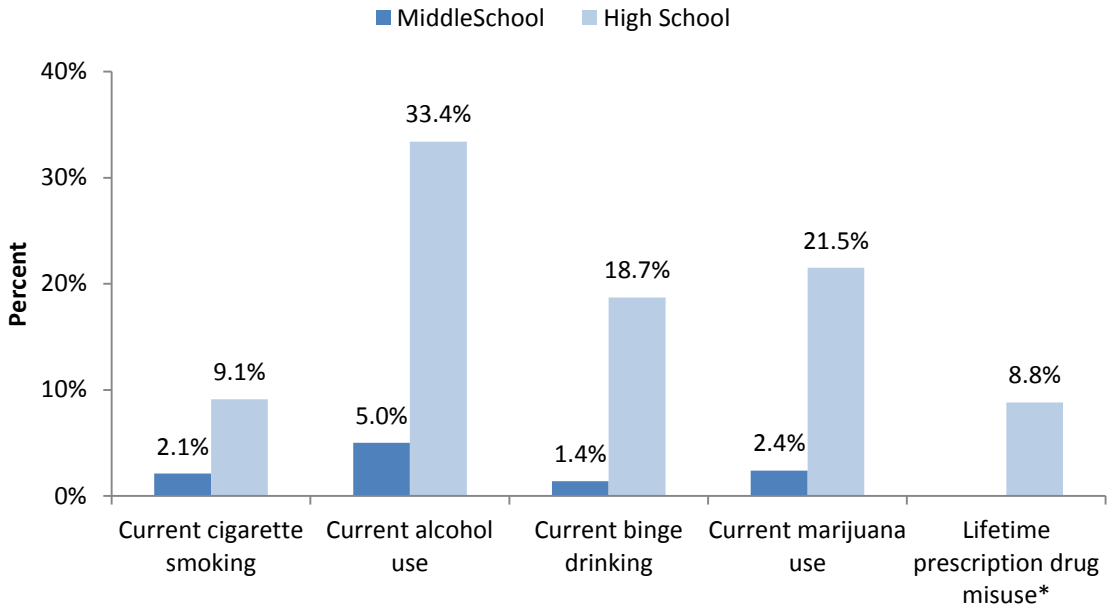
> *"[It seems like] everyone [in Marlborough] is doing drugs, really, the whole town."*—Community resident focus group participant

"Two biggest needs are addictions recovery, especially in younger people, and the physical health status of people with behavioral health conditions…it's deplorable."—Stakeholder key informant interview

In addition to obesity, substance use was mentioned in almost every focus group with participants concerned about a range of substances from tobacco to prescription drug abuse. Lack of substance use services was cited as a factor contributing to high substance abuse rates. Health department focus group members reported that recent cuts to state funding for substance abuse services has negatively affected the ability to address this issue.

Focus group participants were particularly concerned about substance abuse among youth. They indicated that they thought that smoking even seemed to be more of a norm now than it did a few years ago. As one youth focus group member explained, *"lots of kids are smoking all of a sudden, especially the electronic cigarettes."* In the MetroWest Adolescent Health Survey, middle and high school students were asked a series of questions regarding their use of cigarettes, alcohol, marijuana, and non-medical use prescription drugs (Figure 35). Among middle school students in the MetroWest region, students were most likely to engage in alcohol use (5.0%) followed by cigarette smoking (2.1%). Among high school students, 33.4% reported current alcohol use, with 18.7% reporting current binge drinking ('current' was defined as within the past 30 days). Nearly one-fourth of high school students also reported current marijuana use (21.5%) while 8.8% reported prescription drug misuse in their lifetime.

Figure 35: Percent of Students Engaging in Substance Abuse Behaviors in MetroWest Region, 2012



NOTE: 'Current' is defined as within the past 30 days
*NOTE: This question not included on Middle School survey
DATA SOURCE: Education Development Center, Inc., Health and Human Development Divisions, MetroWest Adolescent Health Survey, Middle School and High School Reports, 2012

Table 19 summarizes substance use and abuse behaviors by Massachusetts and the communities in the MetroWest area for which data were available. Aggregate data from 2007 to 2009 illustrate that Hopkinton had the highest percent of residents engaging in binge drinking (16.1%) while Wayland had the lowest (12.0%); still, all were below the statewide average of 17.7%. 'Current smoker' was defined as having smoked with the past 30 days. Hudson had the greatest proportion of its population reporting

current smoker status followed by Marlborough (12.8% and 12.3%, respectively). All communities in the MetroWest catchment area for which data were available were below the statewide average of 15.9%.

Table 19: Substance Use and Abuse Behaviors by Massachusetts and Community, 2007-2009

Geographic Location	Engage In Binge Drinking	Current Smoker
Massachusetts	17.7%	15.9%
Ashland	15.2%	10.0%
Framingham	14.8%	10.9%
Holliston	15.1%	9.7%
Hopkinton	16.1%	8.9%
Hudson	15.7%	12.8%
Marlborough	15.9%	12.3%
Medfield	14.7%	8.5%
Millis	15.8%	11.4%
Natick	14.4%	9.3%
Northborough	14.2%	9.4%
Sherborn	13.4%	6.9%
Southborough	14.4%	4.6%
Sudbury	13.7%	7.7%
Wayland	12.0%	7.0%
Westborough	13.6%	8.6%

DATA SOURCE: MetroWest Health Foundation, Community Health Profiles Report, 2012

As illustrated in Table 20 substance abuse admissions and discharges varied widely across the MetroWest catchment area. The admission rate to Department of Public Health (DPH) funded treatment programs was highest in Framingham (1536.9 per 100,000 population), which was higher than the statewide rate of 1532.4 per 100,000 population. Marlborough also had a relatively high rate of admissions to treatment programs at 1353.5 per 100,000 population. Regarding injection drug user admissions to DPH funded treatment programs, Framingham (508.7 per 100,000 population) had the highest rate among those communities for which data was available, though all rates remained below the statewide rate of 621.2 per 100,000 population. The alcohol and other drug related hospital discharge rate was highest in Foxborough (380.6 per 100,000 population) followed by Plainville (300.2 per 100,000 population).

Table 20: Rate of Substance Abuse Admissions and Discharges per 100,000 Population by Massachusetts and Community, 2009/2011

	Admissions to DPH funded treatment programs +	Injection drug user admissions to DPH funded treatment programs +	Alcohol and other drug related hospital discharges ++
Massachusetts	1532.4	621.2	344.7
Ashland	816.5	291.6	187.9
Framingham	1536.9	508.7	246.8
Foxborough	1013.0	380.6	380.6
Holliston	701.4	166.3	108.5
Hopkinton	932.5	213.5	99.7
Hudson	902.0	233.5	244.1
Marlborough	1353.5	301.4	204.5
Maynard	645.7	195.7	225.0
Medfield*	348.8	-	162.2
Millis	566.1	163.5	251.6
Natick	567.5	125.4	247.7
Norfolk	647.3	209.4	285.6
Northborough	586.9	136.5	81.9
Plainville	913.1	325.2	300.2
Sherborn*	402.8	-	-
Southborough	851.7	157.7	136.7
Stow*	487.1	-	194.8
Sudbury	399.2	123.3	129.1
Walpole	672.0	221.1	398.8
Wayland*	284.3	-	153.7
Westborough	692.2	303.5	85.2
Wrentham	804.3	244.0	216.9

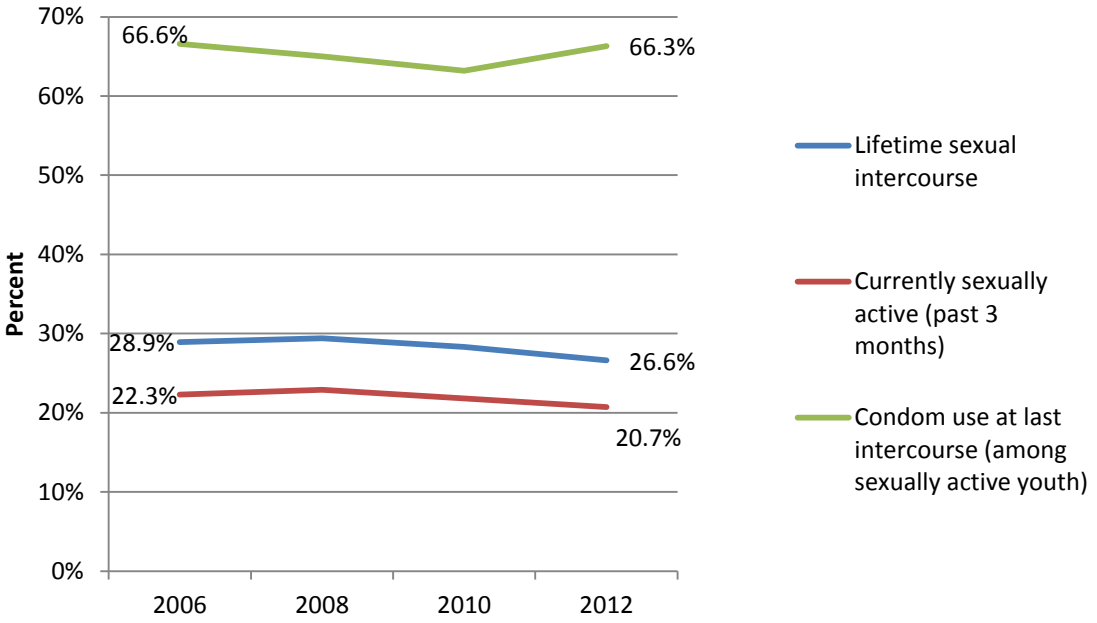
*NOTE: select data were not available
+DATA SOURCE: Massachusetts Department of Public Health, MassCHIP, Health Status Indicators Report, Substance Abuse (BSAS), 2011
++DATA SOURCE: Massachusetts Department of Public Health, MassCHIP, Health Status Indicators Report, Calendar Year Hospital Discharges (UHDDS), 2009

Reproductive and Sexual Health

Overall reproductive and sexual health behaviors and outcomes are similar or lower in the MetroWest region compared to the state, but higher in a few communities such as Marlborough and Hudson. Specifically, teen pregnancy was raised as an area of concern in several focus groups, particularly in groups that included adolescent participants. Residents noted that unprotected sex is prevalent. One youth focus group member commented, *"kids want to get pregnant; it isn't by accident. They are not using protection because they want to get pregnant."* Others believed that youth felt invincible and that *"it couldn't happen to them,"* so they engage in risky behaviors.

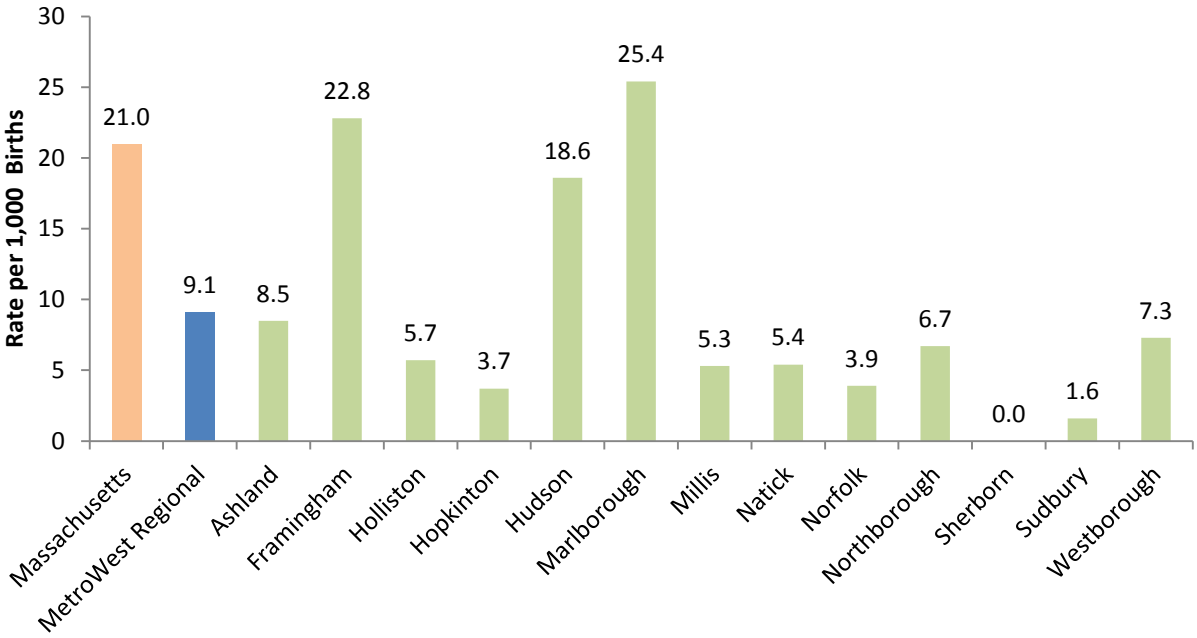
According to the MetroWest Adolescent Health Survey, about 1 in 5 high school students in the region is currently sexually active, and among those, there is a recurring upward trend to 66.3% in 2012 who reported using a condom during their last sexual intercourse(Figure 36). However, when looking at outcomes by community, Marlborough (25.4 per 1,000 births) and Framingham (22.8 per 1,000 births) were highest in the region in their rate of births to teen mothers, and slightly higher than the state rate (21.0 per 1,000 births) (Figure 37).

