

**NORTH SHORE MEDICAL CENTER  
COMMUNITY HEALTH ASSESSMENT**

---

**April 29, 2012**

**SUBMITTED BY:  
Health Resources in Action, Inc.**



**Health Resources in Action**  
*Advancing Public Health and Medical Research*

95 Berkeley Street, Suite 208  
Boston, MA 02116  
617.451.0049 | Fax: 617.451.0062  
TTY: 617.451.0007 | [www.hria.org](http://www.hria.org)

## TABLE OF CONTENTS

EXECUTIVE SUMMARY .....	i
INTRODUCTION.....	1
NSMC: A Comprehensive Community Hospital System .....	1
Acute-Care Services on Two Campuses .....	2
A Regional Referral Center with MGH.....	2
A Network of Physicians.....	2
Purpose of Community Health Assessment .....	2
METHODS AND APPROACH .....	3
Assessment Questions.....	3
Social Determinants of Health Framework .....	3
Quantitative Data Collection .....	4
Qualitative Data Collection.....	4
Limitations .....	7
KEY FINDINGS.....	8
Social and Economic Context.....	8
Population and Age Distribution .....	8
Racial, Ethnic, and Linguistic Diversity .....	9
Income, Poverty and Employment.....	11
Educational Attainment .....	14
Housing and the Environment .....	15
Transportation.....	16
Violence and Safety.....	16
Community Health Issues .....	19
Substance Use and Abuse: Illegal Drugs, Tobacco, and Alcohol .....	19
Obesity .....	26
Chronic Disease: Heart Disease, Diabetes, and Asthma .....	28
Sexual Health, Teen Pregnancy, and Birth Outcomes.....	31
Health Care Access and Utilization .....	33
Supply and Demand of Services .....	34
Patient-Provider Relationship .....	35
Physical Location and Accessibility of Services .....	35
Limited Understanding of and Information on the Health Care System .....	36
Cost of Services, Payment Structure, and Eligibility Requirements .....	37
Vision for Health and Overcoming Access and Utilization Challenges .....	38
Prevention .....	39
Patient Navigators, Case Managers, and Patient Advocates .....	40
Behavioral Health Services and Training .....	41
Care Coordination and in Non-Traditional Care Settings.....	41
Enhanced Primary and Specialty Care Partnerships .....	42
Marketing and Communication of Existing Services and Programs .....	42
Outreach and Community Engagement.....	43
DISCUSSION.....	43
Appendix A. External Key Informant Interview Guide .....	47
Appendix B. Internal Staff Interview Guide .....	49
Appendix C. Community Resident Focus Group Guide.....	53

## EXECUTIVE SUMMARY

### Introduction and Methods

North Shore Medical Center (NSMC) is a multi-site health system and serves the region as a 414 bed community hospital system offering comprehensive acute care services to Lynn, Salem and surrounding communities through two campuses: NSMC Salem Hospital and NSMC Union Hospital in Lynn. With rising health care costs, the focus on reducing disparities, and the importance of providing innovative, cost-effective health services to the region, NSMC is engaging in a broad-based initiative to develop a new model of care. This model aims to address the changing needs of the region, build an infrastructure for coordinated care across the continuum of settings, and increase access to high-quality primary and specialty care across the region. To help guide NSMC's future plans around primary and secondary care delivery and community outreach programming as well as meet the fiduciary obligations commensurate with NSMC's tax-exempt status, NSMC is undertaking a community health assessment of its catchment area.

This assessment aims to provide a comprehensive health portrait of NSMC's priority communities of Danvers, Lynn, Marblehead, Nahant, Peabody, Salem, and Swampscott and identify community needs and assets, pressing health issues, as well as gaps and potential opportunities for program and service delivery improvement and expansion. Guided by a social determinants of health framework, this assessment includes synthesized existing data on social, economic, and health indicators in the region as well as information from four focus groups conducted with community residents and 28 interviews conducted with a diverse range of individuals—17 interviews with 33 external key informants and 11 interviews with 15 staff who work at NSMC. Focus groups were conducted with 31 individuals representing different audiences, including youth, seniors, and low-income residents. External key informant interviewees represented a range of individuals including social service providers, religious leaders, organizational directors, staff from city and state government, and staff from community-based organizations and youth serving agencies, while internal NSMC staff interviews were conducted with staff from a range of departments, including case management, patient navigation, behavioral health, pediatrics, emergency, patient access, primary care, and obstetrics.

### KEY FINDINGS

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

#### Community Social and Economic Context

The NSMC service area comprises seven communities with a wide range of socio-economic conditions.

- **Overall population:** The seven primary cities and towns of the North Shore area (Danvers, Lynn, Marblehead, Nahant, Peabody, Salem and Swampscott) include 246,418 residents and collectively comprise 1.4% of Massachusetts' total population.
- **Racial, ethnic, and linguistic diversity:** Lynn and Salem are much more racially, ethnically, and linguistically diverse than the other NSMC priority communities. In Lynn, 32.1% of the population is Latino and 15.2% is Black, while Salem's population is 15.6% Latino. Lynn and Salem residents are also more likely to be poorer: 19.4% of individuals in Lynn and 11.3% in Salem live below the poverty line, compared to 10.1% statewide and 3-7% in the other NSMC communities.
- **Housing:** The declining economy has taken a particular toll in the area of housing. Recent foreclosure data indicates that Lynn and Peabody have experienced the highest number of foreclosures; further, housing-related health issues such as contaminated ground water, sleep deprivation and pest infestations are arising out of these housing deficits.

- **Transportation:** While highways are accessible in the area and several transportation programs exist to help residents access care, transportation was cited as a challenge for many residents to utilizing health and social services, buying healthy foods, and even commuting to work.

### Community Health Issues

Several issues emerged as primary health concerns facing NSMC's priority communities, specifically behavioral health (substance abuse and mental health), obesity and other chronic conditions, and teen pregnancy. Other health issues discussed included heart disease and related conditions (e.g. hypertension), asthma and other respiratory illnesses, elder frailty, and cancer.

- **Substance Use and Abuse:** Many interview and focus group respondents expressed concern about substance use and abuse, noting increased opioid use in the region.
  - In 2009, incidence rates of nonfatal opioid-related cases in all North Shore communities, except Marblehead and Swampscott, exceeded the state average. In Lynn, the incidence of nonfatal opioid-related cases (1,222.6 per 100,000) in 2009 was more than double that of the state (546.6 per 100,000).
  - Several interview and focus group participants noted there appears to be insufficient resources and treatment options to address substance abuse in the region. Finding appropriate treatment options can be challenging particularly for patients with co-occurring mental disorders or addictions to multiple substances.
- **Mental health:** Mental health was described as a considerable concern and challenge facing North Shore communities, and one in which current treatment options did not seem to meet the growing demand.
  - Various segments of the population, including refugees, children, new mothers, substance users, and the elderly, appear to be disproportionately affected by mental health issues, according to interviewees.
  - The stigma associated with mental health was acknowledged as a significant barrier to seeking help, further exacerbated by the limited availability of outpatient resources.
- **Obesity:** Obesity and its related behaviors of physical inactivity and unhealthy eating were cited as pressing concerns in the community.
  - 61.7% of adults in the region were overweight or obese, compared to 58.2% statewide. There are higher rates of childhood overweight and obesity in a number of North Shore towns (Lynn (41.9%), Peabody (39.7%), and Salem (41%)) compared to the rate statewide (33.4%).
  - Interviewees and focus group participants cited a number of factors contributing to high obesity rates, including the prevalence of fast food restaurants, affordability of healthy foods, challenging transportation options, safety concerns in Lynn resulting in limited use of public parks, and unhealthy food options for school lunch.
- **Chronic disease:** Despite socioeconomic differences among NSMC priority communities, geographic disparities in chronic disease indicators were less apparent. However, several interviewees noted that chronic conditions are important concerns in many communities, particularly given the increasing rates of obesity.
  - Heart disease and diabetes were noted as two important issues, while asthma was cited as a concern particularly among children in poorer, urban areas.
- **Teen Pregnancy:** While teen birth rates have steadily declined, rates in the North Shore area still far exceed those seen statewide.
  - In the North Shore, 14.0% of all births in 2009 were from mothers 15-19 years old, compared to 5.9% statewide.



- This statistic is mainly driven by Lynn, whose teen birth rate in 2009 was 55.8 births per 1,000 females ages 15-19, compared to the MA rate of 19.5 births.
- Several key informant interviewees and focus group participants, particularly youth themselves, cited teen pregnancy and risky sexual practices as concerning issues, particularly among youth in Lynn and poorer immigrant groups. Social norms and lack of hopeful employment opportunities for the future were discussed as two possibilities for these higher numbers.

### Health Care Access and Utilization

Overall, interview and focus group participants reported that health care access and utilization in the region were hampered by a variety of factors, including the following:

- **Supply and Demand of Services:** Participants mentioned a paucity of service delivery options, particularly with regard to urgent care, inpatient and outpatient substance abuse detoxification and treatment, outpatient mental health services, and prevention services for a range of health issues. They indicated that in many instances the services either do not exist, are in short supply, or the demand for services exceed the capacity of services, facilities, and providers.
- **Physical Location and Accessibility of Services:** The physical location of many health care services—and limited transportation options to get to them—were factors cited as barriers to service accessibility. Some participants noted that the concentration of health care and social services are in specific sections of town, particularly in Lynn, while the “hotspots” of problems are in other areas.
- **Limited Understanding of the Health Care System:** Focus group and interview participants highlighted limited patient understanding of the health care system as an on-going challenge; this included lack of knowledge regarding when to seek care, where services exist, and how to use services. These limitations were largely attributed to language, culture, age, and complicated insurance and agency rules and regulations.
- **Cost of Services and Payment Structure:** Health care access and utilization are largely influenced by cost, not only for consumers, but also for service providers. Interviewees in particular described how constrained resources at the local and state level have impacted capacity for services; in the current economic climate the resources simply are not there due to budget cuts.

### Vision for Health and Overcoming Access and Utilization Challenges

When asked about suggested approaches for addressing community health needs and overcoming barriers to access and utilization, interview and focus group participants’ recommendations clustered around several areas including the following:

- **Prevention:** Interview and focus group participants discussed that shifting to a prevention focus in services would help address health concerns before they become severe problems and potentially reduce later health care utilization. Youth provided several specific suggestions for prevention-focused services in obesity and teen pregnancy.
- **Patient Navigators, Case Managers, and Patient Advocates:** While interview and focus group participants emphasized that quality health care and social services exist in the region, a mechanism that links residents to these services seems to be missing. Many participants shared that a robust case management or patient navigation system would help patients connect patients to the services they need.
- **Behavioral Health Services and Training:** Expanding services related to behavioral health, particularly substance abuse and mental health treatment, was supported and suggested by

numerous interviewees, particularly internal NSMC staff. They suggested that a helpful first step in this process would be to enhance training opportunities for a variety of clinicians and providers. In addition to training, the need for expanded substance abuse and mental health treatment options, especially for detoxification and outpatient care, was strongly emphasized.

- **Care Coordination and Non-Traditional Care Settings:** Increased care coordination was suggested as an approach both to enhance patient care as well as streamline services within the health care system. As part of coordination of care, participants also saw care being delivered in non-traditional settings, via home-visiting services, mobile health vans, and service-delivery in non-conventional community-based facilities.
- **Enhanced Primary and Specialty Care Partnerships:** Internal NSMC interview participants specifically expressed a need for stronger connections among and between primary care providers and specialists. These connections were described as potentially playing a role in reducing emergency room usage, duplication of services, patient wait time, and cost.
- **Marketing and Communication of Existing Services and Programs:** Focus group participants were concerned that many residents were not aware of the existing services and programs in the community. They suggested a range of methods for increasing current visibility.
- **Outreach and Community Engagement:** Greater collaboration, outreach, and engagement of people involved in the health, health care, and social service communities was viewed as an important step in moving forward on future initiatives. Interviewees saw the role of wide-ranging partnerships as critical to future endeavors, as they recognized that no single entity could address these pressing issues.

## DISCUSSION

Several key themes emerged from this synthesis of the data, including the following:

- **There is wide variation across the North Shore region in population composition and socioeconomic levels.** Lynn and Salem have lower socioeconomic levels than their neighboring communities. This cultural, language, and economic diversity across NSMC's catchment area presents significant challenges when delivering services and care that aim to meet the multitude of needs across the region.
- **In many instances, health outcomes follow social and economic patterns, but not in hospitalization and mortality rates of chronic disease.** While Lynn, which has the lowest income level, has higher rates of substance abuse, obesity, and teen pregnancy, hospitalization and mortality rates for several chronic diseases are not as high as what would be expected in this community. While the reason is unknown, it may be that there are critical periods of opportunity along the continuum for intervention.
- **While strong community-based health services exist in the region, vulnerable populations— such as the socially isolated elderly, non-English speaking residents, and the very poor— encounter continued difficulties in accessing primary care services.** Numerous challenges for these populations were identified during the interviews: limited or slow public transportation options in some cities, language and cultural barriers, complexity of navigating the health care system, lack of support system to help patients make appointments, and time or cost constraints. Suggestions for addressing these included: additional patient support and navigation services, transportation programs, expanded hours of operation, more community health workers, expanded community-based services, and greater coordination across health care settings in the community.

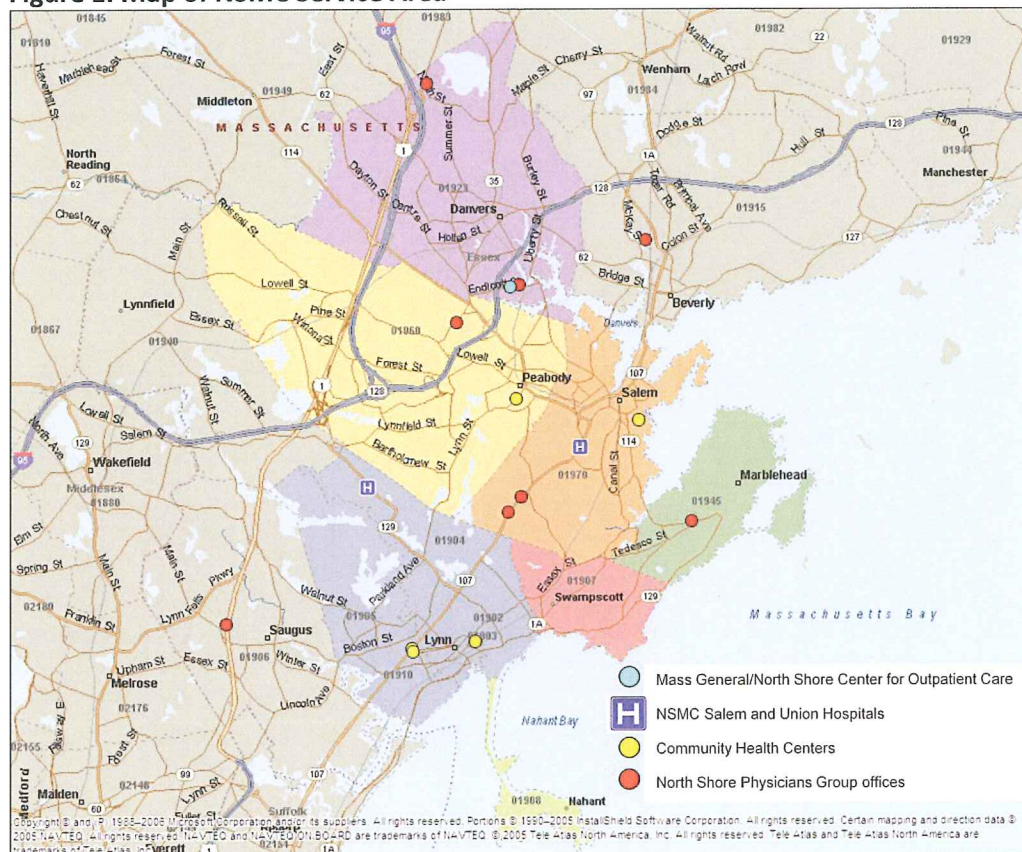
- **Substance abuse and mental health were considered pervasive, pressing concerns by interviewees, and one in which the current treatment models were not perceived as addressing these increasing and complex issues.** It was noted that the demand for treatment far exceeds what is currently available. For substance abuse treatment, patients typically need multiple interventions: detoxification, psychiatric treatment, and long-term recovery help. Ensuring that a patient receives all of these services can be difficult.
- **Obesity, physical activity, and nutrition were considered top-of-mind health issue.** Nearly every interview participant and several focus group participants mentioned obesity—and particularly the increase in childhood obesity—as a major concern of the region and one that will have even more severe health and cost repercussions in the future as the younger generation transitions to adulthood. The pervasiveness of fast food outlets and expense of healthy foods were cited as significant challenges to healthy eating for poorer residents, particularly those in Lynn and Salem.
- **Teen pregnancy remains a concern, as the North Shore teen birth rate is much higher than what is seen statewide.** The teen pregnancy issue is mainly focused in Lynn compared to other communities and was viewed by interviewees as a result of lack of education, social norms, and perception of limited economic opportunities. Access to education and health care services focused on youth as well as improving future employment prospects in the community were viewed as important approaches for addressing this issue.
- **Numerous services, resources, and organizations are currently working in the North Shore region to try to meet the population's health and social service needs.** Throughout the discussions, both external key informants and internal staff recognized the strong work related to health in which many community-based and regional organizations are involved. However, numerous interviewees commented that many of these programs are fragmented, uncoordinated, and under-funded. There was strong interest for these issues to be addressed via a more strategic, coordinated approach with multiple organizations and agencies working together.

# North Shore Medical Center Community Health Assessment

## INTRODUCTION

This report provides the preliminary findings from the community health assessment study for North Shore Medical Center (NSMC), a multi-site regional health system headquartered in Salem, MA. NSMC is the North Shore's largest health care provider, one of its largest employers, and the second largest community hospital system in Massachusetts. In collaboration with Massachusetts General Hospital, and as a member of Partners HealthCare, NSMC maintains multiple facilities, providing state of the art, advanced health and medical services throughout an extensive region north of Boston (Figure 1).

Figure 1. Map of NSMC Service Area



Source: North Shore Medical Center, 2012

### NSMC: A Comprehensive Community Hospital System

NSMC serves the region as a 414 bed community hospital system offering comprehensive acute care services to Lynn, Salem, and surrounding communities through two campuses: NSMC Salem Hospital and NSMC Union Hospital in Lynn. In addition, the organization includes MassGeneral for Children at North Shore Medical Center, the NSMC Heart Center, the NSMC Women's Center in Danvers, primary and specialty care through North Shore Physicians Group practices, as well as a wide range of outpatient services and wellness programs. With one pediatric and two adult emergency departments, NSMC is one of the largest providers of emergency care in Massachusetts. It also maintains extensive clinical collaborations with local community health centers.

### *Acute-Care Services on Two Campuses*

- NSMC's Salem Hospital campus is a community teaching hospital that provides comprehensive adult and pediatric medical and surgical services. It is home to the interventional cardiology, electrophysiology, and cardiac surgery programs of the NSMC Heart Center as well as advanced imaging, interventional radiology, the complete obstetrical services of the Birthplace at Salem Hospital, and adult psychiatry. It is designated by the Massachusetts Department of Public Health as both a Primary Stroke Service Hospital and a Level II Trauma Center.
- NSMC's Union Hospital campus provides high-quality, convenient health care to the residents of Lynn and surrounding communities. The clinical staff provides adult medical and surgical services including emergency care, convenient day surgery and other procedures. A state-of-the-art Interventional Radiology Suite enables physicians to provide sophisticated treatment involving the vascular system with the latest technology. The Union Campus also offers comprehensive imaging services, inpatient pediatric and senior/geriatric psychiatry services, cardiac rehabilitation, an infusion clinic and a Diabetes Management Program.

### *A Regional Referral Center with MGH*

With a clinical relationship dating back five decades, NSMC maintains a strong collaborative relationship with Massachusetts General Hospital (MGH). NSMC participates in a wide range of inpatient and outpatient care programs with MGH, providing patients with local access to advanced subspecialties. NSMC's collaborative specialties with MGH include cardiac, neuro- and thoracic surgery, interventional cardiology, radiation and medical oncology, maternal-fetal medicine and reproductive endocrinology, and a range of pediatric specialties.

- Mass General/North Shore Center for Outpatient Care: Following years of collaboration around tertiary services, NSMC and MGH jointly developed the new Mass General/North Shore Center for Outpatient Care in Danvers, enhancing the outpatient specialty care experience for patients from across the region. The facility is also the new home of the Mass General/North Shore Cancer Center.

### *A Network of Physicians*

NSMC's Medical Staff includes nearly 600 active, affiliated physicians representing primary care, family practice and 50 additional specialties. These physicians work closely with their colleagues from MGH on the North Shore, providing seamless access to care in town when needed.

- North Shore Physicians Group (NSPG) is NSMC's multi-specialty and multi-location physician network. More than 200 NSPG physicians, nurse practitioners and other health care professionals provide a wide range of specialty services in more than 16 hospital campus and off-site locations including family practice, internal medicine, obstetrics and gynecology, emergency medicine, endocrinology, gastroenterology, infectious disease, pulmonology, rheumatology, general surgery, neurosurgery, thoracic surgery, vascular surgery, and more.

### **Purpose of Community Health Assessment**

As a nonprofit institution, NSMC is committed to ensuring high quality health care for all residents within its service area. Because of the diversity of the service area, a comprehensive community health assessment is a critical tool for use in strategic planning, service delivery, initiative development, and outreach. With the background of rising health care costs, the focus on reducing disparities, and the

importance of providing innovative, cost-effective health services to the region, NSMC is engaging in a broad-based initiative to develop a new model of care. This model aims to address the changing needs of the region, build an infrastructure for coordinated care across the continuum of settings, and increase access to high-quality primary and specialty care across the region.

