Quincy Medical Center

A STEWARD FAMILY HOSPITAL

Steward®

Population Health Improvement Report 2012–2013

Table of Contents

Executive Summary

While the full effects of health reform in the United States have yet to be realized, one thing is certain: from the largest teaching hospital to the smallest rural clinic, the assumptions that drive care delivery are changing. No longer will a patient's immediate condition be treated without consideration of the factors that have given rise to that situation - the external determinants that drive either health or illness and overpower the impact of a discrete prescription or an isolated emergency room visit. The results of such a myopic approach are evidenced in the status quo: fragmentation of care, disconnect between providers, duplication of services, and an overuse of resources.

Recognition of this critical situation has produced a renewed commitment across the US health system to focusing on three principal issues: improving the experience of patient care, providing care that improves the health of whole populations, and reducing the per capita cost of health care. Collectively referred to as the Triple Aim, these three goals create a roadmap for health systems to look both internally and externally at the conditions and drivers of health, and by innovation, to discover new ways of addressing those factors. The aim of this Population Health Improvement Report (PHIR) is to present the areas of opportunity for Quincy Medical Center to optimize health system quality and address cost while confronting the pressing health concerns impacting the populations in its community.

This report details the most imminent concerns that arose from the examination of health related data in Quincy Medical Center's (QMC) service area population retrieved from sources such as the US Census Bureau and the Boston Public Health Commission's Health of Boston 2011 Report. We also collected primary data through a survey of QMC's Community Benefits Advisory Committee and focus group discussions with local residents. Internally, discussion with hospital staff and leadership and directors of patient services and systems at QMC were done and examined for areas of action for improvement in quality and cost. Five areas of opportunity emerged:

Chronic Disease

Circulatory disease, cancer, and respiratory disease are the top three causes of death. Most of the primary service area's (PSA) chronic disease rates are above the state average. Focus group feedback mentioned lack of nutrition, healthy lifestyle, and preventative health maintenance knowledge as obstacles to combating chronic disease. Providers felt that patients needed more education on nutrition and managing medications.

Obesity

Rates of overweight and obese school age children are high for the hospital service area. Quincy (31.50%) and Braintree (31.60%) were at the state level (32.30%), while Weymouth (36.70%) and Hull (41.60%) surpassed it. Adult obesity rates for the service area as a whole were a concern (above 20%) but lower than the state average. Community input reflected a need for increased education and interventions to address the behavioral patterns leading to obesity. Additionally, lack of access to healthy foods was another contributor cited.

Access to Health Care

Though the population has relatively high rates of insured, community input showed a need for better health outreach as well as better coordination of care. Some of the major obstacles to health access cited by the community have been lack of health referral sources, language disparity, health insurance process navigation, and transportation.

Address Access issues for the Asian Population

The City of Quincy has a relatively large Asian population (24%) compared to the state (5.3%) and neighboring towns. Focus group participants as well providers expressed concern that Asian residents experience barriers to regular care including difficulty with insurance enrollment requirements and availability of culturally-similar providers.

Behavioral Health

Behavioral health outcomes for the PSA are worse than the state outcomes. The age-adjusted mental health discharge rate for Quincy (4140.47), Weymouth (4708.34), and Hull (4373.4) all surpassed the state rate (3949.16). This problem is apparent to both community service providers and residents. Additionally, mental health stigma has been identified as a major obstacle to accessing behavioral health resources.

Reproductive Health

Reproductive Health is an important issue in the QMC service area. Area birth rates have been steadily growing. Quincy had the largest proportion of births to "Asian or other race" mothers (32%). However there are no hospital based delivery services within the City forcing resident to go outside of the community for needed services.

Substance Abuse

QMC service area substance abuse outcomes are high compared to the state rate. Additionally, data from 2007 to 2009 indicate that substance abuse indicators are worsening. Community responses cited a need for more health information to help the community understand the symptoms and the negative outcomes of drug addiction.

Recommended Actions for the Health System

Chronic Disease

- Increase community education on chronic disease prevention and maintenance.
- Utilize small media to inform and remind patients to get screened for chronic disease.

Obesity

- Offer education on healthy food preparation on-site at the farmers' market and through partnerships with local community organizations.
- Implement nutrition education initiatives.
- Prescribe farmers' market vouchers to diabetic patients who are at risk for obesity.
- Promote and sponsors physical activity and education programs to address childhood obesity.

Access to Health Care

- Utilize Community Health Advocates to provide follow-up enrollment assistance for uninsured patients who visit the emergency department.
- Provide information on and assistance with enrolling in state insurance exchange plans to working populations through partnerships with community service organizations.
- Increase community outreach efforts utilizing multiple media channels.

Underserved Populations

- Utilized culturally-competent Community Health Advocates.
- Gather more information on the needs of the Asian community.
- Outreach to Asian populations through local media outlets, including TV and radio.
- Host community events with Chinese-speaking physicians.

Sexual and Reproductive Health

- Install an Obstetrics Department at QMC.
- Develop maternal-child services and support.

Behavioral Health

- Increase outreach to educate on current mental health services at QMC.
- Provide education to front-line caregivers and community leaders on the signs of mental illness and how to access necessary resources.
- Host a presentation by the National Association on Mental Illness to raise awareness of and support for community members affected by mental illness.

Substance Abuse

- Implement substance abuse education initiatives.
- Collaborate with community-based programs to develop education for front-line workers and advocates on red flags of substance abuse.

Introduction

Quincy Medical Center (QMC) is a general medical and surgical hospital in Quincy, MA, with 196 beds. QMC is a member of Steward Health Care System, the largest fully integrated community care organization in New England. QMC provides acute care with state-of-the-art medical technology and a highly skilled staff.

QMC focuses on integrating care across the spectrum of hospital, primary, and community-based care. A Community Benefits Advisory Committee comprised of hospital leadership, representatives of local health and human service organizations, city health and public works departments, community centers, churches, and schools, guides the planning and execution of the community health initiatives.

This report provides the results of an examination of the health conditions and social factors affecting the people living in the neighborhoods and towns surrounding QMC as well as the key issues the hospital needs to address to improve quality and address cost. Evaluation of both the needs of the community and the strategic goals of the hospital furthers the prospect of working collectively to improve both the health delivery system and the health of the population. Opportunities are realized at the intersection of the hospital's strengths, the community's needs, and the new direction of health care in the United States.

The current US health care system, characterized by fee for service payment models and widely condemned for its exorbitant per capita costs and less than optimal health outcomes, is faced with an opportunity for transformation at a critical moment of unprecedented policy change. The prospect of shifting from a system that rewards providers for volume of services to one that rewards health systems based on the end goals of healthy populations is a highly attractive solution to the current state of affairs.

Health care transformation is also highly debated, particularly in terms of means and methods. Long-standing practices and cultures must be shifted to embrace the idea of caring for populations instead of individuals alone and of examining medical practices with the aim of reducing health care costs.

The Institute for Healthcare Improvement's Triple Aim framework is a widely recognized model for health care transformation. It is a paradigm that calls for improving simultaneously the experience of care, the per capita costs of health care, and the health of populations.[1] While these pursuits are all necessary to improve the current health care system, they are interrelated and must be considered in balance.[2] The challenges of widespread change, including developing infrastructure to support new models of caring for populations, require thoughtful planning, determined execution, and intentional learning from experience. This report aims to answer the call for thoughtful planning by using the triple aim framework to reveal the opportunities for health care transformation within Steward Health Care System hospitals and their communities. The results and recommendations here are designed to be the basis for strategic actions for QMC and its community partners.

Methods

The approach for the Population Health Improvement Report (PHIR) consisted of the following steps, each of which is briefly described in the order they were implemented.

1. Extensive public data was collected and key findings were derived from the research of online data sources such as the U.S. Census and the Massachusetts Community Health Information Profile (MassCHIP). Online research of Administrative policies and legal ordinances were done to identify and analyze policies and regulations that affect population health status.
2. A Community Provider Survey was distributed to Quincy Medical Center's Community Benefits Advisory Committee and other key community-based organizations. Local health and human service organizations, government agencies, boards of health, community centers, and churches were among the organizations that were surveyed.
3. A focus group was conducted to capture community data on perceived health issues and barriers to health resources.

From these sources, data on health behaviors, health conditions (also referred to as health outcomes), access to and utilization of health services, and health care costs were examined for opportunities where the hospital, in partnership with local community service providers, could make a difference in lowering per capita health care costs, improving quality, and improving the health of populations.

The priority concerns to be addressed were selected based on the following criteria:

- Disease or condition rates higher than the state average
- Disease or condition rates increasing over time
- Identified as concerns by focus group participants and provider survey respondents
- Aligns with the strategic goals and objectives of QMC
- Availability of potential resources to address the issue/problem identified
- Ability to reduce per capita costs

A detailed version of the methods is available in Appendix A. Data on demographics and additional health indicators are available in Appendix B.

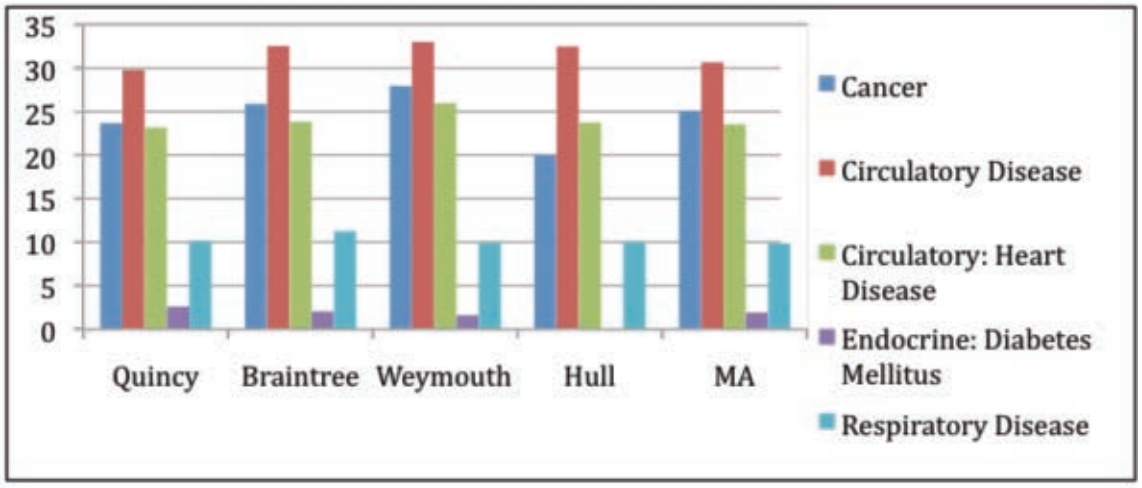
Results

Analysis of the primary and secondary data reveals several areas of concern for Quincy Medical Center's primary service area (PSA) including chronic disease, access to health care, behavioral health, determinants of health, sexual and reproductive health, obesity, substance abuse, and crime.

Chronic Disease

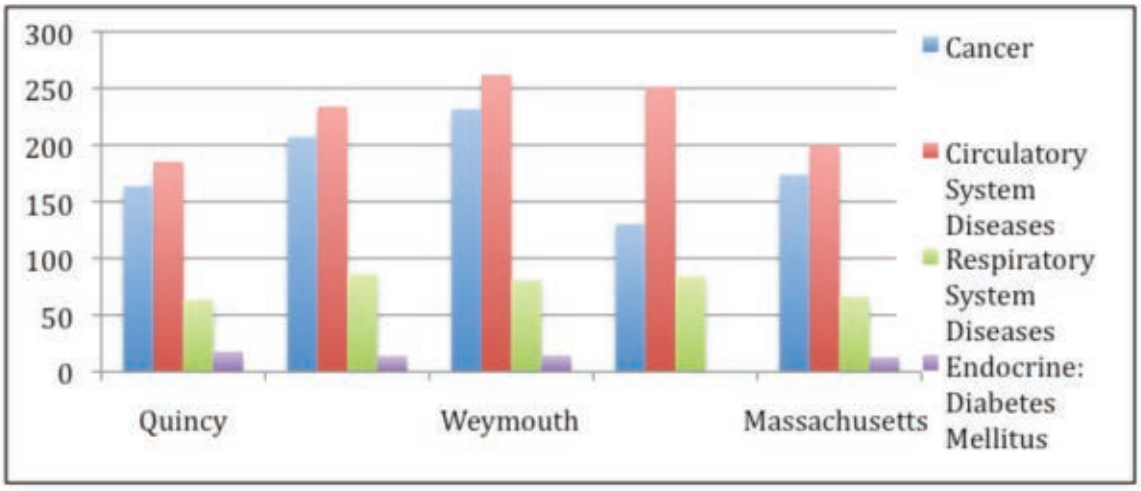
Circulatory disease is the number one cause of death in most of the service area towns. Cancer is the second most frequent cause of death (Figure 1). Age-adjusted mortality rates for Braintree (207.08) and Weymouth (231.66) are above the state average (173.69). Heart disease is the primary cause of circulatory disease mortality. Age-adjusted mortality rates for respiratory disease are above the state average for all service areas except for Quincy (Figure 2). Hull's age-adjusted cancer rate is well below the state average. Asthma rates within the area are below the state average. Age-adjusted mortality rates for cancer are high for Braintree and Weymouth relative to the state rate. The data demonstrate that work needs to be done to improve these outcomes.

Figure 1: Mortality - Percentage of All Causes (2009)



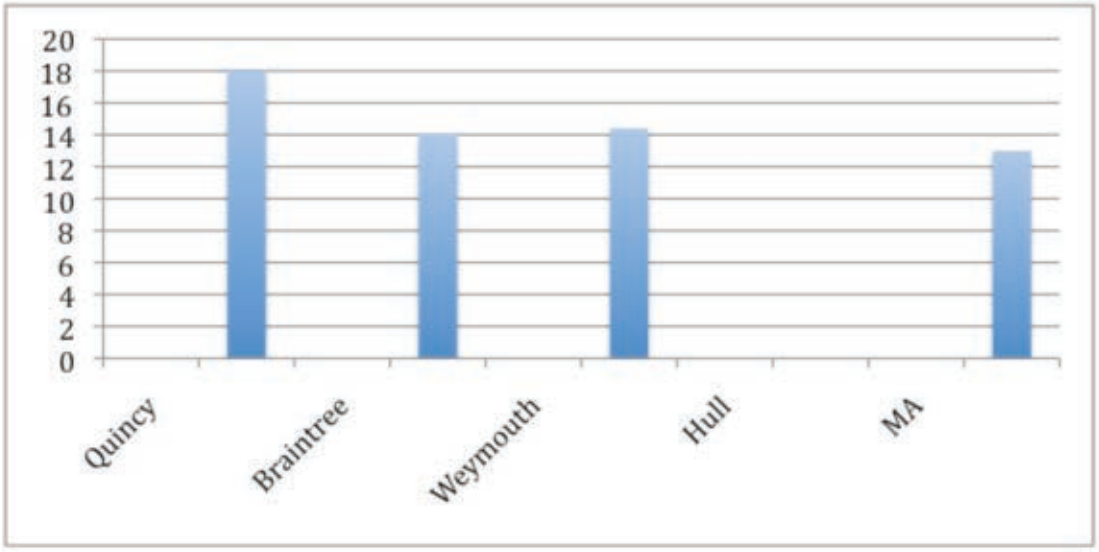
(SOURCE: MASSCHIP)

Figure 2: Age Adjusted Mortality Rate per 100,000 (2009)



