

Community Health Needs Assessment | 2016

Prepared for

Baystate Franklin Medical Center

Adopted by Baystate Health Board of Trustees on Tuesday, November 8, 2016

By

**Partners for a Healthier Community
Collaborative for Educational Services
Pioneer Valley Planning Commission**



Collaborative for Educational Services
Everyone is a learner



Consultant Team

Lead Consultant

Partners for a Healthier Community (PHC), is the Public Health Institute of Western Massachusetts. Our mission is to build measurably healthier communities with equitable opportunities and resources for all through civic leadership, collaborative partnerships, and policy advocacy. We provide skills, expertise and experience to create successful campaigns and systems to improve health and well-being in the Pioneer Valley. Our efforts focus on activities and policy changes that build on community assets while simultaneously increasing community capacity. Partners for a Healthier Community has a strong track record of supporting coalitions, engaging community members and incorporating public policy advocacy in its work. As a Public Health Institute, we provide “backbone” infrastructure support to the region in a variety of areas, including convening of multi-sector partnerships, design and implementation of population-based health programs, research and program evaluation.

Consultants

Community Health Solutions (CHS), a department of the **Collaborative for Educational Services**, provides technical assistance to organizations including schools, coalitions, health agencies, human service, and government agencies. We offer expertise and guidance in addressing public health issues using evidence-based strategies and a commitment to primary prevention. We believe local and regional health challenges can be met through primary prevention, health promotion, policy and system changes, and social justice practices. We cultivate skills and bring resources to assist with assessment, data collection, evaluation, strategic planning and training.

Pioneer Valley Planning Commission (PVPC), is the regional planning agency for the Pioneer Valley region (Hampden and Hampshire Counties), responsible for increasing communication, cooperation, and coordination among all levels of government as well as the private business and civic sectors to benefit the region and to improve quality of life. Evaluating our region – from the condition of our roads to the health of our children – clarifies the strengths and needs of our community and where we can best focus planning and implementation efforts. PVPC conducts data analysis and writing to assist municipalities and other community leaders develop shared strategy to achieve their goals for the region.

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Executive Summary

Introduction and Methods

Baystate Franklin Medical Center (Baystate Franklin) is a 90-bed facility located in Greenfield, Massachusetts that provides high quality inpatient and outpatient services to residents of rural Franklin County and the North Quabbin region. Baystate Franklin is a part of Baystate Health, Inc. which is the not-for-profit parent corporation of a multi-institutional integrated delivery system which includes the following: Baystate Medical Center, Baystate Franklin Medical Center, Baystate Mary Lane Hospital, Baystate Wing Hospital, Baystate Noble Hospital, Baystate Medical Practices, Baystate Visiting Nurse Association and Hospice and Baystate Health Foundation. In addition to its 12,500 employees, Baystate Health has 1,500 medical staff, 2,000 nurses, 2,000 students including residents, fellows, and medical, nursing and allied health students, and over 900 volunteers. Inpatient services include behavioral health, intensive care, medical-surgical care, and obstetrics/midwifery. Outpatient services include cardiology, emergency medicine, gastroenterology, general surgery, neurology, oncology, ophthalmology, orthopedics, pediatrics, physical medicine & rehabilitation, pulmonology & sleep medicine, sports medicine, vascular surgery, wound care & hyperbaric medicine.

Baystate Franklin is a member of the Coalition of Western Massachusetts Hospitals (“the Coalition”) a partnership between ten non-profit hospitals/insurer in the region. The Coalition formed in 2012 to bring hospitals in western Massachusetts together to share resources and work in partnership to conduct their community health needs assessments (CHNA) and address regional needs. Baystate Franklin worked in collaboration with the Coalition to conduct this assessment. This assessment was conducted to update the findings of the 2013 CHNA so Baystate Franklin can better understand the health needs of the communities it serves and to meet its fiduciary requirement as a tax-exempt hospital.

The assessment focused on Baystate Franklin’s service area, which primarily consists of Franklin County. When identifying the health needs that can be addressed to improve the health of the population, the assessment used the determinants of health framework since it is recognized that these factors contribute substantially to population health. The prioritized health needs identified in the CHNA include community level social and economic issues that impact health, barriers to accessing quality health care, and specific health conditions and behaviors within the population. The assessment included analysis and synthesis of 1) a variety of social, economic and health data; 2) findings from recent western Massachusetts community health assessment reports; and 3) information from four focus groups and 25 key informant interviews, some of which were conducted specifically for Baystate Franklin and others which were conducted by other Coalition members and were relevant to this CHNA. Community and stakeholder input was also gathered through a preliminary CHNA findings review meeting and a community listening session. Vulnerable populations were identified using a health equity framework with available data. Information from this CHNA will be used to inform the updating of Baystate Franklin’s hospital specific community

benefits implementation strategy as well as to inform the Coalition's regional efforts to improve health.

Findings

Below is a summary of the prioritized community health needs identified in the 2016 CHNA.

Community level social and economic determinants that impact health

A number of social, economic, and community level factors were identified as prioritized community health needs in Baystate Franklin's 2013 CHNA and continue to impact the health of the population in Baystate Franklin's service area. Social, economic, and community level needs identified in this CHNA include:

- **Lack of resources to meet basic needs** – Many Baystate Franklin service area residents struggle with *poverty* and *low levels of income*. Focus group participants and key informant interviewees identified poverty as a factor that impacts overall health. Nearly a third of the population lives in households with incomes at or below 200% of the federal poverty level, an indicator which offers a glimpse of individuals who are low income and may lack resources to meet basic needs. Poverty rates are also high among children. Nine percent of service area residents do not have a high school diploma. *Low levels of education* contribute to unemployment and the ability to earn a livable wage. Income also plays a role in the accessibility of childcare. *Affordable childcare* was identified as a need in this service area.
- **Housing needs** – Focus group participants and key informant interviewees identified *housing insecurity* as a key contributor to poor health. More than a third of the population is housing cost burdened, meaning more than 30% of their income goes towards housing. A lack of affordable housing leads to increased stress and can often force families to prioritize housing costs over factors that can influence health, such as purchasing healthy food or medications. It can also contribute to *homelessness*. In western Massachusetts as a region, many individuals and families face homelessness. In addition, older housing combined with limited resources for maintenance can lead to *poor housing conditions*, which negatively impact the health of residents.
- **Transportation** – Regional public health officials interviewed for the 2016 CHNA identified increased transportation options as an overall community need for the region. Individuals who do not own a vehicle face difficulties accessing educational and employment options or participating in community-based programs that promote health, such as exercise and nutrition programs, or other activities that promote social connection. In addition, for those who do own vehicles, limited resources may encourage people to drive unsafe or uninsured vehicles.
- **Food insecurity and food deserts** – *Food insecurity* continues to impact the ability of many Baystate Franklin service area residents to access healthy food. The overall food insecurity rate in Franklin County is 10% and the rate among children is 17%. In addition, the Baystate Franklin service area has several *food deserts*, which are areas where low-income people have limited access to grocery stores.

Barriers to Accessing Quality Health Care

The lack of affordable and accessible medical care was identified as a need in the 2013 CHNA and continues to be a need today. The following barriers were identified.

- **Limited availability of providers** – Baystate Franklin service area residents experience challenges accessing care due to the shortage of providers. Seventeen percent of county residents live in a healthcare professional shortage area, and the entire service area is considered a medically underserved area, with the eastern portion designated under a Governor’s exception. Focus group participants reported long wait times for urgent care and wellness visits, prompting them to frequent local clinics and emergency room departments. Focus group participants and key informant interviewees overwhelmingly reported a need for increased access for both mental health and addiction services for acute, maintenance, and long-term care.
- **Insurance related challenges** - Focus group participants identified the cost of co-pays and some services that are not covered as a barrier to accessing the care and services needed to maintain their health. Key informant interviewees also identified policies for MassHealth that impact availability of providers and services.
- **Lack of transportation** - Transportation arose as a barrier to care among interviewees in the 2013 CHNA, and it continues to be a major barrier to accessing care as cited in key informant interviews and focus groups conducted for the Coalition for the 2016 CHNA. These challenges relate to frequency and range of transit services, primarily for low-income populations.
- **Lack of care coordination** – Increased care coordination continues to be a need in the community. Areas identified in focus groups and interviews include the need for coordinated care between providers in general, a particular need for increased coordination to manage co-morbid substance use and mental health disorders, and the need for health care providers to coordinate care with community-based organizations.
- **Health literacy and cultural humility** – The need for health information to be understandable and accessible was identified in this assessment. Data from focus groups indicate the need for increased *health literacy*, including understanding health information, types of services and how to access them, and how to advocate for oneself in the healthcare system. In addition, focus participants called for provider education about how to clearly communicate with patients regarding medical information. Increased training in *cultural humility* as a means to deliver *culturally sensitive care* was also identified as a prioritized health need in this assessment. Public health leaders interviewed for this CHNA recommended increased training in this area in order for health care providers to serve the needs of increasingly diverse community residents.

Health

- **Chronic health conditions** – High rates of *obesity, cardiovascular disease, diabetes, asthma, chronic pulmonary obstructive disease* and associated morbidities impact Baystate Franklin service area residents. Several of these conditions were prioritized in the 2013 CHNA, including obesity and pediatric asthma. An estimated 54% of adults in the population are overweight or obese with high rates also observed among children. High hospitalization rates for cardiovascular disease (CVD) and stroke in some communities, as well as the high prevalence of conditions that increase the risk of CVD (e.g. hypertension and high cholesterol) indicate that CVD is an area of need in the service area. Nearly one in five Franklin County residents has either prediabetes or diabetes, and a number of communities within the service area have high diabetes hospitalization rates, which are a measure of

severe morbidity. Baystate Franklin service area residents are also impacted by asthma. Children are particularly impacted, with prevalence rates over 16% observed in Rowe, Leverett and Athol. In many communities, the ER visit rate for COPD was high, and in Orange it was more than double that of the state. Older adults experience high rates of many of these conditions, including heart disease, hypertension, diabetes, and COPD. Children are particularly impacted by obesity and asthma.

- **Need for increased physical activity and healthy diet** - The need for increased access to *physical activity* programs and low-cost fresh fruits and vegetables was identified as a need for Baystate Franklin residents. Low rates of physical activity and unhealthy eating contribute to high rates of chronic disease and also impact mental health.
- **Mental health and substance use disorders** - Key informant interviewees and focus group participants identified substance use and mental health as the most urgent health needs impacting the area. *Substance use disorders* overall and opioid use were of particular concern. *Opioid use disorder*, which has been declared a public health emergency in Massachusetts, is impacting Franklin County residents with fatality rates higher than that of the state. *Tobacco* use remains high with an estimated 20% of adults that smoke. Youth, and in particular LGBTQ youth, are disproportionately impacted by with mental health and substance use issues. Older adults also experience high rates of depression, with focus group participants noting social isolation, loss of independence and the impact of chronic and age-related illnesses as contributing factors.
- **Infant and perinatal health risk factors** - Infant and perinatal health factors impact Baystate Franklin service area residents. *Smoking during pregnancy* was identified as a priority health area in the 2013 CHNA, and the rates continue to be high. The need for increased utilization of *prenatal care* was identified in this CHNA. Prenatal care and smoking during pregnancy impact rates of adverse birth outcomes. Drug use among women during pregnancy and neonatal abstinence syndrome was also cited as a concern.
- **Sexual health** - *Teen pregnancy* rates were identified as a concern in the 2013 CHNA and continue to be an issue in Franklin County. The teen birth rate is more than double that of the state.

Vulnerable Populations

Available data for this assessment indicate that **children and youth; older adults;** some communities of color, particularly **Latinos and Blacks; LGBTQ youth;** and individuals with **low income** levels, those living in **poverty**, and those who are **homeless** are disproportionately impacted by poor health when compared to that of the general population in the Baystate Franklin service area.

Overall, more data is needed to understand the unique factors that impact the health of each of these vulnerable populations.

Summary

The Baystate Franklin Medical Center service area continues to experience many of the same prioritized health needs identified in Baystate Franklin's 2013 CHNA. Social and economic challenges experienced by the population in the service area contribute to the high rates of chronic conditions and other health conditions identified in this needs assessment. These social and economic factors also contribute to the health disparities observed among vulnerable populations, which include children/youth, older adults, Latinos, Blacks, and LGBTQ youth. Low-income levels, poverty, and homelessness have also been connected to poorer health outcomes. Additional data is needed to better understand the needs of these populations in order to reduce inequities. The Baystate Franklin service area population continues to experience a number of barriers that make it difficult to access affordable quality care, some of which are related to the social and economic conditions in the community, and others which relate to the healthcare and insurance system. Mental health and substance use disorders were consistently identified as top health conditions impacting the community, and the inadequacy of the current systems of care to meet the needs of individuals impacted by these disorders arose as an important issue that needs to be addressed. The opioid crisis was identified as a particular concern. Progress has been made to address some of the prioritized health needs previously identified, such as teen pregnancy and childhood obesity; however, rates remain high and work needs to be continued.

Introduction

About Baystate Franklin Medical Center

Baystate Franklin Medical Center (Baystate Franklin) is a 90-bed facility located in Greenfield, Massachusetts (40 miles north of Springfield near the Vermont border) that provides high quality inpatient and outpatient services to residents of rural Franklin County and the North Quabbin region. Baystate Franklin is a part of Baystate Health, Inc. which is the not-for-profit parent corporation of a multi-institutional integrated delivery system which includes the following: Baystate Medical Center, Baystate Franklin Medical Center, Baystate Mary Lane Hospital, Baystate Wing Hospital, Baystate Noble, Baystate Medical Practices, Baystate Visiting Nurse Association and Hospice and Baystate Health Foundation. In addition to its 12,500 employees, Baystate Health has 1,500 medical staff, 2,000 nurses, 2,000 students including residents, fellow, and medical, nursing and allied health students, and over 900 volunteers. Inpatient services include behavioral health, intensive care, medical-surgical care, and obstetrics/midwifery. Outpatient services include cardiology, emergency medicine, gastroenterology, general surgery, neurology, oncology, ophthalmology, orthopedics, pediatrics, physical medicine & rehabilitation, pulmonology & sleep medicine, sports medicine, vascular surgery, wound care & hyperbaric medicine.

Mission Statement: To improve the health of the people in our communities every day with quality and compassion.

Community Benefits Mission Statement: To reduce health disparities, promote community wellness and improve access to care for vulnerable populations.