Figure 36: Percent of High School Students Engaging in Sexual Activity by MetroWest Region, 2006-2012



DATA SOURCE: Education Development Center, Inc., Health and Human Development Divisions, MetroWest Adolescent Health Survey, High School Report, 2012

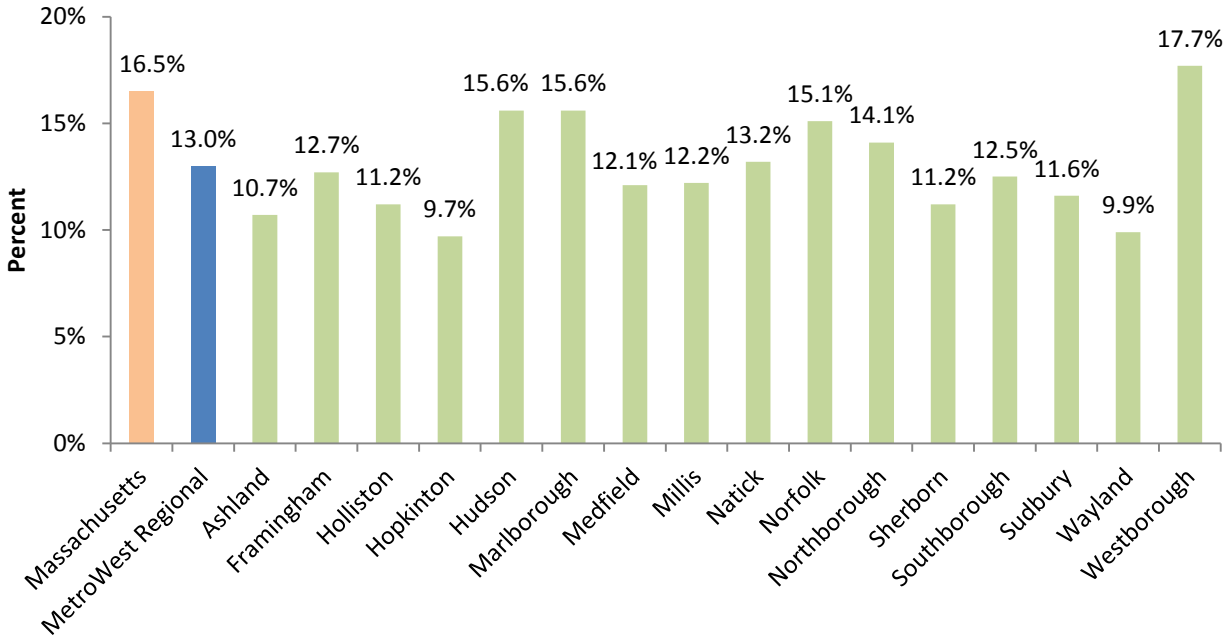
Figure 37: Teenage Birth Rate per 1,000 Births by Massachusetts, Region, and Community, 2005-2009



DATA SOURCE: MetroWest Health Foundation, MetroWest Health Data Search, Births, 2005-2009

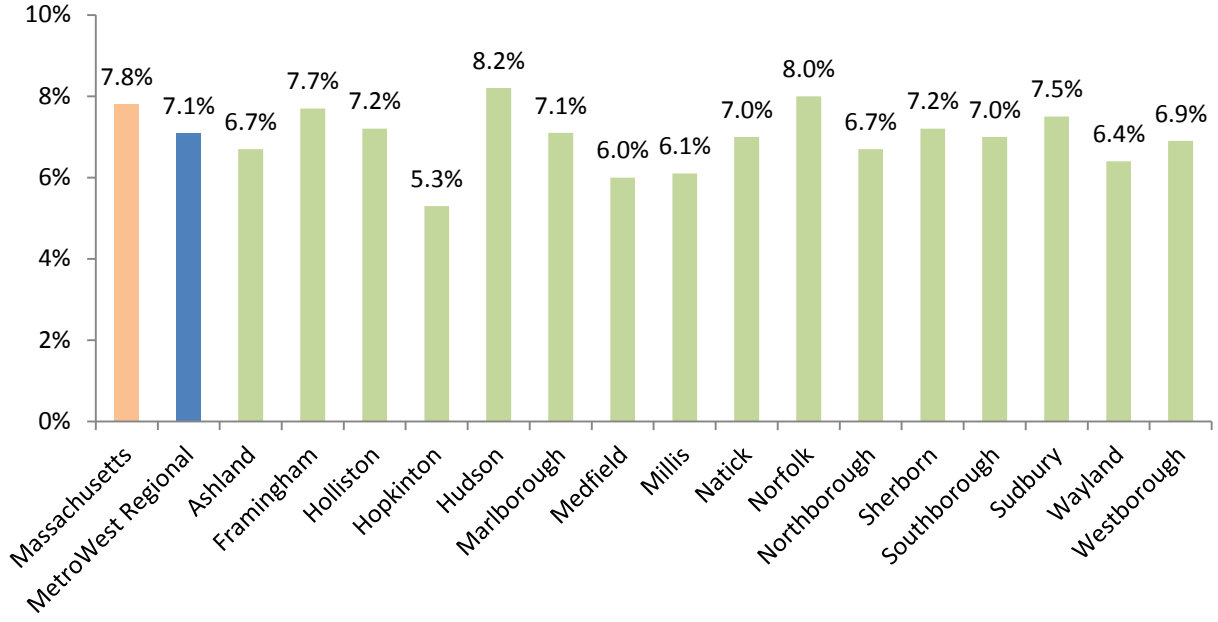
Birth risk factors and outcomes are important indicators that may be contribute to further health problems later in childhood and adulthood. Overall, mothers in MetroWest communities were less likely to get inadequate prenatal care or have low birthweight babies, compared to rates in the state overall (Figure 38 and Figure 39). However, communities that exceeded the state for each of these included Westborough, where 17.7% of all births did not receive adequate prenatal care, and Hudson and Norfolk, where approximately 8% of births were low birth weight (<2,500 grams).

Figure 38: Percent of all Births with Inadequate Prenatal Care by Massachusetts, Region, and Community, 2005-2009



DATA SOURCE: MetroWest Health Foundation, MetroWest Health Data Search, Births, 2005-2009

Figure 39: Percent of all Low Birth Weight Births by Massachusetts, Region, and Community, 2005-2009



DATA SOURCE: MetroWest Health Foundation, MetroWest Health Data Search, Births, 2005-2009

Occupational Health

> *"People work in landscaping and construction and are not educated about workplace hazards such as dangerous chemicals."*—Organizational staff focus group participant
>
> *"There is a lot of stress [related work-related injuries] leading to back pain and knee, elbow problems and people just self-medicate themselves with Advil or Tylenol."*—Community resident focus group participant

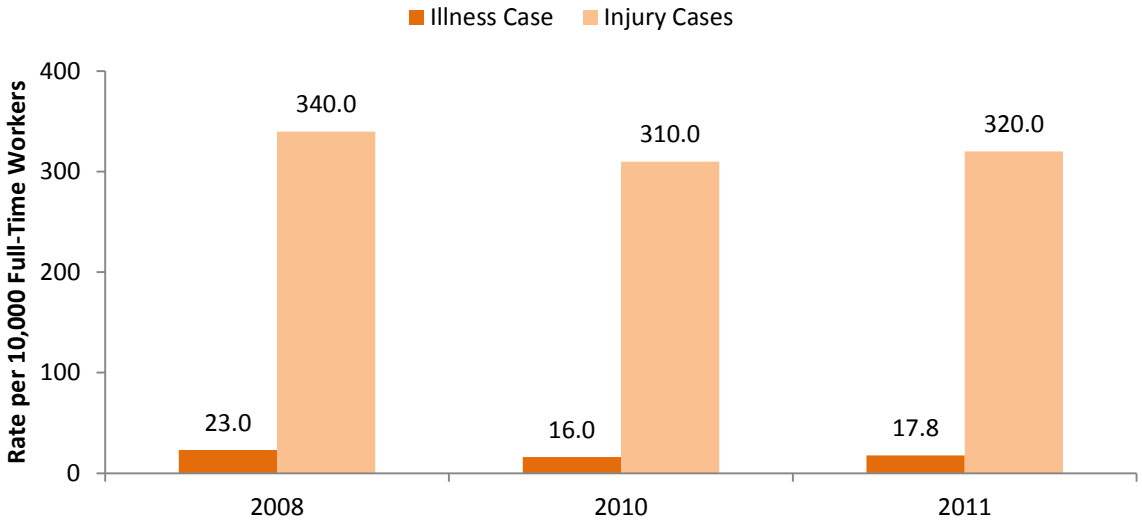
An area of health concern that emerged in focus groups specifically with foreign-born residents or those that directly work with them was workplace hazards. These participants noted that many MetroWest immigrants work in low-wage factory, restaurant, and cleaning jobs that are physically taxing. As a result, workers experience repetitive motion injuries, exposure to harmful chemicals, and stress on joints, addition to long working hours. Respondents commented that these workers are often not educated about workplace hazards or how to do their work to reduce injury.

While MetroWest specific data were not available, the MetroWest Worker Center, a regional non-profit organization focusing on immigrant workers, has noted that many of the occupational injuries seen by their program are from the industries of roofing, siding, and construction (falls, lifting injuries, tool-related injuries), painting (lead exposure from older houses), cleaning (exposures to harmful chemicals), and food service (falls).

State level data indicate that there were 320 work-related injury cases per 10,000 full-time workers and 17.8 work-related illness cases per 10,000 full-time workers in 2011 alone. These numbers were a slight increase since 2010, but a slight decrease since 2008. However, the Bureau of Labor Statistics data reveal that Hispanics are disproportionately affected by occupational-related injuries. The death rate in

Massachusetts for Hispanics is 3.9 fatalities per 100,000 full-time workers compared 1.7 fatalities per 100,000 full-time workers overall in the state.

Figure 40: Rate of Injuries and Illnesses per 10,000 Full-Time Workers in Massachusetts, 2008-2011

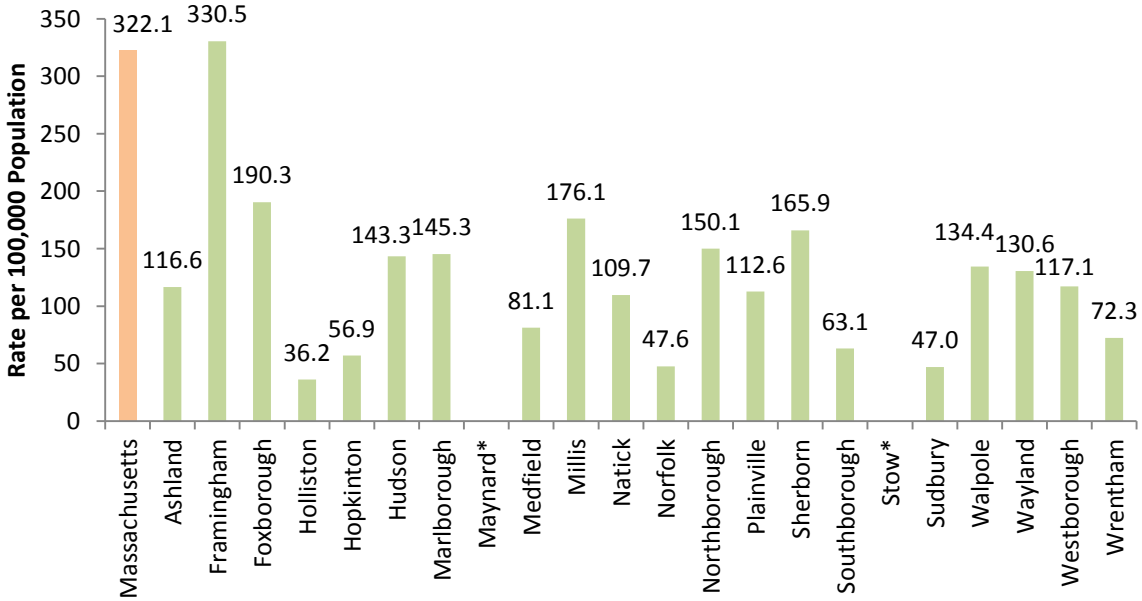


DATA SOURCE: US Department of Labor, Bureau of Labor Statistics, Databases, Tables, & Calculators by Subject, Occupational Injuries and Illnesses Industry Data, 2008-2011