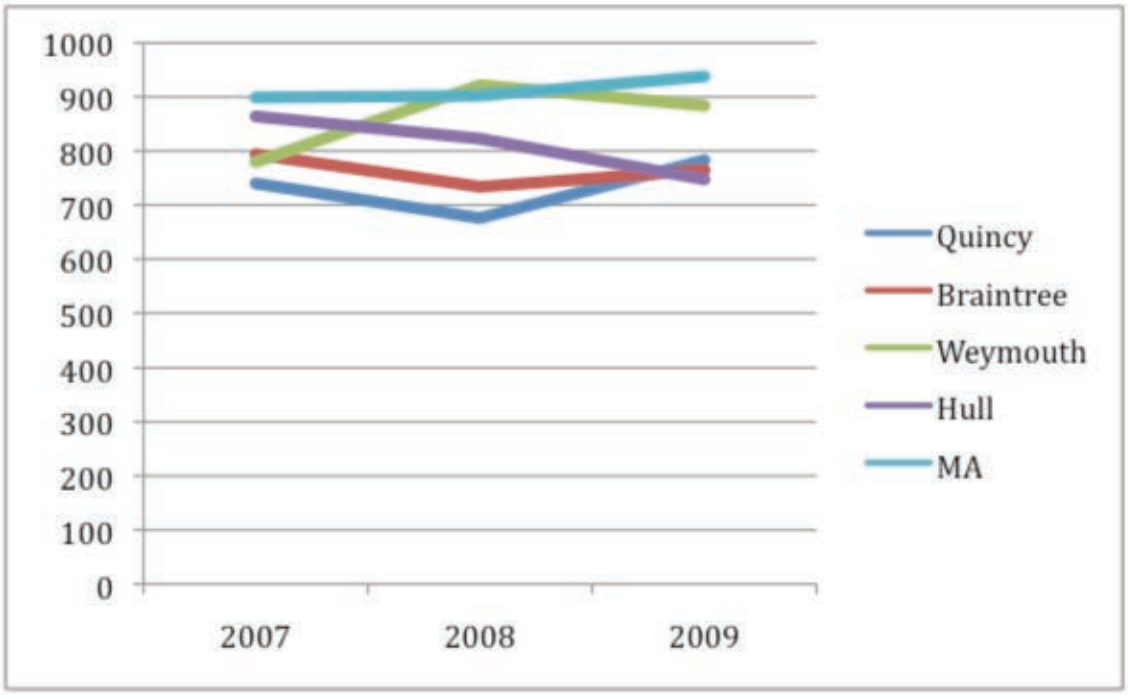
(SOURCE: MASSCHIP)

Figure 3: Age-adjusted Mortality Rates: Endocrine: Diabetes Mellitus



(SOURCE: MASSCHIP)
Data for Hull not available

Figure 4: Asthma Related-Hospitalizations Age Adjusted Rate per 100,000



(SOURCE: MASSCHIP)

Focus group participants thought that chronic disease is a concern in the Greater Quincy community particularly due to lack of proper nutrition, lack of lifestyle knowledge, lack of healthy eating choices, and lack of school education on chronic disease and preventative health maintenance.

Provider surveys also noted concerns about nutrition, especially among the elderly and the young disabled population. Providers mentioned interventions such as nutrition education in the community and within schools as a start to address this issue. Additionally, providers felt that patients needed more assistance in managing medications in order to follow treatment plans.

The service area towns have several regulations that impact chronic disease, including regulations to curb the use of cancer causing products. Quincy and Braintree have smoking regulations prohibiting smoking in the workplace, providing certain exceptions for substance abuse facilities, nursing homes, private homes (unless used as a daycare facility), hotels and motels, religious ceremonies, or on stage as part of a theatrical performance. There are also tanning bed polices to warn about and regulate usage. In addition, there are education and tobacco cessation resources available in the service areas that address chronic disease management. All of these polices demonstrate ongoing efforts to combat carcinogenic elements within the Quincy community. However, greater legal restrictions can be implemented towards the aim of reducing cancer rates within the QMC service area. For instance, greater regulation could be implemented to prohibit smoking in certain areas including at entrances to bars, businesses, schools, government buildings, and places of worship.

There are an estimated 90 million Americans living with at least one chronic disease.[2] Chronic disease contributes to over 70% of deaths in the US each year.[3] The majority of adults in the US with high cholesterol, and about half of adults with high blood pressure, do not have their conditions under control.[4] Despite the relatively low cost and proven effectiveness of treatments for these common and preventable - but potentially deadly - conditions, many Americans are not getting better.

People with chronic disease are more likely to go to hospitals, emergency rooms, and long-term care facilities.[5] Transitioning from one care setting to another, these individuals are more susceptible to inefficiencies of a fragmented care system. Such inefficiencies manifest in a number of ways, including misunderstood discharge instructions, lack of transportation to health services, and lack of communication between care settings. They are also likely to need continual supportive services to help them with daily life and often rely on an informal caregiver (a spouse, relative, or friend).[6]

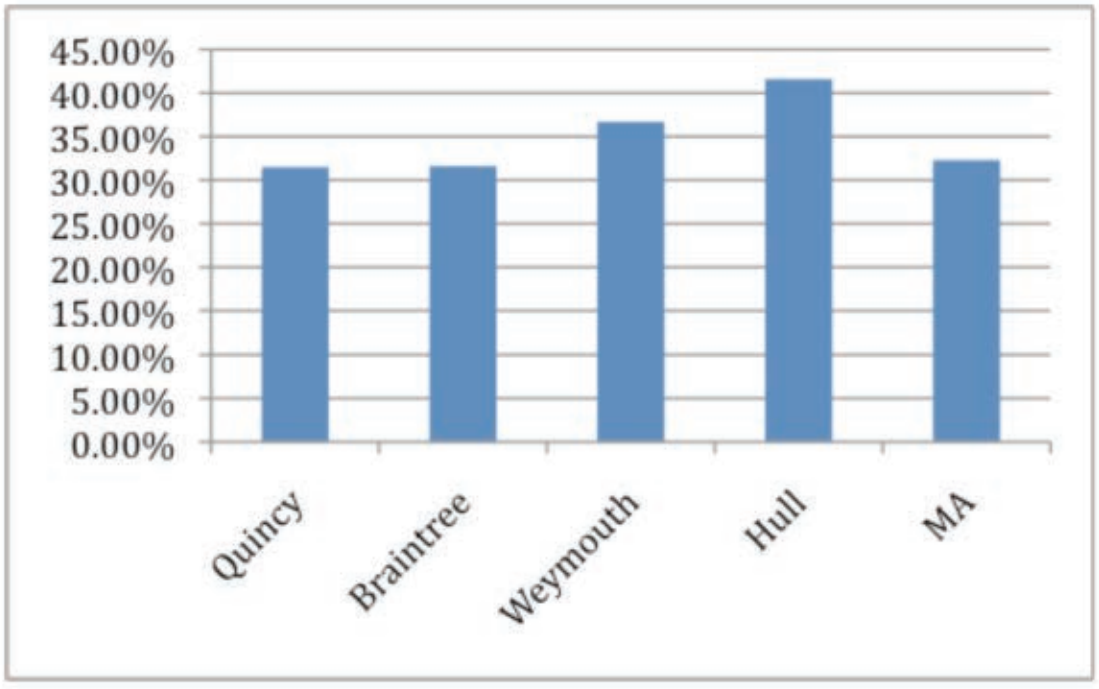
Chronic disease costs are rising. More than 75% of health care costs are due to chronic conditions.[7] Patients with chronic conditions often require long-term services and supports.[8] Such care cost the US health care system over $200 billion each year.[9] Chronic disease issues tend to increase as the population ages.[10] Current estimates indicate a growing geriatric population will double by 2030.[11] Costs from chronic disease will rapidly grow as the US population ages.

Obesity

Service area data demonstrate that, on average, over 30% of school aged children are overweight or obese. There is a higher proportion of overweight or obese students in grades 1, 4, 7, 10 in Weymouth and Hull than in Quincy and Braintree. The rates for Quincy (31.50%) and Braintree (31.60%) were at the state level (32.30%) while Weymouth (36.70%) and Hull (41.60%) surpass the state rate. Quincy, Braintree and Hull's obesity rates for adults were approximately 20%or higher in 2005. Weymouth's obesity level was higher at 23.7%.

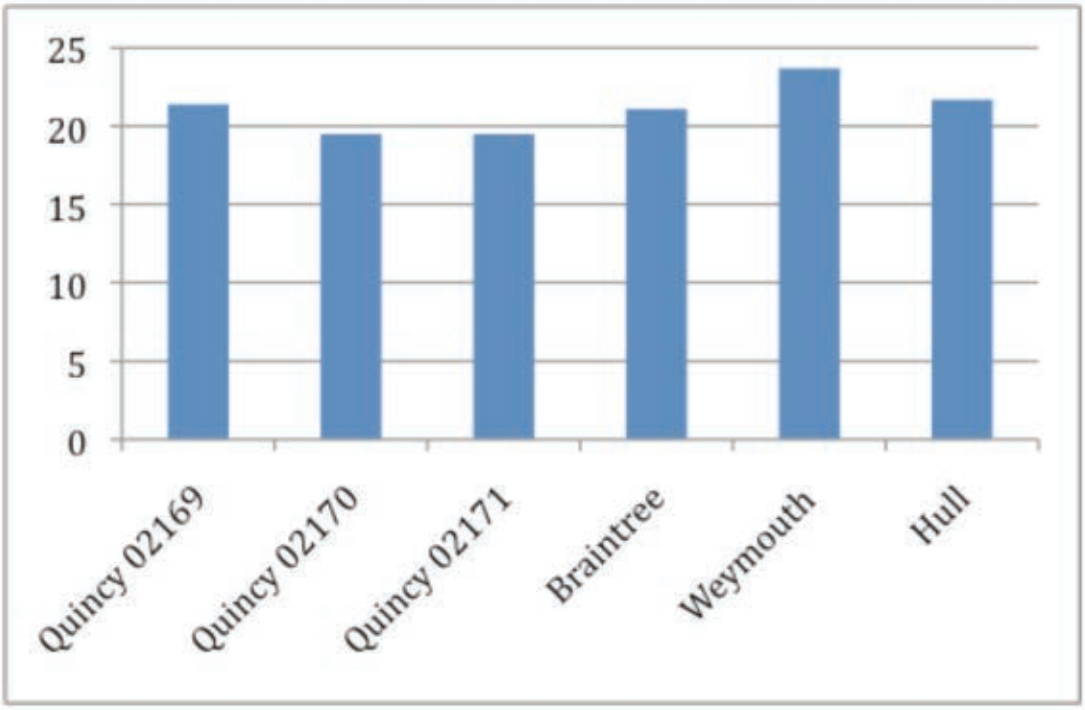
Input from the focus group pointed to a need for education and promoting healthy eating habits within the community in order to fight obesity. Additionally, providers surveyed mentioned nutrition as a major concern. Providers suggested increasing access to nutritious foods as well as education on healthy food and lifestyle choices as possible interventions to reduce obesity within the QMC service area.

Figure 5: Grades 1, 4, 7, 10 Percent Overweight or Obese Males and Females (2011)



(SOURCE: Executive Office of Health and Human Services (EOHHS)-Publications Status of Childhood Weight)

Figure 6: Adult Obesity Rate (2009)



(SOURCE: Small-Area Estimation and Prioritizing Communities for Obesity Control in Massachusetts", American Journal of Public Health March 2009)

Quincy, Braintree and Weymouth have farmers' markets that provide access to fresh and healthy foods within the local community. Though Hull does not have a farmers' market, there is one located next to Hull in Hingham. Quincy has well over thirty food purveyors, at least seven of which are supermarkets (two Stop & Shop locations, Hannaford's, Roche Bros., Star Market, Kam Man Market, and Roxies), one Wal-Mart, and one BJ's wholesale club. Braintree and Weymouth both have one supermarket and other smaller food markets. There are 3,177 residents in Germantown, 25% of whom are low-income.

Obesity has reached epidemic proportions in the United States. The prevalence of obesity in the US has increased during the last decades of the 20th century.[12] More than 35% of US men and women were obese in 2009–2010.[13] Overall, adults aged sixty and over were more likely to be obese than younger adults.[14] Since 1980, the prevalence of obesity among children and adolescents has almost tripled.[15] In 2009–2010, 16.9% of children and adolescents were obese.[16] In 2009–2010, over 78 million adults and about 12.5 million children and adolescents were obese.[17]

Obesity increases the risk of a number of health conditions including hypertension, adverse lipid concentrations, and type-2 diabetes.[18] It is estimated that 300,000 deaths per year may be attributable to obesity.[19] Additionally, obesity has been shown to reduce life expectancy.[20] One study revealed that people who are severely obese live up to twenty years fewer than people who are not overweight.[21]

One report estimated obesity to cost $190 billion for obesity-related health care expenses in 2005.[22] Healthcare spending on obesity-related conditions is estimated to be 8.5% of Medicare spending, 11.8% of Medicaid spending, and 12.9% of private-payer spending.[23] Costs are only expected to rise as rates of obesity are increasing.

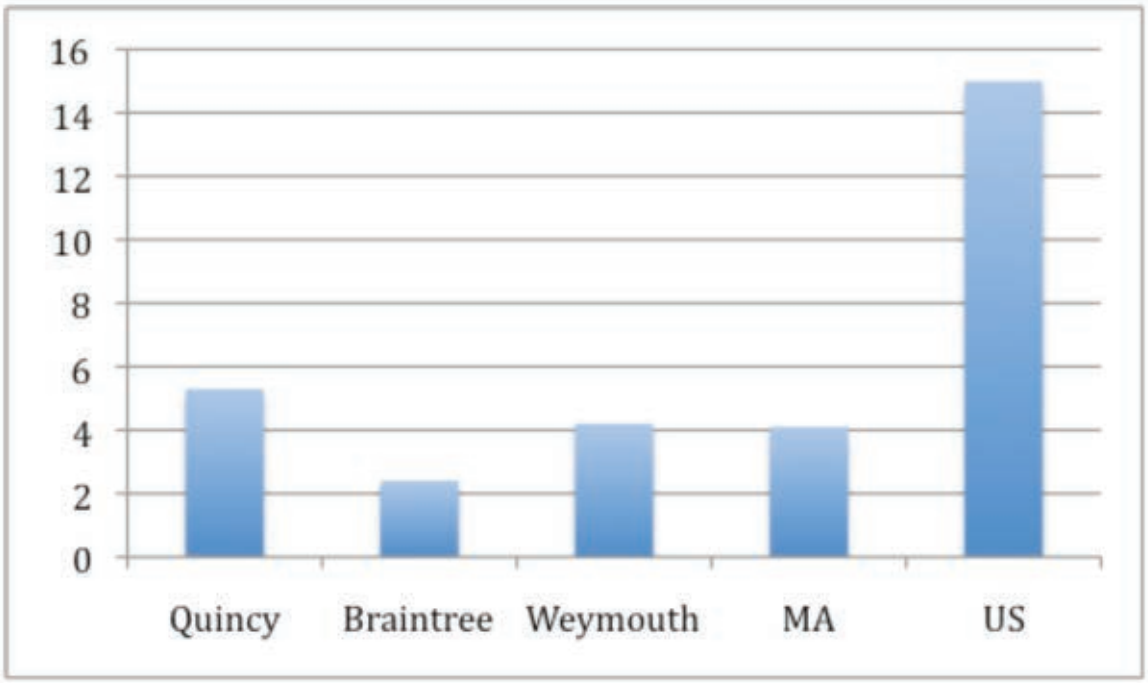
Access to Health Care

Health insurance coverage within the QMC service area is better than the US as a whole. This area has a relatively low percentage of uninsured residents (Quincy 5.3%, Braintree 2.4%, and Weymouth 4.2%) when compared to the national average (Figure 3). All of the PSA has average or lower than average rates of uninsured individuals when compared to the state average except for Quincy, which has a higher rate of uninsured males when compared to the state average. When stratifying the population by sex, a larger proportion of males are uninsured when compared to females, showing a need to increase outreach to that population.