To this end, the Community Relations Department at NSMC has partnered with Health Resources in Action (HRiA), a non-profit public health consultancy organization in Boston, to undertake a comprehensive community assessment effort. The purpose of this effort is to provide data to:

1. Guide strategic planning, programming and practices for NSMC and the community, particularly related to a) engagement of the community; and b) future plans around primary and secondary care delivery per the new model of care initiative;
2. Meet fiduciary obligations to provide benefits to communities commensurate with NSMC tax-exempt status.

The information collected and analyzed as part of this assessment incorporates social, economic, and epidemiological data at the community level to provide a comprehensive health portrait of NSMC's priority communities. The geographic area covered by this report includes the North Shore Community Health Network Area (North Shore CHNA 14) and focuses specifically on the cities and towns of Danvers, Lynn, Marblehead, Nahant, Peabody, Salem, and Swampscott. This report identifies community needs and assets, pressing health issues, as well as gaps and potential opportunities for program and service delivery improvement and expansion.

## **METHODS AND APPROACH**

### **Assessment Questions**

This effort aims to identify the health needs and assets of NSMC's priority communities as well as understand how primary and secondary care can be more effectively delivered into the community to reach the populations NSMC aims to serve. There are several overarching questions to be answered. These include:

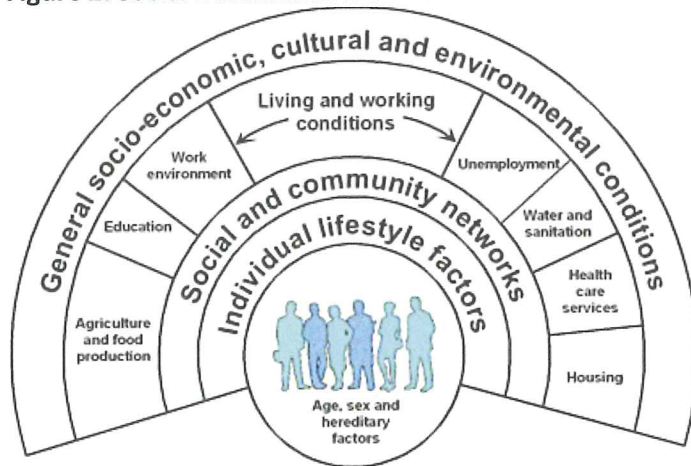
- Using a social determinants approach, what are the current and perceived health-related needs and assets of NSMC's priority communities?
- What are the challenges North Shore residents face in accessing public health and primary and specialty care services in the region?
- From the perspectives of external stakeholders, internal NSMC staff, and community residents, how can these needs be addressed? Specifically, where are there opportunities for action, collaboration, and coordination?

### **Social Determinants of Health Framework**

The social determinants of health framework addresses the distribution of wellness and illness among a population—its contours, its origins, and its implications. Building on this framework, this report approaches population data in a manner designed to elucidate who is healthiest and least healthy in the community as well as some of the larger social and economic factors associated with good and ill health. It is important to recognize that upstream factors such as housing, education, employment status, racial/ethnic disparities, and neighborhood-level resources critically affect population health. Figure 2 provides a visual display of how a multitude of factors, from individual lifestyle choices to social networks to the larger community and social environment have an impact on health. This report provides information on many of these factors, as well as reviews key health outcomes among the residents of NSMC's priority communities.



Figure 2. Social Determinants of Health Framework



Source: World Health Organization, 2005

### Quantitative Data Collection

To develop a social, economic, and health portrait of NSMC’s priority communities, HRiA reviewed existing data drawn from state and local sources. Data varied in its geographic scope, ranging from individual cities and towns to state level only data. In some reports, data were available for the Department of Public Health’s designated Community Health Network Area 14 (CHNA 14, which includes Danvers, Lynn, Marblehead, Nahant, Peabody, Salem, and Swampscott) or for the Massachusetts Executive Office of Health and Human Services (EOHHS) Northeast Region.<sup>1</sup> Data sources for this report included the U.S. Census, U.S. Bureau of Labor Statistics (BLS), Centers for Disease Control and Prevention (CDC), U.S. Department of Health and Human Services’ Health Resources and Services Administration (HRSA), Massachusetts Department of Public Health (DPH), Massachusetts Division of Health Care Finance and Policy, Massachusetts Department of Elementary and Secondary Education (DESE), Massachusetts Bay Transit Authority and the Massachusetts Court System, as well as, independent data sources (i.e., policy advocacy organizations such as the Urban Institute) and secondary data analysis from published academic literature. Primary types of data included self-report of health behaviors from large, population-based surveys such as the Behavioral Risk Factor Surveillance Survey (BRFSS) and the Youth Risk Behavior Survey (YRBS), as well as vital statistics based on birth and death records.

### Qualitative Data Collection

To gather information from leaders and organizational staff who work directly in the priority communities or on key health issues across the city or state, HRiA conducted 28 interviews with a diverse range of individuals—17 interviews with 33 external stakeholders and 11 interviews with 15 staff who work at NSMC. Several interviews were conducted as dyads or small focus groups either by telephone or face-to-face. Interviews lasted approximately 15-60 minutes and were led by experienced HRiA facilitators. All interviews took place between October 2011 and December 2011.

<sup>1</sup>The EOHHS Northeast Region includes the primary service area for this study, but also extends to 8 communities along the New Hampshire border in the north, as far west as Dunstable and south to the city of Everett.

External stakeholder interviewees represented a range of individuals including social service providers, religious leaders, organizational directors, staff from city and state government, staff from community-based organizations and youth serving agencies, among others. The goal was to explore their perceptions of community health needs and assets and identify opportunities for addressing these needs more effectively. A copy of the external key informant interview guide can be found in Appendix A.

Similarly, interviews were also conducted with leaders and staff who work at NSMC and represent a range of departments, including case management, patient navigation, behavioral health, pediatrics, emergency, patient access, primary care, and obstetrics. The internal staff interview guide can be found in Appendix B. Internal staff interviews explored staff members' perspectives on how NSMC is currently working in the community, perceptions of community health needs and strengths, and opportunities for addressing community needs more effectively.

Additional qualitative data were collected via four focus groups with community residents – one with youth, one with seniors, and two with low-income residents (i.e., clients of low-income serving organizations) in February-March 2012. Discussions explored participants' perceptions of key health issues and their suggestions on strategies for implementation of services, ways to overcome barriers to access, and how to effectively and innovatively reach out to those most in need so that the public health and health care system can engage all residents in the region. A semi-structured moderator's guide was used across all discussions to ensure consistency in the topics covered; however probing questions focused on issues that were particularly relevant to each audience. The general focus group guide can be found in Appendix C.

Table 1 provides an overview of the participant characteristics of individuals involved in the focus groups. Most participants lived in Lynn (67.7%), while 12.9% lived in Peabody and 9.7% lived in Salem. Slightly more than half of participants were female (56.7%) and identified as White-non Hispanic (54.8%); 22.6% identified as Hispanic/Latino and 19.4% as Black/African American. Approximately one-third of participants were either less than 24 years old or more than 65 years old. A majority of participants had either a high school diploma or less (60%); one-fifth of participants had a college degree or higher (20%). When asked about where they go for minor health issues, over half of participants reported that they visit a community health center or clinic (54.8%) and approximately one-third go to a health care provider in a private practice (32.3%)



**Table 1. Characteristics of focus group participants, n=31**

	Total Sample (n=31)	
	n	%
<b>City or town</b>		
Danvers	0	0
Lynn	21	67.7
Marblehead	0	0
Nahant	0	0
Peabody	4	12.9
Salem	3	9.7
Swampscott	0	0
Other	3	9.7
<b>Gender</b>		
Male	13	43.3
Female	17	56.7
<b>Age</b>		
Under 18 years old	2	6.5
18-24 years old	8	25.8
25-34 years old	3	9.7
35-44 years old	1	3.2
45-54 years old	5	16.1
55-64 years old	1	3.2
65 years old or older	11	35.5
<b>Education</b>		
In high school or less than high school diploma	11	36.7
High school diploma or equivalent (e.g., GED)	7	23.3
Some college, junior college, or vocational school	6	20.0
College graduate or more	6	20.0
<b>Race/ethnicity</b>		
White, non-Hispanic	17	54.8
Black/African American, non-Hispanic	6	19.4
Hispanic/Latino	7	22.6
Asian or Pacific Islander	0	0
Other	2	6.5
<b>Source of medical care</b>		
Community health center/clinic	15	48.4
Doctor/health care provider in a private practice	10	32.3
Emergency room of a hospital	2	6.5
Nowhere – I would not or could not go anywhere for medical care	1	3.2
Other	3	9.7

Frequencies were tabulated among participants who answered the question on a pre-focus group anonymous questionnaire. Not all participants answered every question.

Each focus group was facilitated by an experienced HRIA staff member, while a note-taker took detailed notes during the discussion. On average, focus groups lasted 90 minutes and included 5-10 participants. Before the groups began, the moderator explained the purpose of the study, and all participants were requested to sign a consent form. They were also advised in writing and verbally that group discussions would remain confidential, and no responses would be connected to them personally. All participants were provided a small stipend of \$30 for their time. Participants were recruited by community and

social service organizations serving North Shore communities, which were compensated \$200 per group for their efforts.

The collected qualitative information was coded using Atlas ti qualitative data analysis software and then analyzed thematically, where data analysts identified key themes that emerged across all interviews and focus groups. Frequency and intensity of discussions on a specific topic were key indicators used for extracting main themes. While community differences are noted where appropriate, analyses emphasized findings common across communities and audience segments. Selected quotes – without personal identifying information – are presented in the narrative of this report to further illustrate points within topic areas. Quotes from interviews and focus groups are based on detailed notes and not transcriptions. Because of this, quotes may not be the participants' exact words.

### **Limitations**

As with all efforts involving data, there are several limitations related to the data used in this assessment that should be acknowledged. For the quantitative data, the units of analysis and/or time frames may be inconsistent since the data were obtained from different sources. While every attempt was made to obtain the most current information, inconsistencies across datasets and time lags in data reporting were apparent. In addition, much of the data sought were not available at the local level, and occasionally not at regional levels. This results in lack of specificity in some cases, but also provides breadth and context in others.

For the qualitative data, limitations inherent in qualitative research are small sample sizes and potential lack of representativeness. While the interviews and focus groups conducted for this assessment provide valuable insights, results are not statistically representative of a larger population due to non-random recruiting techniques. Additionally, focus groups and the interviews including more than one participant may have somewhat restricted open dialogue and/or unevenly reflected some person's views more than others. However, efforts were made to elicit input from all participants. Regarding external interviews and focus groups, there is an overrepresentation of organizations and residents from Lynn, but it is important to note that in many instances organizations service multiple communities. 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.

## KEY FINDINGS

### Social and Economic Context

*“Towns are small enough around here that if something were to happen, people rally together. There is an ability to help each other in an emergency which isn't as common in other areas.” – External key informant interviewee*

*“We are so diverse in the region as far as who lives here. We have some very affluent towns—good schools, lot of resources. And then we several areas with very vulnerable populations—socially isolated elderly, immigrants who don't speak the language, young adults high all the time. Poverty, unemployment, social cohesion... they are all interrelated.” –External key informant interviewee*

*“Vibrant, newer immigrant communities are springing up, particularly in Lynn and some parts of Salem, and they are both an asset and a challenge. We have great cultural diversity here, but some people feel threatened.”—Internal staff interviewee*

*“The city [Lynn] has grown and they can't sustain the number of people who go into the shelter. They don't have the capacity. So now there are more people on the street.” – Focus group participant*

*“I used to let me kids out to play in the yard...I won't do that now because I'm scared.” – Focus group participant*

**The NSMC service area comprises seven communities with a wide range of socio-economic conditions. Of these communities, Lynn, in particular, and Salem experience lower median incomes, higher rates of poverty and unemployment, and lower levels of education than their neighboring communities.**

Interview participants were asked to describe the communities they serve, including strengths and challenges, and how these issues affect daily lives and service delivery. There were discrepant views among participants as the cities and towns in the NSMC catchment area vary greatly, particularly in terms of income, educational levels, and racial and ethnic composition. However, most appreciated that cities and towns are relatively small and cohesive compared to those in and around Boston.

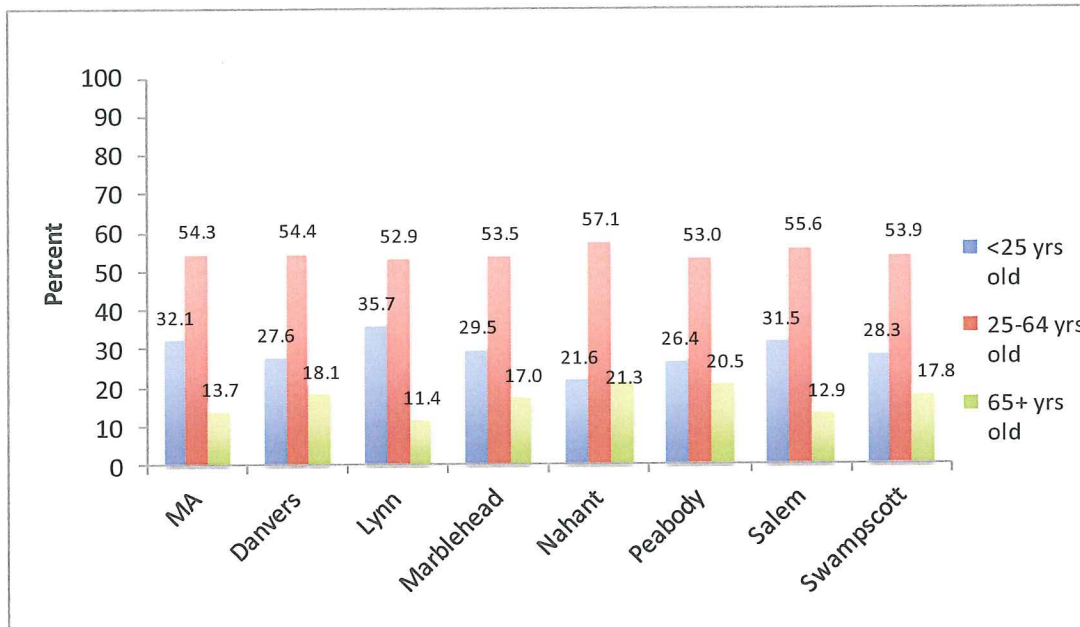
#### *Population and Age Distribution*

**Comprising 1.4% of Massachusetts' population, the North Shore area has a population that is both younger and older, depending on the city, than what is seen across the state.** In 2010, the seven cities and towns that comprise NSMC's primary service area included a total of 246,418 people (Lynn: popul. 90,329; Peabody: popul. 51,251; Salem: popul. 41,340; Danvers: popul. 26, 493; Marblehead: popul. 19,808; Swampscott: popul. 13,787; Nahant: popul. 3,410). Population size and population density followed a similar pattern. Thus, the city of Lynn, which has the largest population, also has the greatest population density (8,627 people per square mile), while Nahant has the lowest (220 people per square mile).

Examining the age distribution of the NSMC primary cities and towns indicates that over half of the population in all cities and towns is between the ages of 25 and 64, which is similar to the state (Figure 3). Lynn and Salem tend to have younger populations (over 30% are under the age of 25), while the other communities have a higher proportion of senior residents (over 17% are 65 years and older)

compared to the state overall (13.7%). In Nahant and Peabody at least one in five residents are over the age of 64. In many key informant interviews, participants spoke of a growing aging population and frequently identified the elderly as one of the most vulnerable populations in most communities.

**Figure 3: Age Distribution of NSMC Primary Cities and Towns, 2010**



DATA SOURCE: US Department of Commerce, Bureau of the Census, 2010 Census

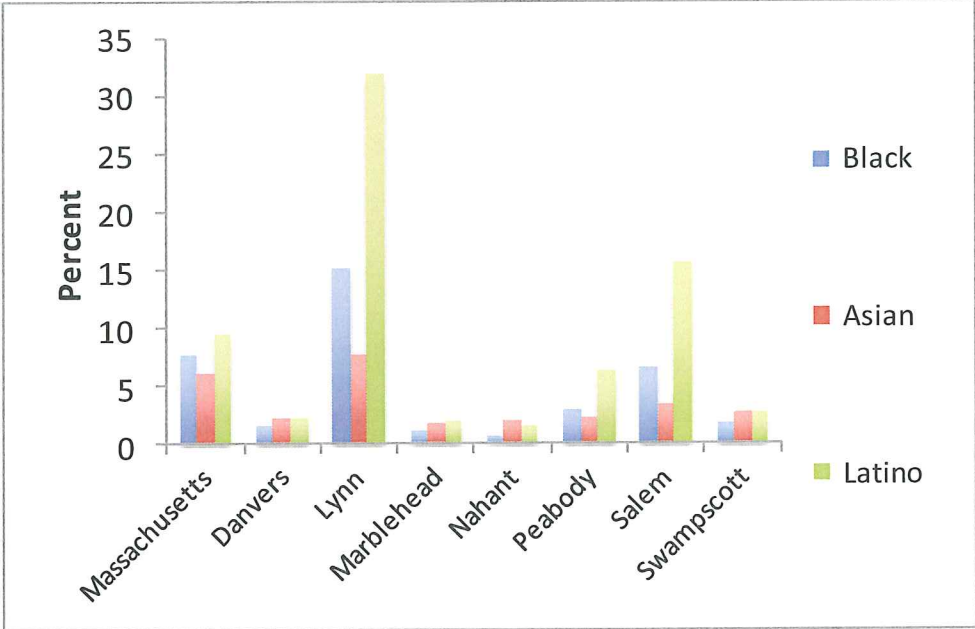
*Racial, Ethnic, and Linguistic Diversity*

**While several of the communities in the North Shore area are affluent and White, Lynn and Salem have a diverse population, with residents from a multitude of racial, ethnic, and cultural backgrounds which presents both strengths and challenges to the community.** In 2010, almost one-third (32.1%) of the population of Lynn identified as Latino, 15.2% as Black, and 7.7% as Asian (Figure 4). Salem also has a substantial Latino population (15.6%), higher than that of the state (9.6%). Of the remaining five communities in the area, over 90% of the population is White.

Most of the interviewees and focus group participants noted that they have observed substantial increases in minorities and immigrant populations, particularly refugees, in Lynn and Salem; this growth in diversity presented both cultural richness and challenges to communities, particularly in terms of language, communication, and the provision of services. Interviewees generally described new immigrants as among the most vulnerable in terms of health conditions; this was attributed to their limited understanding of the U.S. health care system, lack of documentation precluding insurance coverage, and overall fear and distrust of the medical community. In addition, some interview and focus group participants reported xenophobia particularly among older residents. Although 2010 Census data for foreign-born residents are not available for individual cities and towns, 2000 data revealed that nearly one-quarter of Lynn’s residents were foreign-born (22.8%), almost double that of the state (12.2%). Additionally, in five years (2006-2010), the Massachusetts Office for Refugees and Immigrants

provided case management services to 1,750 people from 51 different countries in the North Shore area,<sup>2</sup> a testament to the increased diversity of the region and need for culturally-appropriate services.

**Figure 4: Racial Composition of NSMC Primary Cities and Towns: Non-White, 2010**



Note: Due to the large proportion of Whites in these communities, this figure only illustrates those non-White populations.

DATA SOURCE: US Department of Commerce, Bureau of the Census, 2010 Census

Interview and focus group participants also described the linguistic diversity of NSMC’s priority communities. In 2005-2009, almost 40% of Lynn residents and 25% of Salem residents spoke a language other than English at home; whereas in Danvers and Marblehead less than 10% of residents spoke a language other than English at home (Figure 5). Language barriers were often identified by interview participants as a predominant service-delivery challenge. The Lynn school district in particular has been faced with an influx of refugee students presenting both academic and cultural challenges; forty-nine languages are spoken in Lynn public schools by immigrant students and their parents.<sup>3</sup> Enrollment numbers from the MA Department of Education for 2011-2012 indicate that for over half of students in the Lynn public school district, English is not their first language (53.6%) and almost 20% are limited English proficient (19.6%); these rates are the highest in the North Shore and more than double those of the state.<sup>4</sup>

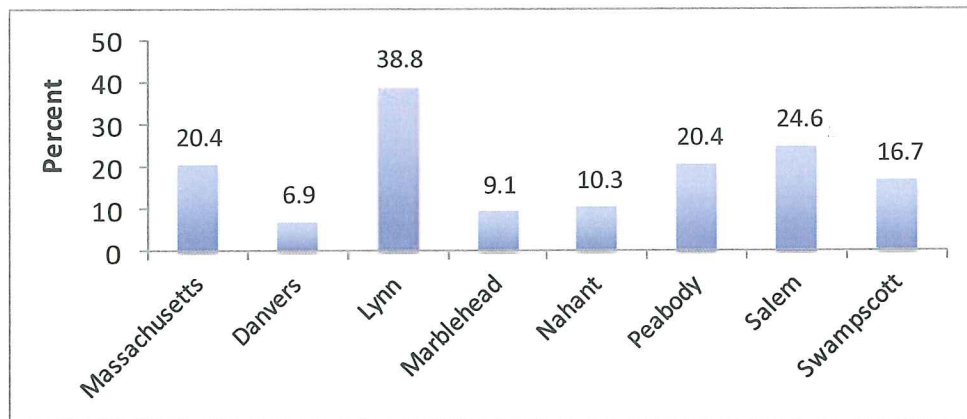
<sup>2</sup> Massachusetts Office for Refugees and Immigrants, Refugee Case Management New Arrivals/Enrollees by Country of Origin and MA Region FFY 06 - FFY 10. Accessed 12-23-11 at <http://www.mass.gov/eohhs/docs/ori/demographics-country-region.pdf>.