Infectious Diseases

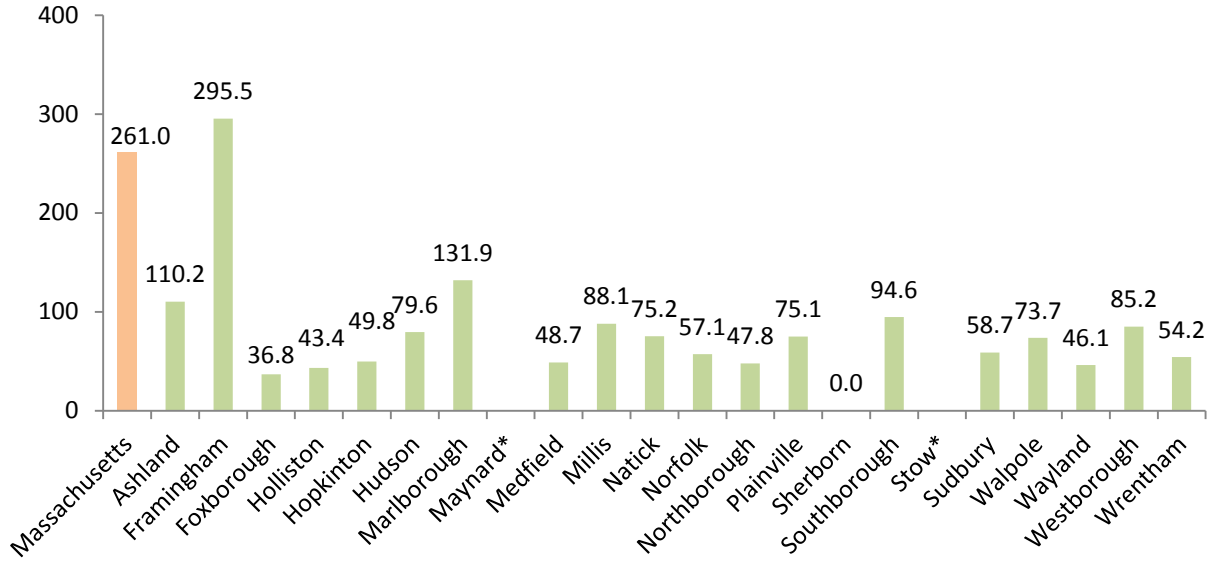
While issues related to infectious disease rarely were discussed in focus groups, Framingham was shown to have higher Chlamydia and HIV rates than what is reported statewide. As seen in Figure 41 and Figure 42, the Chlamydia rate and HIV/AIDS prevalence rate in the MetroWest region is markedly lower in all communities except Framingham, when compared statewide.

Figure 41: Rate of Chlamydia per 100,000 Population by Massachusetts and Catchment Area, 2010



*NOTE: Due to small numbers (N=1-4), exact count not provided therefore rate could not be tabulated
DATA SOURCE: MassCHIP, Massachusetts Department of Public Health, Division of Sexually Transmitted Disease Prevention, 2010

Figure 42: Rate of HIV/AIDS Prevalence per 100,000 Population by Massachusetts and Catchment Area, 2010



*NOTE: Due to small numbers (N=1-4), exact count not provided therefore rate could not be tabulated
DATA SOURCE: MassCHIP, Massachusetts Department of Public Health, Division of Sexually Transmitted Disease Prevention, 2010

As numerous CHA survey respondents indicated that the issue of aging was a particular concern of theirs, it is important to look at preventive measures related to influenza and pneumonia, conditions that can be particularly harmful for older adults. Data indicate that 77.2%% of MetroWest seniors (65+ years old) reported receiving a flu vaccine in the past 12 months and 66.3% reported ever receiving a pneumonia vaccine (Figure 43).

Figure 43: Percent of Seniors Who Received Flu and Pneumonia Vaccines by Massachusetts and MetroWest Region, 2007-2009

	Massachusetts		MetroWest Region	
	Aged 50-64 Years	Aged 65 Years or Older	Aged 50-64 Years	Aged 65 Years or Older
Had Flu Vaccine in Past Year	46.9%	74.6%	50.3%	77.2%
Ever Received Pneumonia Vaccine	21.1%	69.8%	17.1%	66.3%

DATA SOURCE: A Profile of Health in MetroWest: Results of the Behavioral Risk Factor Surveillance Survey, 2007-2009

Concerns about rising mosquito-borne illnesses were expressed by one or two residents in focus groups. Members of local health departments noted that concerns about mosquito-related illnesses, West Nile and Eastern Equine Encephalitis (EEE) are growing creating challenges for communities that seek to reduce risk of these illnesses by imposing restrictions on outdoor activities between dusk and dawn. Quantitative data indicate rates overall for mosquito borne illnesses have increased across the state, and several cases have been reported in the MetroWest area.

HEALTHCARE ACCESS AND UTILIZATION

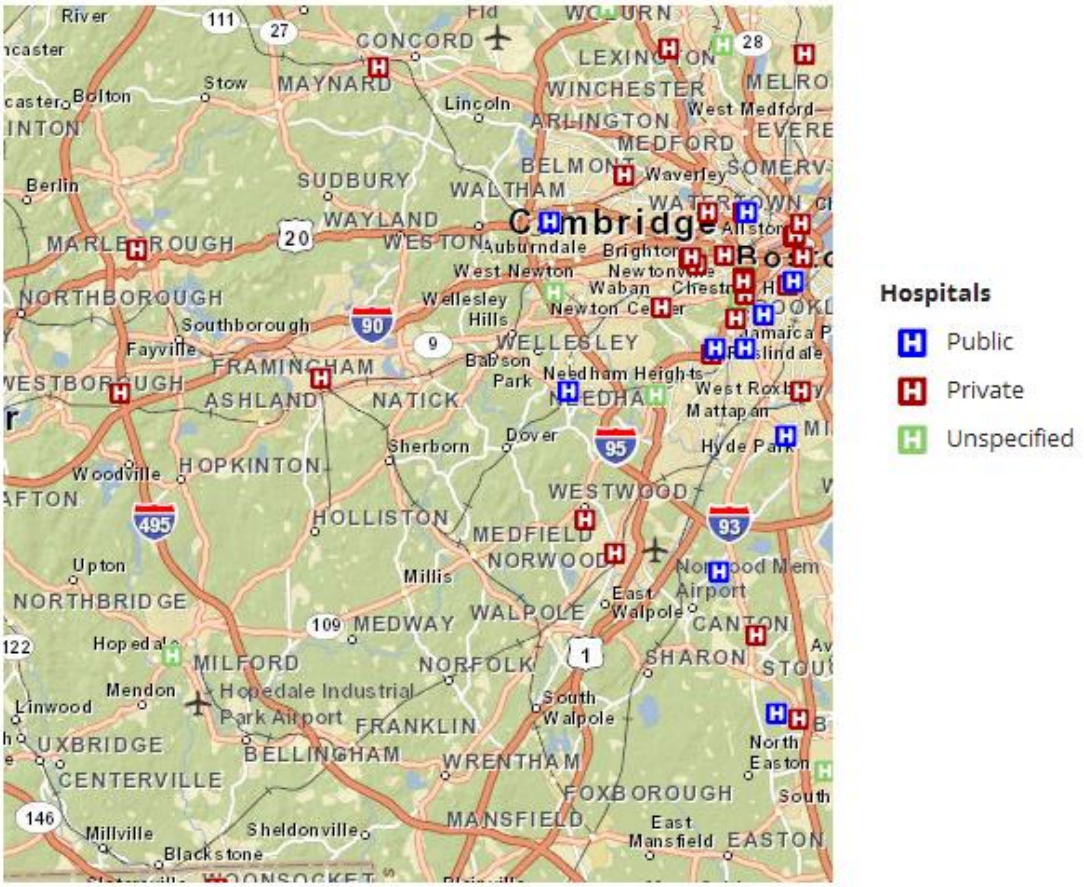
Resources and Use of Health Care Services

> *"Sometimes smaller is better—I got fabulous care here."*—Community resident focus group participant

> *"As a senior, I feel very lucky to be living in this area because of the medical care."*—Community resident focus group participant

Overall, the MetroWest region was viewed as providing high quality care in a number of different locations; however, challenges to accessing services still remained for more disadvantaged populations. When asked about health and medical resources in their region, MetroWest focus group respondents cited a number of institutions including MetroWest Medical Center and Marlborough Hospital. In addition, residents mentioned relying on the Kennedy Community Health Center and walk-in clinics at local drugstores. Lower income individuals reported relying on the free clinics such as the MetroWest Free Medical Program but noted that another free clinic, in Hudson, had recently closed. The MetroWest Medication Program (MetroWest Meds) was discussed as a source for lower-cost medications. According to residents, the region's proximity to Boston's teaching hospitals and the UMASS network contributed to the strengths of the region's health care systems. Figure 44 is a map indicating the location of area hospitals.

Figure 44: Map of Area Public, Private, and Unspecified Hospitals in the MetroWest Region, 2013

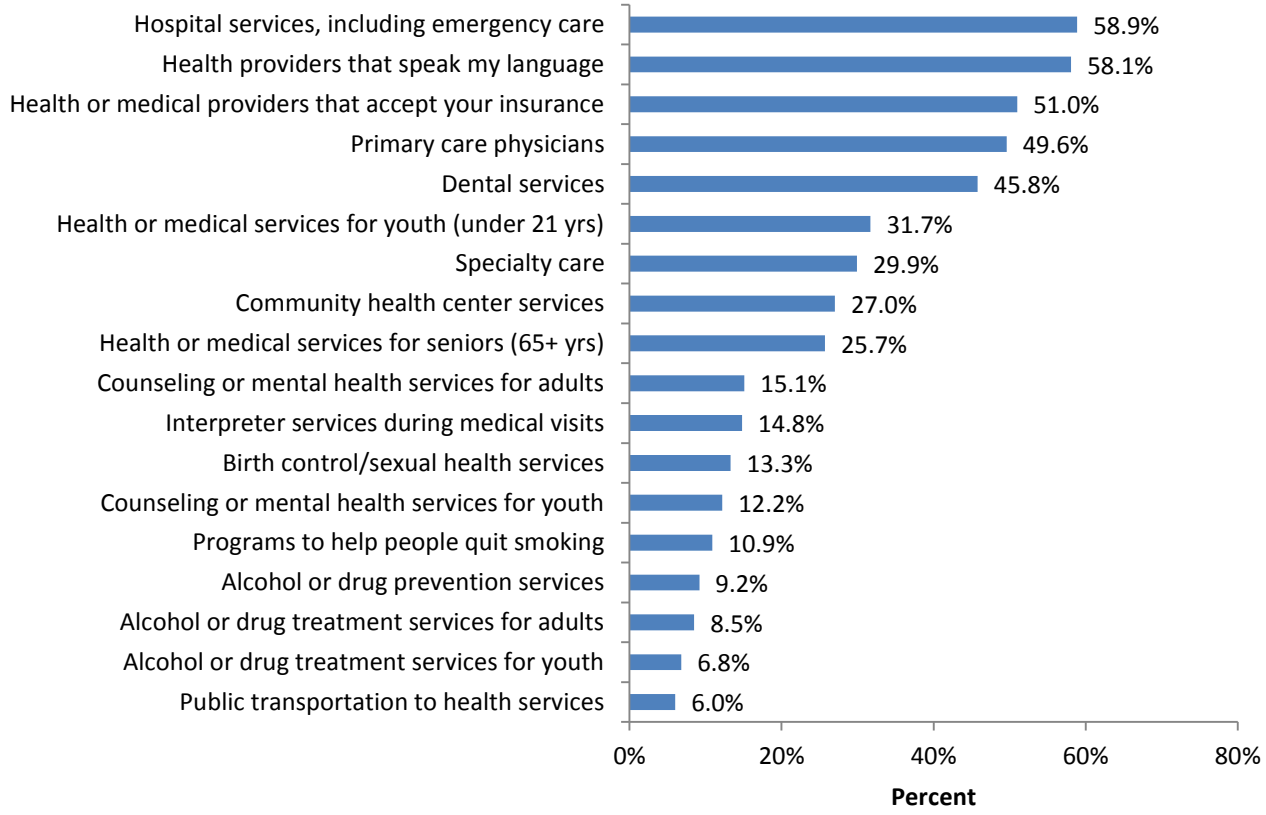


DATA SOURCE: Community Commons, Community Health Needs Assessment Vulnerable Populations Footprint, [http://assessment.communitycommons.org/Footprint/Default.aspx], 2013

MetroWest residents viewed local medical facilities generally favorably. As one focus group member stated, *"[there are] great hospitals in the area with good services available, good nursing and rehab services."* Another, in describing services at a local institution, shared, *"it's very busy but always willing to help and they are very polite."* MetroWest Free Medical Program (MWFMP) was described by a focus group member as *"a very welcoming setting."* Similarly, the area community health centers and the MWFMP Clinic viewed very favorably, especially among non-English speaking focus group members. Residents reported that doctors and nurses at these clinics take time with patients and patients do not feel rushed; furthermore, at these clinics, language and immigration status are, in the words of one focus group member, *"never an issue."* However, a few focus group participants also described some health services in the region as not being welcoming to non-English speakers.

When asked about the availability of medical services in the region, over half of community health assessment survey respondents were very satisfied with the availability of hospital services and health providers that speak their language or take their insurance (Figure 45). Respondents were least likely to be satisfied with the availability of public transportation to services, the alcohol or drug treatment services available, smoking cessation services, and mental health services.