There was a consistent call for improved information dissemination within the focus group session and among the providers surveyed. The focus group participants felt there was a lack of knowledge of available health resources available to the community, citing the need for more service referral points. Coordination of health providers in order to make information and referrals easier was mentioned as a possible solution. Community service providers echoed this, mentioning care coordination as a needed intervention in improving population health. Additionally, the focus group expressed the need for increased access to dental or oral health care for all residents. They mentioned that utilization of preventative dental services was low and that financing for dental health resources was inadequate.

The focus group felt populations within the community that are underserved include returning veterans, Asian residents, the growing population of South Asian residents, and single parent families. Some of the provider surveys mentioned underserved elderly and a growing Portuguese-speaking community as groups that face disparate access to health resources. The focus group cited language disparity, cumbersome health insurance process navigation, and transportation issues (particularly among seniors) as major obstacles to accessing health services.

Figure 7: No Health Insurance 2010 (%)



(SOURCE: US CENSUS BUREAU, CENSUS 2010)

Quincy's health department maintains several resources that conduct outreach to the community in order to improve health access. It has resources that investigate communicable disease outbreaks. The health department conducts seminars on prevention, control, and treatment of communicable disease. Additionally, the service area towns have public health nurses that link people with personal health services within the community to provide informational seminars on various health topics.

Community health centers are valuable community-based organizations often located in areas with a significant underserved population that brings comprehensive primary health care and social support services to the community. The QMC service areas contain two major community health centers: South Cove Community Health Center (South Cove) and Manet Community Health Center (Manet). South Cove and Manet both provide community-based health care services to the medically underserved population of Massachusetts.

Access to health care is often dependent on reliable means of transportation. There are various means of transportation in the area. All service towns are located in the Greater Boston Area, which has access to rail and highways. Principal highways are the Southeast Expressway (Route 3) and Route 128, the inner belt around Boston. Quincy and Braintree have access to the subway and bus service is also available in all four areas.

The ability to access health resources has a profound effect on every aspect of health, yet almost one in four Americans does not have a Primary Care Provider (PCP) or health center where regular medical services can be received.[24] Approximately one in five Americans does not have medical insurance.[25] People without medical insurance are more likely to lack a usual source of medical care such as a PCP. These individuals are more likely to skip routine medical care due to costs, increasing their risk for serious and disabling health conditions.[26] When they do access health services, they are often burdened with large medical bills and out-of-pocket expenses.[27]

Recent studies commissioned by the Institute of Medicine found that uninsured adults in the U.S. face serious and sometimes grave risks to their health. Without health insurance, adults have less access to effective clinical services including preventive care and, if sick or injured, are more likely to suffer poorer heath outcomes, greater limitations in quality of life, and premature death.[28] A Kaiser Family Foundation report found that nationally, 65% of health care costs for the uninsured adult are not reimbursed despite safety net programs (2004).[29] When hospitals seek compensation for care and do not receive it, the charges are considered bad debt. The impact of bad debt on a hospital impedes its ability to reduce costs.

Underserved Populations

Quincy has a very diverse community, with a 32.7% non-white population as compared to the state average of 19.6%. Other towns in the service area are not as diverse, most having white, non-Hispanic populations of approximately 90%. Quincy in particular has a significant Asian population of 24%. Braintree, the third largest town in QMC's PSA, has an Asian population of 7.3%. In Quincy and Braintree, the top 3 Asian population groups are Chinese (Quincy 14,444, Braintree 1,476), Vietnamese (Quincy 2,979, Braintree 471), and Asian Indian (Quincy 2,404, Braintree 281).[30] Quincy's public school population shows a 32.9% Asian population.

Figure 8: Diversity of General Population (2010)

Race	Quincy 2010 (%)	Braintree 2010 (%)	Weymouth 2010 (%)	Hull 2010 (%)	MA 2010 (%)
White, non-Hispanic	67.3	89.9	91.6	95.1	80.4
Black/African-American	4.6	1.8	3.4	1.8	6.6
American Indian and Alaska Native	0.2	0.1	0.1	1	0.29
Asian	24	7.3	3.3	0.6	5.3
Native Hawaiian and Other Pacific Islander	0.1	0	0	0	0.034
Some Other Race	1.7	0.5	0.6	0.4	4.6
Two or More Races	2.1	0.5	0.9	1.1	2.63
Hispanic (not counted in Race)	3.2	1.4	2.3	3.6	9

(SOURCE: US CENSUS)

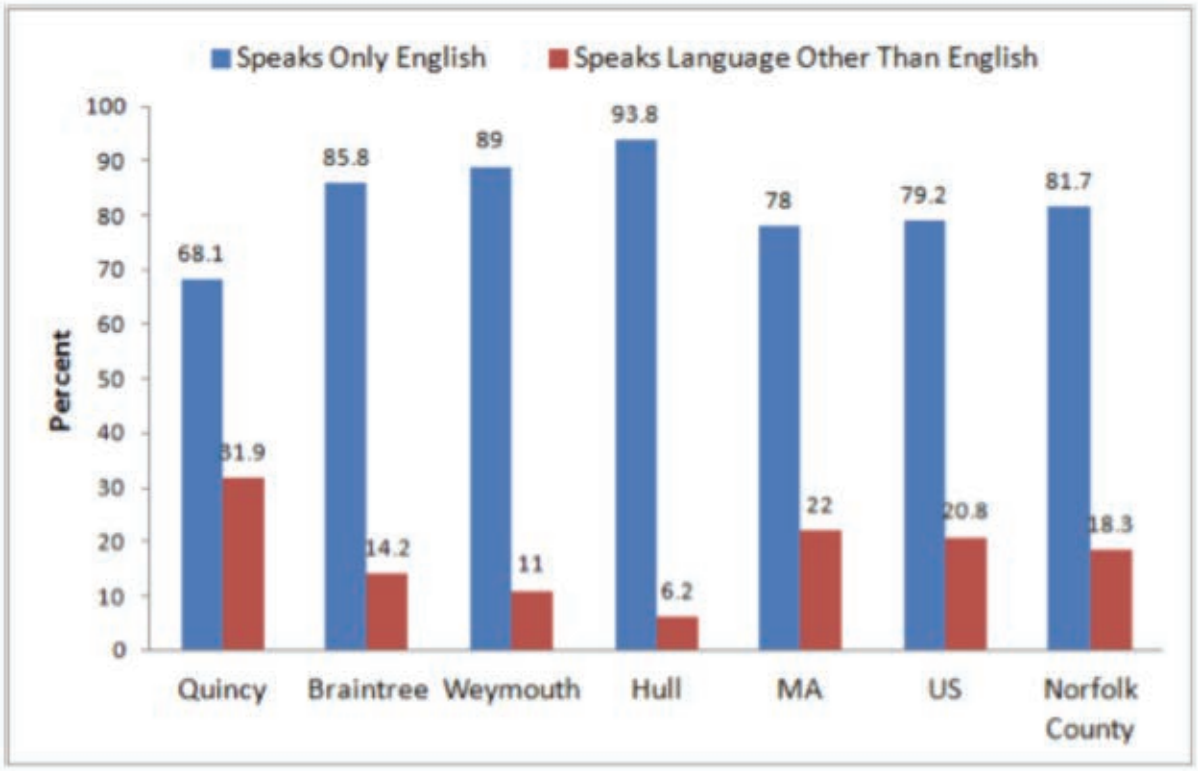
Figure 9: Diversity of Public School Population (2011)

Public School Population	Quincy (%)	Braintree (%)	Weymouth (%)	Hull (%)	MA (%)
White, non-Hispanic	52.9	80.6	82.3	95.7	68.0
Black/African-American	6.5	4.7	4.6	1.0	8.3
Hispanic	4.7	3.7	6.3	1.6	16.1
Asian	32.9	9.8	3.8	0.6	5.7
Other	0.6	0.1	0.4	0.5	0.3
Two or More Races	2.4	1	2.6	0.6	2.5

(SOURCE: MA DEPARTMENT OF ELEMENTARY AND SECONDARY EDUCATION, DISTRICT PROFILES, 2011

With 31.9% of its population speaking another language, Quincy has a larger population that speaks a language other than English than the county or state average. Spanish speakers make up 3.2%, other Indo-European languages make up 8.0%, and Asian and Pacific Island languages make up 18.9%

Figure 10: English Language Indicators (2010)



(SOURCE: US CENSUS)

Cultural differences between patient and health providers can lead to disparities in health and health access. This may affect variations in patients' ability to recognize clinical symptoms of disease and illness, thresholds for seeking care (including the impact of racism and mistrust), expectations of care (including preferences for or against diagnostic and therapeutic procedures), and the ability to understand the prescribed treatment.[31] Along with linguistic issues in communication, there is also a cultural component. When health care providers fail to understand socio-cultural differences between themselves and their patients, the communication and trust between them may suffer. This in turn may lead to patient dissatisfaction, poor adherence to medications, and poorer health outcomes.[32]

Minority populations tend to have higher rates of uninsured than whites. About 82% of Asian Americans had health insurance coverage in 2009 as compared to 88% of white Americans.[33] Being uninsured often means postponing needed health care services. Many more Asian-Americans do not have a usual source for health care, have substantially higher unmet health needs than their insured counterparts, and have high out-of-pocket costs.[34] Additionally, at QMC, only 5% of the patient population is of Asian descent. Since QMC is the only hospital in Quincy, a majority of Asians within the community either are not receiving the health resources they need or they are going outside of the community for their care.

Lack of access to insurance programs is estimated to cost the US $23.9 billion dollars.[35] Over the next decade, the total cost is approximately $337 billion.[36] At QMC, uninsured patients arrive at the ED and, after receiving care, may be unable to pay for services received. When hospitals seek compensation for care and do not receive it, the charges are considered bad debt. QMC has accumulated $306,750 of bad debt as a result.

Reproductive & Sexual Health

Services that focus on reproductive and sexual health are important resources for public health. These services improve health and reduce costs by covering family planning, Human Immunodeficiency Virus (HIV) and Sexually Transmitted Infection (STI) testing and treatment, and prenatal care. Services also screen for intimate partner violence and reproductive cancers, provide substance abuse treatment referrals, and provide counseling on nutrition and physical activity. Untreated STIs can lead to serious long-term health consequences, especially for adolescent girls and young women. Such consequences include reproductive health problems and infertility, fetal and prenatal health problems, cancer, and possible sexual transmission of HIV.

Braintree, Weymouth and Hull have much lower incident rates of sexually transmitted infections than Quincy. However, the rates across the entire PSA are still below the average state rate. The data shows that Chlamydia by far is the most prevalent sexual disease, followed by HIV/AIDS, gonorrhea, and syphilis.

The well-being and health of mothers, infants, and children determine the health of future generations and help predict health status and other issues that may arise. Quincy is the largest city in the PSA and also has the largest number of births, having more births than the other three cities in the service area combined. Quincy has a rising population growth trend, with high crude birth rates compared to the state and incremental increases in the number of births almost every year from 2000 to 2009. Additionally, Quincy had the largest proportion of births to “Asian or other race” mothers (32%).[37] However, infant mortality for Quincy is high when compared to the other towns in the service area, though it is below the state average.

Currently, there are no obstetrics services within the Quincy community. Patients are required to go outside of the hospital to access needed labor and delivery services. Many residents in the service area have to travel to downtown Boston for services when a community-based obstetrics program could meet maternal and newborn service needs.

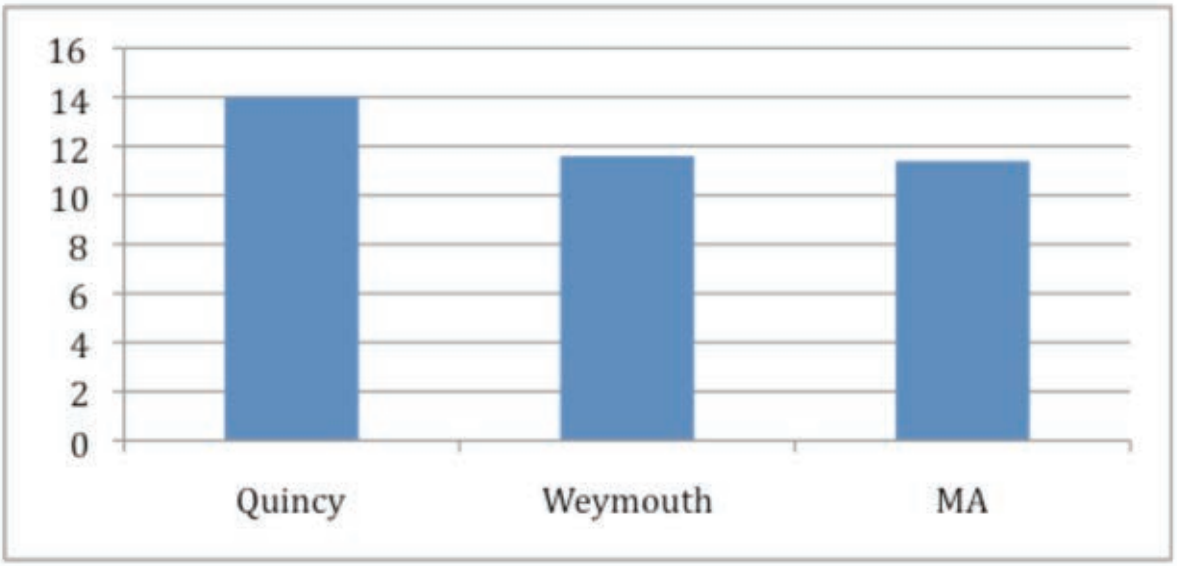
Quincy had the largest number of residents who gave birth outside of their community between 2005 and 2010. During this period, Quincy residents received labor and delivery services at hospitals outside of their city. Sixty-two percent of those services were at one of the five major Boston hospitals. This results in an added burden to the family from added travel time and expense. Additionally, Quincy experienced a growth trend from 1,212 births in 2000 to 1,326 births in 2009. Prenatal, labor and delivery as well as developmental services offered by QMC would allow pregnant patients access to personalized maternity services within their own community instead of a larger more costly medical centers.