The Coalition of Western Massachusetts Hospitals/Insurer

Baystate Franklin Medical Center is a member of the Coalition of Western Massachusetts Hospitals (Coalition). The Coalition is a partnership between ten non-profit hospitals/insurer in western Massachusetts: Baystate Medical Center, Baystate Franklin Medical Center, Baystate Mary Lane Hospital, Baystate Noble Hospital, Baystate Wing Hospital, Cooley Dickinson Hospital, Holyoke Medical Center, Mercy Medical Center (a member of Sisters of Providence Health System), Shriners Hospitals for Children – Springfield, and Health New England, a local health insurer whose service area covers the four counties of western Massachusetts. The Coalition formed in 2012 when seven western Massachusetts hospitals joined together to share resources and work in partnership to conduct their community health needs assessments (CHNA) and address regional needs. The Coalition has since expanded to ten members and is currently conducting collaborative work to address mental health needs in the region.

Community Health Needs Assessment (CHNA)

Improving the health of western Massachusetts is a shared mission across the Coalition of Western Massachusetts Hospitals. To gain a better understanding of these needs, and as required by the 2010 Patient Protection and Affordable Care Act (PPACA), Coalition members conducted community health needs assessments (CHNA) in 2012-2013. Integral to this needs assessment was the participation and support of community leaders and representatives who provided input through steering committee participation, a community survey, and stakeholder interviews and focus groups. Based on the findings of the CHNA, and as required by the PPACA, the hospitals developed community benefits implementation strategies to address select prioritized needs.

The 2016 CHNA was conducted to update the 2013 CHNA findings so that Baystate Franklin can better understand the health needs of the community it serves and to meet their fiduciary requirement as a tax-exempt hospital. The PPACA requires tax-exempt hospitals to “conduct a Community Health Needs Assessment [CHNA] every three years and adopt an implementation strategy to meet the community health needs identified through such assessment.” Information from this CHNA will be used to update the community benefits implementation strategies developed in 2013 and to identify regional needs and corresponding strategies to address these needs.

Methodology for 2016 CHNA

Social and Economic Determinant of Health Framework

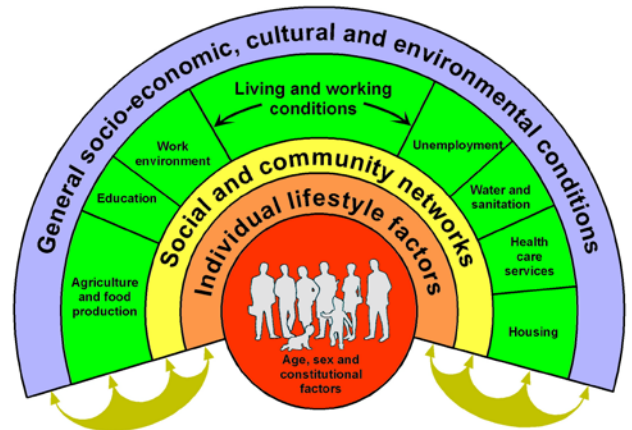
The 2016 CHNA was conducted using a **determinant of health framework** as it is recognized that social and economic determinants of health contribute substantially to population health. It has been estimated that less than a third of our health is influenced by our genetics or biology¹. Our health is largely determined by the social, economic, cultural, and physical environments that we live in and healthcare we receive (Figure 1.).

Among these “modifiable” factors that impact health, social and economic factors are estimated to have the greatest impact. The County Health Rankings model (Figure 2), developed by the Robert Wood Johnson Foundation and the University of Wisconsin Population Health Institute, estimates how much these modifiable factors contribute to health, based on reviews of the scientific literature and a synthesis of data from a number of national sources. It is estimated that social and economic factors account for 40% of our health, followed by health behaviors (30%), clinical care (20%), and the physical environment (10%). Many health disparities occur as a result of inequities in these **determinants of health**. According to the County Health Rankings, Franklin County ranked 8th of the 14 counties in Massachusetts for health outcomes and 7th for health factors.² See Appendix V for County Health Rankings data.

Assessment Methods

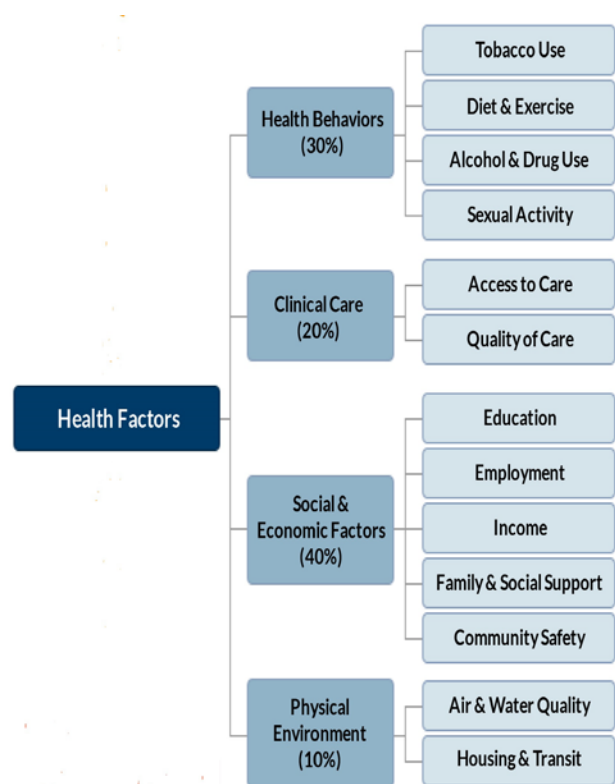
The primary 2016 CHNA goals were to update the list of prioritized community health needs identified in the 2013 CHNA conducted by Verité Healthcare Consulting and to the extent possible, identify potential areas of action. The prioritized health needs identified in this CHNA include **community level social and economic determinants that**

Figure 1. Determinants of Health



Source: Dahlgren & Whitehead, 1993

Figure 2. County Health Rankings Model - Health Factors



Source: County Health Rankings

impact health, barriers to accessing quality health care, and specific health conditions and behaviors within the population. Assessment methods included:

- analysis of social, economic and health **quantitative data** from MA Department of Public Health, the U.S Census Bureau, the Centers for Disease Control and Prevention [CDC] Behavioral Risk Factor Surveillance System [BRFSS], the County Health Ranking Reports, Community Commons, and a variety of other data sources;
- analysis of findings from one (1) **focus groups** and eight (8) **key informant interviews** conducted specifically for Baystate Franklin (Appendix II);
- analysis of findings of an additional three focus groups and 17 key informant interviews conducted for other Coalition members and considered relevant for this CHNA (Appendix II);
- review of seven existing assessment reports published since 2013 that were completed by community and regional agencies serving Franklin County.

The assessment focused on county-level data and community-level data as available. In some instances, data constraints related to accessibility and availability limited analyses to highlighted communities chosen by Baystate Franklin. In these instances, analyses focused on Greenfield, Montague, and Orange. Other communities were included as data was available and analysis indicated an identified health need for that community.

To the extent possible given data and resource constraints, vulnerable populations were identified using information from focus groups and interviews as well as quantitative data stratified (or broken down) by race/ethnicity; age with a focus on children/youth and older adults; and LGBTQ (lesbian/gay/bi-sexual/transgender/queer) populations.

Prioritization Process

A systematic process was conducted to develop a list of prioritized community health needs. Community level social and economic determinant of health factor related needs and access to care needs were assessed using quantitative and qualitative data gathered for this CHNA. Health conditions were identified based on consideration of the following: magnitude of impact (low, moderate, high), severity of impact (low, moderate, high), populations impacted (including vulnerable populations), and rates compared to a referent (generally the state rate). Prioritized health needs were those that had the greatest combined magnitude and severity or that disproportionately impacted vulnerable populations in the community.

Community and Stakeholder Engagement

The input of the community and other important regional stakeholders was prioritized by the Coalition as an important part of the 2016 CHNA process. Below are the primary mechanisms for community and stakeholder engagement (see Appendix I for list of community representatives and other stakeholders included in process)

- A **CHNA Steering Committee** was formed that included representatives from each hospital/insurer Coalition member as well as public health and community stakeholders from

each hospital service area. Stakeholders on the Steering Committee included local and regional public health and health department representatives; representatives from local and regional organizations serving or representing medically underserved, low-income or minority populations; and individuals from organizations that represented the broad interests of the community. When identifying community and public health representatives to participate, a stakeholder analysis was conducted by the Coalition and Consultants to ensure geographic, sector (e.g. schools, community service organizations, healthcare providers, public health, and housing) and racial/ethnic diversity of community representatives. By including these stakeholders on the Steering Committee, the community and public health representatives had input on the CHNA process used to identify and prioritize community health needs, CHNA findings, and dissemination of information. Assessment methods and findings were modified based on the Steering Committee feedback. The Steering Committee met monthly from October 2015 – June 2016.

- **Key informant interviews** and **focus groups** were conducted to both gather information that was utilized to identify priority health needs and engage the community. Key informant interviews were conducted with health care providers, health care administrators, local and regional public health officials, and local organizational leaders that represent the broad interests of the community or color that serve medically underserved, low-income or communities of color in the service area. Interviews with the local and regional public health officials were used to identify current and emerging high priority health areas and healthcare and community factors that contribute to health needs. Focus group participants included individuals representing the broad interests of the community, including community organizational representatives, vulnerable population community members (e.g. low-income, people of color) and other community stakeholders. Topics included: maternal and child health, mental health and substance use, behavioral health and emergency department care, and health care access and linkages to faith-based communities. Key informant interviews and focus groups were conducted from February 2016 – April 2016.
- A **preliminary CHNA findings review meeting** was held with hospital and community representatives to vet findings and obtain input on whether findings resonated with their understanding of the community and whether any important areas were missing. Prioritized health needs and presentation of data were revised based on feedback from this meeting.
- A **community listening session** was held to vet the revised list of prioritized health needs with over 50 community members representing the following sectors: health care, human service, education, substance use treatment and recover, elder services, substance use prevention, youth development, transportation, emergency preparedness, the faith community, and more. Modifications were made based on findings from this session. At this session, attendees also provided information on existing resources in the community to address prioritized health needs.

Limitations and Information Gaps

The assessment focused on community determinant areas for which data was available. Given time, resource and data availability limitations, our analysis was not able to examine every health and community issue. Much of the quantitative data gathered for this report was provided by the

Massachusetts Department of Public Health (MDPH) as part of a pilot effort to provide data for community health needs assessments. Challenges were experienced as this was their first effort to compile this data across multiple divisions in the short timeframe needed for this assessment. MDPH was very supportive in pulling together supplemental data, and this experience will inform the continued development of data for future CHNAs. The assessment is based on best available data given these time and resource constraints.

This assessment utilized both 2012 and 2013 age-adjusted hospitalization and emergency room (ER) data from MDPH. Age-adjusted rates are utilized when comparing rates between geographic locations because differing age distributions can affect the rates and result in misleading comparisons. This data was available at the community level if counts were 11 or higher. MDPH suppresses data for counts less than 11 because of data instability and confidentiality concerns. The 2012 data included information on highlighted communities (Greenfield, Montague, and Orange) counties, and the state. The 2013 dataset included data for all counties and communities within Baystate Franklin's service area, unless it was suppressed. 2013 data was used to identify communities with high rates within the service area. The Franklin Regional Council of Governments reports that many residents of Buckland are included in numbers reported to MDPH as Shelburne due to the shared zip code of the two towns. Rates presented for small communities should be interpreted with the understanding that because estimates for these communities have wide confidence intervals and the potential to vary widely. Hospitalization and ER rates are based on the number of hospitalizations and ER visits reported to the state. They may include an individual utilizing these healthcare services on multiple instances within the timeframe examined.

This assessment also utilized self-reported survey data from the Behavioral Risk Factor Surveillance System (BRFSS), Youth Risk Behavior Survey (YRBS), and Prevention Needs Assessment Survey (PNAS).

Much of the social and economic data was obtained through Community Commons (CC), which is an online needs assessment tool that provides up-to-date data from a number of federal and non-profit data sources. The tool allows for customized data for a hospital service area based on county or zip code. As Baystate Franklin's hospital service area was defined by zip code, and zip codes do not always align with community borders (e.g. some zip codes cross town/city borders) the aggregate data from the Hospital service area may differ somewhat slightly than the service area defined by community borders.

Limited data was available to assess some vulnerable populations. We were able to identify health needs among some vulnerable populations; however, more data is needed. We have included emergent health needs that were identified primarily through qualitative data, though additional data may be needed to better understand the impact of the need or potential actions to address the need.

Hospital Service Area

The service area for Baystate Franklin includes the 26 communities in Franklin County, as well as the Town of Athol, which is located in Worcester County (Table 1). The region is fairly rural, and borders the state of Vermont to the north. The total population of the service area is just over 80,000. There is a mix of rural and urban populations as defined by the U.S. Census Bureau (Figure 3). Urban areas consist of census tracts and/or blocks that meet the minimum population density requirement (2,500-49,999 for urban clusters and over 50,000 for urbanized areas) or are adjacent and meet additional criteria. The main population centers in the service area include Greenfield (a city of about 17,000 people), and the Athol-Orange area (population of about 18,000) located approximately 20 miles to the east of Greenfield. Many communities in the area are nestled among hilly, forested terrain, and have populations under 2,000. The median age in this service area is higher than the state's at 45 years old (ACS, 2010-2014). Less than six percent of the population identifies as either Black or African American, Asian, American Indian or some other race. Those who identify as Hispanic and Latino population comprise 4% of the total population.

Economic indicators vary somewhat between the two population centers in the Baystate Franklin service area. The median household income in Franklin County is just over \$54,000 (\$13,000 less than the state). The overall poverty rate in Franklin County is similar to that of the state at 12%, and the child poverty rate of 16% is slightly higher than that of the state (ACS, 2010-2014). Athol is more economically depressed, with an overall poverty rate of 17% and a child poverty rate of 28%, almost double the state rate of 15%. Approximately 92% of adults over the age of 25 hold a high school diploma and over 34% hold a bachelor's degree or higher. In Athol, these numbers are lower at 85% and 15% respectively. The unemployment rate in February 2016 was comparable to the state's rate of 4% (CC, U.S. Department of Labor, Bureau of Labor Statistics). The unemployment rate is based on the number of people who are either working or actively seeking work. Major employers in the region include the health care and social assistance industry, as well as the education, retail and manufacturing industries.³ The area is served by a regional transit (bus) system that connects population and employment centers within the region. Paratransit service is also available for people with disabilities within $\frac{3}{4}$ mile of a fixed route to facilitate access to medical care. Daily train service provides access to larger cities to the south, such as Springfield and Hartford.