Figure 45: Survey Respondents Very Satisfied with the Availability of Services by Total Service Area, 201



DATA SOURCE: MetroWest Region Community Health Assessment Survey, 2013

In focus group discussions, participants specifically talked about the shortage of mental health and oral health services in the region. According to residents, MetroWest lacks enough mental health providers to meet the need, and as a result, residents who need services are unable to access them or must wait long periods to access them.

Several respondents also noted a lack of dental care as a concern for the region. Access to dental care was identified as a key challenge for the region during the needs assessment process conducted for the MetroWest Health Care Foundation. Focus group members reported that many residents do not have dental insurance and those who do often find that their insurances provide only limited coverage for oral health services beyond cleanings. Furthermore, MassHealth dental coverage is provided only to children, not adults. The costs of dental care are prohibitive to many families in the area. One member of the focus group commented, *"adequate dental care is extremely expensive. Some patients find they can only obtain the dental care they really need if they pay out of pocket."* Although some commented that there are dentists who provide free care as does a local college (Mt. Wachusetts College), these services cannot reach all those who need free or discounted dental services.

Data at the county level indicate that overall Middlesex and Norfolk Counties indeed have lower population to provider ratios for mental health and dental providers than the state overall (Table 21). However, rates are higher for both in Worcester County.

Table 21: Ratio of Population to Mental Health and Dental Providers by Massachusetts and County

	Mental Health Providers	Dentists*
Massachusetts	970:1	1,222:1
Middlesex County	558:1	1,187:1
Norfolk County	660:1	953:1
Worcester County	1,658:1	1,690:1

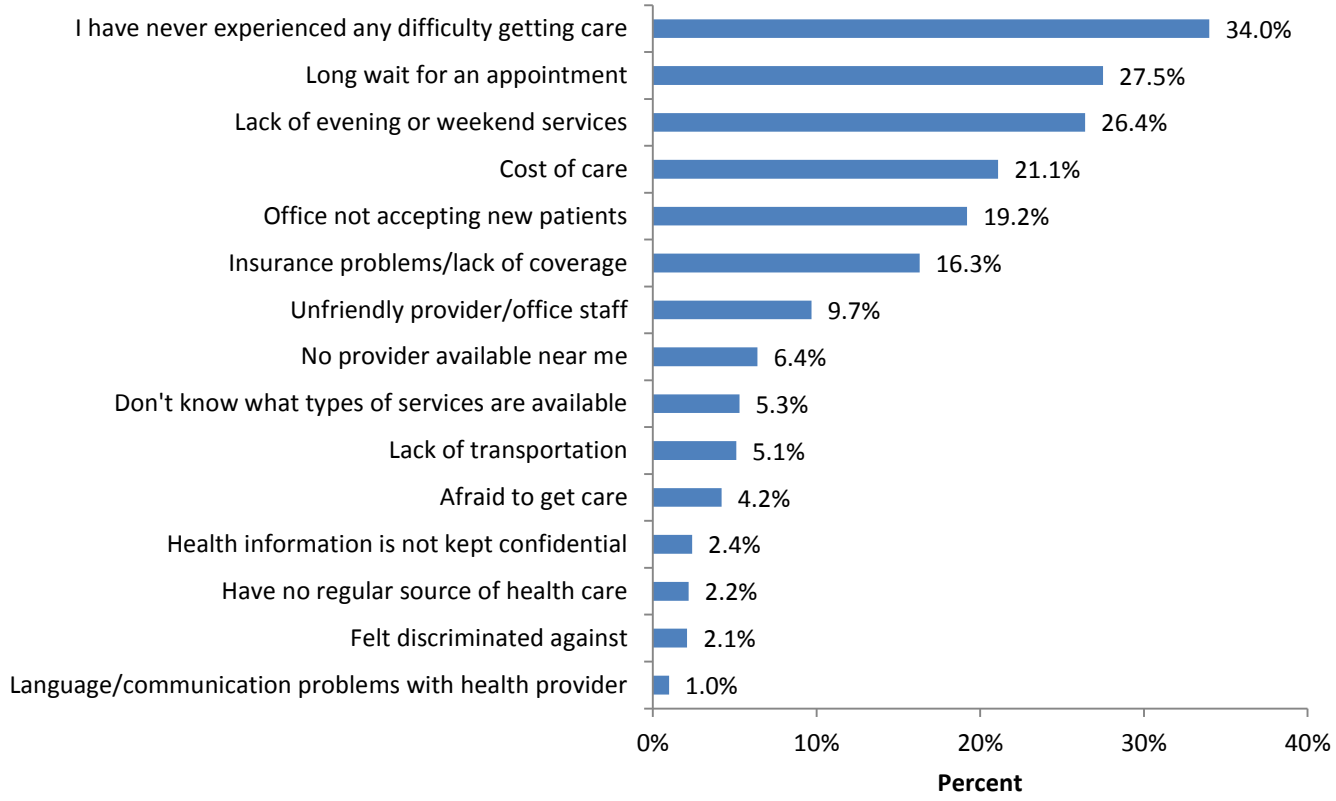
DATA SOURCE: US Department of Health and Human Services, HRSA Area Resource File, as cited by the University of Wisconsin Population Health Institute, County Health Rankings, 2011-2012; For Dentists: County Health Rankings, 2013

Challenges to Accessing Health Care Services

When asked about access to health care services, respondents acknowledged that while the region has many medical services, barriers exist and services are not available equally to everyone; specific barriers were related to obtaining adequate insurance, high out-of-pocket costs for care, challenges to locating primary, after-hours, and specialty care, and language and transportation barriers. Access to care identified as one of two top issues during the needs assessment conducted for the MetroWest Health Foundation during its strategic planning process. Focus group participants indicated that even with the Massachusetts health care reform, barriers still exist for many residents.

Survey respondents also noted their barriers to care. Figure 46 reveals that survey respondents were most likely to report long waits for appointments, lack of evening/weekend services, and cost of care as the top three challenges they have experienced. Most commonly cited challenges did not differ greatly by geographic sub-region. (Detailed data tables by sub-region are found in the Appendix C survey data tables.)

Figure 46: Survey Respondents' Perceived Challenges to Accessing Care by Total Service Area, 2013



DATA SOURCE: MetroWest Region Community Health Assessment Survey, 2013

For community health assessment survey respondents, finding services was not necessarily the issue, as over 9 in 10 indicated that they would know where to go for services if they needed medical or dental care (Table 22). Yet, a high percentage (93.5%) also indicated that they believed the health or social services in their community should focus more on disease prevention. Of all challenges asked about in the survey, public transportation was noted as a barrier by 86.6% of respondents. Some respondents had personal negative health experiences, as 36.8% had a personal experience of not receiving care because of cost and 28.7% had a negative experience with medical office staff. Approximately 5-10% noted feeling discriminated against when trying to get medical care because of income, gender, age, race/ethnicity, language, or sexual orientation.

Table 22: Percent of CHA Survey Respondents Who Perceived the Following Statements to be True about Health Care Access, 2013

% answering TRUE	**Total Service Area (N=673)**
If I need medical services, I know where to go to receive them	95.1%
The health or social services in my community should focus more on prevention of disease or health conditions	93.5%
If I need dental services, I know where to go to receive them	92.3%
It's hard to use public transportation to get to medical/dental services	86.6%
If I need mental health services, I know where to go to receive them	72.2%
I or someone in my household has not received care needed because the cost was too high	36.8%

% answering TRUE	Total Service Area (N=673)
When trying to get medical care, I have had a negative experience with the office staff	28.7%
When trying to get medical care, I have felt discriminated against because of my income	10.7%
When trying to get medical care, I have felt discriminated against because of my gender, age, or sexual orientation	5.6%
When trying to get medical care, I have felt discriminated against because of my race, ethnicity, or language	5.1%

DATA SOURCE: MetroWest Region Community Health Assessment Survey, 2013

Table 23 shows data across the state and region of residents who do not have a personal doctor (10.6% for state, 8.8% for region) and who have not had a check-up in the past year (23.3% for state, 26.0% for region). Overall, MetroWest residents were less likely than those statewide to say they did not have a personal doctor, although rates were higher than the state in Framingham. MetroWest residents were slightly more likely than those in the state to not have had a check-up in the past year.

Table 23: Engagement in Health Care Prevention Services by Massachusetts, Region, and Community, 2010

Geographic Location	Without a Personal Doctor	No Check Up in Past Year
Massachusetts	10.6%	23.3%
MetroWest Regional	8.8%	26.0%
Ashland	8.7%	26.7%
Framingham	10.8%	26.0%
Holliston	7.4%	25.6%
Hopkinton	7.5%	27.1%
Hudson	8.9%	25.8%
Marlborough	10.4%	26.7%
Medfield	7.0%	25.4%
Millis	8.1%	26.0%
Natick	8.2%	25.9%
Northborough	7.8%	25.5%
Sherborn	6.2%	24.2%
Southborough	7.4%	25.8%
Sudbury	6.8%	25.1%
Wayland	6.6%	23.8%
Westborough	8.8%	26.3%

DATA SOURCE: MetroWest Health Foundation, MetroWest Health Data Search, Behavioral Risk Factor Survey Statistical Estimates, Clinical Tests and Care, 2010

More details on specific identified barriers to obtaining health and medical care are discussed below.

Obtaining Insurance and Coverage

> *"Not all surgery and follow-up costs are covered by insurance."*—Community resident focus group participant
>
> *"Insurance can be a barrier. Counseling or therapy options are limited based on your insurance."*—Organizational staff focus group participant
>
> *"Some residents are in the US for 15, 20 years and don't understand insurance. If you are here for 5 years you can get Medicare, if you are on MassHealth you don't pay money for care. Health insurance is an issue."*—Organizational staff focus group participant

MetroWest focus group members reported that accessing and understanding health insurance is a substantial barrier to accessing health care. As one focus group member explained, "a*ccess to care is based on insurance."* While Massachusetts has universal health insurance, the uninsurance rate across the state varies widely. Data from the Blue Cross Blue Shield Foundation's report on uninsurance indicate that Marlborough (4.9%) and Framingham (4.6%) had some of the highest rates of uninsurance for children across the state, which ranged from 0% to 6.1%. For adults, statewide uninsurance rates ranged from 1.4% to 15.9%. Marlborough had an adult uninsurance rate of 4.3% while Framingham's was over twice as high at 9.4%. Data were not available for other MetroWest communities.[ii]

Several MetroWest residents noted problems with obtaining insurance including substantial paperwork and long wait times for enrollment. For undocumented persons, fear of being deported raises a barrier to obtaining health insurance, according to respondents.

A closely-related challenge to accessing health care services, according to MetroWest residents, is the length and scope of services covered by different insurance plans. As one resident stated, *"MassHealth is very complex."* Residents noted that not all health care costs are covered by insurance; additionally, some specialist care and tests may not be covered. Obtaining health insurance to cover these other costs can be cost prohibitive, residents explained. Understanding what is covered and what is not is a key challenge for residents. As one social service focus group participant stated, *"what I hear of others is [that lower income residents] don't know about insurance and how they are covered. Even though we have universal coverage, it's still hard to understand."* A related problem reported by residents is what happens when insurance changes. One MetroWest resident commented, *"there is a problem when you change health insurance, you have to change doctors."*

[ii] Blue Cross Blue Shield Foundation of Massachusetts, *Reaching the Remaining Uninsured in Massachusetts: Challenges and Opportunities* report, March 2013 [http://bluecrossmafoundation.org/sites/default/files/download/publication/Uninsured_in_MA_Report_FINAL_0.pdf]

Healthcare Costs

> *"People may go without necessary health care or medications due to cost."*—Community resident focus group participant
>
> *"[I] can't stand not knowing how much something is going to cost. No job right now so using savings and it's hard to manage."*—Community resident focus group participant
>
> *"The cost of co-pays and urgent care is a real problem—we need a solution to this."*—Organizational staff focus group participant
>
> *"People cannot afford good health care, because of the cost."*—Organizational staff focus group participant

Affordability of health care was also identified as a significant concern by MetroWest CHA focus group participants. They noted that insurance coverage can be expensive. The cost of co-pays, differing co-pay costs, and out-of-pocket charges were concerns shared by many focus group members. As one person shared, *"I went to the clinic and it cost me $330 even though I have Medicare."* Some respondents commented that they or people they knew have had to make decisions between paying for food and rent and paying health care costs.

A related challenge is the ability to pay for prescriptions. Some participants reported that their insurance did not cover medications, which are often expensive. As one person stated, *"coverage for certain prescriptions are not available through MassHealth."* According to participants, high out-of-pocket costs often mean that people avoid accessing health services, particularly preventative ones, and avoid the most expensive tests and specialists, all of which can compromise health outcomes.

Finding Primary, Specialty and After-Hours Care

> *"We need more doctors who will accept MassHealth."*—Community resident focus group participant
>
> *"There are no specialty providers who take safety-net coverage in this area, so these people need to travel to Boston and Worcester…they don't have cars and can't take time off work."*—*Stakeholder key informant interview*

Finding physicians who take MassHealth is another challenge to health care accessibility, according to focus group respondents. Residents reported difficulty finding primary care physicians and pediatricians and long wait lists for those who do take MassHealth. As one health provider explained, *"physician access is restricted. Some physicians are not taking new patients."* MetroWest residents reported similar challenges to finding specialists who accept MassHealth. Finding specialty providers who accept MassHealth is also a challenge. The result, focus group members shared, is that patients sometimes have to travel to Boston to obtain specialty care.