Figure 11: Service Area Birth Counts

	2006	2007	2008	2009
Quincy	1,279	1,272	1,379	1,326
Braintree	441	426	409	439
Hull	102	95	106	89
Weymouth	696	756	759	663

(SOURCE: MASSCHIP)

Figure 12: Crude Birth Rates



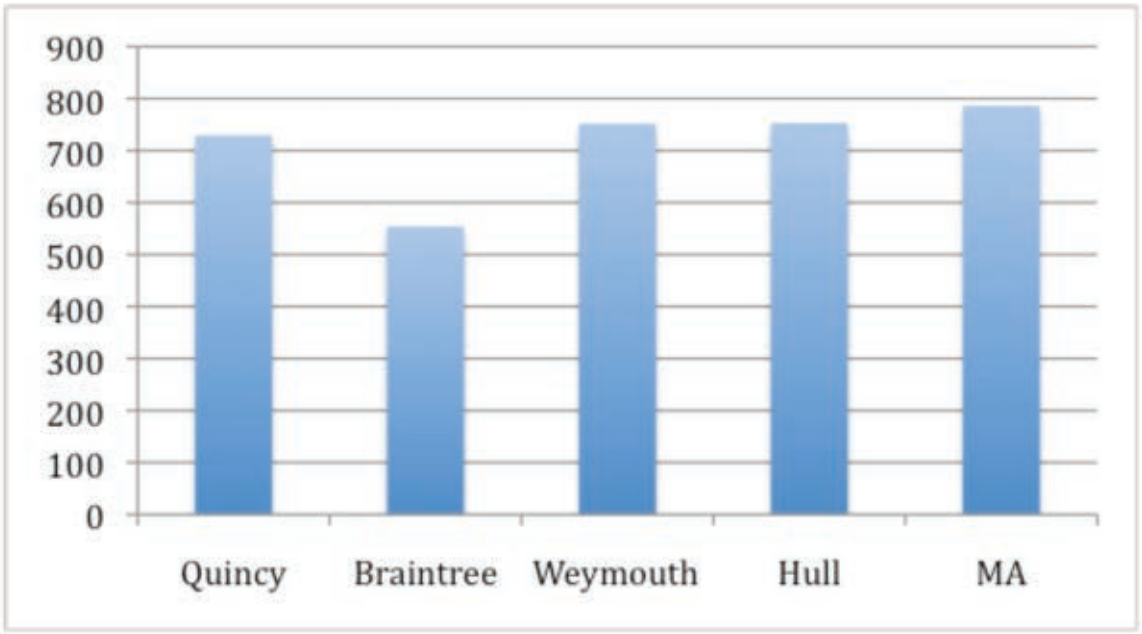
(SOURCE: MASSACHUSETTS DEPARTMENT OF PUBLIC HEALTH BUREAU OF HEALTH INFORMATION, STATISTICS, RESEARCH AND EVALUATION–MASSACHUSETTS BIRTHS 2009)

Behavioral Health

The QMC primary service area shows high mental health discharge rates. All service area towns showed mental health discharge rates that were higher than the state average. The age-adjusted mental health discharge rate for Quincy (4140.47), Weymouth (4708.34), and Hull (4373.4) all surpassed the state rate (3949.16). Weymouth has the highest rate of hospital discharges, followed by Hull, Braintree, and Quincy. Above-average rates indicate a need for more behavioral health interventions in the area. This was reflected in the provider survey with respondents citing behavioral health as a serious issue within the community.

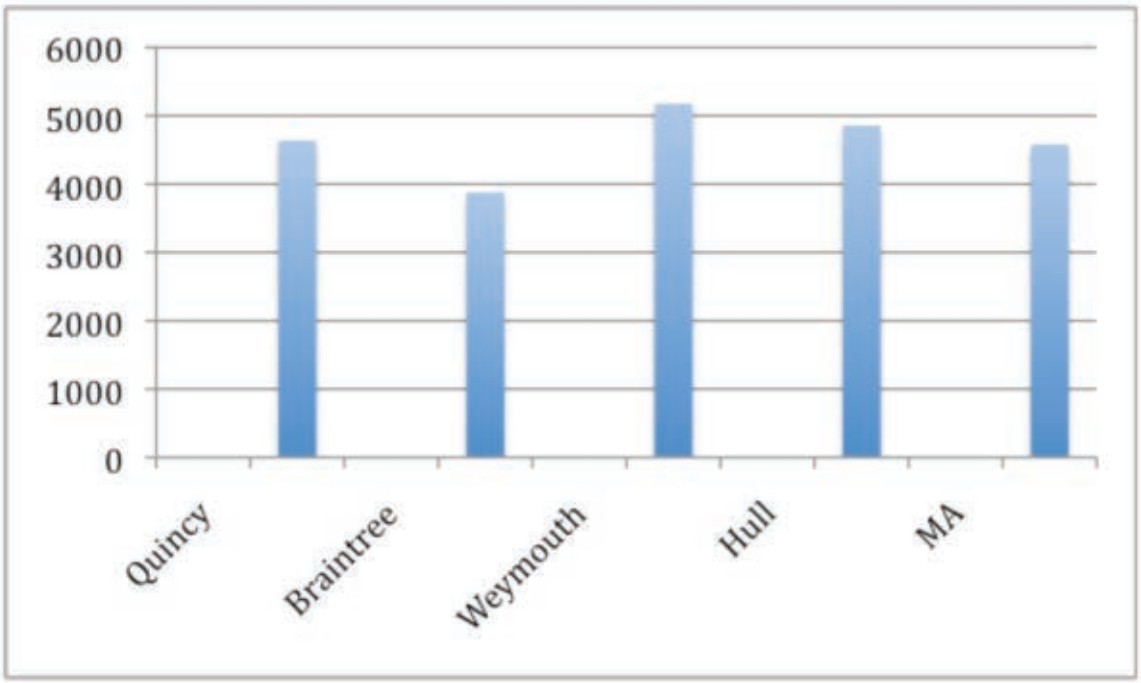
The focus group articulated a need for increase behavioral health resources; especially follow up services (such as better outpatient appointment scheduling process or establishing an aftercare plan). Additionally, participants cited behavioral health issues among the elderly as a consistent and growing issue. Community-based organizations articulated difficulty in treating behavioral illness because of a lack of resources including lack of inpatient psychiatric beds and inadequate behavioral health reimbursements.

Figure 13: Mental Health All-Related Hospital Discharges Age Adjusted Rate per 100,000 (2009)



(SOURCE: MASSCHIP)

Figure 14: Mental Health All-Related Visits to Emergency Departments Age Adjusted Rate (2009)



(SOURCE: MASSCHIP)

Behavioral health patients face great obstacles in receiving behavioral health services. Behavioral health stigma is a main barrier preventing patients who might otherwise seek health resources from doing so from fear of social ostracism or discrimination. Additionally, behavioral health patients face difficulty in accessing social services, including adequate housing, proper health insurance, and employment support, which are known social determinants of health.

Behavioral health issues have a serious impact on overall health. It is associated with the prevalence, progression, and outcome of some of today's most pressing chronic diseases, including diabetes, heart disease, and cancer. On average, people with serious behavioral health illness die twenty-five years earlier than the general population. Behavioral health disorders can have harmful and long-lasting effects—including high psychosocial and economic costs—not only for people living with the disorder, but also for their families, schools, workplaces, and communities.[38]

Behavioral health issues cause indirect costs that accumulate through reduced labor supply, public income support payments, reduced educational attainment, and costs associated with other consequences such as incarceration or homelessness.[39] Additionally, people with behavioral health conditions are at higher risk than others for physical illness and disability. The cost of medical care for this population is, on average, much higher than the cost of medical care for people without behavioral health conditions.[40] Better behavioral health services for this population would be likely to reduce the costs of their physical health care and produce significant overall savings in health spending.[41]

Substance Abuse

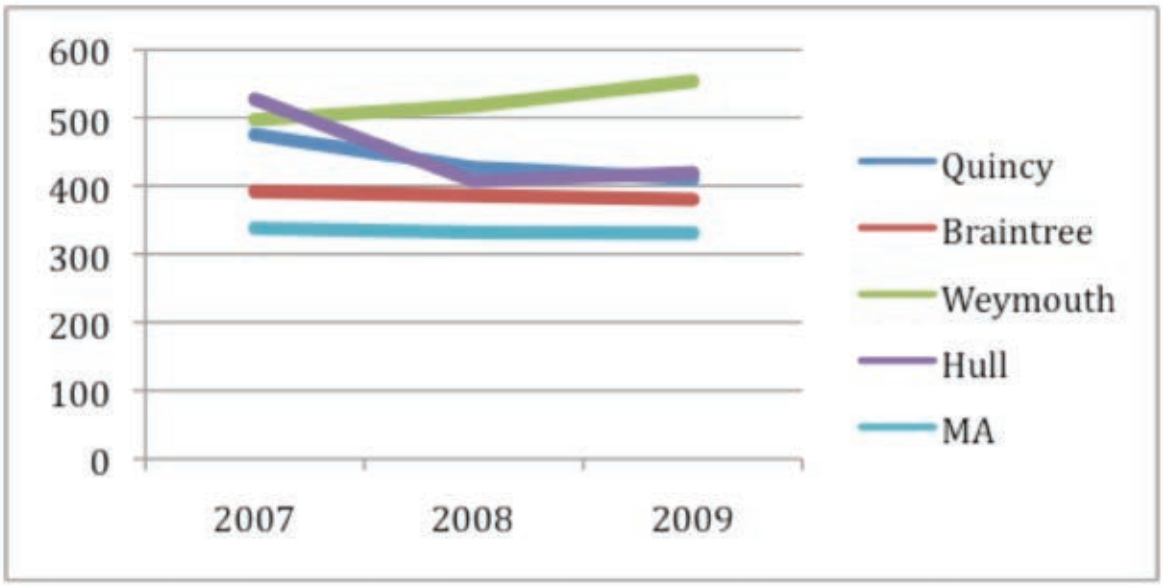
Substance abuse may directly involve the misuse of drugs and alcohol, but it is also associated with a range of destructive social conditions. Such conditions include family disruptions, financial problems, lost productivity, failure in school, domestic violence, child abuse, and crime. Moreover, both social attitudes and legal responses to the consumption of alcohol and illicit drugs make substance abuse one of the most complex public health issues.

The data reflect a sustained gradual decrease of alcohol and substance-related hospitalization for Braintree and Quincy. Hull demonstrated a significant decline in alcohol and substance related hospitalizations over a three-year time frame. However, Weymouth showed a consistent increase in alcohol and substance-related hospitalizations, far surpassing the other service area rates.

The data also indicate a general increase in Quincy and Braintree hospitalization injuries related to opioids. There are distinct increases in these types of hospitalizations within Weymouth and Hull. Hull showed a large increase in 2009, which was the most recent year for which data were available. Substance abuse and opioid-related hospitalization rates for the service area towns are significantly higher than the state average, demonstrating a need for substance abuse interventions.

Focus group data showed a general concern about the substance abuse problem in the community. There is a need for more health information to help the community understand the symptoms and the negative outcomes of drug addiction. Additionally, it was expressed that a large portion of the substance abuse problem stemmed from prescription medication abuse, which participants felt reflected the abuse of doctors' prescription privileges. The group also noted support groups aimed at substance abuse recovery as possible interventions.

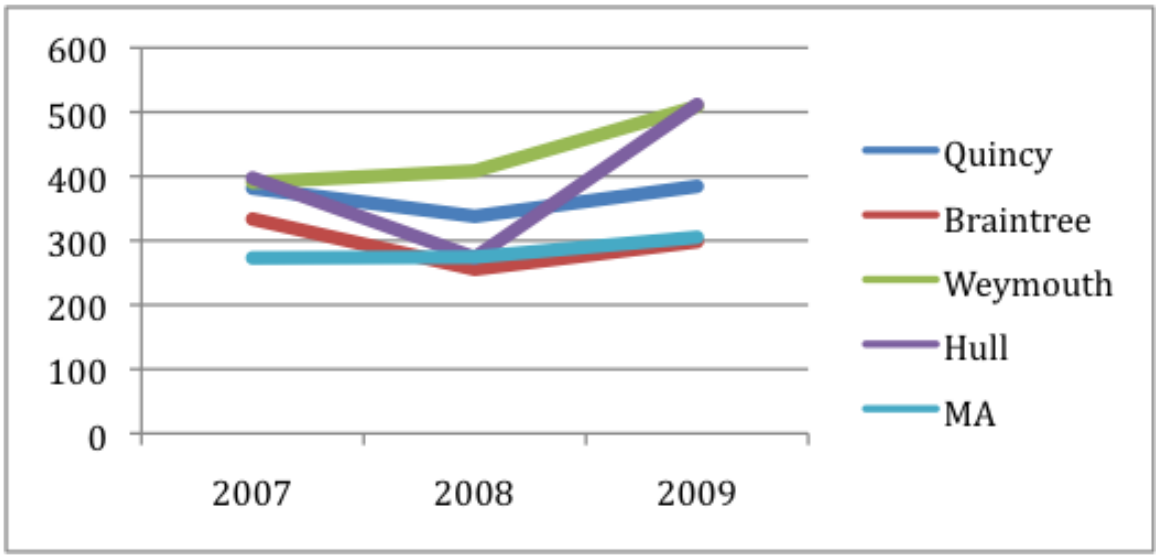
Figure 15: Alcohol / Substance Related – Age Adjusted Hospitalizations Rate (2007-2009)



(SOURCE: MASSCHIP)

The municipalities of QMC have taken several steps to deal with the substance abuse issue. Quincy has a Substance Abuse Task Force that was commissioned by Mayor Thomas Koch in April of 2008. The Task Force meets monthly to discuss the issue of substance abuse in the community and to promote awareness, education, prevention, and treatment of substance abuse in the city. There is also a Prescription Drug Disposal program that allows residents to bring unused prescription drugs to a disposal center free of charge; this has drastically reduced access to prescription opiates and other medications. Additionally, the Massachusetts Screening, Brief Intervention, Referral, and Treatment program provides screening and treatment options for patients at QMC.

Figure 16: Injuries: Opioid-related – Age Adjusted Hospitalizations Rate (2007-2008)



(SOURCE: MASSCHIP)

Local Policies Affecting Health

Figure 17: Ordinances affecting health. 2010. Source: City and public school websites.

	Obesity	Tobacco	Cancer Prevention	Schools	Zoning
Quincy	None	2004 Smoking Regulations prohibiting smoking in the workplace, exceptions provided for substance abuse facilities, nursing homes, private homes (unless used as a daycare facility), hotels/motels, religious ceremonies, or on stage as part of a theatrical performance	Smoking: restrictions on smoking in certain buildings and areas; see "smoking" section for more information.	None	Quincy is utilizing a "smart growth" plan for its down-town redeve-lopment.
Weymouth	None	None	None	Weymouth has designed and implemented a bullying prevention program,	None
Braintree	None	No tobacco sales to minors, no single cigarette sales ("open package" ban), no self-service machines unless located in an establishment where the admittance is 18+	Tanning bed regulations – warning signs must be posted, issuance of permits, etc.	Wellness program prom-oting healthy lifestyle including nutrition and physical activity.	None
Hull	None	None	None	None	None

Discussion and Recommendations

The previous section identified the major public health issues within the QMC primary service area. QMC is well positioned to address the following areas:

- Chronic Disease
- Obesity
- Access To Health Care
- Underserved Population
- Sexual and Reproductive Health
- Behavioral Health
- Substance Abuse

These areas represent opportunities for QMC to take the lead in addressing population health, improving the experience of care, and reducing per capita cost. The remaining health topics detailed in the results section of this report are significant and should be addressed. QMC should look for ways to collaborate with community partners to support efforts to impact and improve upon these areas.

Recommendations for the health system are given below for these areas. Where appropriate, community-wide recommendations are given, representing actions that are beyond the scope of the hospital but which represent efforts in which the hospital can play a part.

Chronic Disease

Health System Recommendations

- Increase education on chronic disease maintenance at community spaces.
- Utilize small media to inform and remind patients to get screened for chronic disease.

Combating chronic disease requires education and modification of health behavior.[42] Focus group input indicated a lack of health promotion education within the community. Promotion and education on healthy behaviors such as chronic disease self-management and preventative screenings are important to chronic disease maintenance.

Additionally, using letters, brochures, newsletters, and other small media to inform and motivate patients to be screened for chronic disease has been demonstrated to be effective.[43] The hospital should do further research in the form of community surveys or focus groups on what types of chronic condition education is most needed and would be most effective for QMC patient population.

Obesity

Community-wide Recommendations

- Add bicycle lanes to roads in service area neighborhoods to increase physical activity.
- Ensure walkable sidewalks on streets.

Health System Recommendations

- Support farmers' market programming.
- Implement nutrition education initiatives.
- Prescribe farmers' market vouchers to diabetic patients who are at risk for obesity.
- Promote and sponsor physical activity and nutrition programs to address childhood obesity.