The general sociodemographic characteristics of Baystate Franklin's service area are provided in Table 2.

Table 1. Communities in Baystate Franklin Service Area

2014 Population Estimate	
Franklin County	
Ashfield	1,731
Bernardston	2,113
Buckland	1,874
Charlemont	1,246
Colrain	1,656
Conway	1,887
Deerfield	5,054
Erving	1,788
Gill	1,496
Greenfield	17,368
Hawley	331
Heath	700
Leverett	1,856
Leyden	718
Montague	8,325
New Salem	1,000
Northfield	3,012
Orange	7,713
Rowe	387
Shelburne*	1,883
Shutesbury	1,770
Sunderland	3,679
Warwick	769
Wendell	871
Whately	1,515
Worcester County	
Athol	11,621
Total Service Area	82,363

Source: Population Division, U.S. Census Bureau, <http://www.census.gov/popest/index.html>

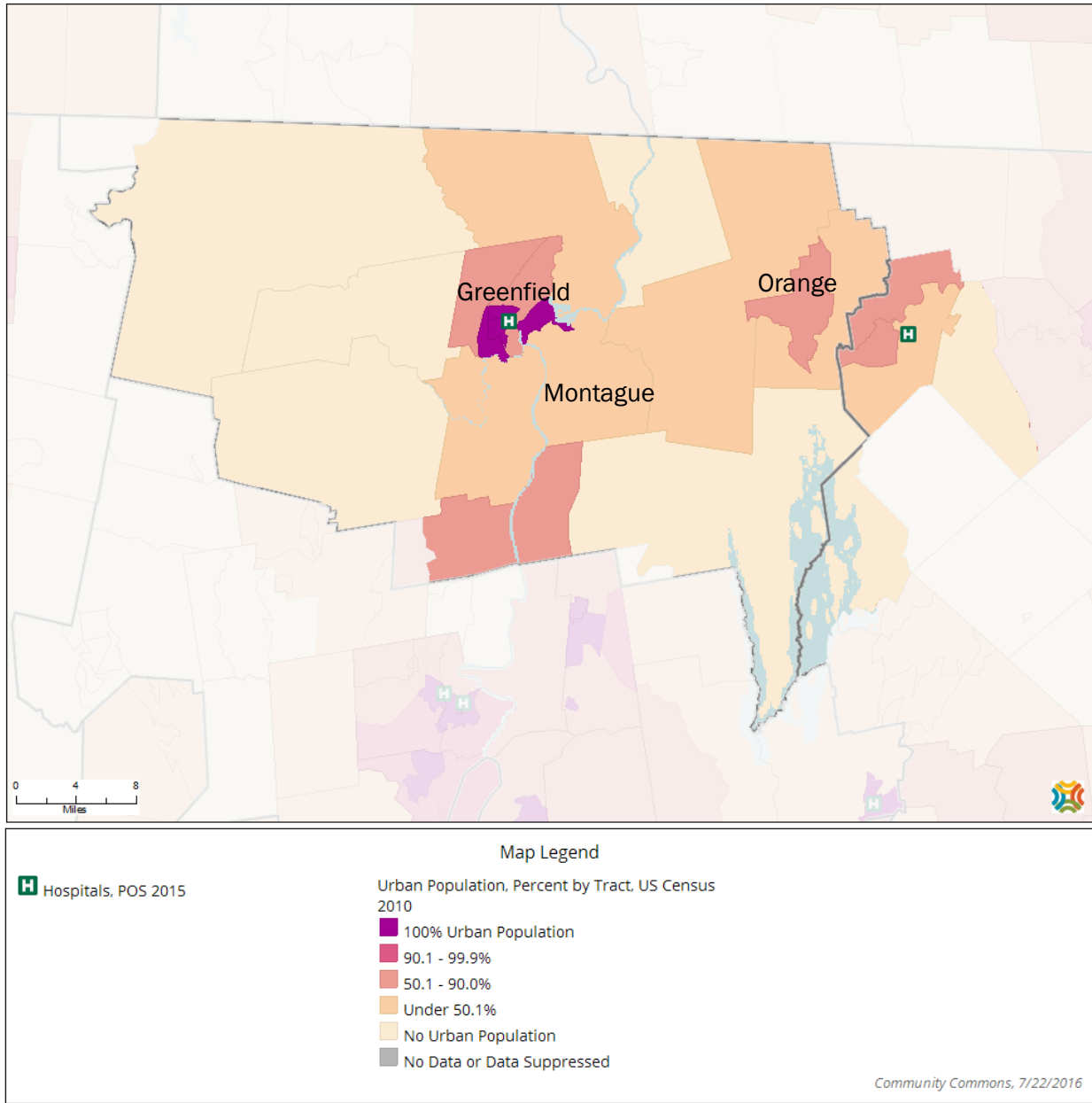
**The following villages are a part of service area and are subsections of communities in the above list: Lake Pleasant, Millers Falls, Montague Center, Shelburne Falls, South Deerfield, and Turners Falls

Table 2. Sociodemographic Characteristics of Baystate Franklin Service Area

Sociodemographic Characteristic	Baystate Franklin Service Area*	Franklin County	Greenfield
Total population	82,363	71,300	17,484
Age			
Median age (years)	NA	44.9	42.8
Under 5 years	4.6%	4.6%	5.9%
5 to 17 years	14.7%	14.3%	12.7%
18 to 44 years	31.5%	64.4%	64.3%
64 and over	16.3%	16.7%	17.1%
Race and Ethnicity			
One race	97.9%	97.8%	97.7%
White	94.1%	94.1%	92.8%
Black or African American	1%	1.1%	1.8%
American Indian and Alaska Native	0.3%	0.3%	0.1%
Asian	1.6%	1.7%	1.8%
Native Hawaiian and Other Pacific Islander	0%	0.0%	0.1%
Some other race	1%	0.7%	1.1%
Two or more races	2.1%	2.2%	2.3%
Hispanic or Latino origin (of any race)	4%	3.5%	6.1%
White, not Hispanic or Latino	NA	91.8%	88.9%
Language Spoken at Home (population over 5)			
Speak language other than English at home	NA	6.2%	9.0%
Educational Attainment			
Population 25 years and over	60,931	52,063	12,821
Less than high school graduate	9.1%	8.1%	8.5%
High school graduate (includes equivalency)	NA	27.6%	32.1%
Some college or associate's degree	NA	29.9%	32.3%
Bachelor's degree or Higher	NA	34.3%	27.1%
Income			
Median income - individual	NA	\$27,360	\$24,699

Source: U.S. Census, ACS, 2010-2014, *CC, ACS 2010-2014

Figure 3. Urban Population in the Baystate Franklin Service Area



Source: CC, 2016, U.S. Census Bureau, Decennial Census 2010

Prioritized Health Needs of the Community

The following are the prioritized health needs identified for Baystate Franklin's service area. The prioritized health needs of the community served by Baystate Franklin are grouped into three categories: (I) community level social and economic determinants that impact health, (II) barriers to accessing quality health care, and (III) health conditions and behaviors.

I. Community Level Social and Economic Determinants that Impact Health

Below are the community level social and economic determinants of health that impact Baystate Franklin's service area, many of which were identified as prioritized community health needs in Baystate Franklin's 2013 CHNA and continue to contribute to the health challenges experienced in its service area.

Lack of Resources to Meet Basic Needs

In Baystate Franklin's service area, many residents struggle with **poverty** and **low levels of income**. The connections between poor health and poverty, low levels of income, and access to fewer resources are well established. Low-income individuals are more likely to be negatively impacted by the chronic stress associated with challenges in securing basic necessities that impact health, such as housing, food, and transportation.

The median family income of \$68,965 in Franklin County is almost 20% lower than that of the state (Table 3). Thirteen percent of Baystate Franklin service area residents live in poverty. There are high rates of poverty (over 20%) concentrated in areas of Greenfield, Turners Falls, and Athol (Figure 4). The federal poverty level is extremely low and omits a sizeable portion of the population that is struggling economically. The percent of the population living at or below 200% of the federal poverty level offers a better glimpse of individuals who are low income and may lack resources to meet basic needs. In particular, families that live below 200% of the poverty line likely do not have the resources they need to be economically self-sufficient. An analysis done by the Crittendon Women's Union found that the income needed for a family with 2 adults and 2 children in Franklin County to be self-sufficient in 2010 was \$55,286,⁴ which was higher than the 2010 200% poverty level of \$44,226 for a family of four.⁵ Thirty percent of Baystate Franklin service area residents live in households at or below 200% of the federal poverty level, with rates over 50% in parts of Orange and Greenfield (CC, U.S. Census Bureau, American Communities Survey [ACS], and 2010-2014). Across the 21 interviews and four focus groups conducted for the Baystate Franklin CHNA, poverty was identified as a factor that impacts overall health, access to health care, and access to program and services that promote health.

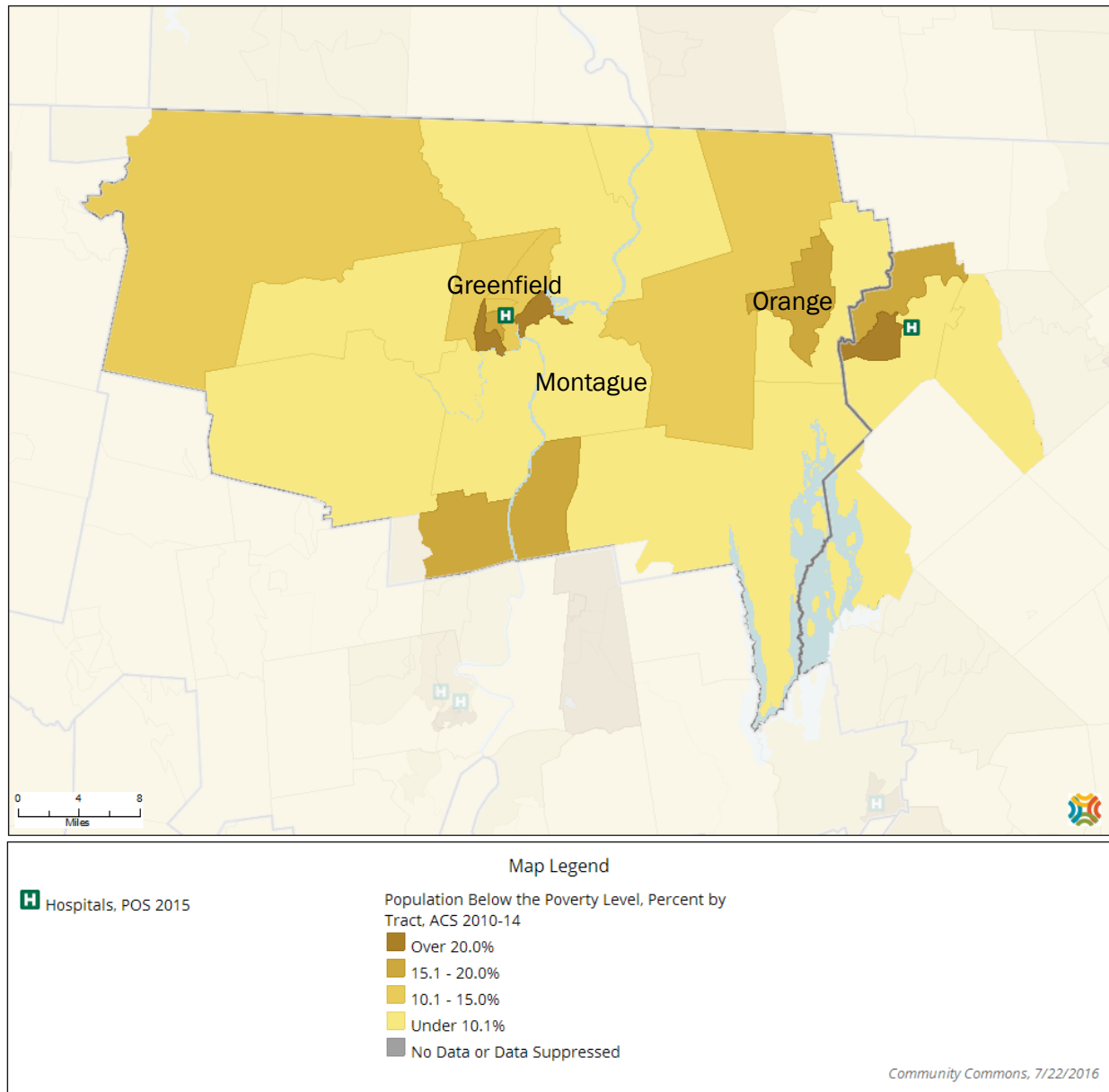
Table 3. Socioeconomic Factors

	Baystate Franklin Service Area	Franklin County	Massachusetts
Median Family Income*	n/a	\$68,965	\$86,132
Unemployment**	4.5%	4.4%	4.6%
Poverty*			
Population living below federal poverty level	12.5%	11.9%	11.6%
Population living below 200% of federal poverty level*	30.4%	30.1%	25.0%
Child living below federal poverty level*	17.3%	15.7%	15.1%
Children eligible for free or reduced lunch*	43.6%	41.8%	38.3%
No high school diploma*	9.1%	8.1%	10.5%

Sources: *CC, U.S. Census Bureau ACS 2010-2014; no high school diploma among adults age 25 and older

**CC, US Department of Labor, Bureau of Labor Statistics, March 2016

Figure 4. Baystate Franklin Service Area Poverty Rates



Source: CC, U.S. Census Bureau, ACS, 2010-2014; poverty is below the federal poverty level

Low levels of educational attainment also contribute to availability of resources to meet basic needs for some residents in Baystate Franklin’s service area. Levels of education are strongly correlated with both employment status and the ability to earn a livable wage. Approximately 9% of Baystate Franklin service area residents age 25 and older do not have a high school diploma. Educational attainment is notably lower in portions of Turners Falls, Orange, and Athol, where over 16% of eligible individuals do not have a high school diploma (CC, ACS 2010-2014).