MetroWest focus group members also stated that the lack of a clinic that provides services after hours and on weekends creates barriers to accessing health care, particularly for those juggling multiple jobs or who have odd work hours. As one Brazilian resident commented about the MetroWest Free Clinic "*being open just once a week and not every week, it makes harder to get the services there but the service is great."*

Transportation

> *"Transportation is a big issue– if you do not qualify for The Ride, it can be very expensive to go to medical appointments."*—Stakeholder informant interview

> *"Primary care provider referrals are sometimes made to specialists who are not on public transportation routes."*—Community resident focus group participant

Lack of transportation also creates barriers to accessing health care, according to respondents. As discussed earlier, MetroWest residents reported that there are few public transportation options in the region, creating challenges to accessing health care services. As provider explained, *"patients are forced to get some of their healthcare in Boston or other communities that are a distance from their home. Because arranging for transportation to these locations can be difficult, patients may not get the care that they need in a timely fashion, thereby jeopardizing their long-term health."*

Complexity and Knowledge of the Healthcare System

> *"The difficulty is the ability to see the whole and where to enter into the system and how to navigate the system once in."*—Organizational staff focus group participant

> *"[People without insurance] don't know they can get healthcare."*—Community resident focus group participant

Understanding how to navigate the healthcare system is a key part of having access, according to focus group respondents. Many noted that immigrant and non-immigrant residents do not understand how the U.S. health care system works and how to optimize use of it for good health. As one focus group member explained, *"if you are in the know, then you can navigate it, if you don't, then you suffer the consequences."* Several participants indicated that lack of knowledge—and the difficulty of figuring out the complex health care system—leads to inappropriate use of health care and poorer health outcomes. A social service provider concurred, saying, *"there is a silent population -- underserved because they don't speak out [about their lack of understanding]…as a result, [they] don't get services that could help."*

Use of the ER for Primary and Specialty Care

> *"The ER is a common entry point into the healthcare system."*—Organizational staff focus group participant

> *"There are long waits in the ER due to overuse."* —Organizational staff focus group participant

In discussing the barriers that MetroWest residents face in accessing health care, focus group members observed that increasingly residents are using hospital emergency rooms (ER) for health services that are not emergent. As one interviewee during the MetroWest Health Foundation strategic planning needs assessment explained, *"there is a lack of people hooked in with primary care, and as a result people use the ER as a source of primary care."* Focus group participants offered various reasons for high ER use including limited hours of existing health care facilities, lack of primary care providers, and lack of urgent care facilities in the region. For some, lack of other available options and lack of insurance leaves the ER as the source of health care even for non-emergent needs.

Lack of Patient-Centered Care and Communication about Prevention

> *"What I'd like from my doctor: quality over quantity, shifting of focus, one-on-one time, look me in my eye, not looking at the clock, being really present is very important."*—Community resident focus group participant
>
> *"People with disabilities can't always get good medical care."*—Organizational staff focus group participant
>
> *"Seniors listen to the doctor, but don't know what he's saying, they don't want to say that they don't understand."*—Organizational staff focus group participant

Focus group members expressed concerns about their interactions with their provider, specifically the limited communication and lack of focus on prevention. MetroWest focus group members noted that communication between providers and patients can be challenging. One focus group participant stated, "*people nod their head like they understand what is being told to them, but they really don't understand."* Other focus group members commented, however, that there have been recent advances in technology—electronic medical records, telemedicine, and patient portals—that can help patients better understand their health and health care and enhance communication between patients and providers.

Related to communication was the short amount of time doctors often spend with patients which leaves patients not always fully aware of their health issues or how to take better care of themselves. As one focus group member shared about his doctor, *"[the] doctor is good, but the system doesn't allow him to sit and listen and answer questions."* Similarly, several MetroWest respondents commented that health care tends to be fragmented across multiple providers or facilities, which can negatively affect health outcomes. They noted that this is especially prevalent for those who are chronically ill and the elderly, who may receive care from several specialists and who are more likely to require hospital care. Noting that follow-up care after a hospital stay is important for improved health, one focus group member affiliated with a hospital stated *"hospitals are not aware of outside circumstances when elderly are released."*

Finally, several focus group members shared that they believed that a critical component to health care quality is patient confidence to ask questions and, at times, seek second opinions. Senior focus group members and those from diverse cultural backgrounds more often reported this as a concern than those in other groups. Understanding one's rights was also important according to respondents. As one medical interpreter explained, *"it is often unclear about what rights patients have and how to exercise those rights."*

Barriers Specific to Immigrant Communities

> *"Some immigrants fall through the cracks given their language barriers."*—Community resident focus group participant
>
> *"[Many immigrants] come without knowledge about preventive care."*—Organizational staff focus group participant
>
> *"Patients avoid services that could provide early detection or prevent exacerbation."*—Organizational staff focus group participant

In addition to the barriers described above, focus group members shared that cultural and language minorities face language barriers to accessing health care according to respondents. As one focus group member shared, *"A woman went to a hospital … and wanted to make an eye exam appointment, but they did not have any translators. They told her to bring a translator with her the next time she came. She was upset. She found someone in the hall (a Mandarin speaker) and asked them to translate for her (to make an appointment). They said she couldn't just find someone in the hallway to translate for her."* The issue of language access also emerged during the strategic planning assessment conducted for MetroWest Health Foundation. As one interviewee participating in this process stated, *"you should not have to bring your own translator to your provider."*

Focus group members from and serving immigrant and refugee communities reported barriers specifically regarding disease prevention in immigrant communities. While respondents noted that there are some specific prevention programs in the region trying to address these issues, they cannot meet the demand. A few focus group members pointed to low immunizations rates among adults from these communities as evidence of this. The need to work and the cost of preventive care were noted as primary barriers to focusing on prevention. As one focus group member commented, *"many poorer immigrants say: 'I cannot afford being sick, I have to work.'"* Financial constraints was a theme that emerged throughout these discussions about care. Lack of knowledge was another barrier to prevention among immigrant communities. As one member of a Brazilian focus group stated, *"people are not educated about prevention…men especially feel they don't need help."* Finally, focus group members noted that many people come from countries where seeking preventative health care is not common practice. As one medical interpreter focus group member explained, *"in their native countries, most people only go to a doctor to treat an acute injury or illness or a chronic illness that has become acute."*

Health Information Sources

Health care providers and the Internet are the primary sources of health information for MetroWest residents. When MetroWest community health assessment survey respondents were asked the sources from which they receive the majority of their health information, nearly half of respondents indicated that their main source was a doctor, nurse, or other health provider (Table 24), which ranged from 42.2% among Sub-Region A residents to 49.3% from Sub-Region C. A somewhat close second was the Internet/websites, with the range of 28.2% of Framingham respondents seeking information from the web up to 37.5% of Sub-Region A using this source.

Table 24: CHA Survey Respondents' Sources for the Majority of Their Health Information by Total Service Area and Region, 2013

	Total Service Area (N=673)	Framingham (N=175)	Sub-Region A (N=155)	Sub-Region B (N=168)	Sub-Region C (N=172)
Doctor, nurse, or other health provider	47.2%	48.3%	42.2%	48.6%	49.3%
Website	31.4%	28.2%	37.5%	34.2%	26.4%
Magazine	3.3%	4.7%	3.9%	2.7%	2.0%
Employer	2.3%	2.0%	3.1%	2.1%	2.0%
Family members	1.9%	4.0%	1.6%	0.0%	1.4%
Social Media	1.4%	2.0%	1.6%	0.7%	1.4%
Friends	1.2%	2.0%	0.8%	0.7%	1.4%
Local newspaper	1.0%	0.7%	1.6%	0.0%	2.0%
Pharmacy	0.9%	0.0%	0.8%	2.1%	0.7%
Television	0.9%	0.7%	0.8%	0.0%	2.0%
Library	0.7%	0.0%	0.8%	1.4%	0.7%
School	0.3%	0.0%	0.0%	0.7%	0.7%
Neighbors	0.2%	0.7%	0.0%	0.0%	0.0%
Religious or spiritual advisor	0.2%	0.7%	0.0%	0.0%	0.0%
Radio	0.2%	0.7%	0.0%	0.0%	0.0%

NOTE: Arranged in descending order by "Total Service Area"
DATA SOURCE: MetroWest Region Community Health Assessment Survey, 2013

COMMUNITY STRENGTHS

> *"People help each other in this area."*—Community resident focus group participant
>
> *"Caring community—people respond when others need help."*—Community resident focus group participant
>
> *"[Our community is] Wonderful. You get to know a lot of people."* —Community resident focus group participant
>
> *"The church is a key place of exchange."*—Organizational staff focus group participant

As noted throughout this report, the MetroWest region has numerous strengths including quality health and medical services, an array of community and social service organizations, community cohesion in many areas, and strong partnerships across organizational entities. When asked about their community's strengths in focus groups, MetroWest residents typically brought up the cohesiveness of many of the communities and neighborhoods. They described the social climate in their communities as *"friendly"* and having a *"small town feel."* They discussed how neighbors helped each other out in times of need.

As discussed earlier in the health care section, MetroWest residents generally lauded the quality of health care services in the region. In addition to medical services, residents reported that there are numerous social services as well. Those specifically mentioned include BayPath, Catholic Charities,

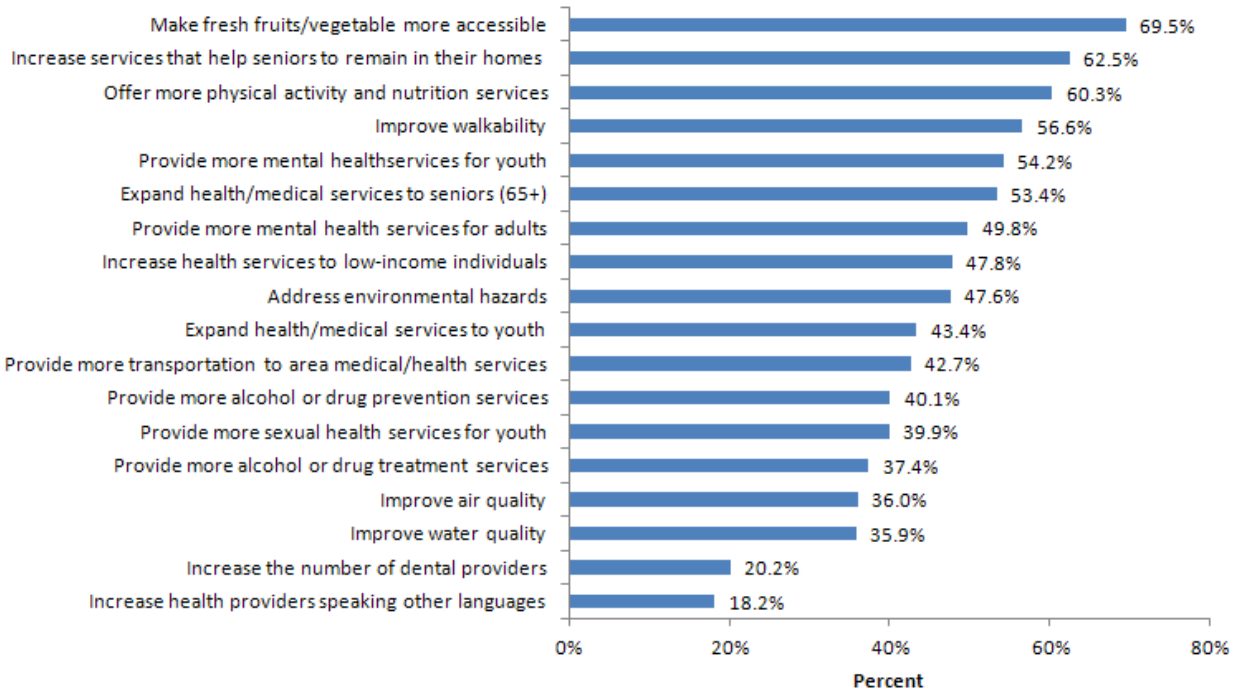
Advocates, Tempo, South Middlesex Opportunity Council (SMOC), the Visiting Nurse Association, Jewish Family Services, Program RISE for homeless, and the SHINE (Serving the Health Information Needs of Elders) program for seniors. In addition, seniors reported that senior centers play an important role in providing information about services and many also offer screenings. As one focus group member observed, *"[there are] good social services agencies. It is possible for people to get the help they need."* However, funding of services and nonprofits was reported to be a challenge and some programs have been cut back. In addition some communities, Hudson was mentioned, were reported to be less rich in social services programs and organizations. As one focus group member stated, *"most of agencies that [provide] services are in Framingham. We're not in Worcester, nor Lowell or Framingham. So we're not really serviced."* Organizational staff participants also noted the partnerships across organizations and agencies as critical to addressing the population's complex health needs.