Focus group input reflected a lack of knowledge about healthy food and lifestyles choices as obstacles in combating obesity. Combating obesity requires education and modification of health behavior.[44] QMC should leverage its collaborations with schools, social service organizations, food pantries, senior centers, and religious organizations to implement education on healthy food and behavioral choices.

The hospital should work with local farmers' markets to support and promote their programs by offering cooking classes and nutrition education during the farmers' markets. Additionally, QMC should start a prescription program allowing physicians to "prescribe" nutritious food from the farmers' markets. Through this program, physicians can identify patients who are at risk for health complications due to obesity, increase their access to health foods, and monitor changes in health status.

Students in elementary, middle school, and high school show obesity rates at approximately 30% or higher for the service area (Appendix Figure 7). Supporting schools in implementing class curricula or workshops on obesity, healthy food, and lifestyle choices would be an important step in reducing school age rates of obesity

Physical activity can help prevent unhealthy weight gain and obesity.[45] Implementing city infrastructure that includes sidewalks and bicycle lanes has been shown to promote physical activity and reduce obesity.[46] Community efforts to implement health promoting city infrastructure would help reduce service area obesity rates.

Access to Health Care

Health System Recommendations

- Utilize Community Health Advocates to provide follow-up enrollment assistance for uninsured patients who visit the emergency department.
- Provide information on and assistance with enrolling in state insurance exchange plans to working populations through partnerships with community service organizations.
- Increase community outreach efforts utilizing multiple media channels.

QMC employs a team of staff that offer insurance enrollment services in the ED, but the burden of follow-up with forms and required documentation is placed on the patient. QMC should engage Community Health Advocates (CHAs) to follow up with uninsured patients and help with enrollment into eligible insurance plans. The CHA model has worked successfully at other Steward hospitals. These CHAs work outside the hospital to follow up with patients, often at their homes, and provide easier access to health insurance by assisting patients with the complex enrollment requirements. QMC is well-positioned to offer a similar program through implementation of best practices learned at the other Steward hospitals. The CHAs also present a mechanism for QMC to better understand from patients and potential patients how to help to improve their care. They are able to gather firsthand knowledge about health preferences, conditions, and related causes, providing QMC with information about how to design care to meet real needs. This presents an opportunity for QMC to both improve the experience of care and improve population health.

The use of community outreach workers would improve the health access of the community and decrease the hospital's bad debt. From 2011-2012, QMC bad debt totaled $6,851,125. CHAs can help eliminate this bad debt and, in doing so, increase funds to be used to further improve patient care and population health.

Lack of understanding of enrollment and navigation of health insurance was consistently mentioned within the focus group. The Community Benefits Advisory Committee members and other community services provide avenues for outreach to the working community to address this issue. The hospital is partnered with faith-based organizations, social service organizations, and other community-based organization. These connections represent an opportunity to present information about enrollment and navigation of state-subsidized health insurance to the working population. Recommended venues include presentations at community club meetings, neighborhood council meetings, and community events, coupled with follow up from community health workers to ensure that the necessary documentation is completed. QMC can assist community members with enrollment in eligible health insurance providers and primary care provider practices. Linking the uninsured with health coverage and source of health care is one of the primary building blocks of the triple aim.

Input from the focus group cited a lack of information on health resources offered by the hospital. QMC should develop media disseminating initiatives to engage and inform the community of hospital services. By utilizing web resources, social media, and collaborations with community-based organizations, QMC can bring awareness of health resources that are available to the community. Such initiatives can take the form of information distributing through the hospital website, Facebook, brochures, and health fairs. Focus group input or a community survey data should be gathered to inform the hospital of which media is more effective.

Underserved Populations

Health System Recommendations

- Utilized culturally-competent Community Health Advocates.
- Gather more information on the needs of the Asian and new immigrant.
- Outreach to Asian population through local media outlets.
- Host community events with Chinese-speaking physicians.

Quincy has a large Asian population (24% of the city's population). Focus group and Provider input consistently cite Asian residents as an underserved population. Barriers to insurance enrollment such as lack of understanding due to language barriers, lack of required documentation, and difficulty navigating the insurance enrollment process once patients have left the hospital are obstacles in attaining insurance coverage for this population.

The use of CHAs to follow up with these patients and complete the enrollment into eligible insurance plans is recommended. Such advocates would be culturally-competent and be able to communicate to the population in their own language, reducing language and cultural barriers to health insurance enrollment. The advocates would also serve to link patients to primary care services. Enrolling this uninsured population in eligible insurance plans will also reduce the hospital's bad debt. This model aligns with the Triple Aim model of improving patient experience, improving population health, and reducing per capita cost. Similar CHA initiatives have worked successfully at other Steward hospitals and are recommended here.

In order to better serve the Asian population, QMC needs to understand the population's preferences and needs in order to better improve the quality of care and health serves. Direct community input should be gathered using a focus group and surveys. Information on population preferences, health access obstacles, and media preferences can be collected in order to better focus efforts in increasing access. CHAs who will already be reaching out to the Asian community should also be used to gather direct community information.

A major health access obstacle for underserved populations is finding care that is culturally-competent. One possible way of increasing Asian patient access to QMC would be by promoting culturally-competent primary care physician practices affiliated with the hospital. By promoting events and opportunities for these physicians to connect with the Asian population in Quincy, QMC can link Asian residents who might need culturally-competent primary care services with providers that can provide them with such services.

Sexual and Reproductive Health

Health System Recommendations

- Install an obstetrics department at QMC.
- Develop Maternal-Child Services and Support.

The addition of an obstetrics department would improve access to delivery service options for the community. Service area residents would no longer be required to travel to another city in order to receive needed labor and delivery services improving their care experience. Additionally, the decreased travel time required to reach such health services could improve population health outcomes and reduce birth mortality rates.

QMC should provide education and support before and after childbirth to help ensure adequate prenatal care and healthy deliveries. Such services are especially important among the immigrant and underinsured population in the QMC service area. Interpreter support by the hospital should be provided for all classes to ensure that women receive adequate prenatal care.

Behavioral Health

Community-wide Recommendations

- Include behavioral health education within school curriculum.
- Create collaborations to decrease stigma attached to behavioral health.

Health System Recommendations

- Increase outreach on current mental health services at QMC.
- Provide education to front-line caregivers and community leaders on the signs of mental illness and how to access necessary resources.
- Host a presentation by the National Association on Mental Illness to raise awareness of and support for community members dealing with mental illness.

Studies have demonstrated that educational programs designed to prevent behavioral problems in children and adolescents have been effective in reducing behavioral issues. Through including a behavioral health component in middle and high school curricula, schools can decrease behavior issues within the student body and better equip students to deal with mental stress as adults.

The service area showed mental health hospitalization rates that were high relative to the state rates.

Mental health stigma has been identified as a major barrier to behavioral health resources.[48] QMC should support collaborations with community-based organizations like Quincy Asian Resources Inc., South Shore Mental Health, and Manet Community Health Center in implementing educational initiatives on topic such as understanding behavioral health, ways to improve behavioral health status, and treatment options for behavioral health issues. Given the large Asian population in Quincy, particularly important is developing a framework to implement an anti-stigma campaign in a culturally-competent way. The National Association on Mental Illness (NAMI) Massachusetts chapter offers “In Our Own

Voice" presentations by people who are maintaining healthy lives despite mental illness. This type of presentation is a powerful method to raise awareness and support for community members with mental illness by demonstrating that people can successfully manage their disease.

Focus group and community provider input revealed a concern for difficulty in accessing behavioral health resources. Through equipping front-line providers with training on recognizing the signs of deteriorating behavior health conditions and information on available resources, QMC can increase its support to local residents.

Substance Abuse

Health System Recommendations

- Implement substance abuse education.
- Collaborate with community-based programs to develop education for front-line workers and advocates on red flags of substance abuse.

Service area data showed high and or worsening substance abuse outcomes relative to the state averages. Focus group inputs cited a need for more health information to help the community understand the symptoms and the negative outcomes of drug addiction. QMC should support pragmatic community programs that can be implemented to improve substance abuse knowledge within the service area. Such programs include collaborative program with community partners, such as Impact Quincy, to conduct substance abuse education. These programs could focus on deterring initiation into drug use by providing education on the detrimental effects of substance abuse. Training on recognizing signs of substance abuse for front line workers can also be helpful in access to timely treatment and resources. Spaces where this education could take place include community spaces, schools, food pantries, and libraries.

Limitations

Thorough data collection was done on the primary service area; however some secondary data sources lacked information on certain PSA towns. Often, these were towns that had smaller populations. In such cases, we could only collect data where it existed. In order to compensate for the lack of secondary data, we tried to collect primary data that represented the smaller towns. Moving forward, we will collect more detailed quantitative data and continue to research available secondary data sources to fill the data gaps.

Focus group data was collected for the PHIR. Though a focus group informs the report with essential primary data from the community, there are some limitations. Focus group data is qualitative because it is based on the opinions of a very small number of participants. The small sample size means the groups may not fully represent the entire population.

Members of Quincy's Community Benefits Advisory Committee were surveyed to gather input on the hospital's service area. Many of these board members are affiliated with local community based organizations. A major limitation is that organizations focus on their mission and constituents, which may not directly align with or be representative of the community as a whole. Additionally, a sampling of community-based organizations many not accurately represent the larger population.

Appendices

Appendix A: Methods

The Massachusetts Department of Public Health-defined service area for Quincy Medical Center was used as the geographical area for this report.

Secondary data was collected by Steward Health Care community health managers for the hospital primary service area as defined by the Massachusetts Department of Public Health. Sources included:

- United States Census Bureau www.census.gov
- US Census Bureau American Community Survey www.factfinder2.census.gov
- Massachusetts Community Health Information Profile (MassCHIP), available at http://www.mass.gov/eohhs/researcher/community-health/masschip/
- Federal Reserve Bank of Boston website http://www.bos.frb.org/
- Massachusetts Department of Elementary and Secondary Education school district profiles http://www.doe.mass.edu/
- Massachusetts Department of Public Health Bureau of Health Information, Statistics, Research and Evaluation
- Status of Childhood Weight in Massachusetts, 2011 www.mass.gov/eohhs/docs/dph/.../status-childhood-obesity-2011.pdf
- A Profile of Health Among Massachusetts Adults, 2010 BRFSS results http://www.mass.gov/eohhs/docs/dph/behavioral-risk/report-2010.pdf
- Massachusetts State Crime Reporting Unit http://www.ucrstats.com/

QMC gathered primary data through a survey to community providers and opinion leaders, and through a focus group (which contained a demographic survey, an evaluation survey, and a consent form).

A community provider survey was sent out to members of the QMC Community Benefits Advisory Committee and other community-based organizations that served as resources for the community. The survey consisted of fourteen questions aimed at capturing information on health status and issues that the community faced. Twelve surveys were distributed. Nine completed surveys were received back. These organizations were social service, religious, governmental, and health-based organizations. The Community Provider Survey can be found in Appendix C.

A focus group was held on November 19th, 2012. The event was advertised via a flyer, and through email distributed to members of the QMC Benefits Advisory Committee and other community based organizations. In gathering participants for the focus group, facilitators aimed at recruiting participants that would be representative of a cross-section of the community served by the hospital. The inclusion criteria for the focus group were participants who live within the hospital primary service area.

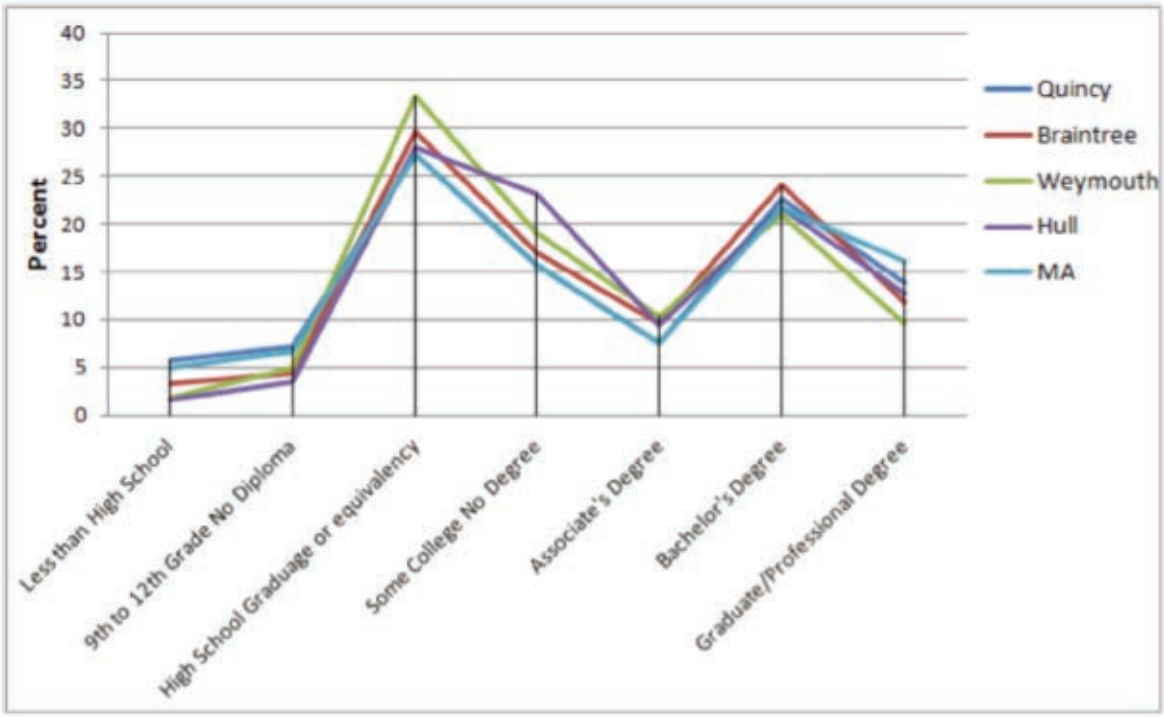
A total of ten focus group participants attended. Incentives to participate in the focus group were a free meal and a raffle for a fifty-dollar gift certificate to Wal-Mart. A template focus group script can be found in section B of this appendix. The demographic data compiled are as follows:

1. What is your current age?		
18 - 25	1	
26 - 35	1	
36 - 45	2	
46 - 55	1	
56 - 65	2	
66 - 75	1	
76+	1	
2. What is your biological sex?		
Male	2	
Female	7	
3. What is your gender identity?		
Male	7	
Female	2	
4. Which group below most accurately describes your racial background (check all that apply)?		
Alaskan Native/Native American/Indigenous		
Asian	2	
Black/African American	0	
Latino(a)/Hispanic (Non-white)	0	
Pacific Islander/Native Hawaiian	0	
White	7	
Multiracial	0	
Other/Please specify:		
5/ What is the highest grade in school, year in college or post-college degree work you've completed?		
Less than High School		
9th to 12th Grade (No Diploma)	0	
High School Graduate or equivalency	1	
Some College (No Degree)	2	
Associates' Degree	0	
Bachelor's Degree	4	
Graduate/Professional Degree	2	
Other/Please specify:		