<sup>3</sup> <http://www.wbur.org/2011/08/15/lynn-schools>

<sup>4</sup> [http://profiles.doe.mass.edu/state\\_report/selectedpopulations.aspx](http://profiles.doe.mass.edu/state_report/selectedpopulations.aspx)



**Figure 5: Language Other than English Spoken at Home by NSMC Primary Cities and Towns, 2005-2009**



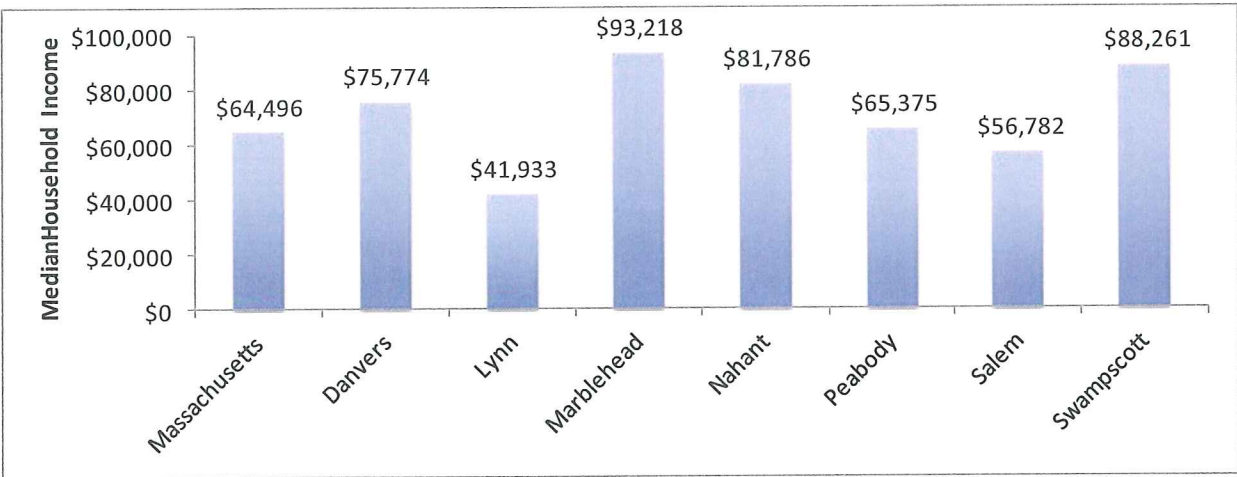
DATA SOURCE: US Department of Commerce, Bureau of the Census, American FactFinder, 2005-2009 American Community Survey 5-Year Estimates

### *Income, Poverty and Employment*

**Increasing concerns and financial challenges in this changing economy were predominant themes in interview and focus group discussions, in their relation to residents' health as well as meeting day-to-day needs.** These notions pervaded even among respondents representing wealthier communities; those in traditionally higher-income communities describe community members struggling to maintain and keep their homes. Due to unemployment and the rising costs of home maintenance, many residents have been faced with difficult decisions; as one participant illustrated the *“choice between medication and fuel is a horrific choice to be faced with.”*

Income, poverty, and unemployment levels demonstrate the wide range of socioeconomic conditions across the NSMC priority communities. In 2005-2009, the majority of the communities had median incomes above the state (\$64,496), ranging from \$65,375 in Peabody to \$93,218 in Marblehead (Figure 6). Median incomes in Lynn and Salem were lower than that of the state, \$41,933 and \$56,783 respectively. This is not surprising given the characteristics of these two communities. Compared to the other North Shore communities, Lynn and Salem have the largest populations, greatest population density, highest proportion of non-Whites, and highest percentage of people whose primary language is not English. They are also younger (e.g., more residents under the age of 25 and fewer residents over 65) than any of the other five cities and towns. Additional indicators further substantiate the low socioeconomic status of these two communities.

**Figure 6: Median Household Income Based on 2009 Inflation-Adjusted Dollars by NSMC Primary Cities and Towns, 2005-2009**

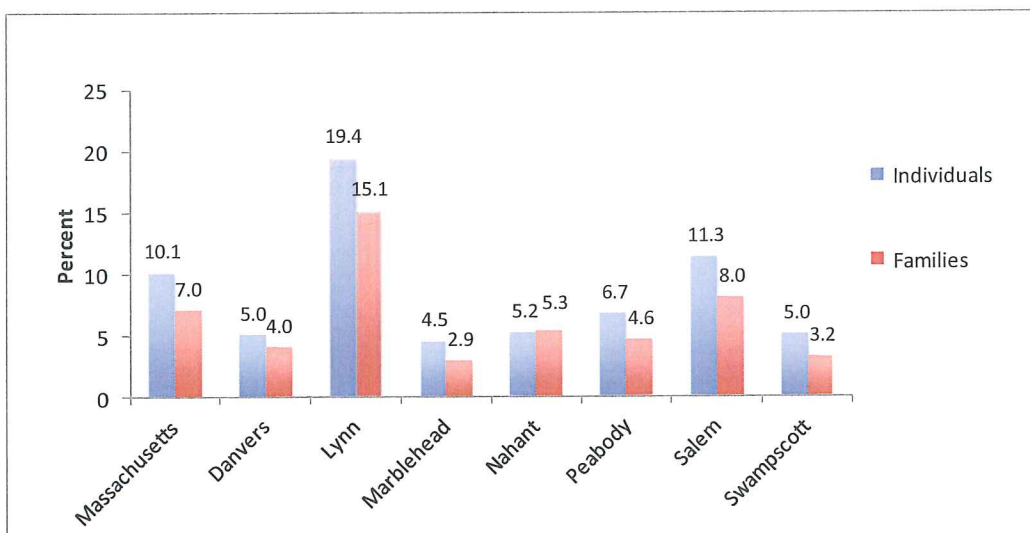


DATA SOURCE: US Department of Commerce, Bureau of the Census, American FactFinder, 2005-2009 American Community Survey 5-Year Estimates

Of the seven communities, Lynn and Salem have the highest individual and family poverty rates. Approximately one in five individuals in Lynn (19.4%) live below poverty, almost double that of the state (10.1%). The percent of families below poverty in Lynn (15.1%) is more than double that of the state (7.0%). In Salem, both individual and family poverty is also higher than in the state overall, 11.3% and 8% respectively (Figure 7). Many interviewees who serve the poorest in the region, specifically in Lynn, discussed that the highest priority for many of these residents is to put food on the table and pay the rent, as accessing health care services and engaging in health promoting behaviors become overwhelmingly challenging.

Focus group participants noted that the low cost of living and the availability of social services in Lynn seemed to attract low-income residents to the area. Across all focus groups, residents who had lived in Lynn for all or most of their lives observed the deterioration of the city and an increase in poverty over the years. As one participant noted, *“I was really disappointed to see...the downfall of the city, to see how it has not been kept up.”* Another participant shared how *“[Poverty] is increasing every year...I was in the shelter helping out and a couple years ago there weren’t that many people here...but now the line is like 20, 30, 40 people long.”* Furthermore, low-income residents are struggling with employment. Participants described visiting temporary employment agencies daily and being unemployed for over three years.

**Figure 7: Percent of Individuals and Families below Poverty by NSMC Primary Cities and Towns, 2005-2009**

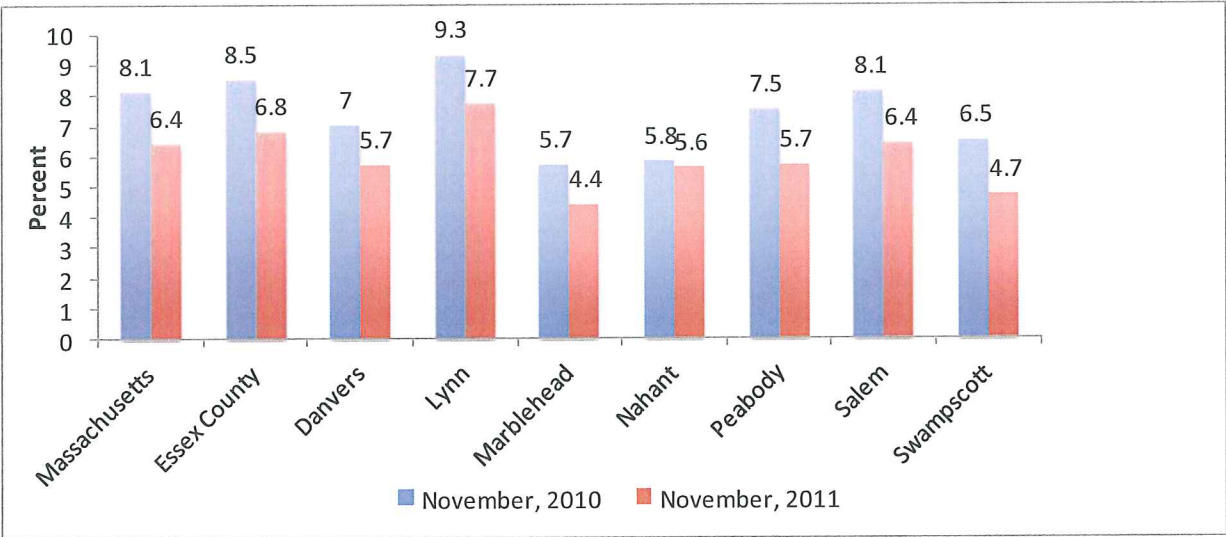


DATA SOURCE: US Department of Commerce, Bureau of the Census, American FactFinder, 2005-2009 American Community Survey 5-Year Estimates

Unemployment mirrors these same trends. The unemployment rate in Essex County as a whole was only marginally higher than the state average from November 2010 to November 2011. Yet Lynn has been consistently higher for the past year, while Salem’s rate was about the same as the state average. The other five communities have maintained unemployment rates lower than the state average, further illustrating the mixed population of both higher and lower socioeconomic status in the NSMC communities (Figure 8). It is important to note that “discouraged workers,” those who have stopped looking for jobs and are no longer collecting unemployment are not captured in these data. Interview participants acknowledged that unemployment continues to be a challenge in most communities and often identified “the unemployed” as vulnerable populations.



**Figure 8: Unemployment by NSMC Primary Cities and Towns, November 2010 and 2011**



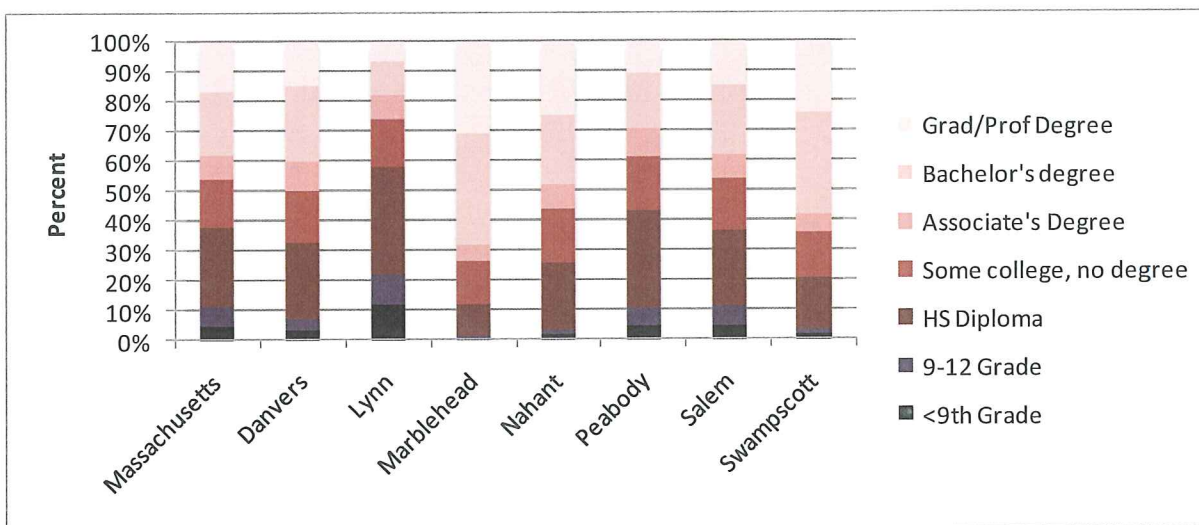
DATA SOURCE: Massachusetts Executive Office of Labor and Workforce Development, 2010-2011  
[http://lmi2.detma.org/lmi/County\\_comparison.asp](http://lmi2.detma.org/lmi/County_comparison.asp)

*Educational Attainment*

**Educational attainment, a strong indicator of socioeconomic status, varied across the region; however, several key informant interviewees and a few focus group participants noted that the educational level of the population, particularly of Swampscott and Marblehead, was considered a strong community asset.** The role of education in health-seeking behaviors was also discussed in several interviews. For example, residents from the more educated communities were described as being more likely than lower income residents to access Boston teaching hospitals for health care. They also could more easily navigate the complexity of the health care system in general.

Figure 9 depicts educational attainment of adults 25 years and older in the region. Results of the 2005-2009 American Community Survey demonstrate that among the NSMC priority communities, Marblehead has the highest levels of education, with more adults holding a bachelor’s degree or higher (67.8%) than the state overall (38.3%); Lynn has the lowest levels of education, where 18% of adults have bachelor’s degree or higher (Figure 9). Furthermore, educational attainment for high school in the region was higher than the state average (88.7%) except in Lynn (77.9%). Additionally, for the 2010-2011 school year, Lynn (68.5%), Peabody (77.6%), and Salem (79.1%) had lower graduation rates compared to the state (82.1%).

**Figure 9: Educational Attainment of Adults 25 Years and Older by NSMC Primary Cities and Towns, 2005-2009**



DATA SOURCE: US Department of Commerce, Bureau of the Census, American FactFinder, 2005-2009 American Community Survey 5-Year Estimates

### *Housing and the Environment*

**The declining economy has taken a toll on all communities in the NSMC catchment area, with the most severe impact on the cities of Lynn and Peabody, particularly in the area of housing.** Recent foreclosure data for 2011 indicates that Lynn and Peabody have experienced the most foreclosures, 57 (1 in 634 housing units) and 24 (1 in 820 housing units) respectively, in the region. Interview participants also described how the economic downturn has resulted in housing deficits that are contributing to housing-related health issues such as contaminated ground water, infectious disease, sleep deprivation, and pest infestations. As one participant described, *“there are children in school with sleep deprivation because they don’t have beds at home.”*

Many key informants as well as elderly and low-income focus group participants identified housing quality as a community issue that is often overlooked. Several participants also expressed concern that when substandard housing is demolished, it is not replaced with newer low-income housing. At the same time, the housing stock is aging and may be falling into disrepair. This is most evident in Lynn, where the majority of residents are renters and 60.2% of the housing is over 70 years old. Additionally, low income focus group participants described the difficult housing social service environment and how they have encountered long waiting lists for Section 8 housing or that shelters were at capacity. As one participant shared, *“I’ve been on the Section 8 waiting list for five years, and I’m still in the shelter.”* The lack of housing options was so severe that some participants explained that they needed to *“sleep in the street.”*

Regarding the larger city environment, several youth and adults indicated that Lynn in particular had both *“good parts and bad parts”* as far as housing and the city’s neighborhoods. However, the city was considered to have deteriorated over the years due to neglect and poverty. Buildings were described as *“old and ugly.”* Despite Lynn’s negative reputation, some long time residents of Lynn exhibited pride in their city and said, *“There are some places downtown that are really dirty and rundown, but I love this*

city.” Other participants stated that there is a sense of apathy among residents towards Lynn, resulting in a lack of community involvement.

Related to housing, homelessness has presented an increasing challenge for some of the communities in the NSMC area, and the homeless population was identified specifically as a vulnerable group by some interviewees. Several interviewees noted how homelessness adds a layer of complication to successful treatment and management of both acute and chronic illness. In addition, they described how caring for homeless patients frequently drains medical resources due to extraordinary measures needed to address unique needs. While Lynn has begun to show a recent decrease in homelessness, other Essex county cities and towns are showing an increase. Overall, the North Shore area accounts for approximately 9% of the statewide homeless shelter count.

### *Transportation*

**While highways are accessible in the area and several transportation programs exist to help residents access care, transportation was cited as a challenge for many residents to utilizing health and social services, buying healthy foods, and even commuting to work.** Interviewees and focus group participants noted that not all residents, such as the elderly or poor, have vehicles or can drive, and they may not have family members who can take them to appointments. Public transportation is the only option for many. Lynn was described as having good public transit options, while other towns were lacking. However, several interview and focus group participants mentioned limited public transit particularly between local cities and towns, which posed challenges in a variety of arenas. Being able to visit a large grocery store to buy less expensive healthy food options or being available to employment opportunities across the North Shore region depends on accessibility of transportation. Senior focus group participants reported that the need for transportation went beyond medical purposes and included enabling senior residents to engage in social activities for their mental health.

Similarly, transportation is critical when visiting area health care facilities and clinicians for diagnostic testing or preventive services. Residents face challenges in using the current public transit options: transferring between buses, extensive travel time required, and other difficulties such as bringing small children on buses can make use of public transportation undesirable and a barrier to accessing health care and social services.

However, participants did mention several programs that exist in the region, such as taxi vouchers and the provision of transportation for vulnerable populations (e.g., elderly), that aim to address these barriers. The problem is that the need far outstrips availability. In focus groups, “The Ride” was discussed among participants; they viewed it as a helpful service, although a lack of service to Boston was noted as a limitation. While some participants indicated that The Ride was available for non-medical purposes, not all participants were aware that the service could be utilized for social purposes as well. Additionally, participants stated that strict eligibility requirements posed challenges; the application process was described as cumbersome and prone to errors that mistakenly disqualified eligible applicants from receiving services.

### *Violence and Safety*

**Safety was considered a community asset in most NSMC communities, except for Lynn which has seen higher rates of violence crime.** Interviewees in particular noted that community and interpersonal violence have a significant impact on stress, mental health, injury, and opportunities for engagement in the community. For example, several interviewees working in Lynn attributed residents’ low levels of

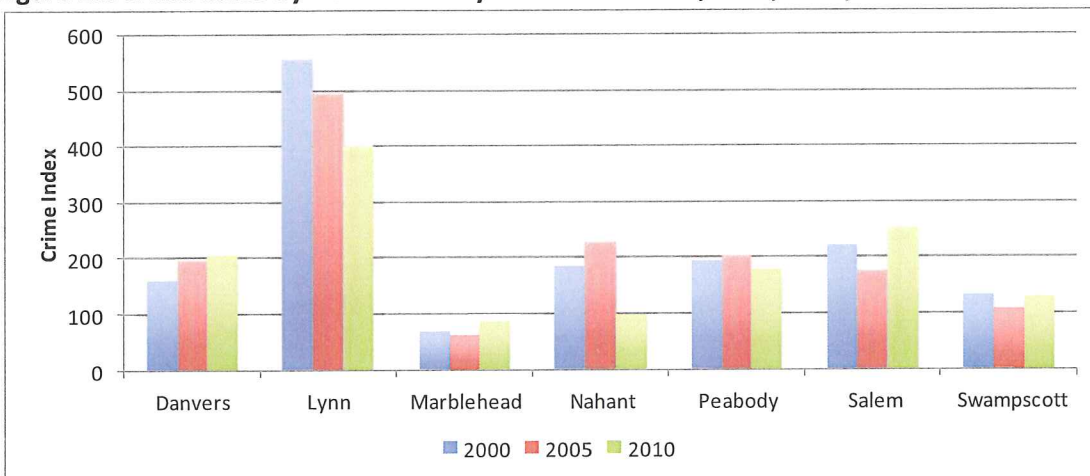


outdoor physical activity to their concern over safety in public parks; they identified gang activity as the primary issue.

When focus group participants were asked the most concerning health issues in their community, violence emerged as a top concern among youth in the discussions. Youth focus group participants described observing frequent fights in school and discussed the impact of this violence on Lynn’s reputation. School violence and bullying were the foremost themes raised when discussing violence. This included both physical and verbal abuse, as well as cyber bullying. Youth participants reported that the use of weapons (e.g., brass knuckles) caused school violence to escalate. A lack of neighborhood cohesion (e.g., “neighborhood watch”) and negative perceptions of police were cited as barriers to reducing violence in Lynn. The negative perception of police was shared across several focus groups; participants described police as being ineffective and exhibiting rude behavior. Youth in particular held a negative perception of police; they did not consider Lynn to be well controlled by the police department.

Statistics support the community’s concern with safety in Lynn. In 2010, the crime index—a composite measure of eight types of major crimes—was lower for all NSMC priority communities than the national average (319.1), except for Lynn (404.0) (Figure 10); however, the crime index in Lynn has consistently declined over the past decade. Nevertheless, Lynn still experiences a higher crime rate in almost every category compared with its neighbors.