Those in more diverse communities reported strong ethnic ties. The strong influence of the church, especially for the Latino community, was noted in several focus groups, and that the church played a key role in providing services and information in Latino communities. However, residents also acknowledged that information exchange among church members may not always be accurate. As one respondent who works in the Latino community stated, *"church is a key play of exchange, but the exchange is between people and sometimes the information is inaccurate."*

VISION FOR THE FUTURE

When thinking about the future, MetroWest community health assessment survey respondents saw key areas for action. As shown in Figure 47, survey respondents were asked to identify the areas they considered to be high, medium, and low priorities to be addressed in the future. Respondents were most likely to identify as "high priority" making fresh fruits/vegetables more accessible, increasing services for elderly to stay in their homes, offering programs focusing on obesity and physical activity, and improving walkability as the top areas of focus, followed by mental health services for youth. Overall, a focus on healthy living/chronic disease prevention and seniors were some of the overarching high priority areas. Table 25 presents the overarching areas identified as top priorities by survey respondents by sub-regions. Specific results from the survey by sub-region for this question can be found in Appendix C.

Figure 47: Percent Survey Respondents Noting Areas as "High Priority" for the Future, 2013



DATA SOURCE: MetroWest Region Community Health Assessment Survey, 2013

Table 25: Top Priority Areas for the Future by Region, 2013

Rank	Framingham	Sub-Region A	Sub-Region B	Sub-Region C
1	Make fresh fruits and vegetable more affordable and available	Make fresh fruits and vegetable more affordable and available	Make fresh fruits and vegetable more affordable and available	Make fresh fruits and vegetable more affordable and available
2	Increase the number of services that help seniors to remain in their homes longer	Offer more programs/services focusing on physical activity, nutrition, or addressing obesity	Increase the number of services that help seniors to remain in their homes longer	Increase the number of services that help seniors to remain in their homes longer
3	Offer more programs/services focusing on physical activity, nutrition, or addressing obesity	Increase the number of services that help seniors to remain in their homes longer	Offer more programs/services focusing on physical activity, nutrition, or addressing obesity	Improve walkability (e.g., sidewalks, bike lanes, street lights)
4	Provide more mental health or counseling services for youth	Provide more mental health or counseling services for youth	Improve walkability (e.g., sidewalks, bike lanes, street lights)	Offer more programs/services focusing on physical activity, nutrition, or addressing obesity
5	Expand health/medical services to seniors (65+)	Provide more mental health or counseling services for adults	Expand health/medical services to seniors (65+)	Expand health/medical services to seniors (65+)

DATA SOURCE: MetroWest Region Community Health Assessment Survey, 2013

Focus group respondents and interviewees were asked about their visions and hopes for the future 3-5 years from now. Some large themes emerged, specifically the need for an improved economy and immigration reform. Residents also wished for more opportunities to be physically active and eat right, improved access to quality healthcare, more health education especially around prevention, more support for youth and seniors, and enhanced transportation. These are discussed in the sections below.

More Opportunities for Healthy Eating and Physical Activity

> *"Everyone needs to know about eating healthier, exercising, and how important it is to have a health provider."*—Community resident focus group participant
>
> *"Easier and more affordable access to healthy food. Making healthy food look cool."* – Organizational staff focus group participant
>
> *"Get rid of banks and Dunkin Donuts and put in more recreational areas like parks and basketball courts."*—Community resident focus group participant

Many MetroWest focus group members reported that they shared a vision of enhanced physical activity and better nutrition among MetroWest residents—in the words of one focus group member, *"more people getting out and doing things."* Focus group members saw this as critical to reducing obesity and chronic disease rates in the region. Some residents expressed a desire for communities to be more pedestrian friendly with sidewalks and bike lanes. They also hoped that fitness centers would be less costly and offer more programs for children and youth. Greater accessibility to healthy foods was also mentioned by residents. One focus group member mentioned the need for more involvement of business in promoting healthy lifestyles.

Several focus group members commented, however, that increasing access to healthy foods and opportunities for physical activity were insufficient and that people also needed to be willing to make necessary behavior changes. As one focus group member stated, *"We need people not being afraid to look for help and taking better care of themselves—personal drive."*

Improved Access to Quality Health Care

> *"Primary care that will take people."*—Community resident focus group participant
>
> *"A social workers or similar professional at every primary care would be helpful."*—Organizational staff focus group participant
>
> *"Encourage doctors to educate their patients since people look to them sometimes as heroes."*—Community resident focus group participant

Improved access to health care and better coordinated care were also key components of MetroWest residents' visions for the future. Respondents described various aspects of this including greater affordability, more doctors, and less wait time for appointments, support for medication costs, after hours care, as well as access to more physical therapy and alternative treatments. Several also mentioned a desire for more specialists including foot care, eye care, and geriatrics.

Better care coordination was also identified as a vision for the future. Suggestions included having more social workers and other professionals to serve as patient navigators able to help patients through

insurance, health, education and social/home care support needs. Other suggestions included more follow up support after being discharge from the hospital, including written instructions in the appropriate language. Members of the health care provider focus group noted the importance of having a patient-centered health team, where all providers of a patient could coordinate and communicate to work together towards the health of the patient. Providers were also interested in a system that allowed them to offer more time for preventive screening and education.

More Engaged, Culturally Competent Health Education

> *"Bilingual social forums and focus groups that offer up the necessary information that minorities need to help with their own health care."*—Organizational staff focus group participant

> *"Responsibility needs to be built in. Community forums on teaching people, families, access to care, incentives for people who do take care of themselves."* —Organizational staff focus group participant

Focus group members were interested in having the public be provided with more information about important health topics, but to do so in an engaging, culturally appropriate way. A vision suggested by one focus group member was that *"people are more educated, have information and take care of their health."* Suggested health education topics included nutrition and weight management, other aspects of prevention, and what to expect then visiting the doctor's office. Reaching youth with messages about substance use and sexual activity was also mentioned by a number of residents. Several focus group members that the 211 service provides information but some may not know about it; others wondered if there was more that could be done to enhance this service.

Residents stressed that creative outreach methods were needed to reach different MetroWest residents with health information, depending on their language, cultural, gender, and age characteristics. They suggested outreach through churches, neighborhood associations, and other community groups. Reaching non-English speaking members of the community with health messaging was seen as critically important and focus group members suggested distributing flyers in places like Brazilian bakeries and restaurants and outreach through ESL classes. A hospital-sponsored health fair in multiple languages was also suggested, although it was cautioned not to be a marketing event.

MetroWest focus group members suggested that cable TV can be an effective way to reach Spanish and Portuguese-speaking residents. For seniors, senior centers are an important source of information and health screenings and some seniors reported that these centers should be more aware of health and social services offered in the community. The role of the faith community in providing information was also noted in many focus groups. Focus group respondents from faith organizations as well as social service providers identified many ways the faith community already provides services.

Electronic media and the web were also seen as good ways to disseminate information. Some focus group members suggested establishing one website with information about health services as well as health education materials. Others, however, cautioned that this needed to be part of a multi-pronged outreach strategy as not all are facile with computers or the internet. As one person noted, *"The services are in place, but people may not be computer savvy in order to reach that important information."*

More Informed Health Care Consumers

> *"The idea is to make it easy for people to see the tools, techniques, and practices of healthcare—any easy and safe entry point into healthcare."*—Organizational staff focus group member

> *"Explain to Brazilians how the American health system works."* —Organizational staff focus group member

As discussed earlier, a prominent theme across focus groups was the need to break down barriers to navigating the complex health system. As a subset of the conversation on health education, focus group members spoke about the need to have, in the words of one resident, *"[a] more informed and educated healthcare consumer."* Suggestions included not just providing information about how to effectively access health care (such as do not use ER), but also helping people to understand the opportunities and limitations of their health insurance coverage as well as their rights as patients.

Supports for Youth

Respondents frequently mentioned the importance of activities and services especially for youth. Having more places for youth to go in their spare time was frequently mentioned, especially by youth focus group participants themselves. Suggestions included more free programs for children, more recreational opportunities for children and youth, and a skate park. Respondents also reported a need for more youth education about mental health, healthy relationships and contraception, and substance abuse. Brazilian parents reported that they would like schools to engage Brazilian parents in a more effective way to address some of these issues.

Supports for Seniors

> *"[We need] more services available at senior centers that are now only available at hospitals such as health clinics in settings more comfortable and accessible for seniors*."—Community resident focus group participant

> *"The population with dementia is growing… those aging with dementia should have case managers but few do today."—Stakeholder key informant interview*

The aging of the population was recognized by many focus group members and therefore, the growing needs of the elderly population was cited as an area of concern and a vision for the future. Focus group respondents mentioned that they would like to see more services such as home visiting for homebound seniors, assisted living facilities, senior centers, as well as more outreach and programming to those who cannot leave their homes.

The need for the medical and health care community to recognize and begin to address the growing aging population was also mentioned. Residents reported that the region needs more geriatric health providers. Additionally, many noted, seniors have difficulty navigating the health system for their often complex medical needs so there is a need for patient navigators for seniors as well as medical providers and others who are trained in Alzheimer's and dementia. Finally, better end-of-life care was identified as an area for opportunity in the future.

More Transportation Options

Several focus group members saw enhanced transportation options as important to the future of the region. They wanted to see more public transportation, a return of some bus lines. Reliability and affordability were important.

Engaging Partners across the Region for Action

When asked about who needs to be involved in realizing their future vision, focus group members named many individuals and organizational entities including community residents, youth, leaders and government officials, churches, schools, health care organizations and hospitals, business, and the media. Several focus group members mentioned the importance of collaboration to leverage resources and create change. This included hospitals working together with the community and community-based organizations as well as linkages between health providers and organizations with specific expertise such as the Alzheimer's Association.

CONCLUSIONS

Integrating secondary data in the region, community resident surveys, and discussions with community residents and leaders, this report provides an overview of the social and economic environment of the MetroWest region, the health conditions and behaviors that affect its residents, and perceptions of strengths and challenges in the current public health and health care systems. Several overarching themes emerged from this analysis:

- **There is wide variation in the MetroWest region in terms of population composition, socioeconomic levels, and needs.** While in general the MetroWest region's risk factors related to health are generally at or better than the state's, rates do differ by community. Part of that reason is the wide variation in population. Racial/ethnic composition, poverty rates, and educational opportunities differ across the region. Many towns are considered quite affluent, while others are more working class. These differences affect residents' access to healthy food, the availability of safe green and recreational space, as well as access to and use of health care and prevention services. By most measures, residents in Framingham, Marlborough, and Northborough experience poorer overall health than those in the region's other communities. While the economic decline has been felt throughout the region, already poor areas were harder hit. Residents reported concerns about slow job growth, high taxes, and the affordability of the region.

- **Obesity and access to physical activity and healthy food were concerns identified by focus group participants and survey respondents.** Similar to trends nationally, obesity rates in the region are concerning. Those in the more affluent communities reported access to many grocery stores, parks, and recreational facilities, but, for some participants, accessibility and affordability were concerns. Similarly, many residents expressed concerns about walkability in the surrounding communities. Healthy food options were reported to be more difficult to obtain in some communities as well. There are a number of initiatives in this area such as the Mass in Motion work to implement environmental and policy strategies to address obesity. While progress to enhance healthy food options in schools were noted, residents and provider reported that these efforts have not necessarily translated into increased consumption of these foods and more physical activity. There was a lot of momentum among CHA participants around the issue of obesity and how to address it regionwide.

- **Mental health and substance use were identified as pressing needs by assessment participants, and current services were largely seen as inadequate.** Mental health concerns in the region were a

top-of-mind issue for residents who perceived depression and youth-related mental health issues as being a top concern. Youth survey data indicate that behaviors and symptoms related to poor mental health are increasing among high school students since 2006, although they are decreasing among middle school students. A closely-related issue is the perceived growing use of substances, including tobacco, alcohol, and prescription drugs. According to residents, the region needs more mental health providers especially those skills at addressing the needs of children and teens, education and prevention programs, culturally competent care for non-English speaking patients, and greater integration of mental health into the primary care setting.

- **The aging of the region's population was noted by many, and concerns about seniors were prominent.** As Baby Boomers age, seniors are expected to comprise an ever increasing proportion of the population in the region. Concerns about the aging population were prominent in focus groups and in the CHA survey. Participants expect that demands on the health and social service infrastructure will rise with an aging population, and it important to consider services that will help them live independently. While services such as senior centers will play an important role, there will be a need to ensure that seniors can access them.

- **Across all issue areas, transportation was identified as a challenge for many residents to accessing services.** In many focus groups and in the CHA survey, transportation and walkability were identified as a critical issue in the community. For those who do not have a car, it is difficult to walk to services due to distance and lack of infrastructure for pedestrians. Public transportation was discussed as being unreliable and limited. For vulnerable populations such as the elderly and lower income, these limited transportation options have a severe impact on their time, ease of getting to employment, appointments, or going about their daily lives such as going to the grocery store. These issues underscore the connectedness between transportation and its challenges to maintaining good health.