Appendix B: Supplemental Demographic Data and Additional Health Indicators

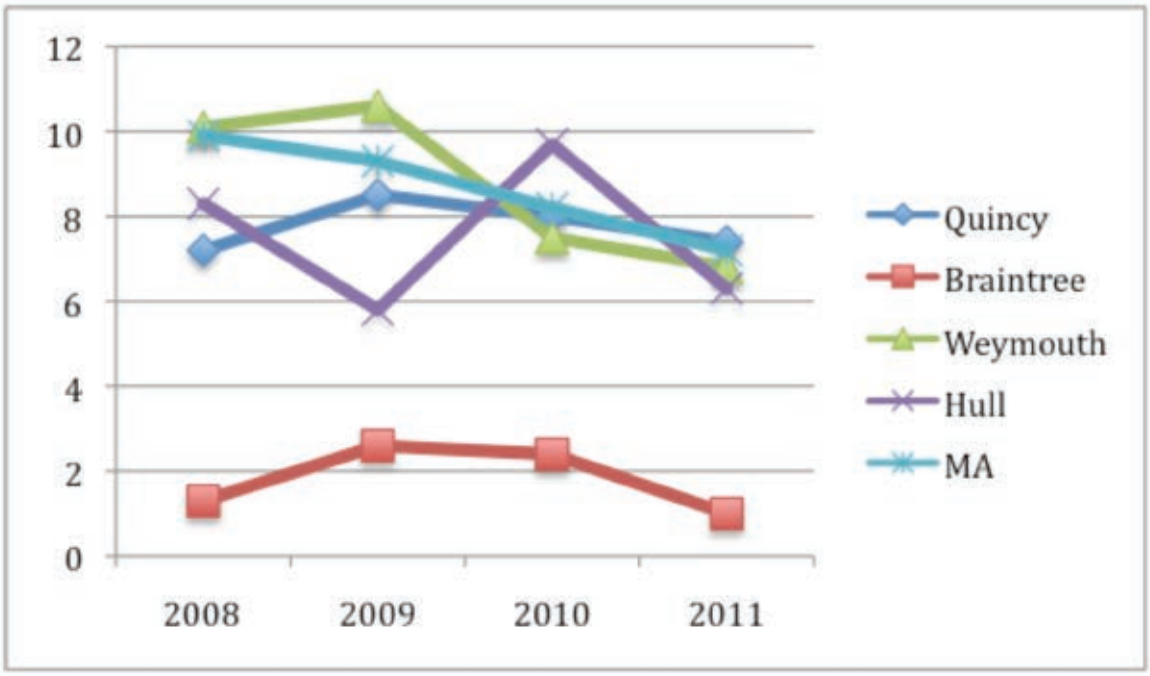
Education

Figure 1: Highest Educational Attainment Population Age 25+ (2009)



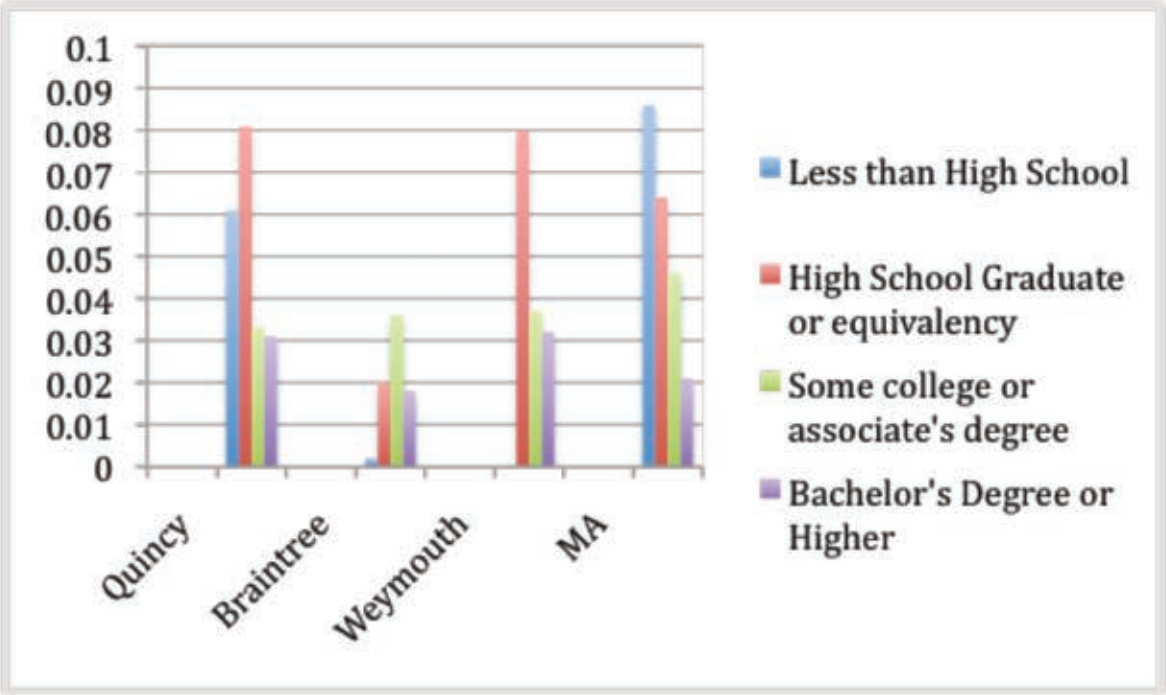
(SOURCE: US CENSUS)

Figure 2: High School Drop-out Rates (2008-2011)



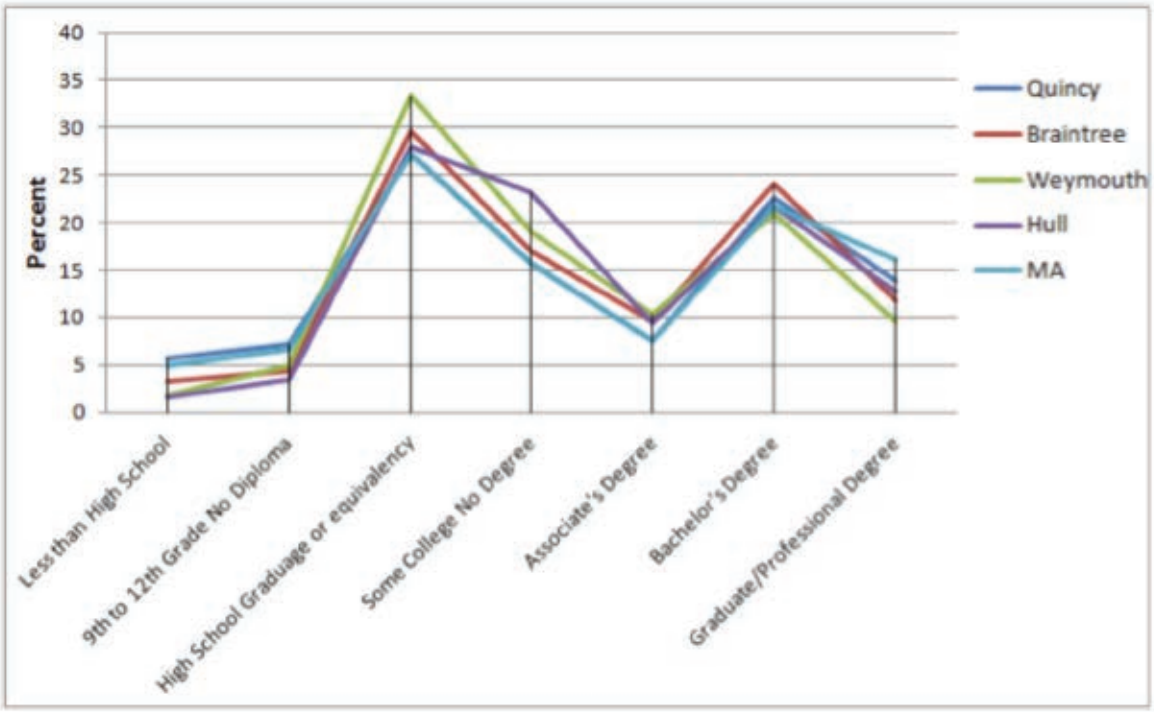
(SOURCE: MASSACHUSETTS DEPARTMENT OF ELEMENTARY AND SECONDARY EDUCATION, SCHOOL AND DISTRICT PROFILES)

Figure 3: No Health Insurance (ages 18-64), by Education (2008)



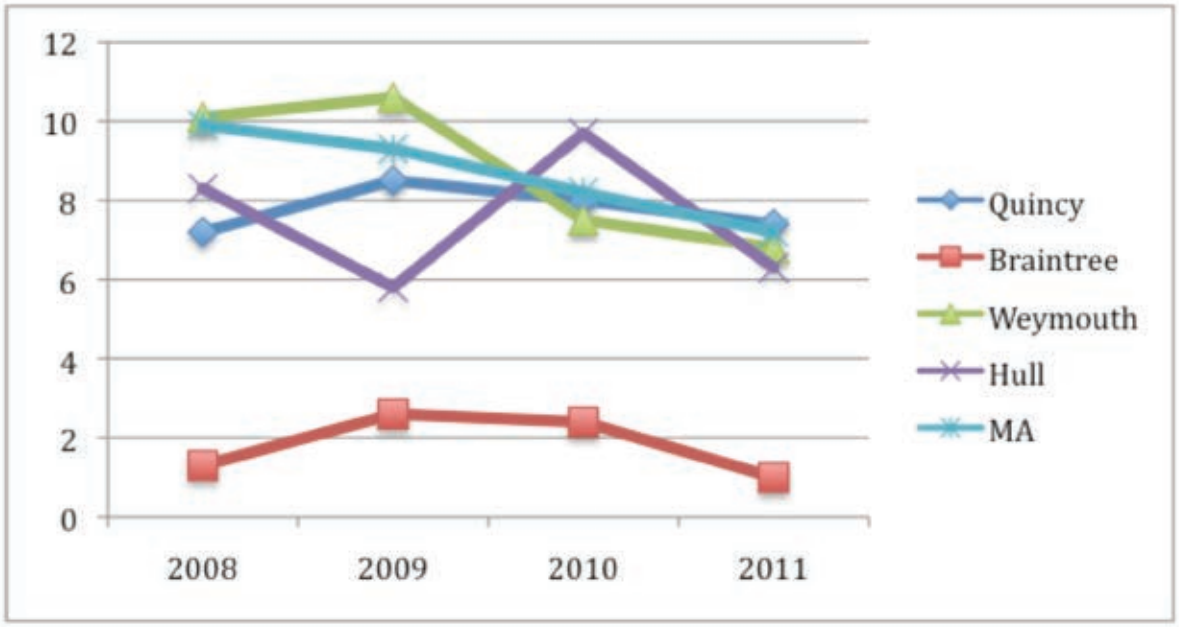
(SOURCE: US CENSUS BUREAU)

Figure 4: Attainment Population Age 25+ (2009)



(SOURCE: US CENSUS)

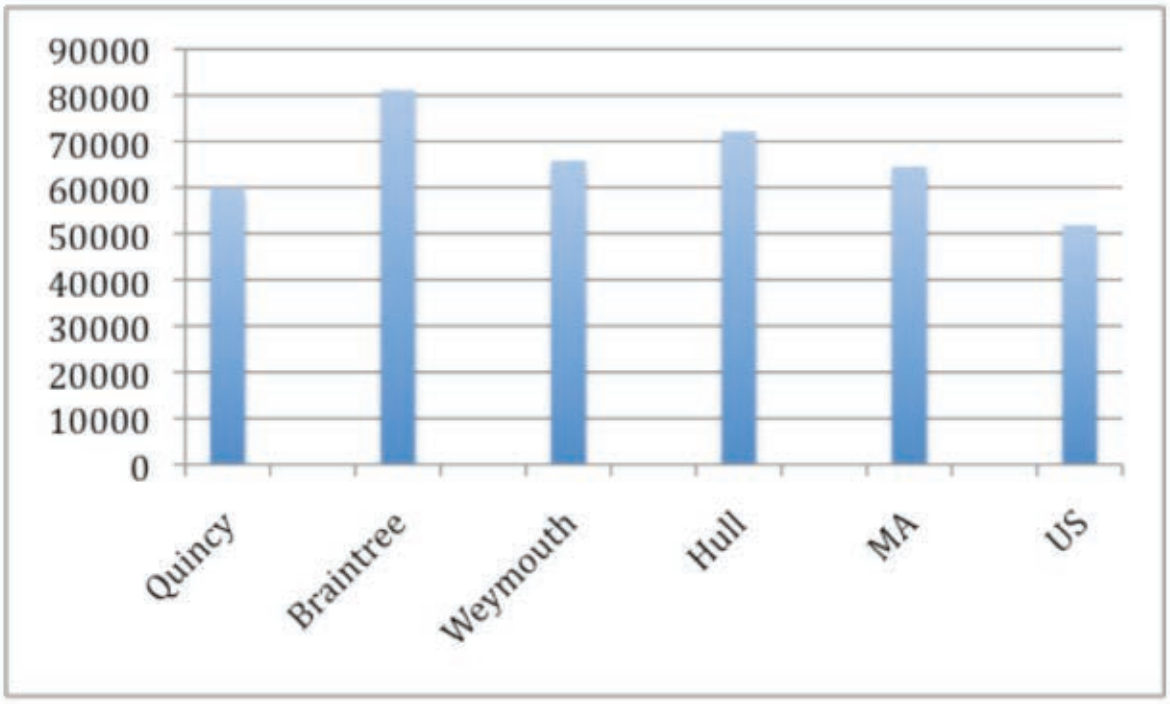
Figure 5: High School Drop-out Rates (2008-2011)



(SOURCE: MASSACHUSETTS DEPARTMENT OF ELEMENTARY AND SECONDARY EDUCATION, SCHOOL AND DISTRICT PROFILES)

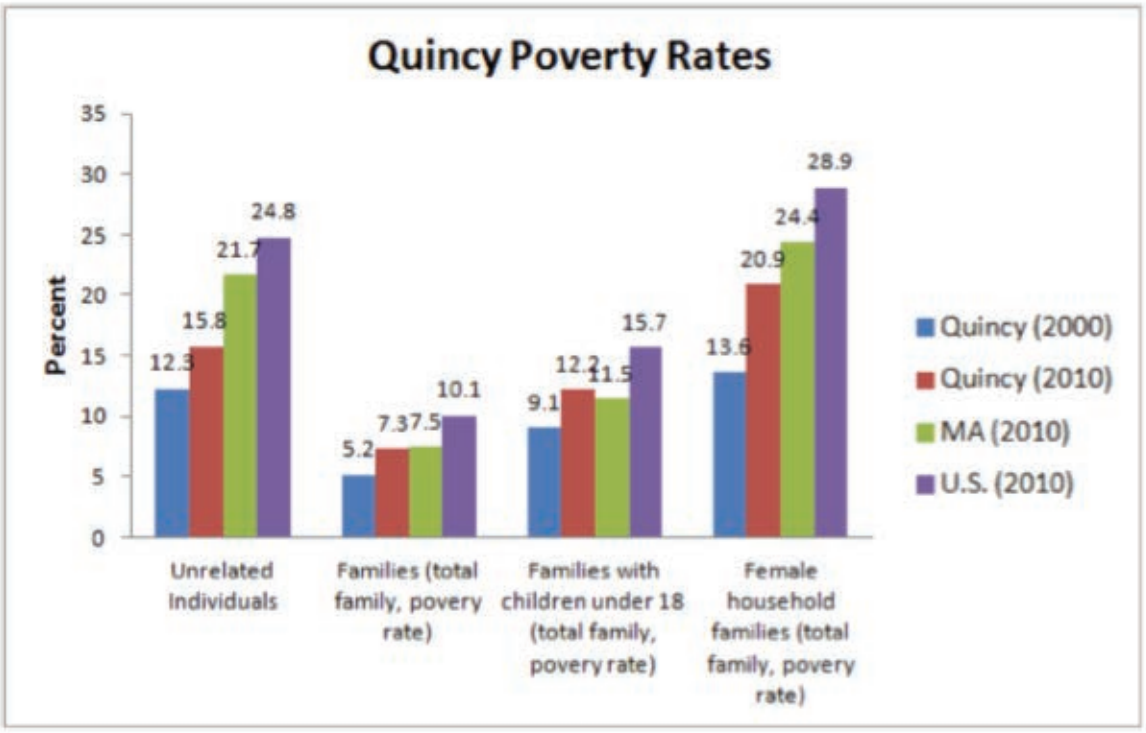
Economics

Figure 6: Median Household Income Inflated Adjusted Dollars (2010)