Lack of access to **affordable childcare** is a need in the Baystate Franklin service area that impacts people's availability of resources to meet basic needs. In a 2014 survey of parents living in Franklin, Hampshire, and western Hampden County, only 12% reported that they could pay for childcare with little difficulty. A quarter of parents said that in order to pay for the care of their child(ren), they had to make sacrifices on other spending. In some cases, holding down a job was financially unviable because of the exorbitant cost of childcare, so one fifth of parents chose to stay home to take care of their child rather than work.⁶ Stakeholders at the preliminary CHNA findings review meeting identified childcare as a community need, and regional public health leaders interviewed for this CHNA identified universal child care as a resource that could benefit families in western Massachusetts.

Vulnerable Populations

Children and populations of color are disproportionately impacted by poor socioeconomic status in Franklin County.

- Over 44% of **children** living in the Baystate Franklin service area qualify for free or reduced lunch and 17% live below the poverty level.
- Percent of population without a high school diploma and poverty rates are higher among **Latinos** and **Blacks** (CC, ACS 2010-2014)

Housing Needs

Focus group participants and key informant interviewees identified housing insecurity as a key contributor to poor health.

Housing insecurity was identified as a health need in the 2013 CHNA and continues to impact Baystate Franklin service area residents. Housing cost burden is defined as more than 30% of income going towards housing. Over a third of the population in Baystate Franklin's service area is housing cost burdened, with rates greater than 40% in parts of Greenfield, Whately, Sunderland, and over 45% in Orange and Turners Falls (CC, ACS, 2010-2014). Among renters in Franklin County, 45% are housing cost burdened (CC, ACS, 2010-2014). Lack of affordable housing can contribute to **homelessness** and housing instability, which leads to increased stress and can often force families to prioritize housing costs over factors that can influence health, such as purchasing healthy food and medications. Despite a decrease in overall homelessness in western Massachusetts in recent years, the rates of homeless families have increased. From 2013 to 2015, the number of homeless families increased from 71 to 122 families in Franklin, Hampshire, and Berkshire Counties combined, and as of 2015, there were approximately 10,300 homeless individuals living in western Massachusetts.⁷ In addition, key informant interviewees noted the challenges with follow up care and maintaining active insurance status that are associated with housing instability and frequent relocation. The lack of affordable housing also impacts older adults, and expanding affordable and accessible housing options can help support healthy aging.⁸

Poor housing conditions also impact the health of residents. Older housing combined with limited resources for maintenance can lead to problems (e.g. mold, pest/rodent exposure) that affect asthma and other respiratory illnesses; exposure to environmental contaminants such as lead paint, asbestos, and lead pipes; and safety and accessibility issues for children, elderly or disabled populations. Franklin County has a large older housing stock with 36% of housing built before 1940.

Greenfield and Montague have a greater number of older homes, with over 40% of occupied housing units built before 1940 (U.S. Census Bureau, ACS, 2010-2014).

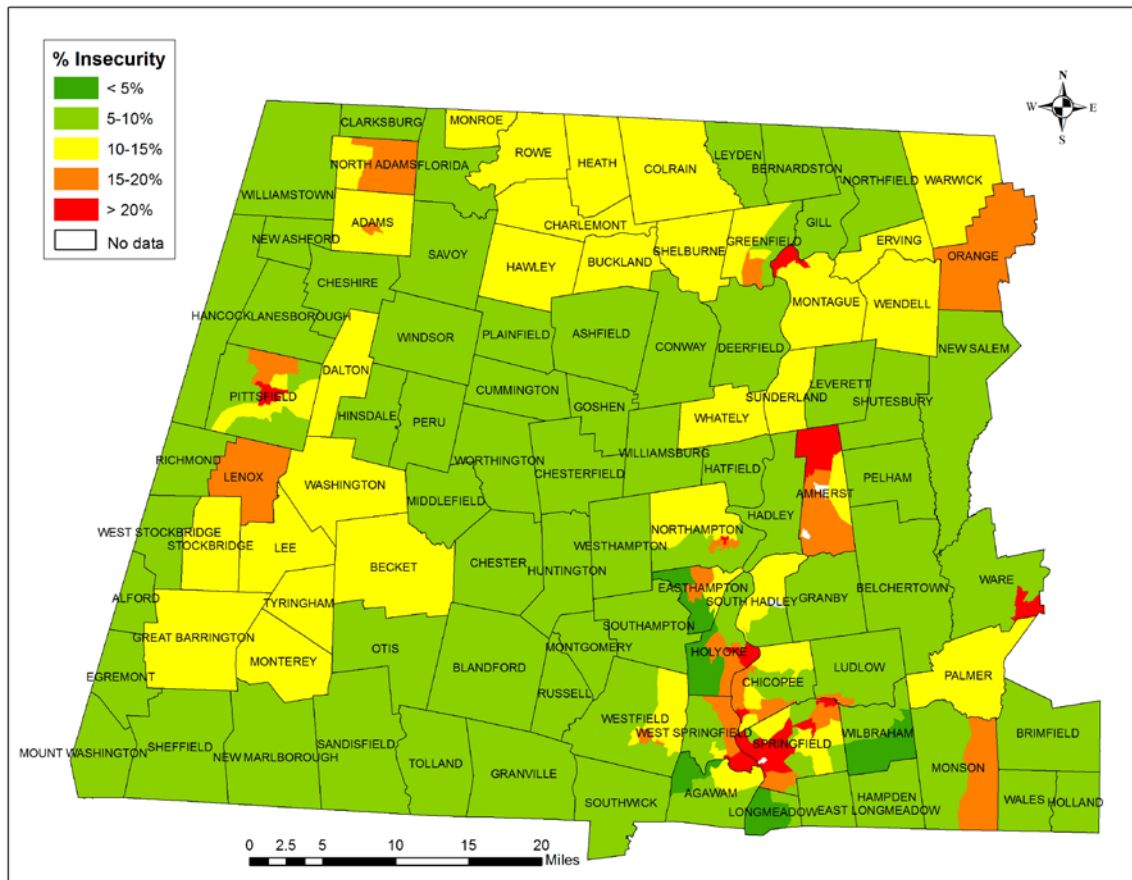
Transportation

Regional public health officials interviewed for the 2016 CHNA identified increased transportation options as an overall community need for the region. Individuals who do not own a vehicle face difficulties accessing educational and employment options, as well as, participating in community-based programs that promote health, such as exercise and nutrition programs; and other activities that promote social connection. In addition, lack of accessible transportation has an impact on health for low-income or elderly populations living in rural areas, where public transportation may have limited routes and frequency of service. An estimated 7% of households in the Baystate Franklin service area do not have vehicles (CC, ACS 2010-2014). In Montague, Greenfield, and Orange 9-11% of households do not have a vehicle (U.S. Census Bureau 2010-2014). In a needs assessment of Franklin, Hampshire, and North Quabbin Regions, lack of transportation was cited as a significant barrier to accessing services.⁹ Although a majority of households in the region own a vehicle, those with limited resources struggle to maintain and utilize their vehicles. The Community Action 2014 community needs assessment survey of people with lower incomes found a major transportation barrier was that limited resources resulted in the use of uninsured and unsafe vehicles.¹⁰

Food Insecurity and Food Deserts

Food insecurity was identified as a health need in the 2013 CHNA and continues to impact the ability of many Franklin County residents to access healthy food. Food insecurity is a measure of inadequate or uncertain access to food, including healthy food, and is estimated based on social and economic characteristics such as income. Eating nutritious food is good for promoting overall health and is important for managing many chronic health conditions. However, not all individuals and communities have equal access to healthy food. The overall food insecurity rate in Franklin County is 10% and the rate among children is 17%.¹¹ As can be seen in a map of food insecure census tracts in western MA (Figure 5), large portions Franklin County have rates of food insecurity greater than 10%, and Orange and parts of Greenfield have rates over 15%.

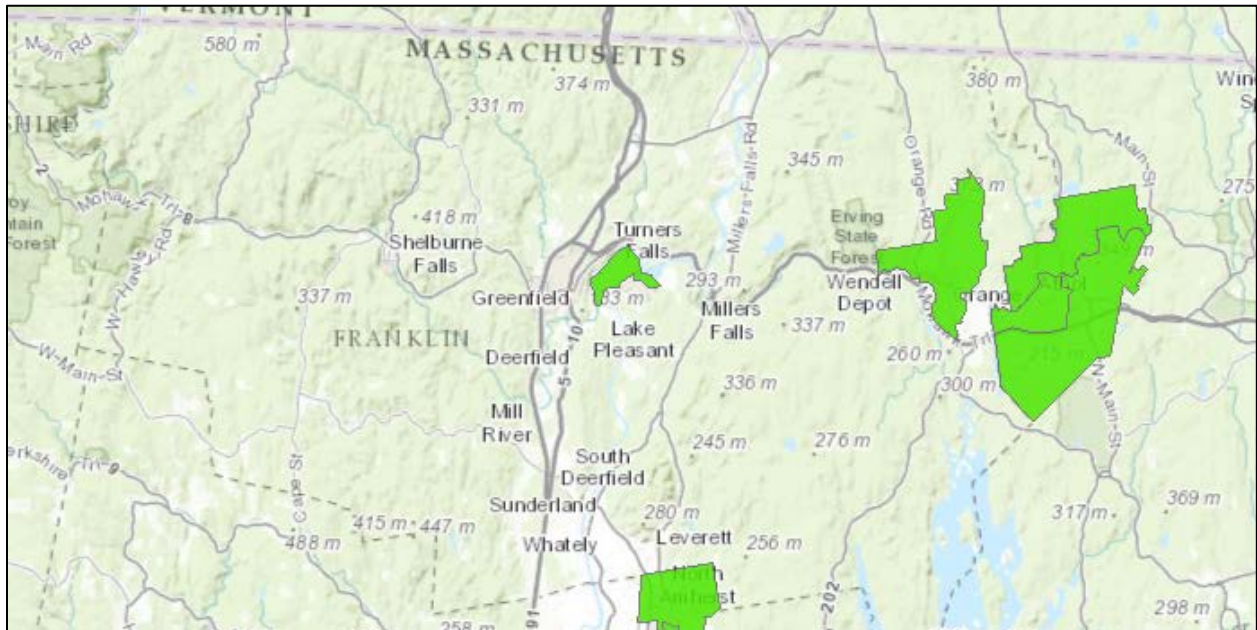
Figure 5. Food Insecurity Rates in Western MA



Data source: Gundersen, C., A. Satoh, A. Dewey, M. Kato & E. Engelhard. *Map the Meal Gap 2015: Food Insecurity and Child Food Insecurity Estimates at the County Level*. Feeding America, 2015. Feeding America. Source: Provided courtesy of the Food Bank of Western Massachusetts. Mapping: Provided courtesy of Baystate Medical Center Biostatistics and Epidemiology Core

The Baystate Franklin service area also has several **food deserts**. Low-income individuals are more likely to live in food deserts, which are areas where grocery stores and other options to purchase healthy foods are far away and difficult to access for people that either do not own a vehicle or have limited access to public transportation. Figure 6 highlights in green the parts of Franklin County that have areas that the USDA has identified as food deserts. Findings from key informant interviews focused on low-income rural populations CHNA identified difficulties in using available incentives for healthy food. Although several programs offer incentives for low-income individuals to use their SNAP (Supplemental Nutrition Assistance Program) benefits at local farmer’s markets, in rural parts of Franklin County those benefits can be underutilized due to challenges accessing markets, including transportation barriers. Baystate Franklin key informant interviewees also identified the need to expand food pantries, grocery stores, and mobile markets as a means to address food insecurity across Baystate Franklin service area.

Figure 6. USDA Food Atlas Food Desert Areas in Baystate Franklin Service Area



Source: USDA Food Access Research Atlas; accessed 5/18/16

USDA Food desert: at least 500 low-income people in a census tract live more than one mile away from a grocery store in urban areas and more than 10 miles from a grocery store in rural areas

II. Barriers to Accessing Quality Health Care

The lack of affordable and accessible medical care was identified as a need in the 2013 CHNA and continues to be a need today.

Limited Availability of Providers

Franklin County residents experience challenges accessing care due to the shortage of providers. Lack of primary care providers and specialty care providers pose a significant challenge to individuals needing health care services. Accessibility to an already limited number of providers can be impacted by community location (rural or urban), and/or insurance restrictions. Low-income individuals are more negatively impacted by insurance related issues of access.

Seventeen percent of Franklin County residents live in a healthcare professional shortage area, compared to 15% for Massachusetts residents overall (CC, Health Resources and Services Administration, March 2015). In addition, the U.S. Health Resources and Services Administration designated Franklin County as a medically underserved area, with the eastern half of the service area designated under a governor's exception (Figure 7). Medically underserved status is based on availability of primary care providers, infant mortality rate, poverty rate and proportion of older adults. Medically underserved areas are based on the overall population, whereas medically underserved populations are based on economic, cultural, or linguistic barriers. A Governor's exception refers to a medically underserved area or population designated at the request of a Governor based on documented unusual local conditions and barriers to accessing personal health services.¹² Focus group participants report long wait times for urgent and routine wellness care, a finding that was echoed among key informant interviewees in administrative roles who noted that these barriers result in higher utilization of emergency room services and drive up healthcare costs.

"Inpatient beds are scarce; people come and have to wait a long time for any inpatient services. Those who come to us, once they're medically cleared, go home but don't get help they need."

- Key Informant Interviewee, Baystate Franklin

Franklin County residents have less access to primary care physicians than the state with population to provider ratios of 1420:1 compared to 940:1 statewide (County Health Rankings, 2016). In addition, a decline in the number of providers that specialize in geriatric care was identified as an area of need by Baystate Franklin focus group participants. This decline is concerning given the increasing population of older adults age 65 and over predicted for Franklin County by the UMass Donahue Institute in their Massachusetts population projections.¹³

"There are special health needs relative to older bodies."