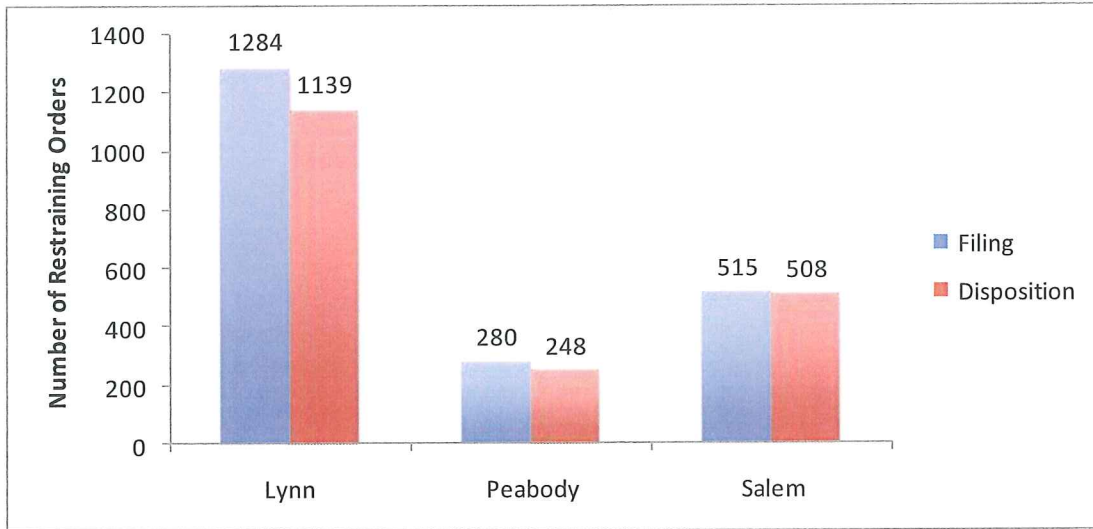
**Figure 10: Crime Index by NSMC Primary Cities and Towns, 2000, 2005, and 2010**



DATA SOURCE: City\_data.com, Massachusetts Bigger Cities, 2000, 2005 and 2010  
<http://www.city-data.com/city/Massachusetts.html> (select city)

In addition to community violence, domestic violence (DV) has both physical and emotional consequences. While not a frequently mentioned issue in interviews, when it was discussed, it was largely linked to the declining economy. *"We see violence as a result of financial distress in families. When the economy is bad, all kinds of things happen,"* cited an external key informant. Furthermore, DV incidents tend to be underreported due to fear of reprisal or misclassification of crimes (e.g., assault and battery). Nevertheless, district court records of filings and dispositions regarding abuse prevention indicate that DV is an issue, particularly in Lynn (Figure 11).

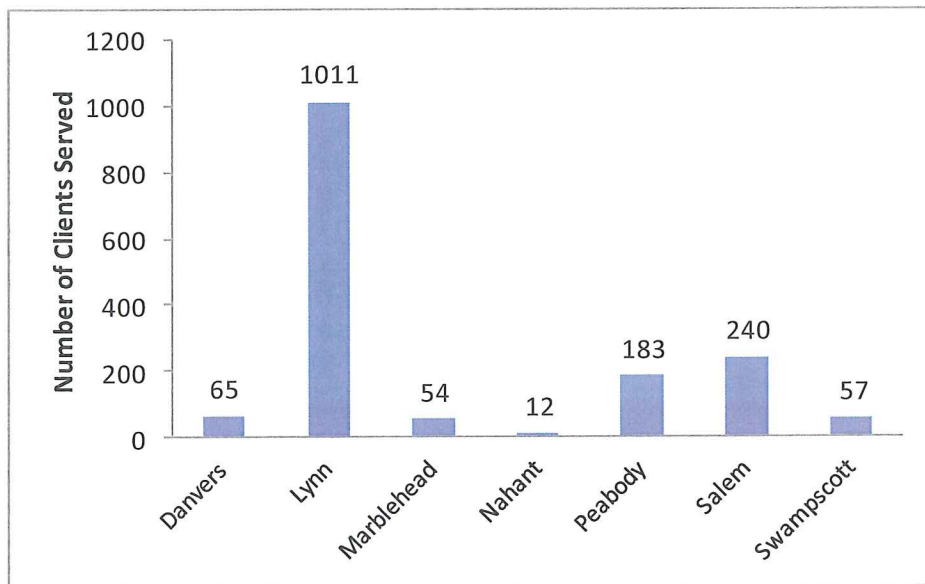
**Figure 11: Restraining Orders (209a) via District Courts for Lynn, Peabody, and Salem, 2004**



DATA SOURCE: The Massachusetts Court System, Civil Filing and Disposition by Court, 2004. Accessed December 22, 2011 <http://www.mass.gov/courts/courtsandjudges/courts/districtcourt/civilstats2004.html>

Service delivery data reported by Healing Abuse Working for Change (HAWC), a domestic violence agency on the North Shore, show that they provide services to clients across the priority communities (Figure 12). In 2011, HAWC served over 1,000 clients in Lynn, more than one-third of total clients served across the North Shore (2,693 clients), not surprising since it is also the largest city in the region.

**Figure 12: Clients Served by HAWC by NSMC Primary Cities and Towns, 2011**



DATA SOURCE: Healing Abuse Working for Change (HAWC), 2011

## Community Health Issues

*“Untreated mental health issues and drug use - they go hand in hand; there are so few treatment options for mental health. And don’t even get me started on the difficulty of engaging the system for substance abuse treatment.”—External key informant interviewee*

*“Mental health for children is a major concern; we see between 50 and 80 kids per month. They have either acted up in school, expressed suicidal thoughts, attempted suicide, taken drugs, or are abusing alcohol. It is a critical issue.” —Internal staff interviewee*

*“Obesity is not just an individual issue. It’s a family issue, a community issue. It’s becoming an epidemic. So many children are getting diabetes. We need to figure out how to deal with this problem comprehensively and as a community.”—Internal staff interviewee*

*“Obesity is double in poorer people than among rich people because poorer people don’t have as many choices when they go to buy things. But rich people can go to the doctor to find help. They can ask a doctor. The doctor can give nutritional advice... but the poorer people don’t have those resources....don’t know how to choose, or can’t afford it.” – Focus group participant*

*“Teenage pregnancy constantly seems like something we are trying to battle. As public health funds decrease, it gets harder and harder.”—External key informant interviewee*

**Several issues emerged as the primary health concerns facing NSMC’s priority communities, specifically behavioral health (substance abuse and mental health), obesity and other chronic conditions, and teen pregnancy.** During interviews and focus groups, participants discussed the health issues that they considered to be the most pressing in their communities. Common issues appeared across nearly all discussions. Behavioral health, including substance abuse and mental health, emerged as primary health concern for the community, in addition to obesity, teen pregnancy, and diabetes. Other health issues discussed included heart disease related conditions (e.g. hypertension), asthma and other respiratory illnesses, elder frailty, and cancer.

### *Substance Use and Abuse: Illegal Drugs, Tobacco, and Alcohol*

**Substance abuse was the foremost concern among participants in most focus groups and interviews.**

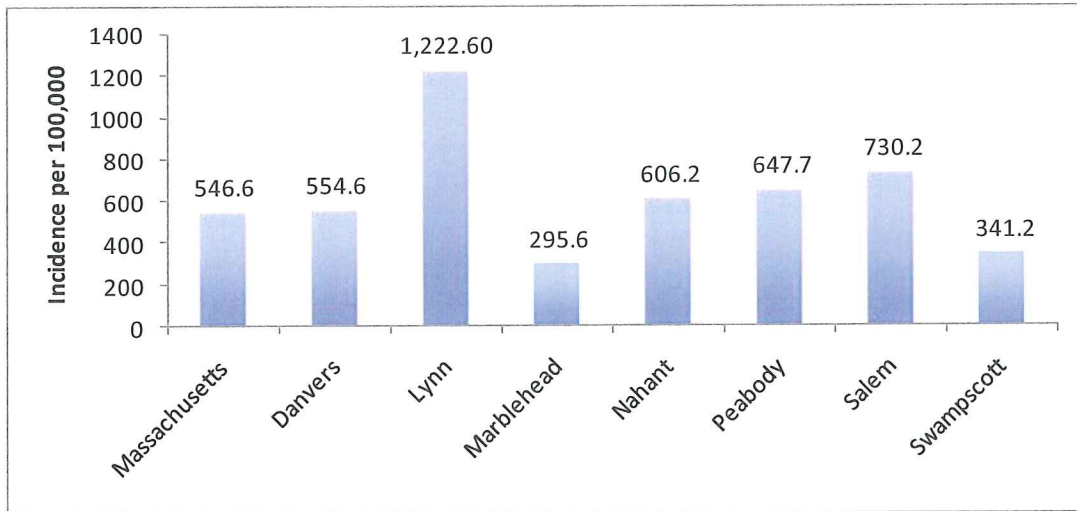
This view was shared equally by external key informants and internal NSMC staff as well as residents themselves. As discussed in the following section, young adults appear to be the group most at-risk for these behaviors; however, substance abuse is still a significant concern among other population groups as well. Not only is substance abuse an incredibly complex issue typically concomitant with mental health co-morbidities, but the treatment landscape is both daunting and limited. In addition to illegal drugs, smoking and alcohol use particularly among youth was raised as a secondary concern.

### Substance Abuse and Illegal Drugs

**When discussing substance abuse, many interview and focus group participants emphasized the growing use of opioids in their community as a predominant health issue.** Several participants noted that substance abuse is not just an individual issue, but one that affects entire families and the larger community: emotional and financial strain on loved ones, increased violence in the community, and a segment of the young adult population unemployed. While many interviewees noted that young adults were the primary age group with these addictions, they also described an increased prevalence of substance abuse among pregnant women. Focus group participants, particularly youth and low-income

resident, discussed substance abuse as a severe community health problem. One participant observed, “People selling their \$200 food stamps for \$20 to get drugs.” Quantitative data further demonstrate use of opioids and other substances in the region. In 2009, incidence rates of nonfatal opioid-related cases in all North Shore communities, except Marblehead and Swampscott, exceeded the state average ( Figure 13). In Lynn, the incidence of nonfatal opioid-related cases was more than double that of the state.

**Figure 13: Nonfatal Opioid-Related Cases (Abuse, Dependence and Poisonings, Overdoses) for NSMC Primary Cities and Towns, 2009**



DATA

SOURCE: Massachusetts Department of Public Health, Injury Surveillance Program, 2009

Trend data for 2007-2010 demonstrate that both inpatient and emergency department discharges associated with opioid poisoning are also highest in Lynn (Table 2 and Table 3). Inpatient hospital discharges in Peabody, while lower than those of Lynn, have been steadily increasing over the past four years, from fewer than seven discharges in 2007 to 20 discharges in 2010. As the data show and interviewees noted, substance abuse puts a difficult strain on the health care system. As treatment services are in high demand, have strict eligibility requirements, and are difficult to navigate, the health care system is providing a stop-gap measure for users who overdose but then cannot—or will not—seek additional help.

**Table 2: Inpatient Hospital Discharges Associated with Opioid Poisoning (Nonfatal Cases Only, All Intentions) by NSMC cities and towns, 2007-2010**

	2007	2008	2009	2010
Danvers	10	<7	10	9
Lynn	37	23	50	31
Marblehead	<7	<7	<7	<7
Nahant	0	<7	0	<7
Peabody	<7	11	18	20
Salem	<7	11	9	11
Swampscott	0	<7	<7	0

DATA SOURCE: MA Inpatient Hospital Discharge Database, MA Division of Health Care Finance and Policy.

NOTE: Rates on average totals <7 not calculated by agency since rates with average numbers less than 20 may be considered unstable.

**Table 3: Emergency Department Discharges Associated with Opioid Poisoning (Nonfatal Cases Only, All Intentions) by NSMC cities and towns, 2007-2010**

	2007	2008	2009	2010
Danvers	<7	<7	<7	11
Lynn	65	58	63	52
Marblehead	<7	<7	<7	0
Nahant	<7	<7	<7	<7
Peabody	26	26	28	22
Salem	14	13	24	20
Swampscott	<7	<7	<7	<7

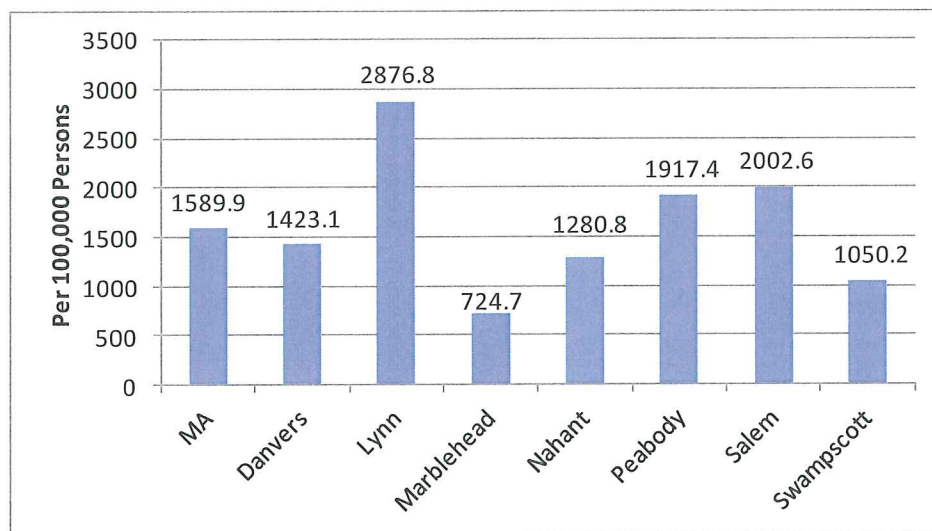
DATA SOURCE: MA Emergency Department Discharge Database, MA Division of Health Care Finance and Policy.

NOTE: Rates on average totals <7 not calculated by agency since rates with average numbers less than 20 may be considered unstable.

Figure 14 indicates the rate of admissions to government-funded substance abuse treatment centers by town. While Lynn, Salem, and Peabody have the highest rates of treatment, interviewees from both community organizations and NSMC—as well as numerous focus group participants—reiterated that the current system of treatment is not sufficient. It is not just simply the limited number of treatment facilities either. Many participants discussed the difficulty of finding treatment programs that are appropriate for the wide ranging issues that users face: co-occurring mental disorders, multiple drug dependencies—some which require detoxification and others that do not, language barriers, problems with the legal system, and other challenges. Additionally, interviewees noted that expanded services are not only needed for the individual, but his/her family as well. Families need assistance in navigating the treatment landscape as well as support services to help them cope with the emotional strain of dealing with substance abuse in the family. Some services do exist, but demand is high. For example, Learn to Cope, a peer-to-peer support group for families dealing with issues of drug addiction in a loved one, which started a North Shore chapter at NSMC’s Salem location four years ago, has attracted 2-4 new families each week for the past two years. Current weekly meetings are attended by approximately 50 people.



**Figure 14: Rate per 100,000 Persons of Substance Abuse Admissions to MA Department of Public Health-Funded Treatment Centers**



DATA SOURCE: MassCHIP, Health Status Indicators Report, 2010 BSAS Funded Program Utilization Data

During discussions, several low-income focus group participants identified themselves as former addicts or had family members who were addicted. Participants described having to create extreme situations in order to receive services. For example, one participant related the story of when she realized she wanted to get clean, she went to the emergency room and said to the provider, *“I feel like I’m going to hurt myself,”* in order to be admitted into a substance abuse treatment facility. Participants noted that the majority of recovery services seemed to only be available for high-risk clients (i.e., currently using drugs). There were limited options for those clients already considered “clean” but needing additional support. One participant who sought additional services after completing a 10-month treatment program described how *“everywhere I went for more services, they told me I was too clean to get in.”* Several participants indicated that it was necessary to *“get high again in order to continue to get help.”*

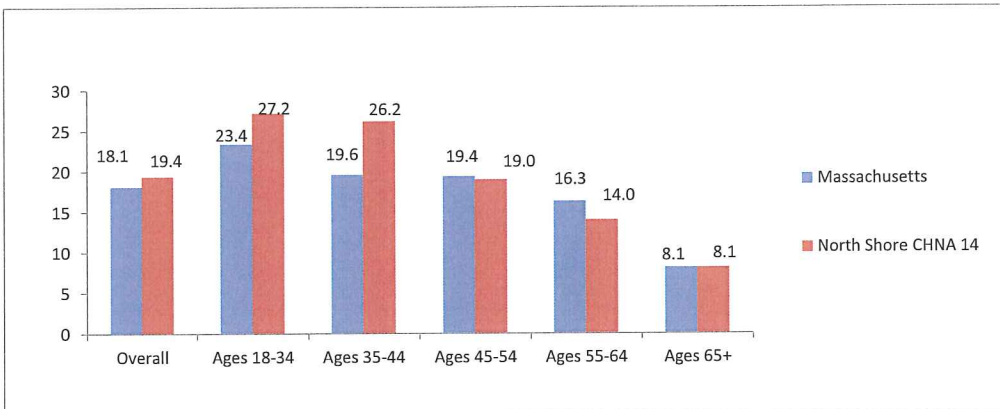
Focus group participants who identified themselves as former drug users also described experiencing discrimination when accessing health services and noted a stigma associated with patients having a history of drug addiction. For example, participants noted that signs posted at clinics saying *“we do not give out narcotics”* made some feel blacklisted and that they were seeking care in an unwelcoming environment.

#### Tobacco and Alcohol Use

**Smoking and alcohol use, specifically binge drinking, are somewhat higher in the North Shore region among particular groups, compared to rates statewide.** According to 2002-2007 BRFSS data, the rate of current smokers was higher in the North Shore CHNA (19.7%) than in Massachusetts as a whole (15.8%). As with the state, smoking rates in the North Shore are highest among those under 45 years old (Figure 15). In the North Shore, over one-quarter of adults ages 18-34 and ages 35-44 reported they were current smokers, while less than 10% of seniors reported smoking. Among Massachusetts high school students, both lifetime and current use of cigarettes has decreased; from 2003 to 2009, lifetime use decreased from 53% to 43% and current use from 21% to 16%. However, smokeless tobacco use has doubled among high school students in 6 years; in 2003, 4% of high school students reported using

smokeless tobacco, up to 8% in 2009. This is over five times higher than adult rates reported in the regional Northeast BRFSS of 1.5%.<sup>5</sup>

**Figure 15: Current Smokers among Adults for North Shore CHNA 14 by Age, 2002-2007**



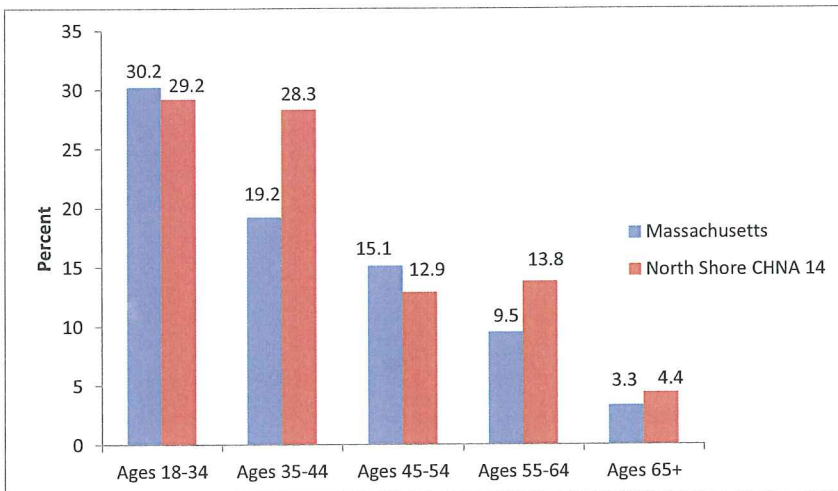
DATA SOURCE: MassCHIP Risk Factors and Health Behaviors Report, MA BRFSS 2002-2007

For alcohol use, binge drinking is considered a critical indicator for this topic. The Centers for Disease Control defines “binge drinking” as “consumption of five or more drinks for men or four or more drinks for women on any one occasion in the past month.”<sup>6</sup> Similar to Massachusetts, the highest proportion of adults residing in the North Shore reporting binge drinking are under the age of 45 (Figure 16). However, the proportion of North Shore adults ages 35-44 that reported binge drinking (28.3%) exceeded that of the state (19.2%) by almost 10%. Adults in the North Shore 55 years and older also reported drinking more heavily than similarly aged adults across the state. Among high school students, rates of alcohol use have decreased over the past 10 years, but still remain high. In 2009, 43.6% of 9<sup>th</sup> graders and 53.2% of 12<sup>th</sup> graders reported they had at least one drink in the past 30 days.

<sup>5</sup> Massachusetts Department of Public Health, Division of Research and Epidemiology, Bureau of Health Information, Statistics, Research and Evaluation. *A Profile of Health Among Massachusetts Adults, 2010: Results from the Behavioral Risk Factor Surveillance System.*

<sup>6</sup>Massachusetts Department of Public Health, Bureau for Health Information, Statistics, Research and Evaluation, Health Survey Program, 2011. *A Profile of Health Among Massachusetts Adults, 2010: Results from the Behavioral Risk Factor Surveillance System*

**Figure 16: Binge Drinking Among Adults for North Shore CHNA 14 by Age, 2002-2007**



DATA SOURCE: MassCHIP Risk Factors and Health Behaviors Report, MA BRFSS 2002-2007

Alcohol and marijuana were discussed as the most frequently used drugs from the perspective of youth. In particular, alcohol was described as easily accessible through adults willing to make purchases on behalf of youth. Participants also noted that youth are easily influenced by adult role models. For example, one participant shared, “If you see adults do it, teens will pick it up.” While youth participants shared that marijuana use was visible in the schools, only one participant noted the use of other drugs in school, such as ecstasy. A few interview participants commented on concerning rates of smoking and alcohol use among young adults, particularly as gateway behaviors for trying stronger substances. However, these two issues of smoking and alcohol were not seen as the most pressing by either external key informants or internal NSMC staff when compared to the other issues mentioned of illegal substance abuse, mental health, and obesity.

*Mental Health*

**Mental health was described by interview participants and some focus group participants as a considerable concern and challenge facing their communities, and one in which current treatment options did not seem to meet the growing demand.** Mental health issues were perceived as affecting various segments of the population, including refugees, children, new mothers, substance users, and the elderly. For example, participants noted that both new and established refugee populations coming from war-torn countries are particularly affected by post-traumatic stress disorder. Depression and dementia were considered prevalent among the elderly. Nearly all interviewees who raised substance abuse as a concern in the community indicated that the addiction often stems from underlying mental health disease. Lastly, the stigma associated with mental health was acknowledged as a significant barrier to seeking help, further exacerbated by the limited availability of outpatient resources.