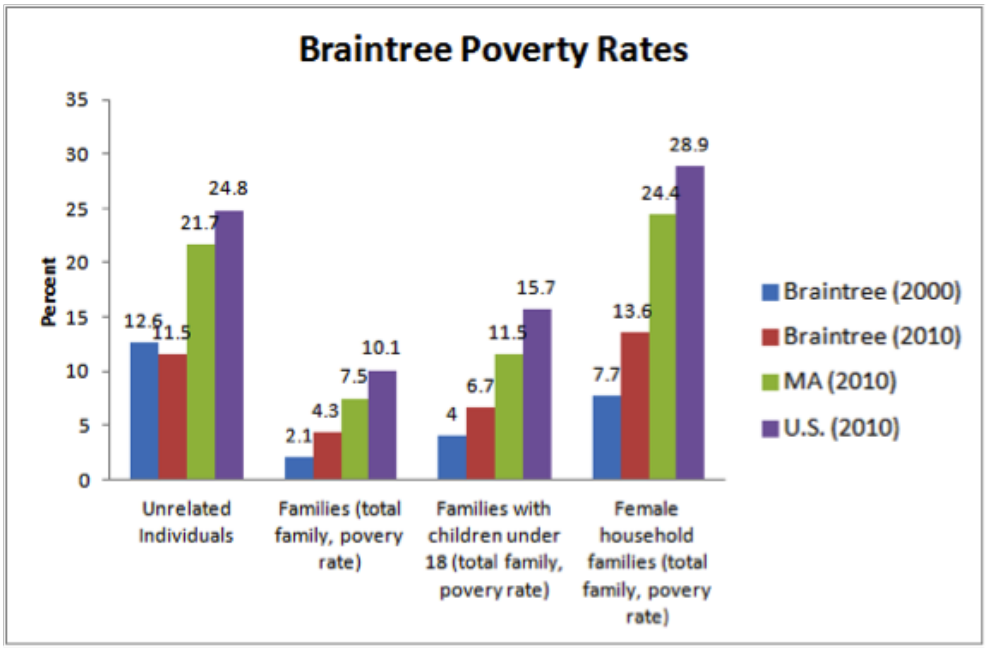
(SOURCE: US CENSUS)

Figure 7: Change in Quincy Poverty Rates from 2000 to 2010



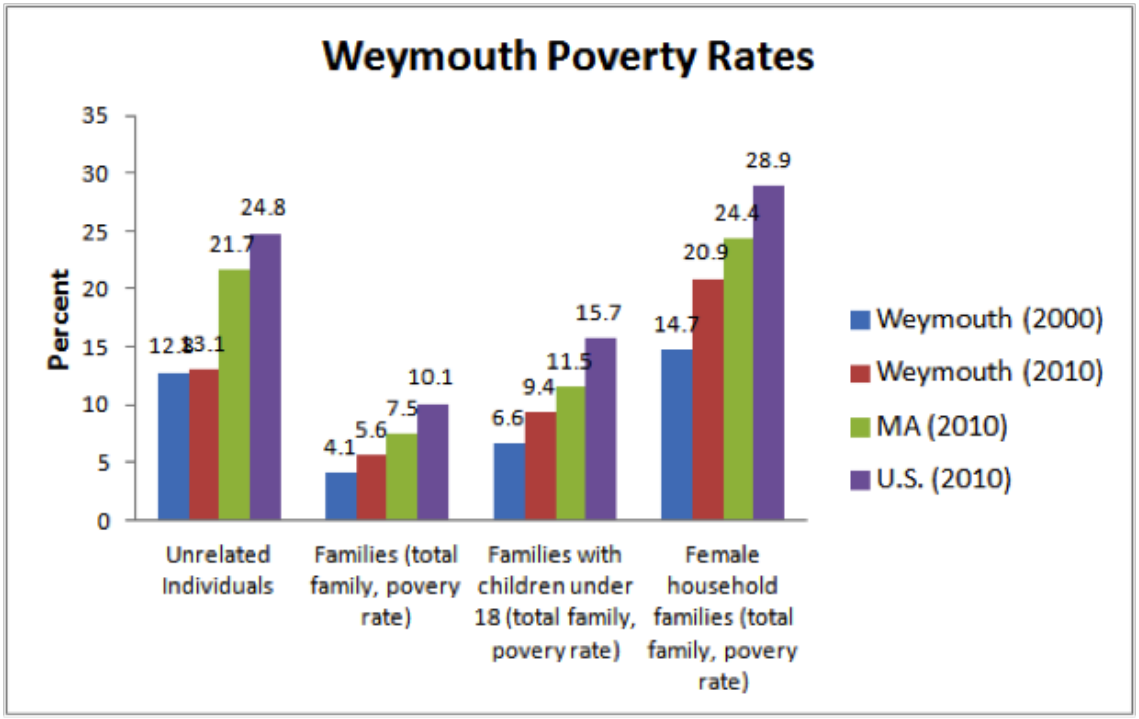
(SOURCE: US CENSUS)

Figure 8: Braintree Poverty Rates in 2000 - 2010



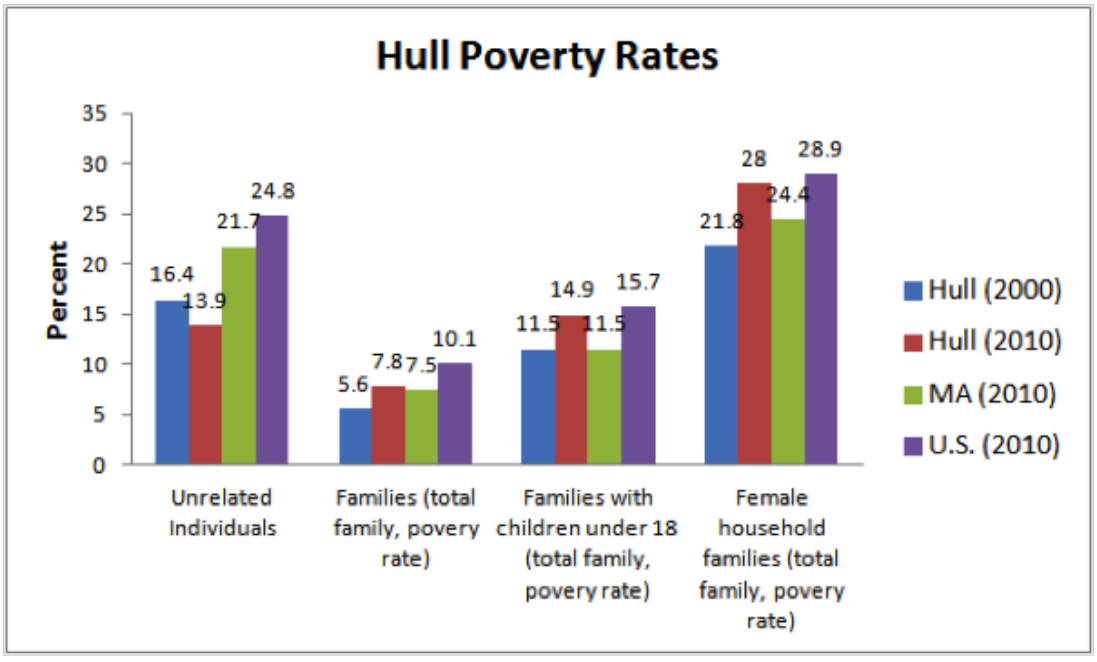
(SOURCE: US CENSUS)

Figure 9: Weymouth Poverty Rates in 2000 - 2010



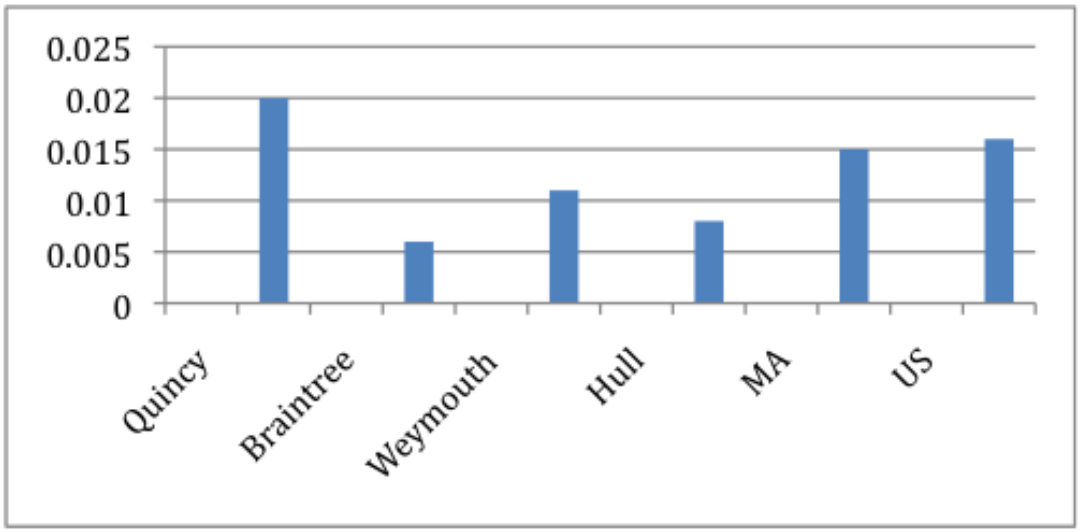
(SOURCE: US CENSUS)

Figure 10: Hull Poverty Rates in 2000 – 2010



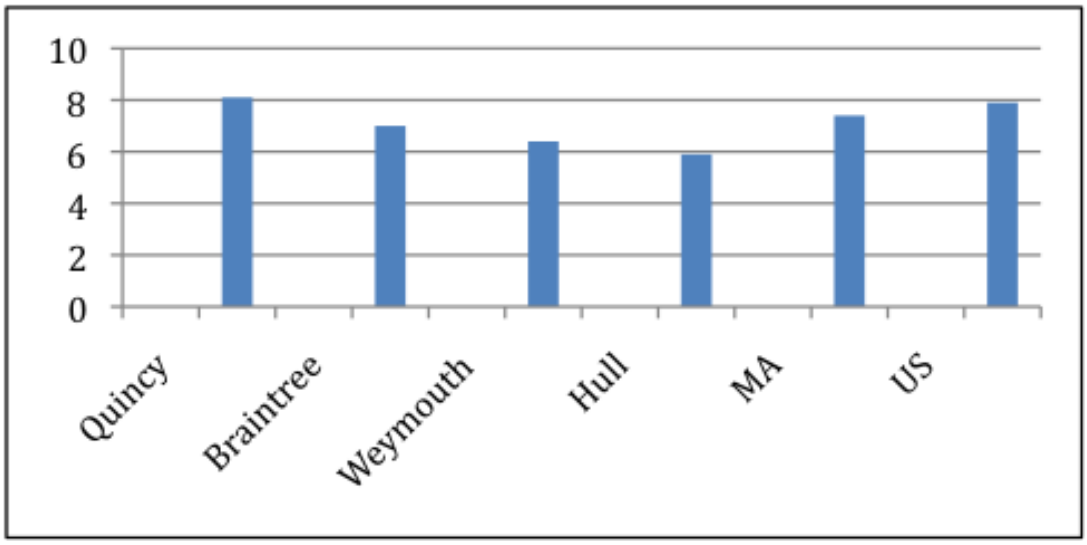
(SOURCE: US CENSUS)

Figure 11: Household Participation Supplemental Nutrition Assistance Program FY2005-2010



(SOURCE: US CENSUS)

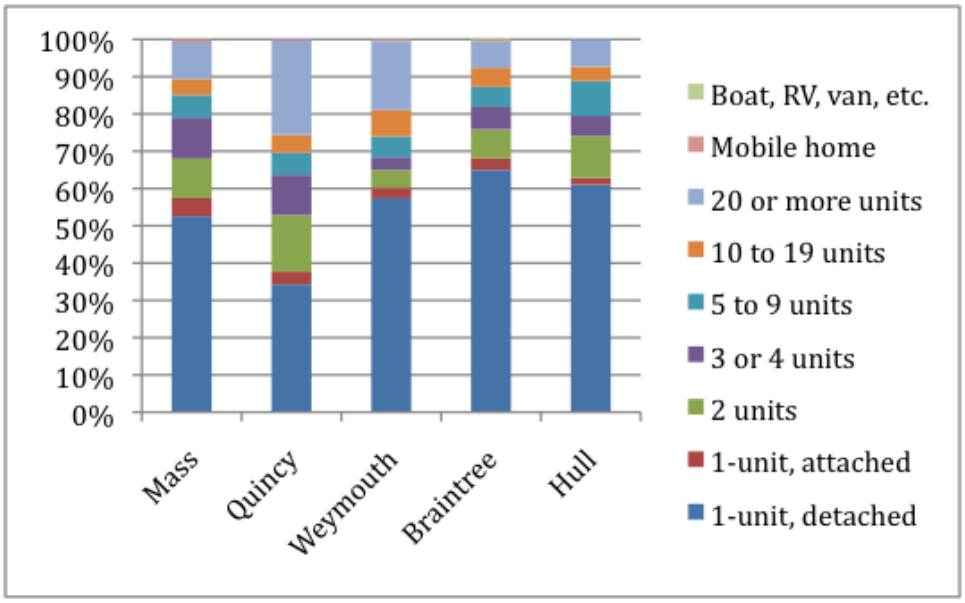
Figure 12: Annual Unemployment Rate 16 years and over (2010)



(SOURCE: US CENSUS)