- **The region is seen as having a strong health care infrastructure, but there are concerns about access.** The region has many health assets including hospitals, community health centers, and social service agencies. Even with health care reform, residents across the region expressed concerns about access including the cost of health care, finding providers willing to accept MassHealth, lack of transportation, and inconvenient office hours (not on weekends or evenings.) Dental and mental health service access is a concern, especially for lower-income populations. Residents also identified lack of awareness of services or how to navigate the health care system as challenges for the region's residents, particularly for immigrant patients. Quality of care, notably the little time that providers now spend with patients and inadequate follow up care after hospital stays, were also identified as concerns. Some approaches to address these challenges included more public awareness and health education as well as greater coordination across health care settings.

- **As the health system increasingly faces challenges and health reform is implemented, residents saw the great need for increased efforts focusing on prevention.** A focus on prevention and better lifestyle behaviors were seen as essential to improving the health of the region. More education relative to health, a stronger infrastructure that supports health (e.g., sidewalks, safe green space), and changes in how to navigate the health system were also seen as an important need. However, assessment participants noted that creative ways were needed to reach populations with these messages, and that these needed to be tailored to the diverse population groups in the region. Future collaboration and coordination of efforts were viewed as critical, and an area in which the region currently has a strong foundation.

APPENDIX A: COLLABORATIVE PARTNERS

Advocates, Inc.
Community Health Coalition of MetroWest (CHNA 7)
Framingham Board of Health
Hudson Board of Health
Edward M. Kennedy Community Health Center
MA Department of Public Health, Healthy Communities
MA Department of Public Health, South-East Region
Marlborough Health Department
Marlborough Hospital
MetroWest Free Medical Program
MetroWest Health Foundation
MetroWest Medical Center
Regional Center for Healthier Communities
Southboro Medical Group/Atrius Health
Visiting Nurse Association Care Network and Hospice

APPENDIX B: FOCUS GROUP INFORMATION

FOCUS GROUP SEGMENTS

- Families of people with disabilities including children of all ages with autism, intellectual disabilities, physical disabilities
- Brazilian female age between 25 and 40 years old (conducted in Portuguese)
- Spanish-speaking older adults (conducted in Spanish)
- Older, mostly immigrant adults (55+ years old)
- Community Benefits Advisory Council for Marlborough Hospital
- College students
- Homeless residents in shelter (both men and women)
- Young adults with children, ages 18-27 living in a shelter
- Local health department staff
- Middle-aged adults from the Recovery Learning Center in Framingham
- Faith-based workers including pastors, outreach coordinators and spiritual care volunteers representing Marlborough, Hudson, and Sudbury
- Marlboro teens ages 14-18
- Youth ages 19-22
- Portuguese-speaking (Brazilian) interpreters
- Spanish-speaking interpreters
- Residents in MetroWest Medical Center service area
- African American residents
- Seniors from the Framingham and Marlborough/Hudson areas

ORGANZATIONS ENGAGED IN FOCUS GROUP LOGISTICS, RECRUITMENT, OR HOSTING

- Advocates
- Boys and Girls Club of MetroWest Pearl Street Clubhouse
- Callahan Center
- Edward M. Kennedy Community Health Center
- Greater Framingham Community Church
- Marlborough Hospital
- Marlborough Senior Center
- Massachusetts Department of Public Health
- Metro Suburban Recovery Learning Community
- MetroWest Free Medical Program
- MetroWest Medical Center
- Saint Stephen Parish
- South Middlesex Opportunity Council (SMOC)
- Town of Hudson Board of Health
- VNA Care Network & Hospice
- Wayside Youth and Family Support Network Tempo Young Adult Resource Center

APPENDIX C: DETAILED SURVEY DATA TABLES

Table 26: Percent Respondents Citing Community Aspects that Make it Easier or Harder to be Healthy by Region, 2013

	Framingham (N=175)	Sub-Region A (N=155)	Sub-Region B (N=168)	Sub-Region C (N=172)
Number/location of grocery stores/bodegas				
Easier to be healthy	57.6%	52.0%	58.8%	52.4%
Neither easier nor harder	40.6%	44.6%	36.9%	42.3%
Harder to be healthy	1.8%	3.4%	4.4%	5.4%
Number/location of fast food restaurants				
Easier to be healthy	3.0%	4.0%	7.5%	7.3%
Neither easier nor harder	52.4%	57.0%	52.2%	58.5%
Harder to be healthy	44.5%	38.9%	40.4%	34.1%
Number/location of parks or recreation center				
Easier to be healthy	62.0%	55.1%	66.5%	60.0%
Neither easier nor harder	24.7%	29.3%	26.1%	29.1%
Harder to be healthy	13.3%	15.6%	7.5%	10.9%
Number/location of medical services				
Easier to be healthy	62.4%	53.4%	68.3%	59.9%
Neither easier nor harder	31.5%	36.5%	28.6%	32.9%
Harder to be healthy	6.1%	10.1%	3.1%	7.2%
Number/location of dental services				
Easier to be healthy	56.4%	58.1%	62.5%	60.6%
Neither easier nor harder	35.2%	33.8%	33.8%	33.9%
Harder to be healthy	8.5%	8.1%	3.8%	5.5%
Number/location of mental health services				
Easier to be healthy	35.8%	36.9%	34.6%	29.3%
Neither easier nor harder	50.0%	38.9%	51.6%	50.0%
Harder to be healthy	14.2%	24.2%	13.8%	20.7%
Number/location of social services				
Easier to be healthy	31.9%	27.9%	26.3%	26.5%
Neither easier nor harder	59.5%	53.1%	64.7%	61.7%
Harder to be healthy	8.6%	19.0%	9.0%	11.7%
Community culture/norms about health				
Easier to be healthy	35.8%	34.0%	47.2%	39.1%
Neither easier nor harder	42.6%	47.9%	41.5%	49.7%
Harder to be healthy	21.6%	18.1%	11.3%	11.2%
Walkability of the community (e.g. sidewalks, street lights)				
Easier to be healthy	57.7%	60.5%	58.5%	53.0%
Neither easier nor harder	18.4%	14.3%	11.9%	18.1%
Harder to be healthy	23.9%	25.2%	29.6%	28.9%
Safety of your neighborhood				

Easier to be healthy	70.3%	71.4%	80.0%	73.0%
Neither easier nor harder	18.2%	25.2%	15.6%	23.9%
Harder to be healthy	11.5%	3.4%	4.4%	3.1%
Access to fresh fruits and vegetables				
Easier to be healthy	78.3%	77.7%	85.0%	75.9%
Neither easier nor harder	12.7%	16.9%	10.0%	18.7%
Harder to be healthy	9.0%	5.4%	5.0%	5.4%
Access to public transportation				
Easier to be healthy	32.5%	18.2%	16.1%	24.8%
Neither easier nor harder	46.0%	40.6%	50.9%	43.5%
Harder to be healthy	21.5%	41.3%	32.9%	31.7%
Environmental hazards				
Easier to be healthy	11.3%	15.3%	12.9%	15.5%
Neither easier nor harder	52.2%	57.6%	53.5%	54.7%
Harder to be healthy	36.5%	27.1%	33.5%	29.8%
Water quality				
Easier to be healthy	56.8%	46.6%	57.1%	45.5%
Neither easier nor harder	29.0%	36.3%	30.4%	40.0%
Harder to be healthy	14.2%	17.1%	12.4%	14.5%
Air quality				
Easier to be healthy	49.7%	43.8%	57.5%	44.0%
Neither easier nor harder	32.9%	41.8%	30.0%	49.4%
Harder to be healthy	17.4%	14.4%	12.5%	6.6%
Housing affordability				
Easier to be healthy	30.7%	23.4%	26.9%	17.0%
Neither easier nor harder	40.5%	48.3%	46.8%	56.6%
Harder to be healthy	28.8%	28.3%	26.3%	26.4%
Employment status				
Easier to be healthy	54.0%	45.5%	52.2%	40.7%
Neither easier nor harder	31.7%	38.6%	32.7%	46.3%
Harder to be healthy	14.3%	15.9%	15.1%	13.0%
Educational opportunities within the community				
Easier to be healthy	54.9%	43.1%	49.4%	51.3%
Neither easier nor harder	35.2%	42.4%	42.3%	42.3%
Harder to be healthy	9.9%	14.6%	8.3%	6.4%

DATA SOURCE: MetroWest Region Community Health Assessment Survey, 2013

Table 27: Top Health Issues with the Largest Impact on the Community of Residence by Region, 2013

	Framingham (N=175)	Sub-Region A (N=155)	Sub-Region B (N=168)	Sub-Region C (N=172)
Overweight or obesity				
You/Your Family	40.6%	38.7%	36.9%	48.3%
Community where you live	50.9%	47.7%	45.8%	55.2%
Aging problems (Alzheimer's, arthritis, dementia, etc.)				
You/Your Family	43.4%	45.2%	53.0%	51.7%
Community where you live	48.0%	41.9%	52.4%	46.5%
Mental health (anxiety, depression, etc.)				
You/Your Family	34.3%	44.5%	34.5%	36.6%
Community where you live	42.9%	53.5%	42.9%	47.7%
Cancer				
You/Your Family	34.9%	41.9%	39.9%	41.9%
Community where you live	34.9%	40.6%	48.8%	51.2%
Drugs/alcohol abuse				
You/Your Family	6.3%	13.5%	10.1%	14.0%
Community where you live	45.7%	45.2%	34.5%	43.6%
Heart disease (stroke, hypertension, etc.)				
You/Your Family	38.9%	48.4%	42.3%	43.6%
Community where you live	38.9%	31.0%	39.3%	35.5%
Diabetes				
You/Your Family	30.9%	34.2%	28.6%	23.8%
Community where you live	32.0%	33.5%	28.6%	20.3%
Smoking				
You/Your Family	8.0%	12.9%	4.8%	12.8%
Community where you live	30.3%	32.3%	18.5%	19.2%
Asthma				
You/Your Family	17.7%	21.9%	26.8%	21.5%
Community where you live	17.7%	16.8%	21.4%	16.9%
Infectious disease (tuberculosis, pneumonia, flu, etc.)				
You/Your Family	7.4%	15.5%	12.5%	11.6%
Community where you live	13.1%	16.8%	19.0%	15.1%
Violence (gangs, street or domestic violence)				
You/Your Family	3.4%	1.3%	0.0%	1.2%
Community where you live	28.6%	12.9%	5.4%	9.9%
Teen Pregnancy				
You/Your Family	0.6%	0.0%	0.6%	0.0%
Community where you live	19.4%	11.0%	5.4%	5.8%
Sexually transmitted infections (HIV/AIDS, Chlamydia, etc.)				
You/Your Family	1.7%	0.6%	0.0%	0.6%
Community where you live	11.4%	5.8%	4.8%	4.1%

Note: Arranged in descending order by "community where you live" percentages and by "Total Service Area"
DATA SOURCE: MetroWest Region Community Health Assessment Survey, 2013

Table 28: Top Health Issues with the Largest Impact on the Community of Residence by Region, 2013

	Framingham (N=193)	Sub-Region A (N=123)	Sub-Region B (N=137)	Sub-Region C (N=126)
Mental health (anxiety, depression, etc.)	53.4%	60.2%	48.9%	51.6%
Overweight or obesity	51.8%	45.5%	43.8%	46.8%
Drugs/alcohol abuse	56.0%	48.0%	26.3%	38.9%
Cancer	29.0%	39.8%	38.7%	50.8%
Aging problems (Alzheimer's, arthritis, dementia, etc.)	32.6%	30.9%	40.9%	42.1%
Heart disease (stroke, hypertension, etc.)	35.2%	30.9%	32.8%	35.7%
Diabetes	35.8%	30.1%	32.8%	28.6%
Smoking	29.0%	27.6%	19.7%	17.5%
Infectious disease (tuberculosis, pneumonia, flu, etc.)	21.2%	17.9%	20.4%	13.5%
Asthma	17.6%	15.4%	16.1%	20.6%
Violence (gangs, street or domestic violence)	33.2%	7.3%	2.2%	2.4%
Teen Pregnancy	25.4%	7.3%	3.6%	6.3%
Sexually transmitted infections (HIV/AIDS, Chlamydia, etc.)	15.0%	6.5%	0.7%	4.8%

NOTE: respondents are those who work in the service area (may live elsewhere)
NOTE: "Total Service Area" respondents include those who selected "I work, volunteer, or go to school in multiple towns listed here"
Note: Arranged in descending order by "Total Service Area"
DATA SOURCE: MetroWest Region Community Health Assessment Survey, 2013

Table 29: Survey Respondents' Level of Satisfaction with the Availability of Services by Region, 2013