Several key informants shared that individuals often present in the emergency room for mental health crises and become admitted to inpatient care; however, upon release, there are few outpatient services available, so follow-up is limited and the situation can worsen. For example, one participant described, “When I call people for outpatient services, it’s typically a 4-6 week wait. And you’ve got people who literally can’t wait that long. For example, they have just been discharged from our inpatient psych unit and now we are saying, ‘Suck it up and wait for 4-8 weeks.’” Additionally, a few key informant



interviewees noted that it is difficult for many patients, particularly those who “are barely making it by” to remember appointments or be able to navigate the system without help. As one interviewee commented, “these patients don’t keep datebooks or day planners for keeping a schedule. They don’t have family around to remind them of their appointments.” A few focus group participants commented that they were interested in receiving mental health services, but were told by the health center that it would be several weeks before they could get an appointment with a provider. Another important challenge noted by interview participants was a lack of training for primary care providers to address mental health.

While there is limited quantitative data regarding mental health intervention outcomes because the “majority of [mental health] clinicians report that they do not currently use outcome measurement in their practice,”<sup>7</sup> there is some statewide and regional data available regarding mental health diagnoses and self-reported symptoms. Statewide data from the 2008 BRFSS reveal that 15.3% of adults have ever received a diagnosis of depression in their lifetime, while 7.1% of adults were diagnosed with current depression.<sup>8</sup> Respondents to the 2008 Northeast Regional BRFSS reported on their perceived mental health status; 8.2% claimed to have had 15 or more days of poor mental health out of the past 30 days. This is nearly identical to the state averages for the same questions.

Results from the 2010 Youth Risk Behavior Survey (YRBS) conducted in Lynn illustrate the potential for serious mental and emotional health problems among youth in this community (Figure 17 and Figure 18).<sup>9</sup> The Lynn YRBS was administered to all public middle and high school students in grades 6-12 and included questions about suicidal thoughts and behaviors as an indicator of depression and serious emotional problems. In 2010, one in four eighth graders reported that they seriously considered suicide in their lifetime (Figure 17); one in five 9<sup>th</sup> graders reported that in the past year they injured themselves on purpose without suicide intention (Figure 18).

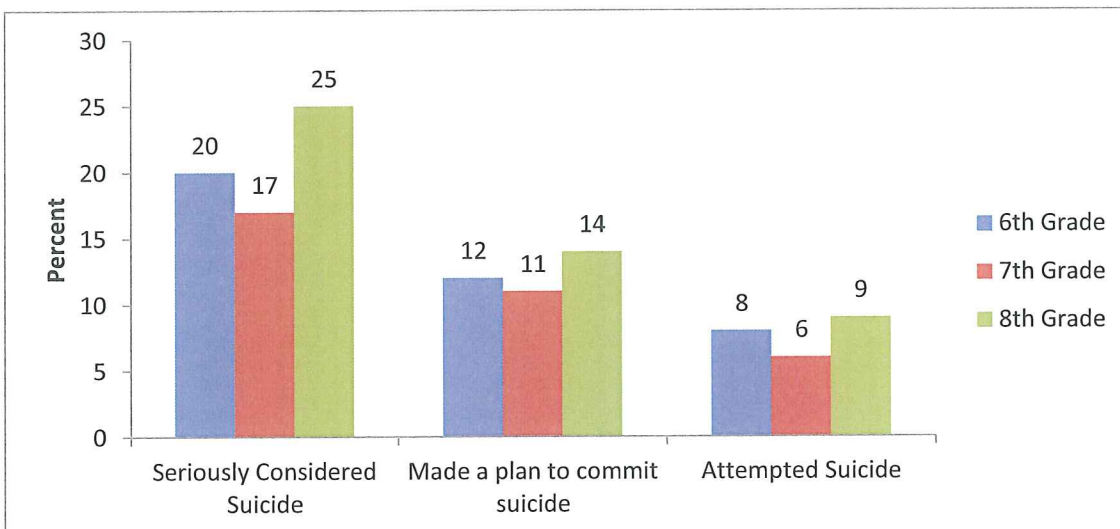
---

<sup>7</sup> Massachusetts Executive Office of Health and Human Services, *Massachusetts Department of Mental Health Final Results of the Outcomes Measurement Survey, 2010*. <http://www.mass.gov/eohhs/researcher/behavioral-health/mental-health/dmh-results-and-reports.html>.

<sup>8</sup> Centers for Disease Control and Prevention, *Mental Illness Surveillance Among Adults in the United States*. Morbidity and Mortality Weekly Report (MMWR), Supplements September 2, 2011/60(03);1-32. [http://www.cdc.gov/mmwr/preview/mmwrhtml/su6003a1.htm?s\\_cid=su6003a1\\_w#Tab7](http://www.cdc.gov/mmwr/preview/mmwrhtml/su6003a1.htm?s_cid=su6003a1_w#Tab7)

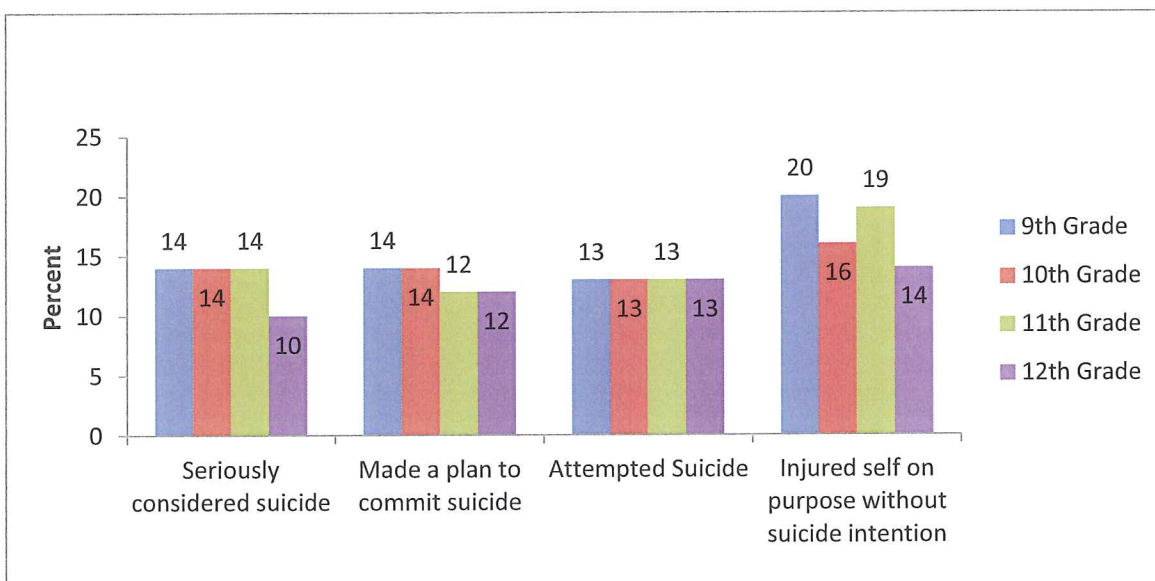
<sup>9</sup> Lynn Communities that Care Assessment of Youth Needs for: Bullying and Violence, Teen Pregnancy and Suicide. April 2011.

**Figure 17: Suicidal Thinking and Behaviors by Grade, Middle School (Lifetime) for Lynn, 2010**



DATA SOURCE: City of Lynn Youth Risk Behavior Survey, 2010

**Figure 18: Suicidal Thinking and Behaviors by Grade Level, High School (Past 12 Months) for Lynn, 2010**



DATA SOURCE: City of Lynn Youth Risk Behavior Survey, 2010

*Obesity*

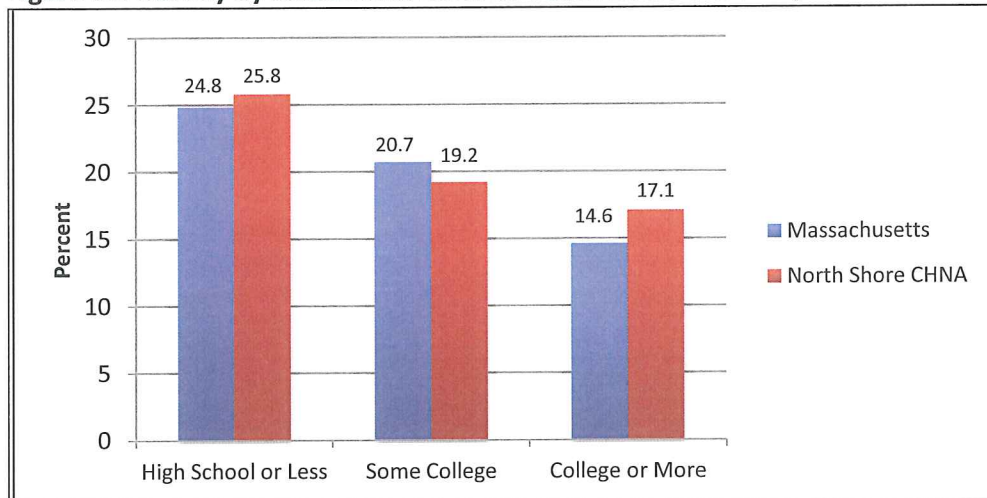
**Obesity and its related behaviors of physical inactivity and unhealthy eating were cited among most interview and focus group participants as pressing concerns in the community, particularly among youth.** Most participants believed there were numerous reasons for the growing obesity epidemic in the North Shore, specifically the prevalence of fast food restaurants particularly in Lynn, affordability of healthy foods, challenging transportation options for residents without a car to shop at establishments selling healthy foods, safety concerns in Lynn resulting in limited use of public parks, and unhealthy food options for school lunch. A few internal staff interviewees commented on how the growth in childhood

obesity will have dramatic repercussions on chronic disease rates, health care utilization, and health care costs in the future as today's younger generation transitions into adulthood. That is why it is imperative to aim to reduce these rates now, noted these interviewees.

According to youth focus group participants, the school environment was not conducive to healthy eating or physical activity. In addition to a lack of health education in general, they noted limited opportunities to engage in physical activity during school as well as a lack of healthy food options offered during school lunch. The availability of fast food restaurants and the sedentary home environment were also mentioned as playing a role in obesity. Adult participants noted that while resources to address obesity are available, many of them, such as commercial entities like Weight Watchers are not affordable. One participant also noted that nutrition classes were offered through Salem Hospital but at a cost. Furthermore, participants explained that obesity disparately affects the socioeconomically disadvantaged.

The epidemiological data substantiate these concerns. Data from the 2007-2009 Behavior Risk Factor Surveillance Survey reveal that over 60% of adults in the North Shore CHNA were overweight (Body Mass Index of 25 to 29.9) or obese (Body Mass Index  $\geq 30$ ), compared to 58.2% statewide. When looking at the data by sub-groups, such as by education level or by city, analyses include older data in order to achieve adequate sample sizes. Examining obesity by education level reveals that the epidemic affects everyone; however, there appears to be a strong relationship between lower education levels and obesity, as those in the North Shore with a high school education or less are more likely to be obese than those with a college degree (25.8% vs. 17.1%) (Figure 19).

**Figure 19: Obesity by Educational Level for North Shore CHNA 14, 2002-2007**



DATA SOURCE: Massachusetts Department of Public Health, MassCHIP Risk Factors and Health Behaviors Report, 2002-2007; Mass CHIP aggregates education data for obesity across multiple years.

Obesity data for each town is only available by aggregating multiple years of data together. This older data reveal that, as with other risk-related behaviors, Lynn has the highest percentage of adults who are considered obese (26.7%), followed closely by Peabody (26.4%). Salem and Danvers also have higher rates of obesity than those statewide, where more than 1 in 5 adults can be considered obese.



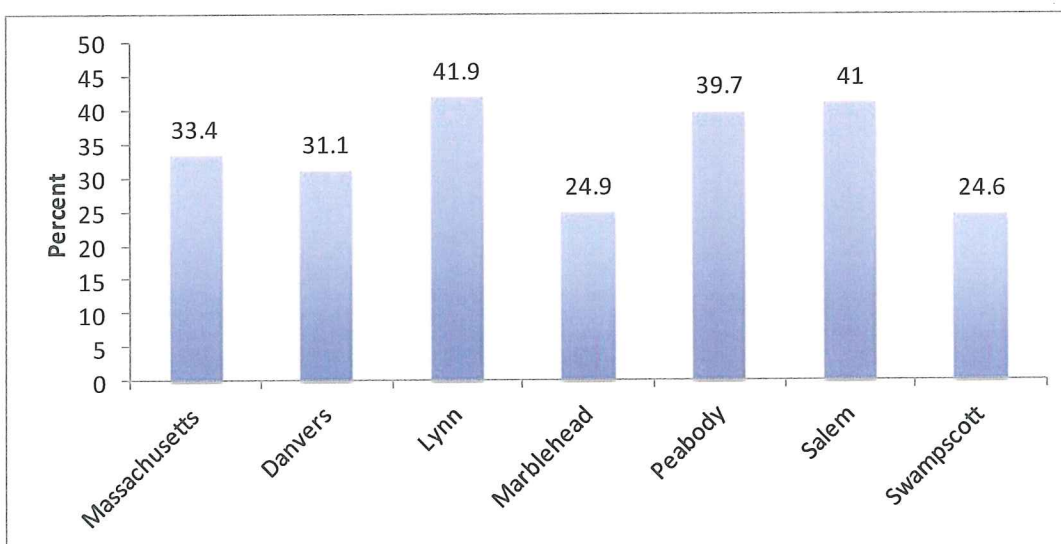
**Table 4: Adult Obesity by NSMC Primary Cities and Towns, 1999-2005**

	MA	Salem	Lynn	Peabody	Danvers	Marblehead	Nahant	Swampscott
<b>Adult Obesity, %</b>	20.7	22.9	26.7	26.4	21.8	15.5	17.1	17.0

DATA SOURCE: City statistics at: Boston.com, published May 6, 2010; Accessed December 27, 2011; [http://www.boston.com/yourtown/massfacts/snapshot\\_percent\\_obese\\_in\\_massachusetts\\_communities/](http://www.boston.com/yourtown/massfacts/snapshot_percent_obese_in_massachusetts_communities/) Based on small area estimations from the 1999-2005 aggregated Behavioral Risk Factor Surveillance Survey (BRFSS)

For school-aged children in the service area, overweight and obesity rates were not as high as those of adults, but concerning nonetheless. In all NSMC priority cities and towns, at least 25% of children were overweight or obese. Rates exceeded the state average (33.4%) in the cities and towns with the lowest median household incomes: Lynn (41.9%), Peabody (39.7%), and Salem (41%)<sup>10</sup> (Figure 20).<sup>11</sup>

**Figure 20: Overweight and Obesity among School-Aged Children by NSMC Primary Cities and Towns, 2010**



DATA SOURCE: Massachusetts Department of Public Health, MassCHIP, 2010 Essential School Health Service (ESHS) data

*Chronic Disease: Heart Disease, Diabetes, and Asthma*

**Despite socioeconomic differences among NSMC priority communities, geographic disparities in chronic disease indicators were less apparent.** However, several interview and focus group participants, especially the elderly, noted that chronic conditions are important concerns in many communities, particularly given the increasing rates of obesity. Heart disease and diabetes were noted as two important issues, while asthma was cited as a concern particularly among children in poorer, urban areas.

Heart Disease and Diabetes

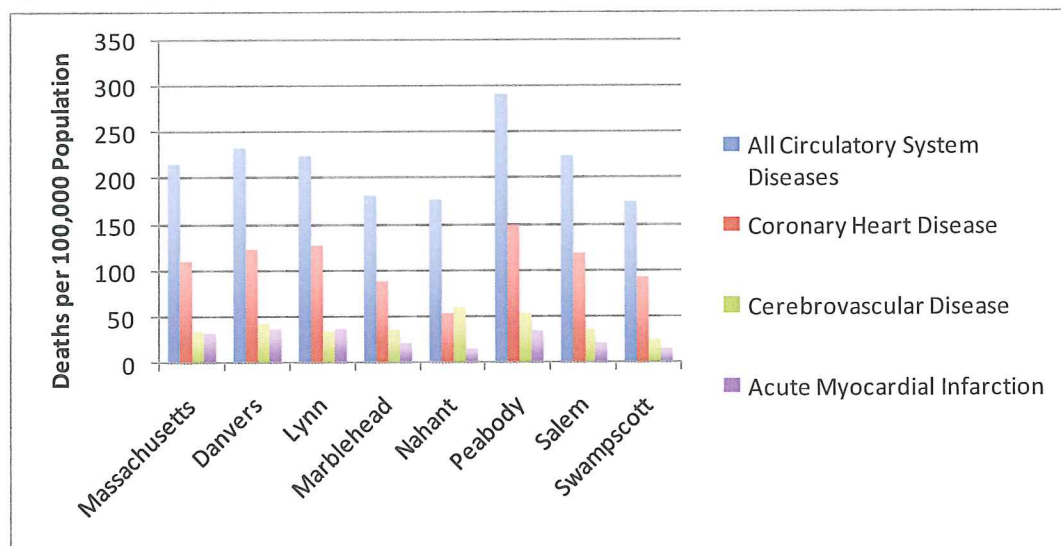
**With its lower socioeconomic status, Lynn is the city with the highest rates of chronic disease risk factors; however, mortality rates from heart disease and stroke are similar to those seen statewide**

<sup>10</sup> MassCHIP, 2010 School Health Services Report

<sup>11</sup> Nahant children not listed as they attend school in Swampscott.

**and not higher than other NSMC priority communities.** Examining 2006-2008 age-adjusted cardiovascular mortality rates (deaths per 100,000 population) reveals that among the seven cities and towns heart disease mortality rates were highest in Peabody (292.1). In addition to Peabody, Danvers (233.5), Lynn (223.4), and Salem (223.6) experienced heart disease mortality rates similar to or slightly higher than the state overall (215.7) (Figure 21). Although the North Shore’s mortality rates for these chronic conditions are not alarming, several key informant and internal staff interviewees noted that heart disease as well as diabetes are chronic illnesses that have a significant impact on many of the region’s population.

**Figure 21: Age-Adjusted Cardiovascular Mortality Rates by NSMC Primary Cities and Towns, 2006-2008**



DATA SOURCE: Massachusetts Department of Public Health, MassCHIP, 2006-2008 hospital data

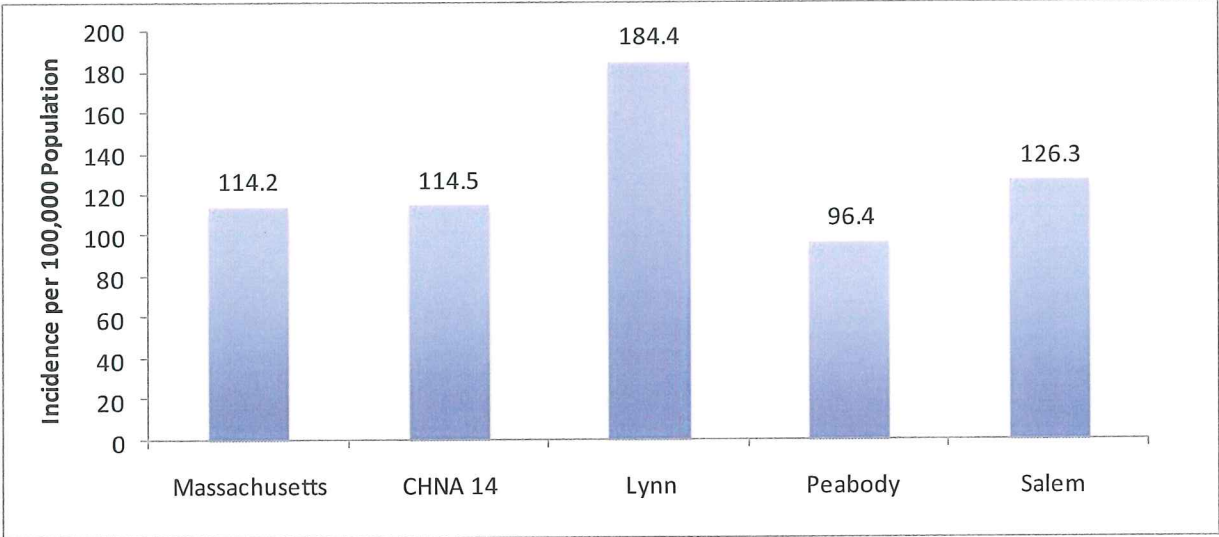
The prevalence of diabetes in North Shore CHNA 14 (5.5%) is lower than that of the state overall (7.5%).<sup>12</sup> Diabetes mortality, inpatient hospitalizations, and emergency room visit rates are available by region (North Shore CHNA 14), as well as by city or town for Lynn, Peabody and Salem. In 2008, diabetes mortality was lower for North Shore CHNA 14 (10.9 deaths per 100,000) than for the state overall (14.5 per 100,000). The cities of Lynn and Peabody had slightly higher diabetes mortality rates than the North Shore CHNA 14 (13.5 and 13.4 respectively), but below that of the state.

Despite low mortality rates, examining additional hospital-related indicators reveals that North Shore communities are disproportionately affected by diabetes illness. In 2008, North Shore CHNA 14 had a similar rate of diabetes-related emergency room visits to the state overall (114.5 and 114.2 per 100,000 respectively). However, Lynn residents experienced a higher rate of diabetes-related emergency visits (184.4 per 100,000) compared to others in the region as well as the Commonwealth (Figure 22). Salem’s diabetes-related emergency room visit rate (126.3 per 100,000) was also above that of the region; whereas Peabody’s rate (96.3 per 100,000) was below the region’s rate.