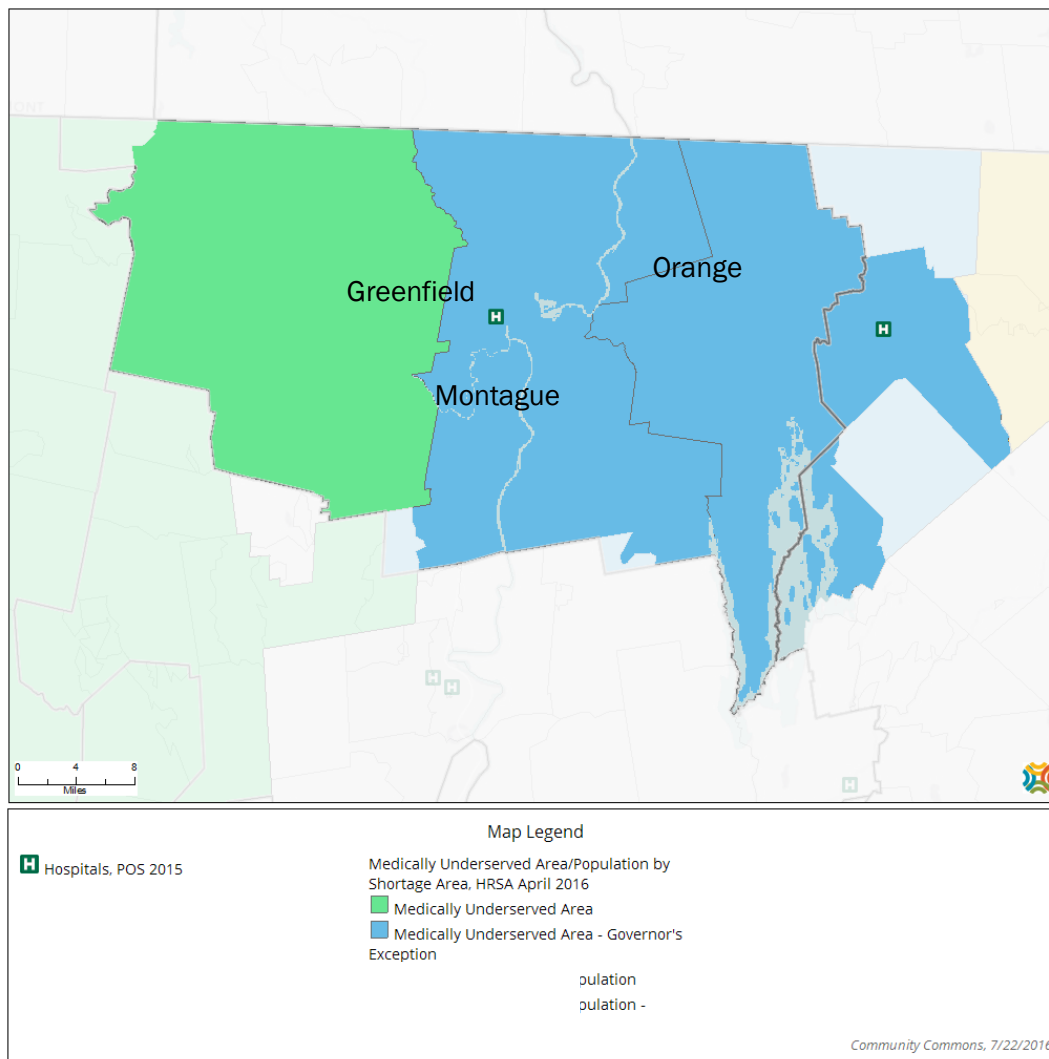
- Baystate Franklin Focus Group Participant
(Health Needs of Older Adults Focus Group)

Limited accessibility to dentists was also an identified need in Franklin County, particularly among low-income adults. Franklin County has a higher population to dental provider ratio compared to the

state (1540:1 vs 1070:1), meaning there are fewer dental providers available for a given population (County Health Rankings, 2016). According to a member of the Massachusetts Oral Health Advocacy Taskforce, adults on MassHealth experience challenges accessing dental services because of the shortage of dental providers accepting MassHealth and insufficient coverage of services. Although access to pediatric dentists has improved over the years, access to dental services remains a challenge for adults. This need was echoed in results from a 2014 community partner survey of 114 representatives from the social service, education, healthcare, faith, and municipal leadership conducted by Community Action of the Franklin, Hampshire, and North Quabbin Regions, where most respondents reported gaps in low-cost dental care and/or providers who accept MassHealth. Nearly half of respondents felt that low-cost dental care did not exist or that dental care was inaccessible and unaffordable.¹⁴ In addition, gaps in coverage among older adults were identified, particularly regarding dental implants.¹⁵ Baystate Franklin key informant interviewees and focus group participants identified that for low-income rural populations there is limited availability of providers that accept Medicaid. In addition, Baystate Franklin focus group participants identified a need for Medicaid to offer dental coverage that goes beyond “cleaning and pulling.”

Despite greater access to mental health providers in Franklin County compared to the state (160:1 vs. 200:1) (County Health Rankings, 2016), focus group participants and key informant interviewees overwhelmingly reported a need for increased access for both mental health and addiction services for acute, maintenance, and long-term care.

Figure 7. Medically Underserved Areas/Populations in the Baystate Franklin Medical Center Service Area



Source: Community Commons, HRSA 2015

Insurance Related Challenges

Findings from focus groups and key informant interviews conducted with health care providers and administrators for hospitals/insurer for the Coalition identified multiple barriers imposed by the health insurance system. These obstacles directly impact adequate treatment of multiple health concerns, most notably mental health and substance use conditions. Issues related to insurance coverage present barriers to affordability and accessibility of care. Issues identified include:

- gaps in service coverage for mental health and substance use treatment between public and private insurance;
- reimbursement policies and guidelines that silo care;
- the limited number of providers that accept patients with public insurance due to bureaucratic requirements (i.e. paperwork to become an approved provider in addition to low

reimbursement rates). This lack of MassHealth providers was most significant in rural communities across western Massachusetts.

Findings from focus groups conducted with residents noted the high cost of deductibles and co-pays for medication and services as barriers to accessing the care and services they need, as well as general frustrations with navigating the health insurance system.

“The way health insurance is going these days, with high deductibles, is causing people to avoid needed healthcare.”

- Key informant interviewee, Health Care Administrator

In addition, both health care administrators and Franklin County residents interviewed for this CHNA identified the “three strikes and you’re out” guidelines for Medicaid patients as an obstacle. Behavioral health patients who miss three consecutive appointments have their cases closed. Similarly, MassHealth patients reported that if they miss three consecutive appointments with a primary care provider, they are required to find a new provider. It is not clear if this is due to MassHealth policy or primary care provider policy. This is an additional challenge in areas where providers that accept Medicaid are limited. Key informant interviewees identified multiple barriers that can contribute to missing three consecutive appointments:

- lack of transportation;
- financial concerns;
- the impacts of a health condition, such as a physical disability or mental health disorder, that may make it difficult for a person to leave their home.

Lack of Transportation

Transportation arose as a barrier to care among interviewees in the 2013 CHNA, and continues to be a major barrier to accessing care. In key informant interviews with local and regional public health officials for the 2016 CHNA, transportation was cited as one of the top three barriers to health care for the region. Findings from Coalition key informant interviews that focused on barriers to health care among low-income rural populations linked limited transportation to chronic appointment tardiness and potential loss of service or coverage. Participants in a focus group conducted for the Coalition for this CHNA noted multiple challenging aspects related to transportation in Franklin County, including:

- providers that accept public health insurance are not always located on a bus route in some rural areas;
- getting to an appointment can require taking a bus then walking the remainder of the distance on roads without sidewalks and with uneven surfaces;
- although transportation vouchers are offered to low-income individuals, they require advance scheduling (a barrier for urgent care) and are only offered for the patient, excluding a parent, child, or caregiver;
- high cost of taxis if public transportation or voucher options are not feasible.

In a 2014 community partner survey of representatives from social service, education, healthcare, faith, and municipal leadership conducted by Community Action in the Franklin, Hampshire, and, North Quabbin Regions, 56% of respondents reported that transportation services to community health centers, hospitals, and medical providers were non-existent, inaccessible, and/or unaffordable.¹⁶ In their needs assessment for 2015-2017, Community Action proposes a few potential solutions to ease transportation barriers, including ride share programs; Good News Garage Model of fixing donated cars and selling them for the cost of repairs; asset development programs to help people save money for vehicles and other financial education; and exploring other ways to make services more accessible to people who do not have transportation.¹⁷

“No one is coordinating your care. This lack of coordination of care results in people going to the ER when they otherwise wouldn’t need to do that.”

- Key informant interviewee, Baystate Franklin

Lack of Care Coordination

Lack of care coordination was identified as a prioritized community health need in the 2013 CHNA and continues to remain an issue. Care coordination refers to the coordination of patient care and information sharing among all health care and other service providers to improve health outcomes.¹⁸ In the 2016 CHNA, focus groups and key informant interviews identified important areas where care administered by multiple providers continues to be uncoordinated and results in challenges. Examples include:

- lack of coordination in managing the overlap between mental health and substance use;
- more linkages between clinics/hospitals and emergency responders to better manage the opioid crisis;
- issues related to keeping track of appointments with multiple providers.

Baystate Franklin focus group participants noted that navigating an increasingly complex system is particularly difficult for older adults. Baystate Franklin key informant interviewees noted the importance of developing hospital-community linkages to assist with community outreach and health promotion efforts. In addition, the barriers that occur as a result of decentralized health care services (i.e. having to travel to multiple locations for care, testing, and medications) were identified as impacting patient compliance. In their key informant interviews, regional public health officials described improving care coordination as key to addressing health inequities in the region.

“Use community agencies, churches, etc. to reach people to make differences.”

- Key informant interviewee, Health New England

Health Literacy and Cultural Humility

The need for health information to be understandable, accessible, and provided with cultural humility was identified as a regional need in this assessment. Health literacy and knowledge of available services were also identified as priorities in the 2013 CHNA.

Health literacy

Health literacy is defined by the CDC as the capacity for an individual to find, “communicate, process, and understand basic health information and services to make appropriate health decisions.”¹⁹Data from regional public health leaders and focus group participants identified health literacy as a concern, including the need for the following:

- education about health information; types of services and how to access them;
- education for patients and their families about how to advocate for themselves to ensure they are getting the information and services they need.

Key informant interviewees that work with Medicaid populations in the region noted that a lack of understanding of a new diagnosis, especially a chronic health condition, negatively impacts adherence to medication protocols and recommendations for lifestyle changes.

Findings from focus groups conducted for the Coalition indicate a need for both patient and provider education to ensure that patients understand what they are being told during a clinical encounter. This includes:

- giving ample time to process information;
- asking if they understand what they are being told;
- using less medical jargon.

Cultural Humility

The need for **culturally sensitive care** was identified as a prioritized health need for the region in this assessment. Increased training in **cultural humility** as a means to deliver more culturally sensitive care was identified as a prioritized health need for the region in this assessment. Cultural sensitivity and humility refer to a commitment among health care providers to self-reflection and evaluation in order to reduce the power imbalance between patients and providers, and to the development of health care partnerships that are based on mutual respect and equality.²⁰

2016 CHNA interviews with regional public health leaders called for increased training for health care providers in this area. Findings from focus groups and key informant interviews conducted across the Coalition noted that cultural sensitivity is not limited to a racial or ethnic culture, but also

“We need our physicians to be clearer on the orders you get when you leave a hospital or ER. Patients need to be able to understand these. When you’re discharged from hospital you may be groggy from whatever medication you were given...No one is coordinating your care.”

- Baystate Franklin focus group participant
(Access To Health Care Among The Elderly)

“In general people need a little more education. And easy access [to information on health care options], [it’s] available on websites, but to find an answer to an exact question is very difficult for people.”

- Focus group participant (Faith Based Leaders)

“Elders of color are an “invisible group” with multiple health care needs.”

- Baystate Franklin focus group participant
(Access To Health Care Among The Elderly)

includes care for stigmatized groups, such as ex-offenders, homeless individuals, and people with mental health or substance use issues. The lack of culturally tailored programming in rural areas was noted by a key informant who works with Medicaid populations in the region as a need for the community. In addition, findings from a focus group conducted for the Coalition highlighted the need for more community liaisons or community health workers (CHWs) to address issues of access, as well as care coordination, health literacy, and language and cultural barriers.

“How we get care and who we trust may depend on who we are”

- Key informant interviewee, Health New England

III. Health Conditions and Behaviors

This section focuses on the health conditions and behaviors that have the largest impact on the communities served by Baystate Franklin Medical Center. Data is summarized for each condition or behavior included. See Appendix III for detailed hospitalization (overall and by race/ethnicity) and prevalence data as available for communities in Baystate Franklin service area.

As discussed in limitations, hospitalization and ER data for small communities should be interpreted with the understanding that they have wide confidence intervals and estimates can vary widely.

Chronic Health Conditions

Chronic health conditions are an area of prioritized health need for Baystate Franklin service area residents. Residents experience high rates of chronic health conditions and associated morbidity, particularly for **obesity, diabetes, cardiovascular disease, asthma, and chronic pulmonary obstructive disease**. A chronic health condition is one that persists for a long period of time, and typically can be controlled but not cured. According to the CDC, chronic disease is the leading cause of death and disability in the U.S. By 2020 it is estimated that 81 million Americans will have multiple chronic conditions.²¹ A **healthy diet** and **physical activity** play an important role in preventing and managing chronic diseases.

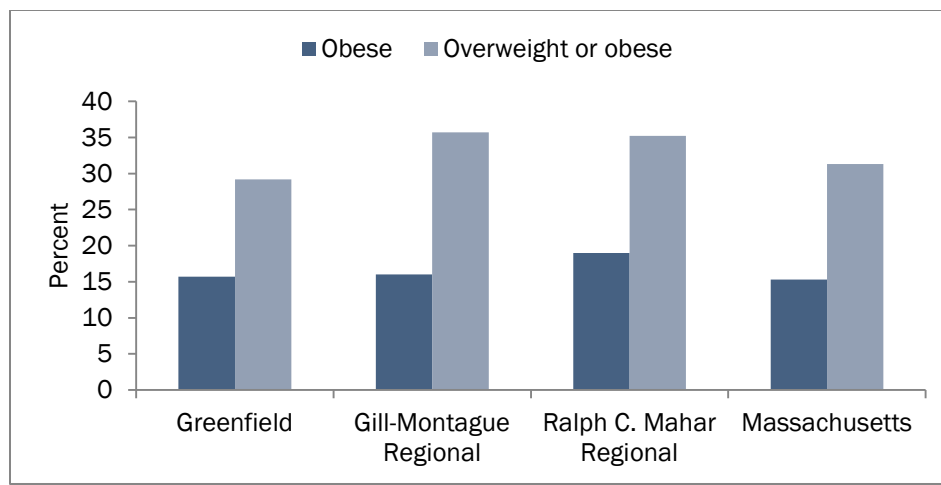
Obesity

In Franklin County almost 22% of adults struggle with obesity and 54% are overweight or obese (MA: obese - 24%; overweight/obese - 59%) (BRFSS 2011). Obesity is a national epidemic and contributes to chronic illnesses such as cancer, heart disease, and diabetes. Obesity can impact overall feelings of wellness and mental health status. A healthy diet and physical activity play an important role in achieving and maintaining a healthy weight.