	Framingham (N=175)	Sub-Region A (N=155)	Sub-Region B (N=168)	Sub-Region C (N=172)
Hospital services, including emergency care				
Not at all satisfied	2.6%	12.7%	2.7%	5.8%
Somewhat satisfied	39.7%	35.1%	26.4%	31.6%
Very satisfied	55.1%	52.5%	68.2%	59.4%
Not sure/Don't know	2.6%	0.0%	2.7%	3.2%
Community health center services				
Not at all satisfied	9.6%	25.8%	12.4%	10.0%
Somewhat satisfied	29.5%	29.5%	37.2%	32.7%
Very satisfied	32.7%	24.2%	23.4%	26.7%
Not sure/Don't know	28.2%	20.5%	26.9%	30.7%
Primary care physicians				
Not at all satisfied	10.9%	21.4%	8.8%	10.5%
Somewhat satisfied	35.3%	38.9%	26.4%	35.9%
Very satisfied	49.4%	37.4%	62.2%	49.0%
Not sure/Don't know	4.5%	2.3%	2.7%	4.6%
Health or medical services for seniors (65+ years old)				
Not at all satisfied	6.5%	13.7%	8.2%	6.5%
Somewhat satisfied	28.4%	28.2%	26.0%	27.5%
Very satisfied	28.4%	20.6%	25.3%	28.1%
Not sure/Don't know	36.8%	37.4%	40.4%	37.9%
Health or medical services for youth (under 21 years old)				
Not at all satisfied	6.5%	17.8%	6.2%	9.9%
Somewhat satisfied	36.8%	32.6%	27.4%	30.5%
Very satisfied	28.4%	24.8%	42.5%	29.8%
Not sure/Don't know	28.4%	24.8%	24.0%	29.8%
Alcohol or drug treatment services for adults				
Not at all satisfied	13.5%	22.3%	18.9%	14.4%
Somewhat satisfied	19.4%	24.6%	16.2%	20.3%
Very satisfied	10.3%	8.5%	4.1%	10.5%
Not sure/Don't know	56.8%	44.6%	60.8%	54.9%
Alcohol or drug treatment services for youth				
Not at all satisfied	19.9%	23.8%	21.6%	17.9%
Somewhat satisfied	16.7%	20.8%	11.5%	17.2%
Very satisfied	8.3%	4.6%	3.4%	10.6%
Not sure/Don't know	55.1%	50.8%	63.5%	54.3%
Alcohol or drug prevention services				
Not at all satisfied	18.6%	23.3%	21.9%	15.8%
Somewhat satisfied	20.5%	30.2%	19.9%	23.7%
Very satisfied	10.3%	7.8%	4.8%	13.2%

Not sure/Don't know	50.6%	38.8%	53.4%	47.7%
Counseling or mental health services for youth				
Not at all satisfied	25.6%	27.7%	22.3%	21.2%
Somewhat satisfied	21.2%	25.4%	25.0%	27.8%
Very satisfied	13.9%	9.2%	13.5%	11.9%
Not sure/Don't know	39.7%	37.7%	39.2%	39.1%
Counseling or mental health services for adults				
Not at all satisfied	21.9%	30.5%	18.9%	19.9%
Somewhat satisfied	27.7%	23.7%	25.0%	31.8%
Very satisfied	14.2%	15.3%	17.6%	12.6%
Not sure/Don't know	36.1%	30.5%	38.5%	35.8%
Public transportation to health services				
Not at all satisfied	36.8%	49.6%	39.7%	35.3%
Somewhat satisfied	23.2%	15.3%	15.8%	24.8%
Very satisfied	7.7%	4.6%	4.8%	6.5%
Not sure/Don't know	32.3%	30.5%	39.7%	33.3%
Birth control/sexual health services				
Not at all satisfied	7.8%	15.5%	9.0%	8.7%
Somewhat satisfied	31.8%	24.0%	24.3%	25.3%
Very satisfied	13.0%	12.4%	12.5%	15.3%
Not sure/Don't know	47.4%	48.1%	54.2%	50.7%
Dental services				
Not at all satisfied	18.1%	9.8%	11.0%	8.6%
Somewhat satisfied	31.6%	31.8%	30.1%	32.5%
Very satisfied	40.6%	51.5%	47.9%	45.0%
Not sure/Don't know	9.7%	6.8%	11.0%	13.9%
Programs to help people quit smoking				
Not at all satisfied	13.6%	18.5%	9.6%	10.2%
Somewhat satisfied	22.1%	26.2%	21.9%	21.1%
Very satisfied	7.8%	10.0%	11.0%	15.0%
Not sure/Don't know	56.5%	45.4%	57.5%	53.7%
Health or medical providers that accept your insurance				
Not at all satisfied	11.0%	8.3%	12.4%	10.7%
Somewhat satisfied	31.2%	31.1%	30.3%	31.3%
Very satisfied	50.6%	53.8%	51.7%	49.3%
Not sure/Don't know	7.1%	6.8%	5.5%	8.7%
Health providers that speak my language				
Not at all satisfied	9.7%	12.3%	8.8%	7.3%
Somewhat satisfied	18.7%	10.8%	17.0%	15.3%
Very satisfied	54.2%	63.1%	57.8%	58.7%
Not sure/Don't know	17.4%	13.8%	16.3%	18.7%
Interpreter services during medical visits/with health info				
Not at all satisfied	7.9%	6.2%	6.2%	3.4%
Somewhat satisfied	15.1%	16.4%	13.2%	13.6%

Very satisfied	13.8%	15.6%	12.5%	17.7%
Not sure/Don't know	63.2%	61.7%	68.1%	65.3%
Specialty care				
Not at all satisfied	11.9%	6.2%	10.1%	6.3%
Somewhat satisfied	33.6%	30.1%	21.7%	31.0%
Very satisfied	29.1%	28.3%	33.3%	29.4%
Not sure/Don't know	25.4%	35.4%	34.9%	33.3%

DATA SOURCE: MetroWest Region Community Health Assessment Survey, 2013

Table 30: Percent of Respondents Who Perceived the Following Statements to be True about Their Community by Total Service Area, 2013

	Framingham (N=175)	Sub-Region A (N=155)	Sub-Region B (N=168)	Sub-Region C (N=172)
The health or social services in my community should focus more on prevention of disease or health conditions				
Agree	95.8%	93.2%	92.2%	92.5%
Disagree	4.2%	6.8%	7.8%	7.5%
It's hard to use public transportation to get to medical/dental services				
Agree	83.3%	90.8%	88.2%	84.0%
Disagree	16.7%	9.2%	11.8%	16.0%
When trying to get medical care, I have had a negative experience with the office staff				
Agree	32.3%	27.5%	28.5%	25.4%
Disagree	67.7%	72.5%	71.5%	74.6%
I or someone in my household has not received care needed because the cost was too high				
Agree	39.2%	30.2%	37.6%	37.1%
Disagree	60.8%	69.8%	62.4%	62.9%
When trying to get medical care, I have felt discriminated against because of my race, ethnicity, or language				
Agree	6.1%	4.3%	4.5%	5.3%
Disagree	93.9%	95.7%	95.5%	94.7%
When trying to get medical care, I have felt discriminated against because of my gender, age, or sexual orientation				
Agree	5.7%	6.1%	5.2%	5.0%
Disagree	94.3%	93.9%	94.8%	95.0%
When trying to get medical care, I have felt discriminated against because of my income				
Agree	12.0%	11.1%	8.9%	10.9%
Disagree	88.0%	88.9%	91.1%	89.1%
If I need medical services, I know where to go to receive them				
Agree	95.9%	95.3%	92.3%	96.7%

Disagree	4.1%	4.7%	7.7%	3.3%
If I need dental services, I know where to go to receive them				
Agree	89.7%	93.8%	92.4%	93.4%
Disagree	10.3%	6.2%	7.6%	6.6%
If I need mental health services, I know where to go to receive them				
Agree	73.1%	73.2%	67.2%	75.0%
Disagree	26.9%	26.8%	32.8%	25.0%

DATA SOURCE: MetroWest Region Community Health Assessment Survey, 2013

Table 31: Survey Respondents' Perceived Challenges to Accessing Care by Region, 2013

	Framingham (N=175)	Sub-Region A (N=155)	Sub-Region B (N=168)	Sub-Region C (N=172)
Language/communication problems with health provider	1.7%	0.6%	1.2%	0.6%
Felt discriminated against	2.9%	1.3%	2.4%	1.7%
Have no regular source of health care	2.9%	2.6%	1.8%	1.7%
Health information is not kept confidential	3.4%	1.9%	3.0%	1.2%
Afraid to get care	5.1%	3.9%	4.2%	3.5%
Lack of transportation	5.1%	7.1%	4.2%	3.5%
Don't know what types of services are available	3.4%	5.8%	9.5%	2.9%
No provider available near me	4.0%	11.0%	5.4%	5.8%
Unfriendly provider/office staff	9.1%	10.3%	10.1%	8.7%
Insurance problems/lack of coverage	15.4%	16.1%	16.7%	16.3%
Office not accepting new patients	18.9%	18.7%	19.0%	19.8%
Cost of care	22.3%	18.1%	20.2%	22.1%
Lack of evening or weekend services	29.1%	31.0%	23.2%	22.7%
Long wait for an appointment	25.7%	25.2%	29.2%	29.1%
I have never experienced any difficulty getting care	37.1%	27.7%	32.7%	38.4%

Note: Arranged in descending order by "Total Service Area"
DATA SOURCE: MetroWest Region Community Health Assessment Survey, 2013

Table 32: Top Priority Areas for the Future by Region, 2013

	Framingham (N=175)	Sub-Region A (N=155)	Sub-Region B (N=168)	Sub-Region C (N=172)
Make fresh fruits and vegetable more affordable and available				
Low priority	4.8%	4.8%	5.0%	7.6%
Medium priority	27.9%	25.0%	25.5%	22.1%
High priority	67.3%	70.2%	69.5%	70.3%
Increase the number of services that help seniors to remain in their homes longer				
Low priority	5.5%	4.0%	4.3%	6.9%
Medium priority	29.7%	36.0%	32.6%	30.6%
High priority	64.8%	60.0%	63.1%	62.5%
Offer more programs/services focusing on physical activity, nutrition, or addressing obesity				
Low priority	4.9%	6.5%	6.3%	4.1%
Medium priority	32.9%	31.5%	31.0%	42.1%
High priority	62.2%	62.1%	62.7%	53.8%
Improve walkability (e.g., sidewalks, bike lanes, street lights)				
Low priority	8.2%	13.7%	12.1%	10.5%
Medium priority	36.3%	34.7%	25.5%	33.6%
High priority	55.5%	51.6%	62.4%	55.9%
Provide more mental health or counseling services for youth				
Low priority	7.0%	6.8%	9.4%	7.8%
Medium priority	30.8%	39.0%	42.4%	39.7%
High priority	62.2%	54.2%	48.2%	52.5%
Expand health/medical services to seniors (65+)				
Low priority	7.5%	9.0%	5.7%	5.6%
Medium priority	36.3%	42.6%	39.0%	40.8%
High priority	56.2%	48.4%	55.3%	53.5%
Provide more mental health or counseling services for adults				
Low priority	9.0%	6.6%	10.1%	9.4%
Medium priority	36.6%	39.7%	46.8%	41.3%
High priority	54.5%	53.7%	43.2%	49.3%
Increase health/medical services to low-income individuals				
Low priority	11.6%	8.1%	12.0%	8.3%
Medium priority	37.7%	39.5%	50.7%	41.0%
High priority	50.7%	52.4%	37.3%	50.7%
Address environmental hazards				

Low priority	13.1%	21.5%	22.1%	11.3%
Medium priority	36.6%	38.0%	26.4%	41.1%
High priority	50.3%	40.5%	51.4%	47.5%
Expand health/medical services to youth				
Low priority	11.7%	10.7%	9.9%	7.6%
Medium priority	39.3%	43.8%	50.0%	52.1%
High priority	49.0%	45.5%	40.1%	40.3%
Provide more transportation to area medical/health services				
Low priority	11.6%	10.6%	19.0%	13.7%
Medium priority	45.2%	37.4%	44.4%	47.3%
High priority	43.2%	52.0%	36.6%	39.0%
Provide more alcohol or drug prevention services				
Low priority	19.3%	9.1%	14.2%	14.2%
Medium priority	41.4%	49.6%	44.7%	46.8%
High priority	39.3%	41.3%	41.1%	39.0%
Provide more reproductive or sexual health services for youth				
Low priority	8.2%	18.2%	15.6%	13.6%
Medium priority	45.2%	39.7%	55.3%	43.6%
High priority	46.6%	42.1%	29.1%	42.9%
Provide more alcohol or drug treatment services				
Low priority	21.0%	10.7%	12.9%	15.7%
Medium priority	44.1%	51.6%	50.0%	45.0%
High priority	35.0%	37.7%	37.1%	39.3%
Improve air quality				
Low priority	26.7%	27.9%	28.6%	28.1%
Medium priority	41.1%	40.2%	27.1%	36.7%
High priority	32.2%	32.0%	44.3%	35.3%
Improve water quality				
Low priority	35.6%	26.0%	27.9%	27.9%
Medium priority	34.9%	35.8%	32.9%	34.3%
High priority	29.5%	38.2%	39.3%	37.9%
Increase the number of dental providers				
Low priority	35.4%	37.2%	41.0%	34.8%
Medium priority	39.6%	47.1%	41.0%	44.2%
High priority	25.0%	15.7%	18.0%	21.0%
Increase the number of health providers/staff that speak other languages				
Low priority	27.4%	32.0%	37.6%	26.4%
Medium priority	48.6%	52.5%	47.5%	57.6%
High priority	24.0%	15.6%	14.9%	16.0%

Note: Arranged in descending order by "High priority" and by "Total Service Area"
DATA SOURCE: MetroWest Region Community Health Assessment Survey, 2013