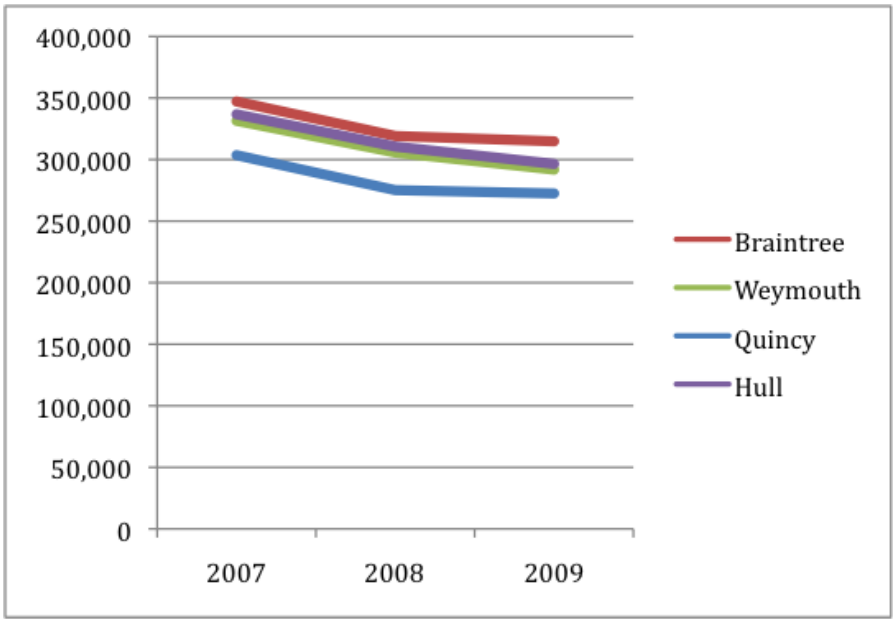
Housing

Figure 13: Housing Structure Type percentage of total structures



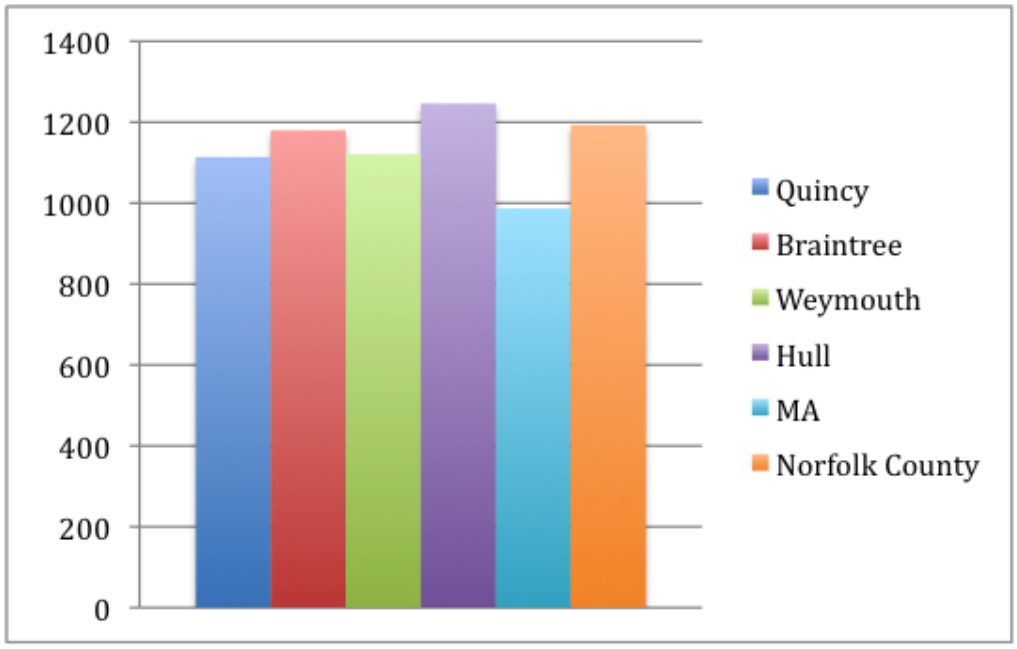
(SOURCE: US CENSUS)

Figure 14: Median Housing Price



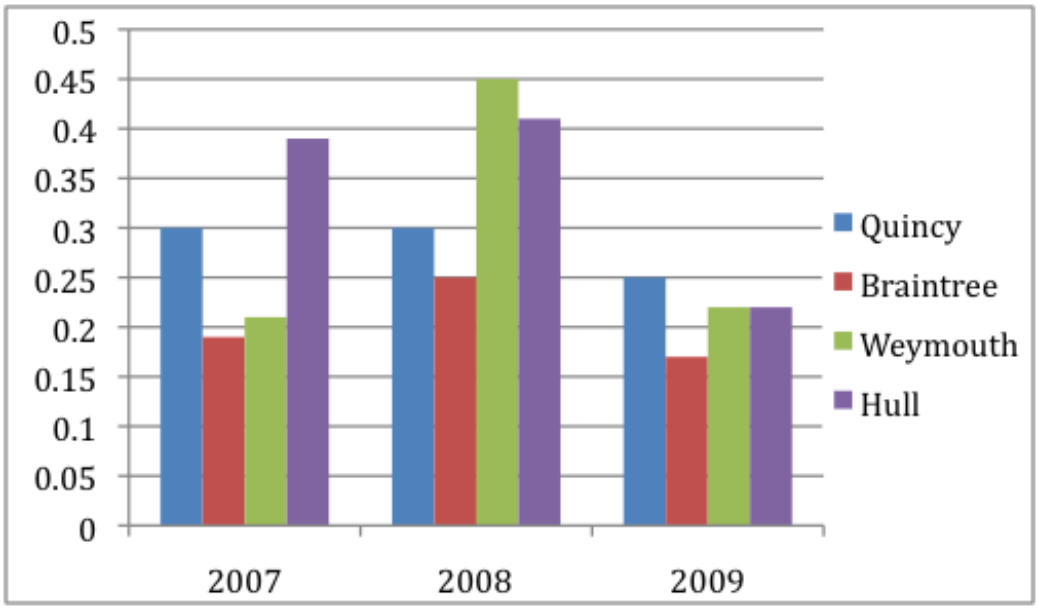
(SOURCE: US CENSUS)

Figure 15: MEDIAN GROSS RENT (2008)



(SOURCE: CENSUS)

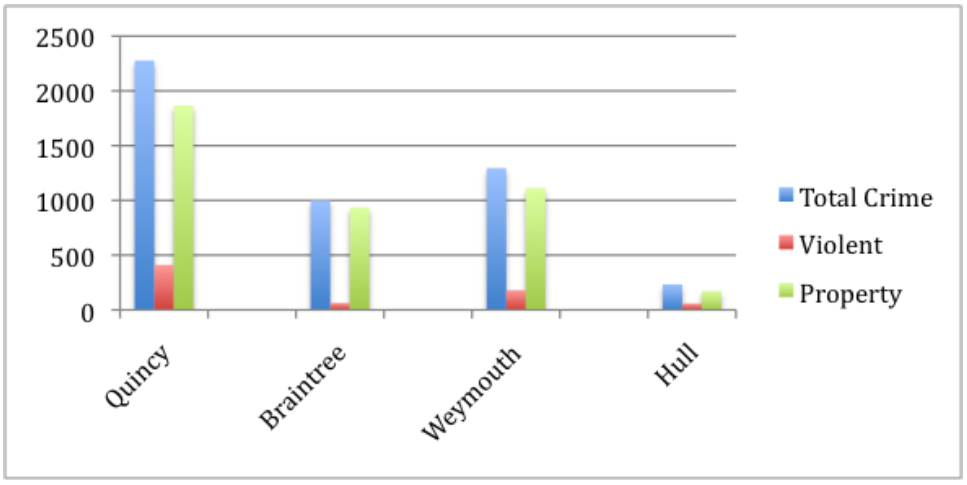
Figure 16: Foreclosure Rate 2007-2008



(SOURCE: FEDERAL RESERVE BANK OF BOSTON, RESEARCH DEPARTMENT)

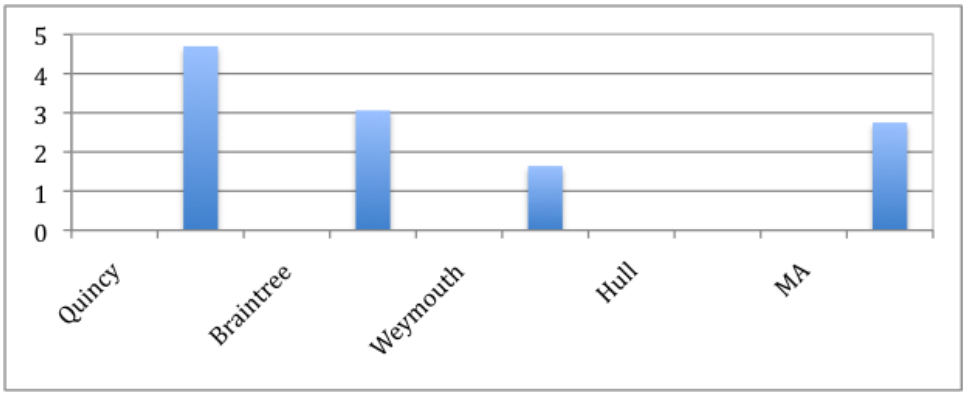
Crime

Figure 17: Total Crime –Violent and Property Crime (2010)



(SOURCE: MASSACHUSETTS CRIME REPORTING UNIT WEB SITE - HTTP://WWW.UCRSTATS.COM/)

Figure 18: Homicide Deaths age adjusted (2009)



(SOURCE: MASSCHIP)

Appendix C: Community Provider Survey

1. How would you identify your geographic service area (town, city, zip code, etc.)?
2. How would you identify the community that you work with?
3. What is healthy about the community you work with?
    a. What is unhealthy?
4. What are the top three areas of concern within the community that you work with?
    a.
    b.
    c.
    d. What are some strategies that could address these concerns?
        i.
        ii.
        iii.
5. What are the top three health concerns within the community you work with?
    a.
    b.
    c.
    d. What are some strategies that could address these concerns?
        i.
        ii.
        iii.
6. What do you feel are the biggest obstacles to health access within the community you work with?
7. What populations would you identify as underserved or underrepresented within the community?
8. What services do you perceive as being most needed within the community?
    a. Which population would most benefit from this service?
9. In what ways is Quincy Medical Center serving the community well?
10. In what ways could Quincy Medical Center serve the community better?
11. What is the number one thing that Quincy Medical Center can do to improve the health and quality of life of the community?
12. Is mental health a primary concern within the community?
    a. What about mental health is a concern?
    b. How might this concern be addressed?
13. Is nutrition a primary concern within the community?
    a. What about nutrition is a concern?
    b. How might this concern be addressed?
14. Is there any other concern that you would like to address?

Appendix D: Focus Group Questions

1. Is there a sense of community where you live?
    a. Why or why not?
2. What is healthy about your community?
3. What are the top three areas of health concern within the community?
    a. What are some strategies that could address these concerns?
4. What populations would you identify as underserved or underrepresented within the community?
5. What do you feel are the biggest obstacles to health access for your community?
6. Is mental health a major issue within your community?
    a. Do you know a lot of people with mental health issues?
7. Do you have issues with chronic disease (Chronic disease are health issues like diabetes, hypertension, obesity which require continuous monitoring and treatment)?
    a. How do these issues affect the way you live work play? (to the moderator look for possible issues that chronic disease causes – asthma preventing school attendance, diabetes hindering job prospects)
8. Do you have or do you know of anybody with issues of Dementia or Alzheimer?
    a. Do you see this issue as increasing, decreasing or staying the same?
9. When was the last time you had dental work done?
    a. What was it?
10. How often do you have your teeth cleaned and checked?
11. How easy or hard is it to access dental health resources/services?
12. What services do you perceive as being most needed within the community?
13. In what ways is Quincy Medical Center serving the community well?
14. In what ways could Quincy Medical Center serve the community better?
15. What is the number one thing that the Quincy Medical Center can do to improve the health and quality of life of the community?

Appendix E: References

[1] Massachusetts Department of Public Health Bureau of Health Information, Statistics, Research and Evaluation - Massachusetts Births 2009.
[2] Center for Disease Control and Prevention, *Chronic Disease Prevention* (http://www.cdc.gov/program/performance/fy2000plan/2000vii.htm)
[3] Ibid.
[4] Centers for Disease Control and Prevention, *High Blood Pressure and Cholesterol Improved care could save more than 100,000 lives a year* (www.cdc.gov/vitalsigns/pdf/2011-02-vitalsigns.pdf)
[5] Ibid.
[6] AARP Public Policy Institute, *The Many Faces of Chronic Disease,* Public Policy Institute, (2009).
[7] CDC.gov, Chronic Diseases: At A Glance (2009).
[8] S. Lawrence Kocot, Mark B McClellan, *Achieving Better Chronic Care at Lower Costs Across the Health Care Continuum for Older Americans,* Engelberg Center for Health Care Reform (2010)
[9] Ibid.
[10] W. M. Hopman, *Associations between chronic disease, age and physical and mental health status,* Chronic Diseases in Canada 29, 2 (2009)
[11] Ibid.
[12] Cynthia L. Ogden, et al. *Prevalence of Obesity in the United States,* 2009–2010, NCHS Data Brief 82 (2012).
[13] Center for Disease Control, Overweight and Obesity, Adult Obesity facts.
[14] Cynthia L. Ogden, et al. *Prevalence of Obesity in the United States,* 2009–2010, NCHS Data Brief 82 (2012).
[15] Center for Disease Control, Overweight and Obesity, Adult Obesity facts.
[16] Ibid.
[17] Ibid.
[18] Cynthia L. Ogden, et al. *Prevalence of Obesity in the United States,* 2009–2010, NCHS Data Brief 82 (2012).
[19] SurgeonGeneral.gov, Overweight and Obesity: Health Consequences.
[20] National Institute on Aging Press Office, *Obesity threatens to cut U.S. life expectancy, new analysis suggests,* National Institute on Aging (2005)
[21] Ibid.
[22] Cawley J, Meyerhoefer C. *The medical care costs of obesity: an instrumental variables approach.* J Health Econ 31:219-30. (2012)
[23] Harvard School of Public Health, The Obesity Prevention Source, Economic Costs, http://www.hsph.harvard.edu
[24] HealthyPeople.gov, Access to Health Services, (http://www.healthypeople.gov/2020/LHI/accessCare.aspx).
[25] Ibid.
[26] Ibid.
[27] Ibid.
[28] IOM America's Uninsured Crisis: Consequences for Health and Health Care (2009).
[29] The Cost of Care for the Uninsured (Kaiser FF 2004).
[30] Data not graphed.
[31] Joseph R. Betancourt, Alexander R. Green and J. Emilio Carrillo, *Cultural Competence In Healthcare: Emerging Frameworks and Practical Approaches,* The Commonwealth Fund Field Report (2002)
[32] Ibid.
[33] Lesley Russell, Fact Sheet: *Health Disparities by Race and Ethnicity,* Center for American Progress (2010).
[34] Lesley Russell, Easing the Burden *Using Health Care Reform to Address Racial and Ethnic Disparities in Health Care for the Chronically Ill* Center for American Progress (2010).
[35] Timothy Waidmann, Estimating the Cost of Racial and Ethnic Health Disparities, Urban Institute (2009).
[36] Ibid.
[37] Massachusetts Department of Public Health Bureau of Health Information, Statistics, Research and Evaluation - Massachusetts Births 2009
[38] Michael Friedman, *Mental Health and Medicaid Costs: Why Ignoring Mental Health Is Expensive,* Huffington Post, (Feb 2011)
[39] Thomas R. Insel, *Assessing the Economic Costs of Serious Mental Illness,* Am J Psychiatry (2008).
[40] Ibid.
[41] Michael Friedman, *Mental Health and Medicaid Costs: Why Ignoring Mental Health Is Expensive,*
[42] Nicole D. Gillespie, Thomas L. Lenz, *Implementation of a Tool to Modify Behavior in a Chronic Disease Management Program,* Advances in Preventive Medicine 2011 (2011)
[43] Roy C. Baron, Client-Directed Interventions to Increase Community Demand for Breast, Cervical, and Colorectal Cancer Screening, A Systematic Review, Am J Prev Med 35 1s (2008)
[44] Nicole D. Gillespie, Thomas L. Lenz, *Implementation of a Tool to Modify Behavior in a Chronic Disease Management Program,* Advances in Preventive Medicine 2011 (2011)
[45] Lakka TA, Bouchard C, Physical activity, obesity and cardiovascular disease, Handbook of Experimental pharmacology, 170 137-163 (2005)
[46] Lawrence D. Frank, PHD, Martin A. Andresen, MA, Thomas L. Schmid, PHD, *Obesity Relationships with Community Design, Physical Activity, and Time Spent in Cars,* Am J Prev Med 27 2 87-96 (2004)
[47] Joseph A. Durlak, Anne M. Wells, Primary Prevention Mental Health Programs for Children and Adolecents: A Meta-Analytic Review, American Journal of Community Psychology, 25 2 115-152 (1997)
[48] Corrigan, Patrick, How Stigma Interferes With Mental Health Care, American Psychologist, 59(7) (Oct 2004)

Quincy Medical Center
A STEWARD FAMILY HOSPITAL

Steward

Quincy Medical Center
114 Whitwell St.
Quincy, MA 02169