Though childhood obesity rates have been falling nationally and within some communities in the region over the last few years, rates among children in highlighted communities in the Baystate Franklin service area remain high with over a third of students from Gill-Montague Regional School District (36%) and Ralph C. Mahar Regional (which includes Orange) (35%) overweight or obese (Figure 8). County-level childhood obesity data was not available.

Vulnerable Populations

- **Children** experience high rates of overweight and obesity which increases their risk for adult onset chronic diseases such as diabetes, and it also increases their risk for being obese and experiencing chronic disease as an adult.

Figure 8. Childhood Obesity Rates for Highlighted School Districts in Baystate Franklin Service Area

Source: "Results from the Body Mass Index Screening in Massachusetts Public School Districts, 2014"
Children are screened in grades 1, 4, 7, 10.

Cardiovascular Disease

Cardiovascular disease (CVD) includes diseases that affect the heart and blood vessels, including coronary heart disease (CHD), angina (chest pain), heart attack (myocardial infarction), and stroke. CVD is a priority health need because of the prevalence of CHD among older adults, the high prevalence of CVD risk factors such as hypertension, and the high rates of stroke hospitalizations in some Baystate Franklin service area communities.

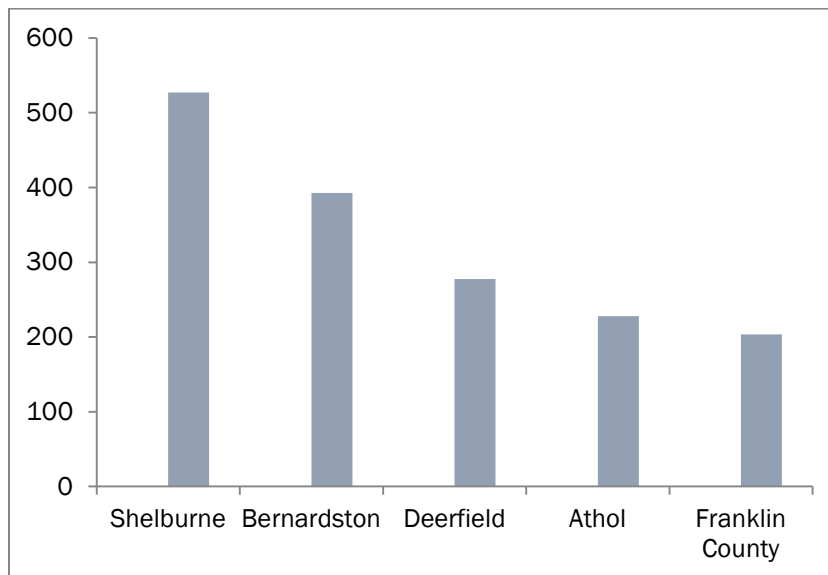
An estimated 4% of Franklin County residents have CHD and 4% have had a heart attack (BRFSS 2012-2014). Older adults experience higher rates of CVD. In Franklin County, an estimated 17% of Medicare enrollees 65 years and older had heart disease in 2014 (statewide rate - 24%)(Medicare 2014, one-year estimate). Hypertension, or high blood pressure, and high cholesterol are conditions that increase risk for cardiovascular disease. An estimated one in four (24%) Franklin County adults have hypertension (25% MA) (CC, BRFSS, 2006-12) and nearly one in three (31%) adults have high cholesterol (34% MA) (CC, BRFSS, 2011-2012). Rates of hypertension are substantially higher in older adults with more than half estimated to have hypertension (54%)(statewide - 55%) (Medicare 2014, one-year estimate).

Stroke hospitalization rates are also high in some Baystate Franklin communities. The highest stroke hospitalization rates were found in Shelburne followed by Bernardston, Deerfield, and Athol (Figure 9). As noted in the limitations section, the Franklin Regional Council of Governments reports that many residents of Buckland are included in numbers reported to MDPH as Shelburne due to the shared zip code of the two towns. From 2012 to 2013 stroke hospitalization rates decreased among the highlighted communities of Greenfield, Montague, and Orange; however, Franklin County's rate remained fairly steady (Figure 10).

Vulnerable Populations

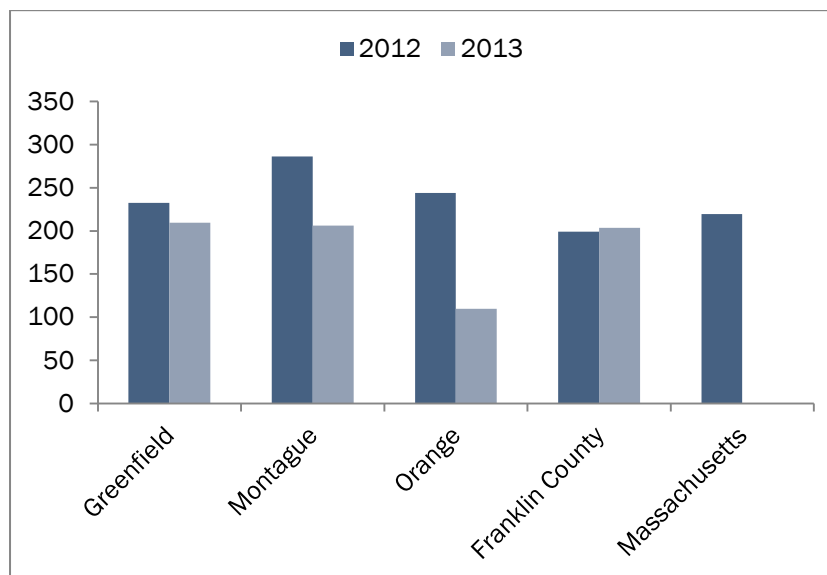
- **Older adults** experience higher rates of coronary heart disease and hypertension as described above.

Figure 9. Communities with the Highest Stroke Hospitalization Rates in the Baystate Franklin Service Area, 2013



Source: MDPH; age-adjusted per 100,000; data available for less than 10 communities

Figure 10. Hospitalization Rates for Stroke in Highlighted Communities in Baystate Franklin Service Area, 2012-2013



Source: MDPH; age-adjusted per 100,000

Diabetes

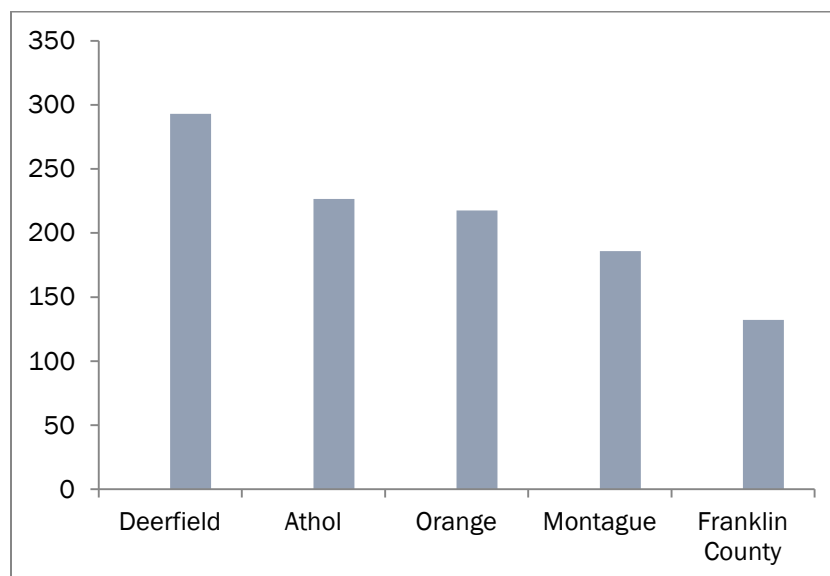
An estimated 9% of Franklin County residents have **diabetes** and 19% of residents have either **pre-diabetes or diabetes** (BRFSS, 2010-2012). Though these rates are comparable to the state, they indicate a large proportion of the population that is impacted by or at risk for diabetes. Diabetes (the vast majority of which is Type 2 diabetes [T2D]) is one of the leading causes of death and disability in the U.S. and is a strong risk factor for cardiovascular disease. The CDC estimates that 9% of people in the U.S. have diabetes, of which 28% are undiagnosed.²² Pre-diabetes is when a person has high blood sugar levels that are not high enough for a diagnosis of diabetes. An estimated 15-30% of people with pre-diabetes will develop T2D within 5 years. T2D can be prevented and managed with a combination of weight loss, exercise, medication, and maintaining a healthy diet.²³

Diabetes hospitalization rates are a measure of severe morbidity. Although Franklin County fell below statewide hospitalization and ER visit rates for diabetes in 2012, a number of communities had higher rates than the County. Figure 11 illustrates the communities with the highest 2013 diabetes hospitalization rates in the Baystate Franklin service area. Figure 12 illustrates 2012-2013 diabetes hospitalization rates among Baystate Franklin highlighted communities of Greenfield, Montague, and Orange. County rates for diabetes hospitalization were generally comparable to that of the state.

Vulnerable Populations

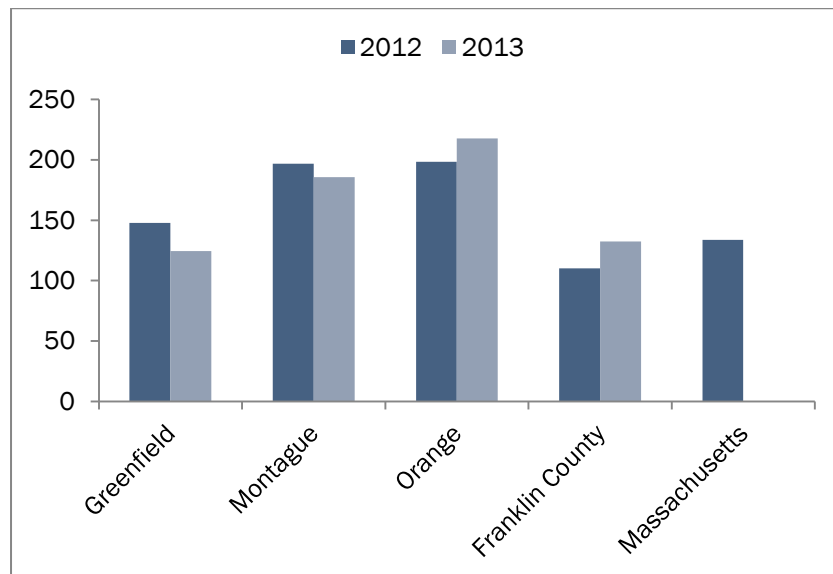
- **Older adults** experience higher rates of diabetes. Medicare data indicates that an estimated 21% of Medicare enrollees age 65 and older in Franklin County have diabetes (Medicare 2014, one-year estimate).

Figure 11. Communities with the Highest Diabetes Hospitalization Rates in the Baystate Franklin Medical Center Service Area, 2013



Source: MDPH; age-adjusted per 100,000; data available for less than 10 communities

Figure 12. Diabetes Hospitalization Rates in Highlighted Baystate Franklin Medical Center Service Area Communities, 2012-2013



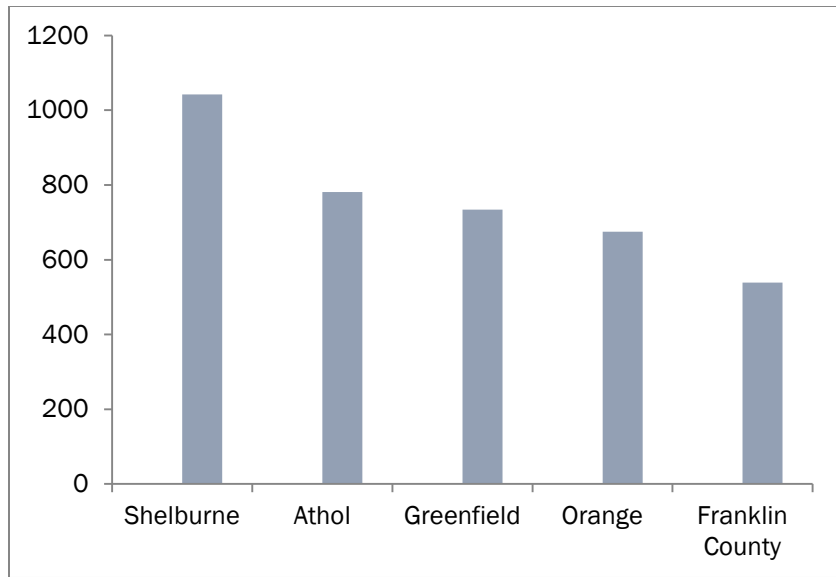
Source: MDPH; age-adjusted per 100,000

Asthma

Asthma impacts many Baystate Franklin service area residents, particularly children. Approximately 12% of school children in the County have asthma (12% MA) (MDPH EPHT, 2013-2014). Asthma is a common chronic respiratory disease that affects the health and quality of life of children and adults. Asthma can be impacted by different factors in the environment, including cigarette smoke, second hand smoke, air pollution, pollen levels, and mold, dust, and other household contaminants or exposures.

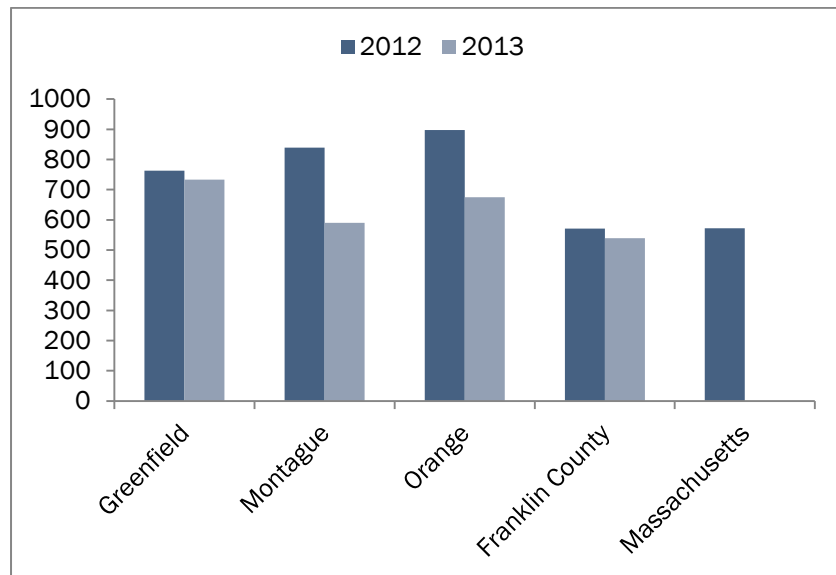
Among Baystate Franklin service area communities in 2013, the highest asthma ER visit rates were observed in Shelburne, Athol, Greenfield, and Orange (Figure 13). In 2012, the rate in Franklin County was comparable to the state, and the rates in Greenfield, Montague, and Orange were higher than the state (Figure 14).