<sup>12</sup>Executive Office of Health and Human Services, MassCHIP, Instant topics, Diabetes, 2010. Accessed 12-26 at: <http://www.mass.gov/eohhs/researcher/community-health/masschip/topics/diabetes.html#chna>.



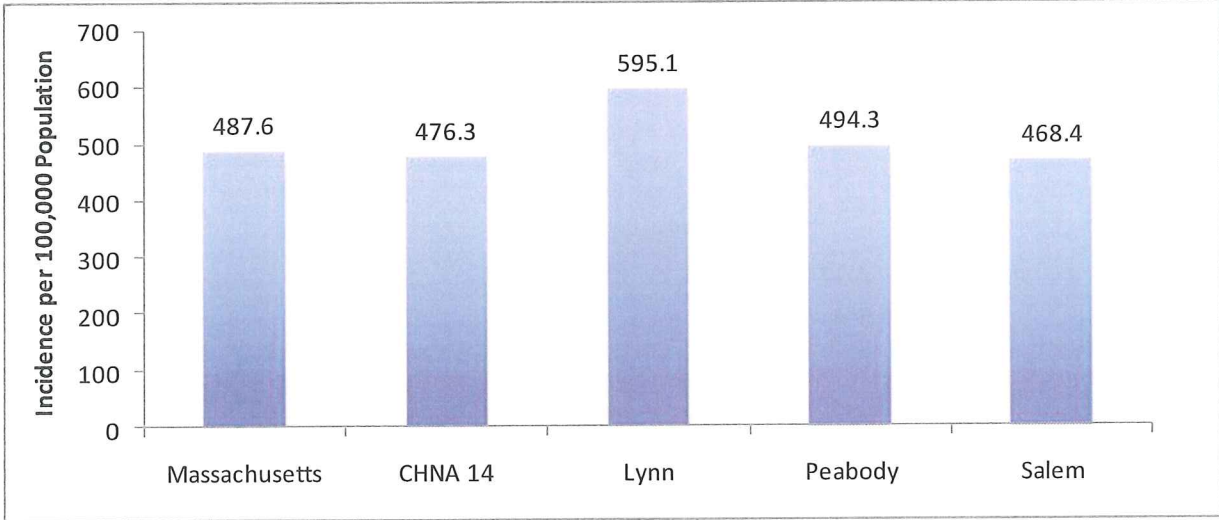
**Figure 22: Age-Adjusted Diabetes-Related Emergency Room Visit Rates for North Shore CHNA 14, Lynn, Peabody, and Salem, 2008**



DATA SOURCE: Massachusetts Department of Public Health, MassCHIP, 2008 hospital data

While the diabetes inpatient hospitalization rate in the North Shore region (476.3 per 100,000) is below that of the state (487.6 per 100,000), the rate in Lynn is 1.25 times higher than that of the region (Figure 23).

**Figure 23: Age-Adjusted Diabetes Inpatient Hospitalization Rates for North Shore CHNA 14, Lynn, Peabody, and Salem, 2008**



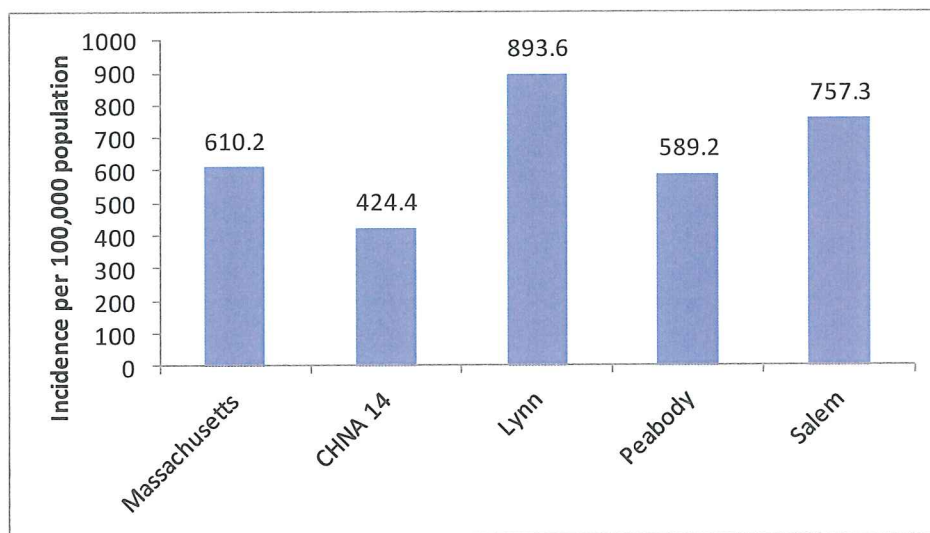
DATA SOURCE: Massachusetts Department of Public Health, MassCHIP, 2008 hospital data

Asthma/Respiratory Illness

Several interview participants cited childhood asthma as disproportionately affecting those from urban, poorer families and resulting in frequent emergency room visits. While the prevalence of asthma in North Shore CHNA 14 (10.2%) was similar to that of the state (9.8%), there was a deep

concern among several internal staff interviewees about the frequency of emergency room use for asthma-related issues. Quantitative data confirm interview participants' concern with asthma-related emergency room use. In 2008, the rate of asthma emergency room visits in Lynn (893.6 per 100,000) was more than double that of the North Shore region (424.4 per 100,000); this rate was also high in Salem (757.3 per 100,000), which was above that of the state overall (610.2 per 100,000). It was noted that asthma can be a manageable illness resulting in fewer emergency room visits when families are provided education on asthma management, and a comprehensive treatment and management plan is developed in partnership with a health care provider or community health worker.

**Figure 24: Age-Adjusted Asthma Emergency Room Visits for North Shore CHNA, Lynn, Peabody, and Salem, 2008**



DATA SOURCE: Massachusetts Department of Public Health, MassCHIP, 2008 hospital data

#### *Sexual Health, Teen Pregnancy, and Birth Outcomes*

**While teen birth rates have steadily declined, rates in the North Shore still far exceed those seen statewide.** In North Shore CHNA 14, 14.0% of all births in 2009 were from mothers 15-19 years old, compared to 5.9% statewide. This statistic is mainly driven by Lynn. Among the 25 cities and towns in Massachusetts where teenage pregnancy remains a health challenge, Lynn ranks sixth within this top 25 and the only community within NSMC's catchment area on the list. While teen birth rates in Lynn declined from 1999-2008, they have recently increased (53.2 to 55.8 births per 1,000 females ages 15-19 between 2008 and 2009, compared to the 2009 MA rate of 19.5 births per 1,000 females).<sup>13</sup>

Several key informant interviewees and participants in the youth and low-income resident groups cited teen pregnancy and risky sexual practices as concerning issues, particularly among poorer immigrant communities and young people in Lynn. Social norms and lack of hopeful employment opportunities for the future were discussed as two possibilities for these higher numbers. A few interviewees also discussed that teen pregnancy is part of a cycle of poverty and that has a significant impact on the financial and overall health of a community. With teen mothers being less likely to finish school and thus ineligible for higher paid jobs, this lower earning potential can stunt the economic progress of the family and larger community. Increased health education, expanded youth programs and employment

<sup>13</sup> *Massachusetts Births 2009*. Boston, MA: Division of Research and Epidemiology, Bureau of Health Information, Statistics, Research, and Evaluation, Massachusetts Department of Public Health. August 2011.

opportunities in the community, and health care services focused specifically on adolescents were some suggestions interviewees provided with regards to teen pregnancy.

In addition to minimizing teen pregnancy, improving birth outcomes is also a health issue important to providing children a stronger foundation for the future. Several key health indicators related to pregnancy and birth are available for the 30 largest municipalities in Massachusetts, of which Lynn and Peabody are included; additional birth characteristics are available for the North Shore CHNA. In addition to having a higher birth rate than the state, Lynn has a higher proportion of Black (14.8%) and Hispanic (42.7%) mothers; whereas, in Peabody, over 80% of the mothers are White (Table 5). In 2009, the majority of births (over 80%) across both the state and the North Shore region received adequate prenatal care; however, nearly two-thirds (67.2%) of births in Lynn utilized public payment for prenatal care, nearly twice the state average. Furthermore, over half of births in Lynn were to unmarried mothers (56.9%). Additionally, for 2007-2009, the infant mortality rate for not only Lynn, but also the North Shore region exceeded the state rate (Table 5).

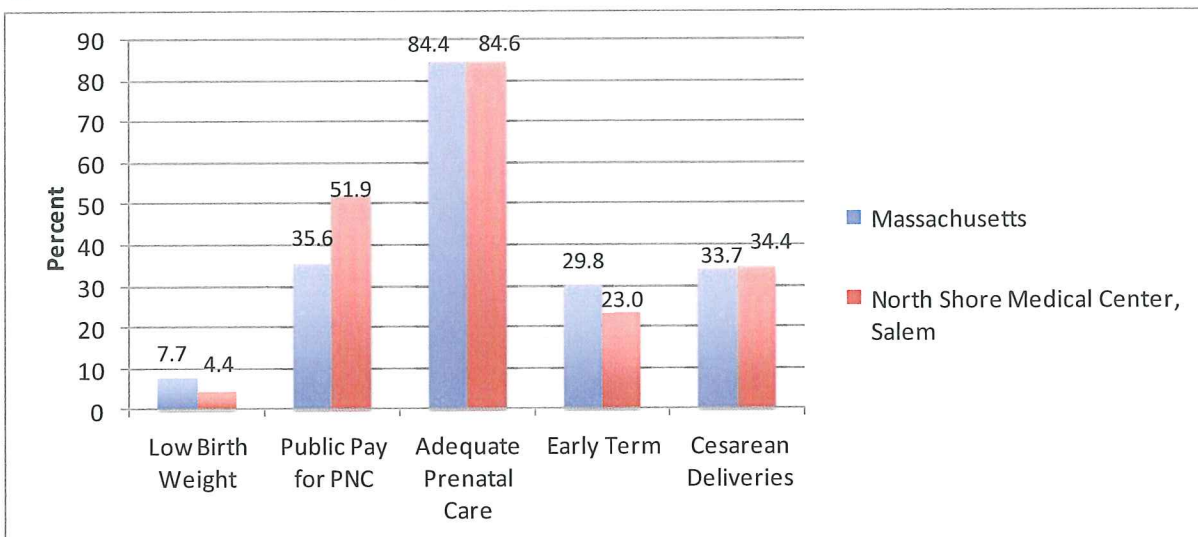
**Table 5: Resident Birth Characteristics for Lynn, Peabody, North Shore CHNA, and Massachusetts, 2009**

Municipality	Births			Deaths			
	Adequate Prenatal Care	Public Payment for Prenatal Care	Unmarried	Infant Mortality Rate		Neonatal Mortality Rate	
	%	%	%	2009	2007-2009	2009	2007-2009
Massachusetts	84.3	36.1	34.7	4.8	4.9	3.7	3.6
North Shore CHNA	87.1	45.2	39.7	5.6	5.3	4.1	3.8
Lynn	82.7	67.2	56.9	5.3	5.9	3.3	4.2
Peabody	91.0	34.2	28.3	—	5.3	—	3.3

DATA SOURCE: *Massachusetts Births 2009*. Boston, MA: Division of Research and Epidemiology, Bureau of Health Information, Statistics, Research, and Evaluation, Massachusetts Department of Public Health. August 2011.

Data on Licensed Maternity facilities in Massachusetts show that although North Shore Medical Center has a significantly higher percentage of Public Pay patients than the state (59.1% versus 35.6%), they have a lower proportion of preterm and low birth weight babies (4.4% versus 7.7%, and 23.0 versus 29.8 respectively) (Figure 25).

**Figure 25: Birth Characteristics by Licensed Maternity Facilities for North Shore CHNA, 2009**



DATA SOURCE: Kids Count Data Center, 2009

<http://datacenter.kidscount.org/data/bystate/Rankings.aspx?state=MA&ind=5692>

### Health Care Access and Utilization

*“Co-pays can be a barrier. Education is needed. Patients don't always understand that co-pays can be waived. They end up having to make choices between spending money on food or co-payments.”* —Internal staff interviewee

*“There is over- and inappropriate use of the ER; we need to get people to appropriate care. We need to develop programs across settings so that people are getting their needs met in the right way and aren't just going straight to the emergency room, which is what many do now.”* — Internal staff interviewee

*“When you see a doctor, they're practically standing through the whole appointment because they have 20 more people to see and no time for you.”* — Focus group participant

*“Accessing services can be really difficult for immigrants and the elderly. They have trouble figuring out the system. For people who can't speak English, it's not just about talking to the clinician, it's about figuring how to make an appointment and where to go.”* —External key informant interviewee

*“I have a procedure in Salem next Friday. Yesterday, I paid someone to drive me up there, and my friend's mother is coming to drive me home. And someone said call Mass Health but there is such a waiting time for those services. These things are started with good intention, but don't always work well.”* — Focus group participant

**Overall, interview and focus group participants reported that health care access and utilization in the region were hampered by a variety of factors, including supply and demand of services; patient-provider relationship; physical location and accessibility of services; a limited understanding of and information on the health care system; and cost of services.** It is important to note that interviewees and focus group participants spoke positively about the quality of health care provided in the North



Shore, both by large institutions and health centers. The concerns that were raised in nearly every discussion related to access to services, particularly among those population groups who are traditionally underserved.

#### *Supply and Demand of Services*

**Interview and focus group participants often spoke of a paucity of service delivery options, particularly with regard to urgent care, inpatient and outpatient substance abuse detoxification and treatment, outpatient mental health services, and prevention services for a range of health issues.**

They indicated that in many instances the services either do not exist, are in short supply, or the demand for services exceed the capacity of services, facilities, and providers. As a result of these limitations, interview participants explained that patients are often faced with long waiting times for services or logistical challenges in accessing facilities. Consequently, they often forego care until conditions exacerbate and require emergency department visits. Focus group participants' views on their health care services confirmed this situation.

Hospital emergency rooms were often selected as a source of care by some focus group participants because they were considered more efficient and quicker than community health centers. When participants were probed on their use of the ER, they indicated that they used the ER for a variety of health issues, ranging from a fever, ear infection, or sprained ankle to an asthma attack. Many focus group participants indicated that they would first call the community health center if they needed to seek medical care. However, the centers were at capacity and typically would not schedule an appointment for them within a brief timeframe. According to focus group participants, if they were in pain, even if it was not an absolute emergency, then they would go to the ER instead of waiting for the health center appointment since they could receive treatment faster.

Despite NSMC's efforts to recruit primary care physicians, interview participants expressed concern regarding health professional shortages, particularly for primary and behavioral health. Specialists were also described as difficult to access; however, this was largely attributed to insurance restrictions rather than local availability. For example, one participant shared, *"sometimes we give them the contact information of a specialty service and they come back saying we contacted that doctor, they don't take my insurance, and what do I do now?"*

Pockets of communities within the NSMC catchment area have received federal designation as Health Professional Shortage Areas (HPSAs) or Medically Underserved Areas/Populations. As such they have been identified as having shortages of primary medical care, dental or mental health providers, high infant mortality, high poverty and/or a high elderly population. As of September 1, 2011, Lynn, Salem, and Peabody were designated as primary care HPSAs because they met the federal criteria. Furthermore, the catchment areas served by the North Shore and Lynn Community Health Center facilities have been designated as not only primary care HPSAs, but also dental care and mental health HPSAs.<sup>14</sup>

---

<sup>14</sup> Health Professional Shortage Areas: Primary Care, Dental Care, Mental Health. Accessed 12/24/11 at: <http://bhpr.hrsa.gov/shortage/hpsas/updates/09012011primarycarehpsas.pdf>, <http://bhpr.hrsa.gov/shortage/hpsas/updates/09012011dentalhpsas.pdf>, <http://bhpr.hrsa.gov/shortage/hpsas/updates/09012011mentalhpsas.pdf>



### *Patient-Provider Relationship*

**For several focus group participants, the inability of patients to develop a long-term relationship with their physician was a challenge to receiving consistent quality care.** Some focus group participants described feeling disconnected from the health care system due to the lack of a strong physician-patient relationship. Several low-income and elderly participants expressed the importance of having a good rapport with their doctor as encouraging them to seek consistent preventive care. As one participant said, *“All I want is one doctor... that I feel comfortable with.”* However, due to the shortage, doctors were described as rushing through appointments to handle their patient load. Yet, as participants noted, it takes time to establish a trusting relationship with a clinician.

### *Physical Location and Accessibility of Services*

**The physical location of many health care services—and limited transportation options to get to them—were cited as barriers to service accessibility.** Some interviewees noted that, particularly in Lynn, the concentration of health care and social services are in specific sections of town, while the “hotspots” of problems are in other areas. There seemed to be a mismatch between where some services were located and who needed them the most. Some interview participants also described that health care services were often designed to meet the needs of providers rather than clients (e.g., lack of evening clinic hours). While the health centers were in convenient locations for many residents, interviewees and some focus group participants commented that the emergency department was considered the most accessible health care facility for some due to hours of operation and location; thus, it tends to be the “provider” of choice for many residents.

According to the Massachusetts Department of Health Care Finance and Policy, 46% of all emergency room (ER) visits are avoidable, or non-emergent (Table 6). ER utilization rates for the North Shore CHNA are about the median for the state, 200 to 250 per 1,000 population. When non-emergency conditions are measured, uninsured patients use the ER about 1½ times as often as insured patients. This higher utilization rate may reflect a shortage of primary care physicians following the implementation of Massachusetts Health Care Reform which provided previously uninsured patients with health insurance, thus seeking access to PCPs.<sup>15</sup>

**Table 6: Emergency Department Utilization for Massachusetts, 2004-2008**

Classification of ED visit	% of ED visits
Preventable/avoidable	46%
Emergent	42%
Mental health	6%
Unclassified	6%

DATA SOURCE: Department of Health Care Finance and Policy, Preventable/Avoidable Emergency Department Use in Massachusetts, Fiscal Years 2004 to 2008.

When asked about what factors they considered in where they seek care, many focus group participants indicated that transportation availability played a large role in their decision around health care. For some participants, there were significant challenges to the public transportation available. As one participant noted, *“I went to the doctor and the last bus home was at 7:00pm. I was able to talk to the receptionist about it, and they got me through within enough time. But what if I had missed that bus,*

<sup>15</sup> Kowalczyk, L., The Boston Globe, July 4, 2010. *Emergency Room Visits Grow in Mass: New Insurance Law Did Not Reduce Number of Users.* Accessed 12-28 at [http://www.boston.com/news/local/massachusetts/articles/2010/07/04/emergency\\_room\\_visits\\_grow\\_in\\_mass/](http://www.boston.com/news/local/massachusetts/articles/2010/07/04/emergency_room_visits_grow_in_mass/).

*how would I get home?"* Several focus group participants also described being referred to health care facilities in Boston, such as for a complicated dental procedure, and struggling with transportation to get to an appointment or procedure there.

#### *Limited Understanding of and Information on the Health Care System*

**Several key informant interviewees and focus group participants highlighted limited understanding of the health care system as an on-going challenge; this included lack of knowledge regarding when to seek care, where services exist, and how to use services.** These limitations were largely attributed to language, culture, age, and complicated insurance and agency rules and regulations. Participants also noted that patients may be impeded from accessing services because of fear and intimidation of the complex health care system; these fears were associated with prior negative experiences, inaccurate information, cultural differences, language barriers, immigration status, or lack of social support. For example, one participant described how *"lack of a support system makes transportation to medical appointments difficult. A lot of people don't have family here, so it is difficult to get help to go medical appointments."* It was reiterated in many interviews that immigrants, who are more likely to be poor and not speak English, encounter even greater barriers to seeking services. *"I have trouble myself figuring out where to go for an appointment. Can you imagine if you didn't speak the language or have an understanding of how the health system worked?"* commented one key informant interviewee.

Focus group participants also described facing particular difficulty in accessing specialty care due to the complicated nature of the referral process. The multiple steps needed to see a specialist was considered confusing and unnecessarily time consuming. In addition to needing to see a primary care physician first for the specialty referral, the subsequent long wait times for an appointment with a specialist were unanimously identified as a barrier. The limited availability and accessibility of specialists in the North Shore area was mentioned as well. For example, one participant shared that specialists are available through NSMC's partnership with Mass General; however, *"He [the specialist] is here one day a week and at one site...and it's so difficult to get organized transportation, and timing and all of that."*

Youth focus group participants described not necessarily understanding the health care system and using a range of sources for their medical needs, including a community health center, primary care physician, the emergency room of a hospital, and their school health clinic. There was limited knowledge regarding what health services were available through school; however, a few youth were aware of free testing available. Their decision-making around care primarily relied on their parents. While youth themselves did not describe encountering a specific challenges when accessing care, when probed, the importance of transportation and language were discussed.

Just finding out information about health care resources in the area was confusing to many focus group participants. Several spoke of the decentralized nature of this information which made identifying a provider or a service even more difficult. As one participant commented, *"There are a lot of things that are available, but how do people find out about them? Is there a common area that people can go to access to that information?"* The type of information delivery was also influential. Senior focus group participants discussed how providers are increasingly sharing health information with their patients online (e.g., "Gateway"); however, this information was not considered easily accessible by elderly residents. A majority of senior participants preferred verbal communication. The "Gateway" was also described as having limited information, and senior participants expressed interest in receiving more specific details regarding their health (e.g., bacteria identified in a urine sample that tests positive for an infection).

In response to the challenges of navigating the health care system, self-advocacy was a common theme raised across all focus groups. Many focus group participants described the need to “*be your own advocate*” and often stated that they had to do all of the “footwork” in order to access services. In every focus group, participants indicated that the need to be proactive with one’s health care was increasingly necessary in a strained health care system with limited resources. Yet participants noted the challenges of self-advocacy, particularly for the elderly. Cultural norms were mentioned as playing a role in someone’s ability to “*take charge of their medical care.*” Elders were described as being embarrassed to ask for help and less aggressive due to how they were raised, particularly females. Additionally, being an effective self-advocate required an individual to be medically savvy.