Figure 13. Communities with the Highest Asthma ER Rates in the Baystate Franklin Medical Center Service Area, 2013



Source: MDPH; age-adjusted per 100,000;; data available for less than 10 communities

Figure 14. Asthma ER Rates in Highlighted Baystate Franklin Medical Center Communities, 2012-2013



Source: MDPH; age-adjusted per 100,000

Vulnerable Populations

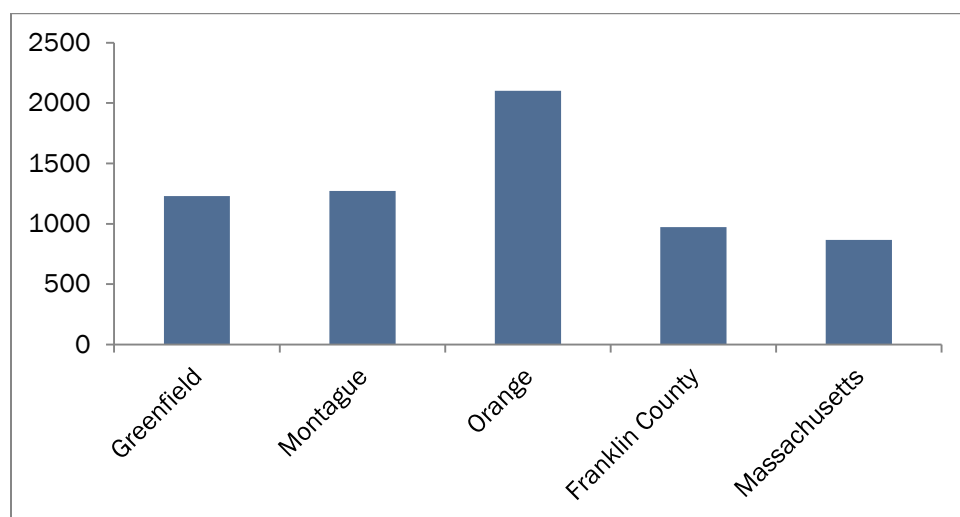
- **Children** are a vulnerable population for asthma. The prevalence of pediatric asthma in many communities in Baystate Franklin service area surpasses the Massachusetts estimate. More than 16% of school children in Rowe, Leverett, and Athol had asthma compared to 12% statewide (MDPH EPHT, 2013-2014).
- **Blacks** in this service area also experienced asthma related disparities with ER visit rates more than five times that of whites and over four times that of the state ER visit rate overall.
- **Latinos** also experienced asthma related disparities in Franklin County with ER visit rates almost double that of Whites and nearly 80% greater than the overall state ER visit rate (MDPH 2012).

Chronic Obstructive Pulmonary Disease

Chronic obstructive pulmonary disease (COPD) impacts many residents in the Baystate Franklin service area. Nearly 6% of Massachusetts adults have ever been diagnosed with COPD, with rates approaching 7% in the western half of the state.²⁴ COPD refers to “a group of diseases that cause airflow blockage and breathing-related problems,” including emphysema, chronic bronchitis, and asthma, and was the third leading cause of death in the U.S in 2011.²⁵ COPD is most commonly caused by smoking, although indoor and outdoor air pollution, genes, and respiratory infections can contribute. COPD is most likely to impact individuals over the age of 65, females, past or current smokers, and low-income individuals. COPD is commonly underreported, has better long-term outcomes if detected early, and can negatively impact quality of life if not managed.²⁶

The ER visit rate for COPD in Franklin County was 12% higher than that of the state (Figure 15). Among highlighted communities, Orange had the highest ER visit rate, which was more than double the rate of Franklin County. In addition, the ER visit rates in Greenfield and Montague were 26-31% higher than Franklin County (MDPH 2012).

Figure 15. COPD ER Visit Rates in Highlighted Baystate Franklin Service Area Communities, 2012



Source: MDPH; age-adjusted per 100,000

Vulnerable Populations

- ER visit rates for **Blacks** in Franklin County were more than 2.5 times greater than the rate of Whites and the overall statewide rate. Disparities were also present in Greenfield among Blacks (MDPH 2012).
- **Latinos** in Franklin County had an ER visit rate nearly 60% higher than that of Whites.
- COPD is most likely to impact **older adults**. An estimated 9% of older adults living in Franklin County have COPD (10% MA) (Medicare 2014, one-year estimate).

Need for Increased Physical Activity and Healthy Diet

The need for increased **physical activity** and consumption of fresh fruits and vegetables was identified as a community need by regional public health officials and key informants interviewed for this CHNA. The CDC's BRFSS 2013 survey estimated that only 9% of Massachusetts' respondents met the vegetable consumption recommendation and 14% met the fruit consumption recommendations,²⁷ comparable to national rates. Only 55% of adults in the Springfield Metropolitan Statistical Area (Hampden, Hampshire, and Franklin Counties) engaged in the recommended 30 or more minutes of moderate activity on five days per week or 20 minutes of vigorous activity on three or more days per week (BRFSS 2009). These rates are affected by the availability of affordable healthy food and safe places to be active as well as individual knowledge and behaviors.

Results from the 2015 Prevention Needs Assessment Survey for Franklin and the North Quabbin Region indicates that only 44% of 8th, 10th, and 12th graders reported eating four or more servings of fruits and/or vegetables each day, and only one in four students reported an hour of physical activity each day.²⁸ The need for increased youth programming that encourages physical activity, among other program area needs, was identified as a need by key informant interviewees consulted for this CHNA. Key informant interviewees who oversee MassHealth programming that were interviewed for this CHNA called for:

- programs that can engage families in physical activity;
- more financial support for team sports;
- after school programming that does not only focus on homework.

Findings from key informant interviews conducted with health insurance administrators for this CHNA identified that limited access to recreation opportunities was a significant barrier for individuals and families living in rural communities. Although most insurance companies offer reimbursements for gym membership, insurance administrators note that this benefit is underutilized among Medicaid enrollees. Findings from a focus group conducted with rural, low-income Franklin County residents cite the high out-of-pocket cost of a gym membership as a barrier to taking advantage of this incentive and other programs that promote exercise and healthy nutrition. Similarly, in a community partner survey of representatives from social service, education, healthcare, faith, and municipal leadership conducted by Community Action in 2014, nearly 30% of respondents reported that health and wellness services, such as nutrition, weight loss services, and public recreation opportunities, were inaccessible, unaffordable, or did not exist in Franklin County and the North Quabbin Region.²⁹

Mental Health and Substance Use

Across all key informant interviews and focus groups conducted for Baystate Franklin and across the Coalition for the 2016 CHNA, substance use and mental health were identified as the most urgent health need/problem impacting the area. Substance use disorders overall and opioid use disorders specifically, were identified as top issues. There was overwhelming consensus among community members, health care providers, and administrators about the need for:

- Increased education across all sectors to reduce the stigma associated with mental health and substance use;
- Increased access to treatment, and the need for long term care;
- Increased integration between the treatment of mental health and substance use disorders;
- The impact of mental health conditions and substance use on families;
- Increased training for physicians to address mental health and substance use concerns in the primary care setting.

“We need to value people with substance abuse problems and mental illness as people with a lot to contribute to life that have an illness and not a personal moral failing. Addiction is a disease. It's not a personality flaw. So is mental illness.”

- Key Informant Interviewee, Baystate Franklin

Mental Health

Poor mental health continues to be a prioritized health need for the Baystate Franklin service area. An estimated 12% of Franklin County residents have poor mental health on 15 or more days in a month (11% statewide) (BRFSS 2012-2014). Though mental health is commonly thought of as the absence of mental illness, mental well-being extends beyond the presence or absence of mental disorders, and has been defined by the World Health Organization as the “state of well-being in which an individual realizes his or her own abilities, can cope with the normal stresses of life, can work productively and is able to make a contribution to his or her community.”³⁰ Only 17% of U.S adults are estimated to be “in a state of optimal mental health.”³¹ Mental health is an indicator of health itself, but also contributes to physical health and inequities.

Depression is the most common type of mental illness, and it affects more than 26% of U.S adults.³² It is estimated that by 2020, depression will be the second leading cause of disability worldwide, and children are a particularly vulnerable population.³³ Mental illness often co-occurs with substance use disorders and impacts physical health as well.

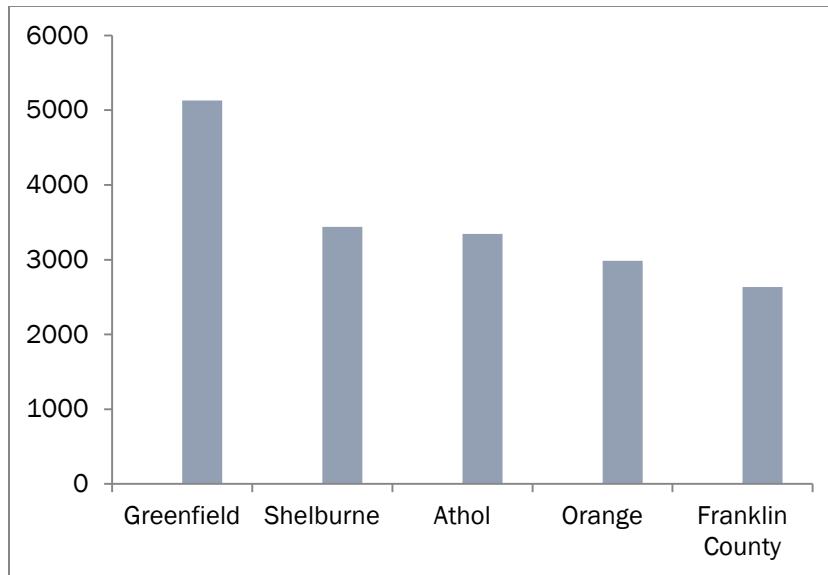
Among all Baystate Franklin service area communities in 2013, Greenfield, Shelburne, Athol, and Orange had the highest ER visit rates for mental disorders (which includes substance use), with rates in Greenfield noticeably higher than that of the County overall (Figure

“We have support groups for diabetes, but we don't have any support groups for elders dealing with mental health issues.”

- BFMC Focus group participant,
(Mental Health and Substance Use Focus Group)

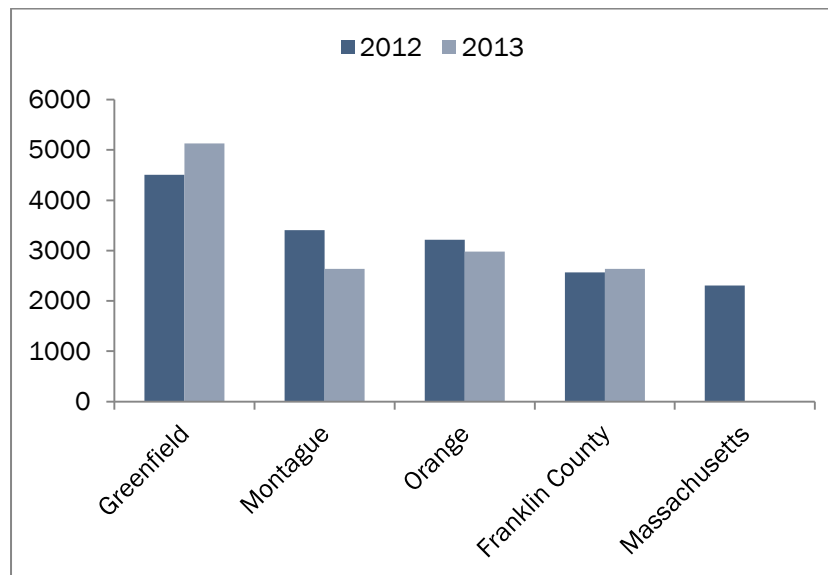
16). In 2012, ER visit rates for mental disorders in Franklin County were slightly higher than that of the state (Figure 17). In addition, hospitalization rates for mental disorders (including substance use) in Franklin County were nearly 50% more than the state (MDPH, 2012).

Figure 16. Communities with the Highest Mental Disorder ER Visit Rates in the Baystate Franklin Medical Center Service Area, 2013



Source: MDPH, age-adjusted per 100,000
 Note: mental health disorder ER visits include those related to substance use

Figure 17. Mental Health Disorder ER Visit Rates in Highlighted Baystate Franklin Medical Center Service Area Communities, 2012-2013



Source: MDPH, age-adjusted per 100,000
 Note: mental health disorder ER visits include those related to substance use

Vulnerable Populations

- **Older Adults** experience high rates of depression. An estimated 17% of older adults in Franklin County have depression (Medicare 2014, one-year estimate). Baystate Franklin focus group participants identified social isolation, loss of independence, and the impact of chronic and age-related illnesses as factors that contribute to depression among older adults.
- **Youth** are disproportionately impacted with mental health issues. Findings from the Franklin County/North Quabbin Youth Risk Behavior Survey (2013) indicate that 26% of youth respondents felt sad or hopeless, for two or more weeks and 16% of students considered attempting suicide over the past year.³⁴
- **LGBTQ youth** have higher rates of depression, with 53% of LGBTQ youth reporting that they have experienced symptoms of depression during the past year compared to 22% of heterosexual youth. In addition, 45% of LGBTQ youth considered suicide in the past year compared to 12% among their heterosexual peers.³⁵
- **Blacks** in Franklin County experienced disparities related to mental disorder ER visits. The ER visit rate among Blacks was 41% greater than whites and 57% greater than the overall statewide rate. Disparities were also present among Blacks compared to Whites in mental disorder hospitalization rates.
- **Latinos** in Franklin County experienced high ER visit rates for mental disorders with rates 32% higher than that of Whites and 46% greater than the overall statewide rate. Similar disparities were detectable in Greenfield ER visit and hospitalization rates.

“A lot of problems, including mental health, are from lack of socialization after people stop working...People are shell shocked once they leave work. It was their social life, and they didn't even know it.”