#### *Cost of Services, Payment Structure, and Eligibility Requirements*

**Interview and focus group participants noted that health care access and utilization are largely influenced by cost, not only for consumers, but also for service providers.** Participants described how constrained resources at the local and state level have impacted capacity for services; stating that in the current economic climate the resources simply are not there due to budget cuts. In addition, participants shared how limitations on insurance reimbursement have caused clinical specialists to deny care to patients because they are unable to accept certain types of insurance. Furthermore, factors related to reimbursement have influenced decisions on whether or not to expand programs (e.g., community health worker programs) that could better address community need.

From the patient perspective, co-pays, deductibles, and prescription drug costs were some direct costs that focus group and interview participants mentioned challenges to seeking care. Lack of health insurance or underinsurance not only were barriers to seeking care, but resulted in the accumulation of unpaid medical bills for those that did retain services. Misunderstanding of insurance requirements further complicated access to care. For example, a participant shared the following scenario that exemplified what others had experienced, “*I had free health care, and eventually I got sick. And they gave me a [primary care physician, but I never went to him before because I had never been sick. And because I had never been to him before, they said I had to sign up and wait three weeks. But I was sick now. I had the flu! That was crazy to me.*”

The cost of medications was also considered prohibitive. Some focus group participants indicated that they were slightly confused over prescription drug coverage through Mass Health. The affordability of prescription medication and complicated nature of Medicare Part D was noted as a particular challenge among senior focus group participants. Additionally, interview and focus group participants discussed the opportunity cost to seeking medical care. For example, hourly workers may not get paid sick time, while they visit a doctor or families may need to find child care during a visit.

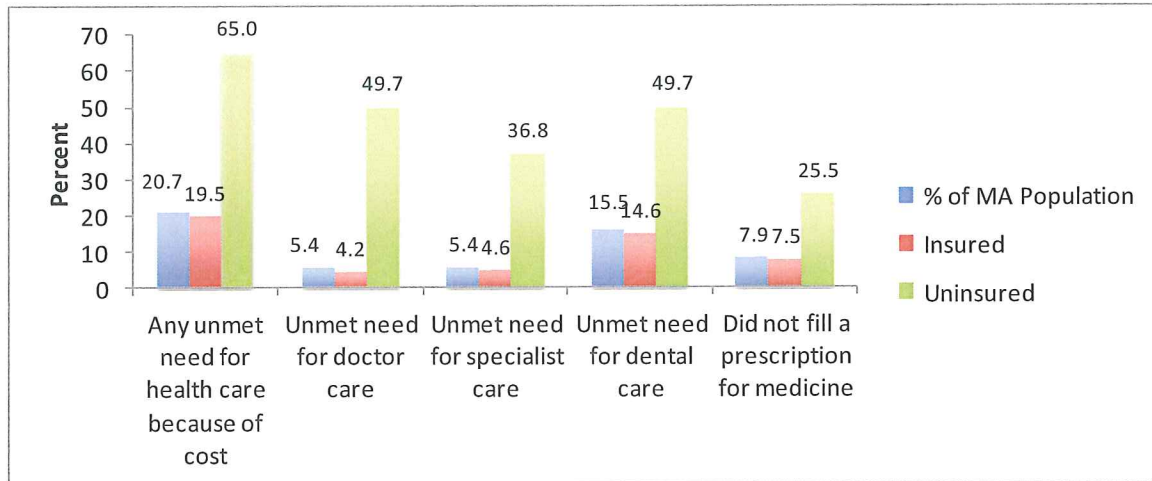
Quantitative data support interview and focus group participants’ concerns regarding cost as a barrier to care. According to the 2010 Northeast Region BRFSS, 7.5% of respondents reported being unable to see a doctor because of cost, compared to 6.7% statewide.<sup>16</sup> In a slightly older survey with additional questions about health care access, nearly 20% of MA residents in 2008 were unable to meet their health care needs due to cost; this rate was 4 to 10 times higher for people without insurance (Figure 26). Uninsured patients were two to three times *less* likely than insured patients to visit any doctor,

---

<sup>16</sup> Massachusetts Department of Public Health, Bureau for Health Information, Statistics, Research and Evaluation, Health Survey Program, 2011. A Profile of Health Among Massachusetts Adults, 2010: Results from the Behavioral Risk Factor Surveillance System

have multiple doctor visits, or see a doctor for preventive care within the previous 6 months.<sup>17</sup> While this survey was administered only two years after state health care reform (in 2008) and currently more than 98% of Massachusetts residents are insured in 2012, cost continues to be a barrier to accessing medical services.

**Figure 26: Unmet Need for Health Care Because of Cost for Massachusetts, 2008**



DATA SOURCE: Long, S., Phadera L., 2009. Health Insurance Coverage and Access to Care in Massachusetts: Detailed Tabulations Based on the 2008 Massachusetts Health Insurance Survey. Massachusetts Division of Health Care Finance and Policy. <http://www.mass.gov/eohhs/docs/dhcfp/r/pubs/09/his-detailed-tables-2008.pdf>

Key informant interviewees also noted that the health care system’s current payment structure presents barriers to health care access and utilization. For example, participants explained how payment systems encourage acute care rather than prevention and outreach services. This payment structure was also described as fragmenting health care services and inhibiting coordination of care.

### Vision for Health and Overcoming Access and Utilization Challenges

*“I have a grand vision of many of us working together to deal with an issue. What can government do? What can the hospital do? Health centers? Community organizations? Schools? Churches? We all have a part in this – if we could coordinate efforts, that would be something.”*  
—External key informant interviewee

*“It’s important for us all to reach out to those working in health, health care, and in the hospital system. We need to coordinate care. There is a vacuum, a lack of connectivity.”* —Internal staff interviewee

*“[We] need to move to integrated, accountable care...focus on wellness beyond treating illness. This involves outreach and social services that are embedded within the health care system.”* —Internal staff interviewee

<sup>17</sup> Long, S., Phadera, L., 2009. Health Insurance Coverage and Access to Care in Massachusetts: Detailed Tabulations Based on the 2008 Massachusetts Health Insurance Survey. Massachusetts Division of Health Care Finance and Policy. <http://www.mass.gov/eohhs/docs/dhcfp/r/pubs/09/his-detailed-tables-2008.pdf>.



*"I think we need to develop an integrated mental health outpatient program because right now we can get patients admitted with a mental health crisis, but when they get discharged, there's nowhere to go for outpatient treatment. So, the patients ultimately do not do well."* —External key informant interviewee

*"It would be great to have a community resource specialist. This would be someone who is really an expert in coordinating all of these different services, so that the right person is doing the right thing at the right time, and everyone else involved with the patient knows about it."* —Internal staff interviewee

*"How about mobile services working with isolated elders? It's less expensive to take a practitioner on the road to 20 elders rather than have 20 elders visit the practitioner."* —External key informant interviewee

**When asked about suggested approaches for addressing community health needs and overcoming barriers to access and utilization, interviewees' recommendations clustered around several areas: prevention; use of patient navigators, case managers, and patient advocates; behavioral health services; care coordination in non-traditional settings; enhanced primary and specialty care partnerships; marketing and communication; and outreach and engagement of the community.** Suggestions from the external key informants and internal NSMC staff were similar; however various audiences stressed different approaches. External stakeholders were more likely to focus on prevention, the use of patient navigators/case managers, and outreach and communication in discussions, while internal staff emphasized behavioral health services, care coordination, and primary and specialty care partnerships. Focus group participants focused their suggestions on prevention programming, coordination of care, and increased communication of existing services.

#### *Prevention*

**Participants discussed that shifting to a prevention focus in services would help address health concerns before they become severe problems and potentially reduce later health care utilization.**

Interview participants, particularly external key informants, noted providing more prevention services in the community would require working collaboratively with a number of community agencies. For example, one participant shared *"I would like to do more prevention and education. I would like to see more screenings, to start that wheel in motion – hearing, vision and cancer screenings. The Senior Center would be good to partner with, as would hospitals."* Specifically, they saw prevention as an important focus particularly in the area of teen pregnancy and obesity. Several interviewees discussed the importance of addressing obesity through a multi-sectoral approach with multiple partners. They saw a collaborative with agencies from health care, education, public works, transportation, local government, and the business community working together to address obesity from many angles and through both programming and policy. Obesity in particular was one issue where a prevention focus had strong momentum among interviewees.

Focus group participants also discussed prevention as an important aspect of their vision for the future. Youth in particular had several specific ideas for prevention-related programming. These included the following specific to sexual health/teen pregnancy and obesity:

*Sexual health and teen pregnancy.* In the area of sexual health and teen pregnancy, youth focus group participants were familiar with several programs, primarily offered through Girls, Inc. Peer education programs were described as popular, such as *Teen Health Ambassadors* and *Sister to Sister*. However,



youth observed that the majority of programs focused on females and agreed that peer education programs should be expanded to provide sexual health information for males as well. Youth also indicated their shared disappointment regarding the termination of the “Sex Van” (the van that provided educational programming and services on sexual health and prevention) due to budget cuts, which was noted as leaving a significant gap in these services. As one youth participant remarked, *“Now that the van is gone, no one is providing the services that it used to.”* All youth participants expressed positive feedback regarding the van and were interested in seeing the program return. The teen health center at the Lynn CHC was also mentioned; however, few focus group participants were familiar with this service.

Youth focus group participants expressed interest in receiving better information around sexual health in school. The discussions during sexual health class were described as limited to covering the transmission of sexually transmitted infections. They considered the discussion of safe sex in schools and distributing contraceptives as critical to preventing teen pregnancy. However, according to youth, a noted barrier was that some schools appeared resistant to having an open-dialogue regarding safe sex practices. Receiving sexual health information in the home was also considered important. Youth were interested in parents receiving education to encourage an open-dialogue with their children about sex and to make the topic less taboo.

*Obesity.* Around obesity, youth focus group participants suggested expanding opportunities for them to exercise by requiring more physical education time (by increasing the PE requirement from one year to four years) and offering alternatives to team sports. Equally important was the need for nutrition programs to provide information on healthy eating (e.g., portion size, caloric intake) and improving the school lunch options. A more robust health curriculum taught by positive adult role models demonstrating healthy behaviors was also described as beneficial. This suggestion was supported by adult focus group participants as well, who indicated that providing nutrition and physical education at an early age was key to preventing obesity. One participant described, *“Starting education in preschool, elementary school through high school to teach the students how to eat, how to choose the meals.”*

#### *Patient Navigators, Case Managers, and Patient Advocates*

**While interviewees emphasized that quality health care and social services exist in the region, a mechanism that links residents to these services seems to be missing.** This mechanism was described as enabling residents to not only understand the range of options available, but also facilitate how these services can be accessed. Many participants shared that a robust case management or patient navigation system would help patients connect patients to the services they need. As one internal staff interviewee commented, *“People fall through cracks of the system and don’t really know how to access care. Patient navigators at hospitals are important.”* This service was seen as especially important for connecting patients who are elderly, immigrants, and traditionally underserved, who may not be familiar with the health care system.

Many focus group participants also expressed a need for advocates to support patients in accessing health as well as social services that affect health. In an attempt to obtain Section 8 housing, one participant shared, *“I had to do everything on my own...if I don’t have someone to at least advocate for me, and show me what needs to be done, where I need to go, then how am I supposed to know.”* While it was recognized by some participants that patient advocate programs exist, they indicated that programs were not well advertised. Many participants agreed that a support system comprised of advocates was necessary to assist individuals with obtaining a range of services more efficiently, including housing and health care. However, in one focus group, there was disagreement regarding

whether or not hospitals should provide patient advocates. Some participants indicated that patient advocates employed by the hospital would not act in the patient's best interest; thus, an advocate independent of the hospital may be viewed more favorably. There was also discussion regarding whether a patient advocate should be medically trained versus medically knowledgeable; however, having a medical background was not the only consideration. Other characteristics of an effective patient advocate included empathy, patience, strong communication skills, and the ability to build relationships (i.e., have a good rapport with patients).

To help patients navigate the complex health care system, focus group participants also suggested introducing a more intensive system of reminder and follow-up phone calls. Participants indicated that a phone call from their provider would be an effective way of ensuring they did not miss an appointment. As one participant shared, *"If I miss an appointment, it's almost impossible to reschedule. So I think if they did courtesy calls as a reminder that would be great."* Similarly, following up with patients to ensure they were able to take a recommended action was considered helpful. For example, one participant requested to see a podiatrist and indicated that after receiving the contact information *"that's the last I heard of it...I have to take these things into my own hands."* Senior focus group participants in particular preferred a combination of both verbal and written communication regarding their health. Due to computer illiteracy among the aging population, a phone call and a mailed letter were considered better modes of communication than the internet.

#### *Behavioral Health Services and Training*

**Expanding services related to behavioral health, particularly substance abuse and mental health treatment, was supported and suggested by numerous focus group participants and interviewees, particularly internal NSMC staff.** They noted that a helpful first step in this process would be to enhance training opportunities regarding several facets of behavioral health, including: recognition of signs and symptoms, addressing overdoses, de-stigmatizing behavioral health care, and understanding community resources and referral processes. It was recommended that these trainings be offered to not only internal staff but community providers as well. Encouraging primary care clinicians to work collaboratively with behavioral health specialists was also considered necessary to address mental health and substance abuse issues. Similar to external stakeholders, internal staff supported increasing the presence of hospital staff in the community through case management. For example, *"It would be great to have hospital folks, maybe at the shelters, at centers, to do case management or social work type things [and] ask the questions: Do you have insurance? Do you know your options? That way they are engaged with what is happening on the community level."* In addition to training, interview participants also strongly emphasized the need for expanded substance abuse and mental health treatment options, especially for detoxification and outpatient care.

#### *Care Coordination and in Non-Traditional Care Settings*

**Increased care coordination was suggested as an approach both to enhance patient care as well as streamline services within the health care system.** Many external key informants and internal NSMC staff agreed that improved care coordination and case management would improve communication, minimize errors or duplication of efforts, and ultimately improve patient health. However, internal NSMC staff also viewed improved care coordination as serving an internal function of alleviating log-jams within the institution. In these discussions, interviewees noted that improved care coordination models could help ensure that the appropriate provider—whether it be a clinician or community health worker—be giving the education and care that are best suited for their role and for the patient. For example, if community health workers collaborated with clinicians via care coordinators, they could

alleviate the clinicians' time by providing important educational counseling while also spending more time with the patient on these issues than a clinician could.

Focus group participants also discussed that information technology systems were viewed as a beneficial mechanism for helping to coordinate care. For example, one participant stated that *"the information about health problems should be in a central system to facilitate the communication between hospitals and clinics."* Such a system was seen as critical to avoid the delivery of misinformation as well as redundant or conflicting messages when seeking care. Similarly, participants were frustrated with being sent in multiple different directions for information to resources and services that did not communicate with each other. They suggested a more centralized system for this type of information. Senior focus group participants were interested in having their medical history readily available via a national electronic medical record system. This would enable all physicians to access their information when needed no matter where they went to receive care.

As part of coordination of care, interview and focus group participants also saw care being delivered in non-traditional settings, where patients reside or conduct their daily activities. Some suggestions included more home-based care via home-visiting services, mobile health vans, and service-delivery in non-conventional community-based facilities such as offering well-child screenings in churches to reach underserved populations. Senior focus group participants encouraged mobile services and home-based care. For example, they recommended that specialists visit senior centers rather than expecting patients to come to them.

#### *Enhanced Primary and Specialty Care Partnerships*

**Internal NSMC interview participants specifically expressed a need for stronger connections both among and between primary care providers and specialists to augment care.** These connections were described as potentially playing a role in reducing emergency room usage, duplication of services, patient wait time and cost. They expected such partnerships to also improve the patient referral process. Several programs to strengthen connections between primary and specialty care were described as being in the planning or pilot stages. Additionally, NSMC staff shared that streamlining and improving technology could support the connection between primary and specialty care clinicians as well as enhance outreach to more patients and improve the delivery of care. While some participants described technology as only one step in the process, current investments in technology were considered critical to ultimately save resources.

#### *Marketing and Communication of Existing Services and Programs*

**While many services seem to be at capacity, focus group participants suggested promoting those services and programs that still have space available since many residents may not know about them.** Many focus group participants noted a lack of knowledge regarding services that were currently available in the community that aimed to address a range of health issues. Participants suggested increasing the visibility of these existing services to ensure all eligible populations knew about them. Youth suggested sharing this information through speaking events held in the community, at schools, or at public events. Adult participants also supported "spreading the word" at public events or where residents tend to gather, including supermarkets, shelters, health clinics, or going door to door. Television was also mentioned as a mode of communication, specifically the "LynnCam," which was described as primarily showing sports but suitable for health information. One participant suggested enhancing awareness of programs, particularly among clients of subsidized housing, by including a *"slip with your [telephone or cable] bill that says, 'you may be eligible for this program and here is how you*

can access it.” Other means of getting the word out about services included posting information on billboards and printing advertisements in newspapers and senior center newsletters.

In the area of communication, senior focus group participants suggested producing print materials that were more reader friendly and appropriate for older and low health literacy audiences. This was also relevant for prescription labels, which were described as unclear and confusing; fine print and similar packaging made it difficult to distinguish different medications. As one senior noted, *“A lot of the stuff presented to seniors is a good cure for insomnia [laughter]. You read it and you start getting comatose. It’s written in a language that is hard to understand. The best way to communicate is using 10 words or less, and large print.”*

#### *Outreach and Community Engagement*

**Greater collaboration, outreach, and engagement of people involved in the health, health care, and social service communities was viewed as an important step in moving forward on future initiatives.**

This was suggested by key informants and internal staff not only as a way to increase coordination, but also to generate buy-in early on. Interviewees expressed that deliberate efforts are needed create a collaborative process that urges people to come together, exchange ideas, and learn from each other. A communication strategy spearheaded by public health directors, area hospitals, and community health centers was suggested to serve as a “wake-up call” to the community and motivate stakeholders to act (e.g., *“This is what our city is going to look like in 10 years if we don’t do something now.”*) Bringing health care to consumers in the community (e.g., mobile services) rather than expecting them to seek out care in an institution was considered critical. Increased communication among providers was also viewed as necessary in order to achieve seamless integrated and coordinated care; as one participant shared, *“There’s a gap between the medical system and social services system and between the system and consumers. We need to promote the notion of medical practices without walls.”*

Senior centers in particular were considered an asset in the community and offered valuable resources for all ages; senior centers were mentioned multiple times across focus groups as a source of employment, information, etc. Working with churches was also identified as an effective way of reaching out to the community. Among senior focus group participants, the Council on Aging was also noted as a useful source of information regarding transportation and other services available for the elderly.

Interviewees saw the role of wide-ranging partnerships as critical to future endeavors, as they recognized that no single entity could address these pressing issues. Without collaboration, care would continue to be fragmented. It was also noted that in the current fiscal climate of limited resources, the most efficacious way to improve health outcomes and health service delivery was to minimize working in silos and join forces; strong partnerships were considered necessary for communication, planning, and leveraging resources. In particular, they recommended more deliberate collaborations between public health entities and private providers, both locally and regionally. Participants described that current collaborations tend to be ad hoc rather than continuous and long-term.

#### **DISCUSSION**

Through a review of the secondary social, economic, and epidemiological data in the region as well as discussions with community residents as well as staff and leaders from community-based organizations, governmental agencies, education, and NSMC clinical and patient services, this assessment report provides an overview of the social and economic environment of NSMC’s priority communities, the health conditions and behaviors that most affect the population, and the perceptions on strengths and

gaps in the current public health and health care environment. Several key themes emerged from this synthesis:

- **There is wide variation across the North Shore region in population composition and socioeconomic levels.** While Swampscott, Nahant, Peabody, Marblehead, and Danvers are overwhelmingly white and more affluent, Salem and Lynn experience lower median incomes, higher rates of poverty and unemployment, and lower levels of education. These factors all have a significant impact on people’s health priorities, their ability to seek services, access to resources, reliance on support networks, stress level, and opportunities to engage in healthful lives. Additionally, this cultural, language, and economic diversity across NSMC’s catchment area presents significant challenges when delivering services and care that aim to meet the multitude of needs across the region.
- **In many instances, health outcomes follow social and economic patterns, but not in hospitalization and mortality rates of chronic disease.** There is a strong evidence base in the public health literature demonstrating the inverse relationship between socioeconomic status and health outcomes. This relationship can be seen in the North Shore region as well, particularly in the area of risk-related behaviors. For example, Lynn has higher rates of substance abuse, obesity, and teen pregnancy. However, hospitalization and mortality rates for several chronic diseases are not as high as what would be expected in this community. While obesity rates are higher in Lynn, Lynn’s age-adjusted mortality rates from heart disease and stroke are similar to what is seen statewide. There may be several reasons for this pattern: early intervention of treatment via health care services or mortality due to another cause are some possibilities. Whatever the reason, socioeconomic status does not have to dictate health outcomes, and there may be critical periods of opportunity along the continuum for intervention.
- **While strong community-based health services exist in the region, vulnerable populations— such as the socially isolated elderly, non-English speaking residents, and the very poor— encounter continued difficulties in accessing primary care services.** Numerous challenges for these populations were identified during the interviews: limited or slow public transportation options in some cities, language and cultural barriers, complexity of navigating the health care system, lack of support system to help patients make appointments, and time or cost constraints (e.g., no sick time provided at work, no child care available). Several interviewees commented that for the most vulnerable populations, it was critical for services to recognize these constraints and use different approaches to accommodate the challenges that many residents face. Additional patient support and navigation services, transportation programs, expanded hours, more community health workers, expanded community-based services, and greater coordination across health care settings in the community were some of the most frequently suggested approaches that emerged in the interview and focus group discussions with key informants, internal staff and community residents themselves.
- **Substance abuse and mental health were considered pervasive, pressing concerns by interviewees, and one in which the current treatment models were not perceived as addressing these increasing and complex issues.** In conversations with interview and focus group participants, many noted that the issues of substance abuse and mental health are intricately intertwined. This makes addressing these issues even more challenging. Current treatment programs do exist, but the demand far exceeds what is currently available and some programs have strict eligibility requirements. For substance abuse treatment, patients typically need multiple interventions:



detoxification, psychiatric treatment, and long-term recovery help. Ensuring that a patient receives all of these services can be difficult. Families of users also are in need of services, particularly to cope with the emotional strain of substance abuse in the family. Similarly, services to treat mental health disorders are limited. Interviewees noted that more outpatient services are needed and without follow-up, patients with mental health disorders are at risk for their condition to worsen.

- **Obesity, physical activity, and nutrition were considered top-of-mind health issues.** Participants in nearly every interview and focus group discussion mentioned obesity—and particularly the increase in childhood obesity—as a major concern of the region and one that will have even more severe health and cost repercussions in the future as the younger generation transitions to adulthood. The pervasiveness of fast food outlets and expense of healthy foods were cited as significant challenges to healthy eating for poorer residents, particularly those in Lynn and Salem. Additionally, some interviewees commented that the higher levels of violence in Lynn contributed to residents not using parks and other green space for physical activity. While several programs in the region are focusing on obesity, many interviewees commented that it was critical to address this issue through a comprehensive approach, in that multiple sectors, including health care, education, public works, transportation, local government, and the business community, needed to be involved and collaborate together to make an impact on current rates.
- **Teen pregnancy remains a concern, as the North Shore teen birth rate is much higher than what is seen statewide.** The teen pregnancy issue is mainly focused in Lynn compared to other communities and was viewed by interviewees as a result of lack of education, social norms, and perception of limited economic opportunities. Some interviewees commented that the issue of teen pregnancy should be viewed as a larger community issue in that young mothers were more likely to drop out of school and would not be able to adequately take care of their children financially or otherwise. This situation was seen as perpetuating poverty and not contributing to the larger economic progress of the area. Hence, teen pregnancy was perceived not only as a health issue, but one that had a significant impact on the social and economic vitality of the community. Access to education and health care services focused on youth as well as improving future employment prospects in the community were viewed as important approaches for addressing this issue.
- **Numerous services, resources, and organizations are currently working in the North Shore region to try to meet the population's health and social service needs.** Throughout the discussions, interview and focus group participants recognized the strong work related to health in which many community-based and regional organizations are involved. Government agencies are sponsoring large community revitalization initiatives, numerous organizations provide support to vulnerable populations such as the elderly, undocumented, homeless, and addicted, and health care centers and large health care institutions offer quality health care services across the region. However, numerous interviewees, particularly external key informants, commented that many of these programs are fragmented, uncoordinated, and under-funded. There was strong interest for these issues to be addressed via a more strategic, coordinated approach with multiple organizations and agencies working together. Overall, participants were hopeful for the future and saw that the multiple discussions happening across the state and in the region would create momentum for moving forward with innovative, collaborative approaches towards health.

Guided by a social determinants of health framework, this report provides a health portrait of NSMC's priority communities. Key health issues such as substance abuse, obesity and related chronic conditions, and teen pregnancy emerged as pressing concerns in the community, while increasing access to primary

and specialty care among those most in need, expanding patient support services, improving behavioral health services, and coordinating care across the multiple settings in which patients seek services were identified as important areas of opportunity to address the needs of residents. Furthermore, focus groups with community residents gathered their feedback on these issues and suggestions on key strategies regarding implementation of services, ways to overcome barriers to access, and how to effectively and innovatively reach out to those most in need so that the public health and health care system can engage all residents in the region.

## APPENDIX A. EXTERNAL KEY INFORMANT INTERVIEW GUIDE

Health Resources in Action  
North Shore Medical Center (NSMC) Community Health Assessment  
External Stakeholder/Key Informant Interview Guide

### Goals of the interviews

- To determine key informants' perceptions of the health needs and strengths of NSMC's priority communities
- To explore how these issues can be addressed from the key informants' perspective
- To identify the gaps, challenges, and opportunities for addressing community needs more effectively

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

### I. **BACKGROUND**

[AFTER INITIAL EMAIL OR TELEPHONE COMMUNICATION]

- Hi, my name is \_\_\_\_\_ and I am with Health Resources in Action, a non-profit public health organization in Boston. Thank you for taking the time to speak with me today. As I mentioned previously, Health Resources in Action is working with North Shore Medical Center on this assessment process.
- North Shore Medical Center is undertaking a comprehensive community health assessment effort to gain a greater understanding of the health issues of North Shore families and its specific communities, how those needs are currently being addressed, and where there are gaps and opportunities to address these needs in the future.
- We are conducting interviews with leaders in the community and focus groups with residents to understand different people's perspectives on these issues. We greatly appreciate your feedback, insight, and honesty.
- Our interview will last about 25-45 minutes. After all of the interview and focus group discussions are completed, we will be writing a summary report of the general themes that have emerged during the discussions. We will not include any names or identifying information in that report. All names and responses will remain confidential. Nothing sensitive that you say here will be connected to directly to you in our report.
- Do you have any questions before we begin?

[CORE QUESTIONS FOLLOW; ADDITIONAL QUESTIONS MAY BE ADDED OR TAILORED TO MEET THE SPECIFIC POSITION/ROLE OF THE INTERVIEWEE]

## **II. COMMUNITY ISSUES**

1. How would you describe the community which your organization/agency serves? What do you consider to be the community's strongest assets/strengths?
  - a. What are some of the community's biggest overall concerns/issues?
  - b. What do you think are the most pressing health concerns in the community? Why? Who do you consider to be the populations in the community most vulnerable or at risk for these conditions/issues?
  - c. From your experience, what are residents' biggest challenges to addressing these health issues?
2. What programs/services are you aware of in the community that currently focus on these health issues?
  - a. What do you think needs to be done to address these issues? Where are the gaps in current services?

## **III. PERCEPTIONS OF HEALTH CARE ACCESS AND QUALITY**

3. What is your perception of the health care services in your community? Why?
  - a. How about specifically related to primary care? Specialty care?
    - i. What do you see as the strengths of health care services in your community?
    - ii. What do you see as the limitations?
  - b. What challenges do residents in your community face in accessing health care?
    - i. What do you think needs to happen in your community to help residents overcome or address these challenges?

## **IV. VISION OF COMMUNITY AND PROGRAM/SERVICE ENVIRONMENT**

4. What is your vision for the future - when you think ahead about the health of your specific community and the greater North Shore region? What would you like to see in the next five years?
  - a. What do you think needs to happen to make that vision more of a reality? What are the biggest "next steps" that need to happen?
    - i. Who do you think should be involved in these efforts?

Thank you so much for your time. Is there anything else that you would like to mention that we didn't discuss today?

## APPENDIX B. INTERNAL STAFF INTERVIEW GUIDE

Health Resources in Action  
North Shore Medical Center (NSMC) Community Health Assessment  
Internal Staff Interview Guide  
December 13, 2011

### Goals of the interviews

- To gain an understanding of staff members' perspectives on how NSMC is currently working in the community
- To determine staff members' perceptions of the health needs and strengths of NSMC's priority communities
- To explore how these issues can be addressed from staff members' perspective
- To identify the gaps, challenges, and opportunities for addressing community needs more effectively

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

### **BACKGROUND**

[AFTER INITIAL EMAIL OR TELEPHONE COMMUNICATION]

- Hi, my name is \_\_\_\_\_ and I am with Health Resources in Action, a non-profit public health organization in Boston. Thank you for taking the time to speak with me today. As I mentioned previously, Health Resources in Action is working with North Shore Medical Center on this assessment process.
- North Shore Medical Center is undertaking a comprehensive community health assessment effort to gain a greater understanding of the health issues of North Shore families and its specific communities, how those needs are currently being addressed, and where there are gaps and opportunities to address these needs in the future.
- In addition to conducting interviews with leaders in the community and focus groups with residents, we are also having discussions like these with staff from North Shore Medical Center to get your perspective of the strengths and needs of the community and suggestions for addressing these issues. We greatly appreciate your feedback, insight, and honesty.
- Our interview will last about \_\_\_\_ minutes [EXPECTED RANGE FROM 15-60 MINUTES, DEPENDING ON INTERVIEWEE]. After all of the interview and focus group discussions are completed, we will be writing a summary report of the general themes that have emerged during the discussions. We will not include any names or identifying information in that report. All names and responses will remain confidential. Nothing sensitive that you say here will be connected to directly to you in our report.
- Do you have any questions before we begin?

[CORE QUESTIONS FOLLOW; ADDITIONAL QUESTIONS MAY BE ADDED OR TAILORED TO MEET THE SPECIFIC POSITION/ROLE OF THE INTERVIEWEE]



### **Program/Department Overview**

5. Can you tell me a bit about your program/department?
  - a. What communities do you work in? How long has your program been working in [SPECIFIC NEIGHBORHOOD OR COMMUNITY]?
  - i. What are some of the biggest challenges your program/department has faced in providing /services in the community?

### **Perceptions of Community**

6. How would you describe the community which your program/department serves?
  - a. What do you consider to be the community's strongest assets/strengths?
    - i. What are some of its biggest concerns/issues?
  - b. What do you think are the most pressing health concerns in the community? Why? [PROBE ON SPECIFICS]
    - i. Who do you consider to be the populations in the community most vulnerable or at risk for these conditions/issues?
  - c. From your experience, what are residents' biggest challenges to addressing these health issues?
    - i. [PROBE ON RANGE OF CHALLENGES: E.g., Various barriers to accessing to medical and/or preventive care and services, socioeconomic factors, lack of community resources, social/community norms, etc.]
  - d. Let's talk about a few of these issues you mentioned. [SELECT TOP HEALTH CONCERNS] What programs/services are you aware of in the community that currently focus on these health issues? [PROBE FOR SPECIFICS]
    - i. In your opinion, how effective have these programs/services been at addressing these issues? Why?
  - e. What do you think needs to be done to address these issues? Where are the gaps in current services?

### **Perceptions of Health Care Access and Quality**

[PROBE ON HEALTH CARE ISSUES IN SECTION IV IF NOT ALREADY DISCUSSED UNDER SECTION III]

7. What is your perception of the health care services in the community? Why?
  - a. How about specifically related to primary care? Specialty care? [PROBE ON ISSUES RELATED TO ACCESS AND QUALITY. IF NEEDED: PROVIDE EXAMPLES OF SPECIALTY CARE (e.g., drug abuse treatment, diabetes, cancer, or eye care).]

- i. What do you see as the strengths of health care services in the community?
- ii. What do you see as the limitations?
- b. What challenges do residents in your community face in accessing health care? [PROBE FOR SPECIFICS]
- c. What do you think needs to happen in your community to help residents overcome or address these challenges?

**Vision for the Future**

- 8. What is your vision for the future - when you think ahead about the health of the community and greater North Shore region? What would you like to see in the next five years? [IF NEEDED PROBE ON HEALTH CONCERNS PREVIOUSLY RAISED.]
  - a. What do you think needs to happen to make that vision more of a reality? What are the biggest “next steps” that need to happen?
    - i. Who do you think should be involved in these efforts?
      - 1. What organizations/agencies/institutions do you think should collaborate to address these issues more effectively?

**Perceptions of NSMC Role**

- 9. What do you consider North Shore Medical Center’s role to be in the community?
  - a. In what ways can North Shore Medical Center engage with the community and outside organizations to address the health needs more effectively? [PROBE FOR SPECIFIC SUGGESTIONS]
    - i. [PROBE] Do you see specific opportunities available for:
      - 1. Partnerships with outside groups/organizations?
      - 2. Scaling up of existing community programs?
      - 3. Engaging community residents in program planning and implementation?
  - b. Does your program/department currently partner with any other organizations or institutions in the community?
    - i. How successful have these partnerships been? What have been the biggest challenges?
- 10. To what extent does your program/department collaborate with other programs/departments within NSMC on community outreach efforts?
  - a. Are there opportunities for improving collaboration within NSMC that would be most effective in leverage existing resources? What collaborations within NSMC would help programs to serve community members more effectively? [PROBE FOR SPECIFIC SUGGESTIONS]

- b. What are some of the current challenges to collaborations within NSMC for community outreach efforts?
  - i. What needs to happen to make collaborations easier within NSMC? What practices could be instituted to support these efforts?

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

## APPENDIX C. COMMUNITY RESIDENT FOCUS GROUP GUIDE

Health Resources in Action  
North Shore Medical Center Community Assessment  
Focus Group Guide – Community Residents (General Guide)  
March 1, 2012

Goals of the focus groups:

- To understand the perceived health needs and assets in the community
- To elicit suggestions on strategy development for NSMC priority areas, including: increasing access to primary and secondary care (i.e., connecting community members with primary care providers and strengthening the infrastructure for care coordination services) and addressing the health issues of substance abuse, obesity, and teen pregnancy

**[NOTE: THE QUESTIONS IN THE FOCUS GROUP GUIDE ARE INTENDED TO SERVE AS A GUIDE, BUT NOT A SCRIPT. SOME QUESTIONS AND PROBES WERE TAILORED TO SPECIFIC POPULATION GROUPS.]**

### I. BACKGROUND (5 MINUTES)

Welcome everyone. My name is \_\_\_\_\_, and I work for Health Resources in Action, a non-profit public health organization in Boston.

I'd also like to introduce some colleagues today: \_\_\_\_\_. They are involved with me on this project and are here to observe and take notes during our discussion, so that I can have my hands and attention free as we talk.

Before we begin, I'd like to explain a few things about how this discussion will work.

- We're going to be having a focus group today. Has anyone here been part of a focus group before? You are here because we want to hear your opinions. I want everyone to know there are no right or wrong answers during our discussion. We want to know your opinions, and those opinions might differ. This is fine. We just want to know what each of you thinks about the topics we will be discussing. Please be as honest as you can. Please feel free to share your opinions, both positive and negative.
- North Shore Medical Center is undertaking a comprehensive community health assessment effort to gain a greater understanding of the health issues of North Shore families and its specific communities, how those needs are currently being addressed in the community, and where there are opportunities to address these needs in the future. The information you provide is a valuable part of this assessment and improving health services in the community.
- We will be conducting several of these discussion groups around the North Shore region. After all of the groups are done, we will be writing a summary report of the general opinions that have come up. In that report, I might provide some general information on what we discussed tonight, but I will not include any names or identifying information. Your responses will be strictly confidential. In our report, nothing you say here will be connected to your name.

- You might also notice that I have a stack of papers here. I have a lot of questions that I'd like to ask you tonight. I want to let you know that so if it seems like I cut a conversation a little short to move on to the next question, please don't be offended. I just want to make sure we cover a number of different topics during our discussion tonight.
- Lastly, please turn off your cell phones, beepers, or pagers or at least put them on vibrate mode. The group will last only about 80-90 minutes. If you need to go to the restroom during the discussion, please feel free to leave, but we'd appreciate it if you would go one at a time.
- Any questions before we begin our introductions and discussion?

## II. INTRODUCTION AND WARM-UP (5 MINUTES)

1. Now, first let's spend a little time getting to know one another. Let's go around the table and introduce ourselves. Please tell me: 1) Your first name; 2) what city or town you live in; and 3) something about yourself you'd like to share— such as how many children you have or what activities you like to do in your spare time. [AFTER ALL PARTICIPANTS INTRODUCE THEMSELVES, MODERATOR TO ANSWER INTRO QUESTIONS]

## III. COMMUNITY AND HEALTH PERCEPTIONS (15 MINUTES)

2. Tonight, we're going to be talking a lot about the community that you live in. How would you describe your community?
3. If someone was thinking about moving into your community, what would you say are some of its biggest strengths or the most positive things about it? [PROBE ON COMMUNITY AND ORGANIZATIONAL ASSETS/STRENGTHS]
  - c. What are some of the biggest problems or concerns in your community? [PROBE ON ISSUES IF NEEDED – HEALTH, ECONOMIC, SOCIAL, SAFETY, ETC.]
4. What do you think are the most pressing health concerns in your community? [UNAIDED]
  - i. How have these health issues affected your community? In what way?
  - ii. [PROBE SPECIFICALLY ON SUBSTANCE ABUSE, OBESITY, AND TEEN PREGNANCY IF NOT YET BROUGHT UP] What about the issue of [ISSUE], how much of a concern is this issue in your community? How so?
    1. Who do you think is affected the most by this issue?

## IV. HEALTH CARE – BARRIERS AND RECOMMENDATIONS (35 MINUTES)

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



- a. What do you think of the health care services in your community? [PROBE ON POSITIVE AND NEGATIVE ASPECTS OF THE HEALTH CARE SERVICES]
6. Have you or someone close to you ever experienced any challenges in trying to get health care? What specifically? [PROBE FOR BARRIERS: INSURANCE ISSUES, LANGUAGE BARRIERS, LACK OF TRANSPORTATION, ETC.]
  - a. [PROBE IF NEEDED] What part of getting health care was the most challenging? Was it finding a doctor? Making an appointment? Getting to the office/clinic? Being at the office/clinic and understanding the doctor?
7. [NAME BARRIER] was mentioned as something that made it difficult to get health care. What do you think would help so that people don't experience the same type of problem that you did in getting health care? What would be needed so that this doesn't happen again?
  - a. [REPEAT Q7 MULTIPLE TIMES FOR THE DIFFERENT BARRIERS MENTIONED].
8. The hospitals and health centers in the area are working to make it easier for *everyone* in the community —youth, seniors, people on MassHealth or other government insurance, and others—to see a doctor or health care provider. What do you think are some things they could do to make it easier for people to see a doctor or health care provider?
  - a. [IF NOT YET DISCUSSED] One idea is to provide more social services for patients seeking health care. These could include services that help with transportation, language interpretation, or what is called patient navigators - people who help patients with the health care system by setting up appointments or dealing with insurance issues. What do you think about these ideas?
    - i. What would you like to see provided by these programs and services? [PROBE ON SPECIFICS FOR TRANSPORTATION SERVICES, LANGUAGE NEEDS, PATIENT NAVIGATION, ETC.]
      1. [PROBE ON SPECIFICS IF NEEDED: What would these services include? Where should they be offered? During what hours]
9. We've been talking about going to see a doctor for general health issues, where you'd see a primary care provider. What about if you needed health care for a specific issue, and you needed to see a specialist? For example, if you had joint problems and need to see an orthopedist – or minor chest pains and needed to see a cardiologist: where would you go for this type of health care? [PROBE IF THEY GO TO PRIVATE PRACTICE, COMMUNITY HEALTH CLINIC, E/R, ETC]
  - a. What challenges do you think you would encounter in trying to see a specialist? How hard do you think it would be to see a specialist?
  - b. What do you think are some services or changes in services that could be provided so it would be easier for people to see a specialist? [PROBE FOR SPECIFICS]

## V. PROGRAMS/SERVICES ON HEALTH ISSUES (25 MINUTES)

10. Before we talked about the different health concerns in the community. Some issues that were discussed were substance abuse, obesity, and teen pregnancy. I'd like to talk about these three issues specifically.

Let's first talk about substance abuse. [THE SET OF QUESTIONS BELOW WILL BE REPEATED FOR EACH OF THE ISSUES]

- a. Do you know of any programs or services in your community that focus on [ISSUE]? [PROBE ON BOTH PREVENTION AND TREATMENT]
  - i. What have you heard or what do you know about these programs or services? [PROBE FOR SPECIFICS] How did you initially hear about them?
  - ii. Based on what you know, how do you think these programs or services could be improved? What should be done differently? What's missing?
- b. What kinds of programs or services should be available in your community to address [ISSUE]? What would you want to see happen in your community to help with this issue? [PROBE ON BOTH PREVENTION AND TREATMENT]
  - i. What would these services or programs look like? [PROBE FOR SPECIFICS: WHO WOULD THEY TARGET? WHAT HOURS WOULD THEY BE AVAILABLE? WHERE WOULD THEY BE LOCATED?]
  - ii. Who do you think should be providing these programs or services?
  - iii. If these types of programs or services were developed in your community, what advice would you have for the folks planning or providing these programs or services? [PROBE IF NEEDED: Are there specific things that they would need to know when thinking about providing these types of services or programs?]

Now I'd like to talk about another issue that was mentioned in the earlier part of the discussion. [AFTER SUBSTANCE ABUSE DISCUSSION, REPEAT QUESTIONS IN Q10 FOR OBESITY AND TEEN PREGNANCY.]

11. If the area hospitals or health centers wanted community members like you to hear about its programs or services, what is the best way to spread the word? How should they let people know about the programs and services available? [PROBE FOR SPECIFICS: SPECIFIC MEDIA, OTHER ORGANIZATIONS, WORD OF MOUTH – I.E., WHO ARE THE COMMUNITY GATEKEEPERS FOR THIS INFO?]

## VI. CLOSING (5 MINUTES)

Thank you so much for your time and sharing your opinions. Before we end the discussion, is there anything that you wanted to add that you didn't get a chance to bring up earlier?

I want to thank you again for your time. And we'd like to express our thanks to you. [DISTRIBUTE STIPENDS AND HAVE RECEIPT FORMS SIGNED].

[NOTE: ADD PARAGRAPH HERE ABOUT GETTING CONTACT INFORMATION FOR PEOPLE WHO ARE INTERESTED IN RESULTS?]

Thank you again. Your feedback is greatly valuable, and we greatly appreciate your time and for sharing your opinion.