– Baystate Franklin focus group participant (Access To Health Care Among The Elderly)

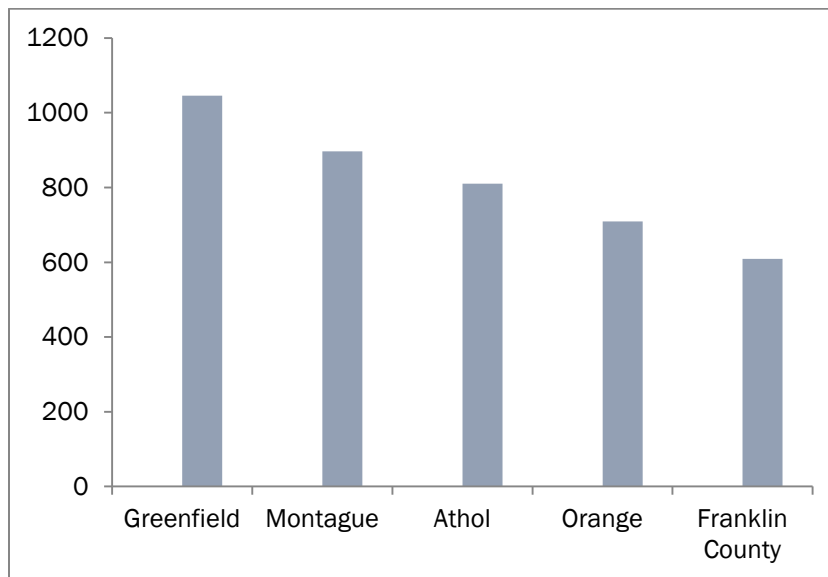
Substance Use

High rates of **substance use**, including tobacco, alcohol, and drugs, continue to be a prioritized health need for the community. Countywide smoking rates are high with an estimated 20% of Franklin County residents smoking **tobacco** as compared to 16% statewide (BRFSS 2012-2014). Though progress has been made to address high rates of youth substance use, rates continue to be high. Twenty-eight percent of 8th, 10th, and 12th graders reported drinking alcohol in the last 30 days, with rates of 54% among 12th graders. Twenty-two percent of students reported smoking marijuana during the past 30 days, with rates of 42% among 12th graders.³⁶

Substance use disorders (SUD) refer to the recurrent use of drugs or alcohol that result in health and social problems, disability, and inability to meet responsibilities at work, home, or school. Risk factors for SUD include genetics, age at first exposure, and a history of trauma. Substance use related ER visit and hospitalization rates (including alcohol) were among the highest ER visit and hospitalization rates of those examined for the CHNA. Among all Baystate Franklin service area

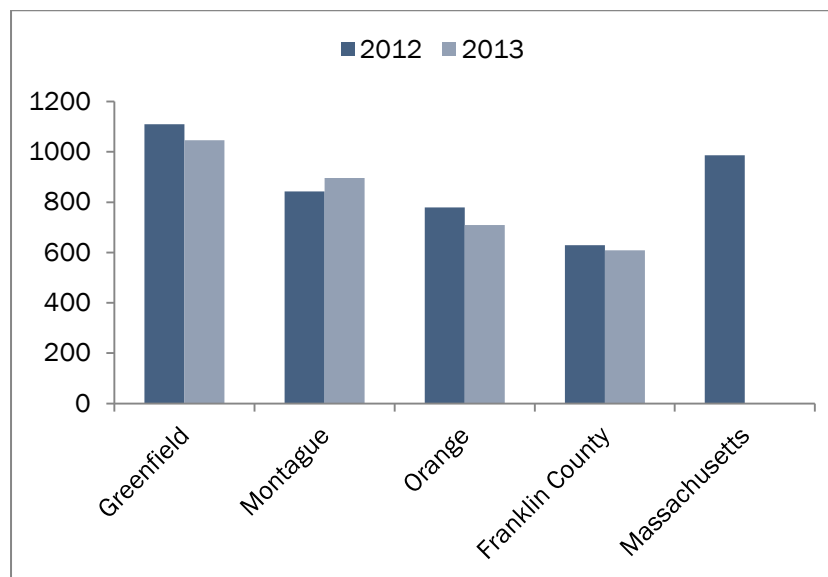
communities in 2013, the highest ER visit rates for substance use (including alcohol) were among residents in Greenfield, Montague, Athol, and Orange (Figure 18). Though 2012 Franklin County rates were lower than that of the state, several of these communities had higher rates than that of the County (Figure 19). In feedback sessions for other Coalition Members for this CHNA, hospital providers noted that substance use ER and hospitalization visit rates are likely an underestimate as people with substance use disorder are sometimes given a primary mental health diagnosis instead to satisfy criteria for admission.

Figure 18. Communities with the Highest Substance Use Disorder ER Visit Rates in the Baystate Franklin Service Area, 2013



Source: MDPH; age-adjusted per 100,000; data available for less than 10 communities

Figure 19. Substance Use Disorder ER Visit Rates in Highlighted Baystate Franklin Service Area Communities, 2012-2013



Source: MDPH; age-adjusted per 100,000

Opioid use disorder has rapidly emerged as a public health crisis in Massachusetts and across the country. Western Massachusetts is impacted as well. Key informant interviews for the 2016 CHNA frequently cited the opioid crisis as an emerging issue and a top health issue facing the community. Between 2002 and 2013 in the U.S, there has been an almost threefold increase in opioid-related deaths.³⁷ In Massachusetts alone, the number of opioid-related deaths in 2014 represents a 65% increase from 2012.³⁸

Opioid overdose fatalities in Franklin County were higher than that of the state with 13.2 fatalities per 100,000 as compared to 10.7 statewide. This is despite lower nonfatal opioid overdose hospitalization and ER visit rates in Franklin County versus statewide (48.8 vs. 103.9 per 100,000).³⁹ Data from the Massachusetts state police indicate that in 2015, unintentional opioid overdose fatalities in Athol were 72.6/100,000. In addition, data from Massachusetts state police indicate that approximately 40% of opioid overdose related fatalities in the first six months of 2014 were attributed to heroin, pharmaceutical opioids, and fentanyl. Many of the opioid overdose fatalities in the first six months of 2014 were the result of using a combination of drugs including heroin, pharmaceutical opioids, fentanyl, cocaine, methadone, antidepressants, antipsychotics, benzodiazepines, stimulants, and muscle relaxants.⁴⁰

“Substance abuse is a chronic and relapsing disease, and it requires intense high touch care to keep people sober. Giving people a list of AA meetings and telling them to go to 90 meetings a month, you might as well just drop them off in front of the liquor store. These issues are hard enough for someone with education, a job, solid housing, people who love them to deal with. But if you are a low-income person without coping strategies, with limited education and psychiatric abilities, and the only people you have are substance abusers, it creates a system of dysfunction.”

- Key informant interviewee, Baystate Franklin

Statewide, there has been a spike in **neonatal abstinence syndrome**. This syndrome refers to babies born with enough exposure to opioids that they require medical management of their withdrawal. During the last 6 months of 2015, 241 babies were born at Baystate Franklin Medical Center and 7.5% of those babies were exposed to opioids. Fifteen of the mothers were on Methadone or Buprenorphine to treat their drug dependency. Eight of the babies who were exposed to substances required treatment for withdrawal.⁴¹

In key informant interviews conducted for the Coalition that focused on substance use in the region, health care providers and administrators identified the need for:

- increased institutional support to promote harm reduction approaches, such as Narcan, to reduce morbidity and mortality that occur as a result of opioid overdose;
- more access to long-term medication-assisted treatment (MAT) programming;

- continued focus on therapeutic, not just pharmaceutical, treatment of substance use disorders;
- more support and prevention education for youth, particularly those with histories of trauma.

In a community partner survey of representatives from social service, education, healthcare, faith, and municipal leadership conducted by Community Action in 2014, 38% of respondents felt that substance use treatment services, including those for tobacco, alcohol, and other drugs, were inaccessible, unaffordable, or did not exist in Franklin County and the North Quabbin Region. Gaps in substance use prevention strategies were also reported by respondents⁴²

“Addiction with seniors is a hugely different story than it is with a 22-year-old in terms of how it is visualized, recognized...Addiction among elders needs to be addressed and treated.”

– Baystate Franklin focus group participant (Access to Health Care among the Elderly)

Vulnerable Populations

- **Older adults** with substance use disorders were identified in Baystate Franklin focus groups as a vulnerable population that is often overlooked. Access to treatment is impacted by social isolation, and stigma, and is further compounded by the closing of detox facilities in the region.
- **Youth** substance use and abuse can affect the social, emotional and physical well-being of youth and lead to lifelong substance dependence problems. As described above, rates in Franklin County and the North Quabbin region are higher than national averages.
- **LGBTQ** youth have higher rates of alcohol and substance use. Findings from the 2013 Youth Risk Behavior Survey indicate that LGBTQ youth from Franklin County/North Quabbin are more likely to have used alcohol (34% vs. 29% of heterosexual youth), marijuana (38% vs. 20% of heterosexual youth), prescription narcotics (14% vs. 6% of heterosexual youth), and other drugs in the past 30 days.⁴³
- **Latinos** experienced opioid-related hospitalizations at double the rate of Whites in Franklin County and the overall statewide rate. (MDPH, 2012).

Infant and Perinatal Health Risk Factors

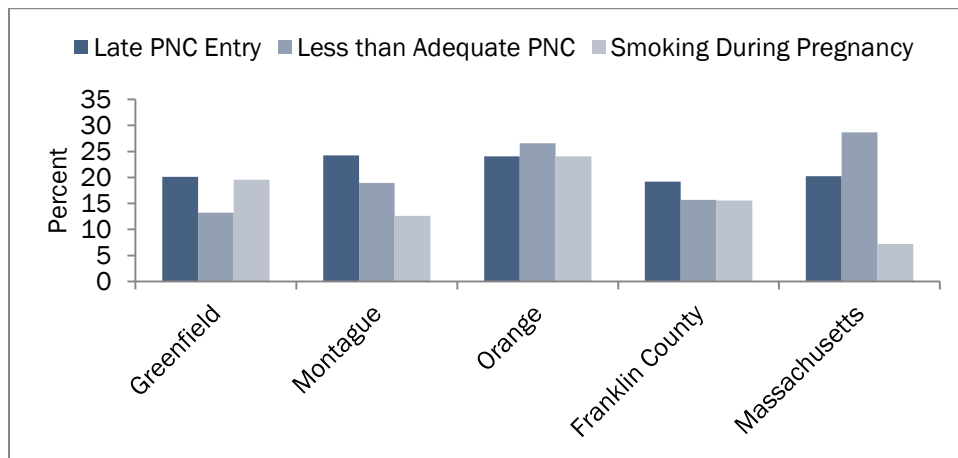
Infant and perinatal health risk factors were identified as a priority health need in this assessment. **Preterm birth** (<37 weeks gestation) and **low birth weight** (<2,500 grams) are among the leading causes of infant mortality and morbidity in the U.S., and can lead to health complications throughout the life span. Early entry to **prenatal care**, (in the first trimester of pregnancy), as well as adequate prenatal care, are crucial components of health care for pregnant women that directly impact birth outcomes, including preterm birth, low birth weight, and infant mortality (infant death before age 1). **Smoking during pregnancy** is a risk factor that increases the risk for pregnancy complications and affects fetal development.⁴⁴

In Franklin County, an estimated 16% of women did not receive adequate **prenatal care** and 19% started prenatal care after their 1st trimester (Figure 20). Adequacy of prenatal care is based on whether a woman entered prenatal care early in pregnancy and number and timing of prenatal visits. Though the rate of late entry to prenatal care (after the first trimester) is comparable to the state, and the percent of women who received less than adequate prenatal care is lower than the state, they indicate a continued area of need (MDPH, 2012). Montague and Orange experienced slightly higher rates of late entry to prenatal care as compared to the state (24% vs. 10% in MA).

Another area that continues to remain a concern is **smoking during pregnancy** with 16% of women in Franklin County reporting smoking during pregnancy (MDPH, 2012). This rate is more than double that of the state. In addition, the use of other substances, particularly opiates, during pregnancy is a concern. As mentioned in the substance use section above, there has been a spike in neonatal abstinence syndrome and babies requiring medical management of opiate withdrawals.⁴⁵

Participants in a Coalition focus group with mothers of young children receiving services in Hampden County expressed a need for the health care system to be more understanding about the challenges women experience managing their own care as well as the care of their families. In addition, focus group participants agreed on the need for support around stress and anxiety, particularly in the postpartum period, feelings of social isolation, and the need for increased parenting education and support for fathers.

Figure 20. Percent of Women with Late Entry to Prenatal Care, Less Than Adequate Prenatal Care, or that Smoked During Pregnancy in Highlighted Baystate Franklin Medical Center Service Area Communities, 2012



Source: MDPH; adequate prenatal care includes women that received adequate or adequate plus care
 *Late PNC entry is entry to prenatal care after the 1st trimester

Sexual Health

Teen Pregnancy

The teen birth rate among women aged 15-19 in Franklin County is triple that of the state (15 vs. 5 per 1,000 in MA). Rates are particularly high in Athol (24 per 1,000) and Orange (17 per 1,000) (MDPH 2014).

IV. Vulnerable Populations of Concern

Available data for this assessment indicate that **older adults, children and youth**, and some communities of color, particularly **Latinos** and **Blacks**, experienced disproportionately high rates of certain health conditions or associated morbidities when compared to that of the general population in the Baystate Franklin service area.

- Children and youth experienced high rates of asthma and teen pregnancy and are impacted by obesity;
- Older adults had high rates of cardiovascular disease, hypertension, diabetes, COPD, and depression. In addition,, older adults were identified as a poorly served population by respondents (primarily representatives from non-profit, social service organizations) in 2014 community partner survey conducted by Community Action;⁴⁶
- Latinos and Blacks experienced higher rates of ER visits and/or hospitalizations due to some chronic diseases, including asthma and COPD, as well as mental health. Latinos also experienced high substance use ER visit rates.

Data also indicated increased risk for mental health conditions among youth, particularly **LGBTQ** (lesbian, gay, bi-sexual, trans-sexual, queer) **youth**, older adults, Latinos, and Blacks.

Individuals with **low-income** levels, those living in **poverty**, especially children and people of color, and those that are **homeless** are also disproportionately impacted by poor health. Though data was not available for health conditions by income/poverty level, these health determinants have been consistently documented with poor health outcomes.

Overall, more data is needed to understand the unique factors that impact the health of each of these vulnerable populations.

Community & Hospital Resources to Address Identified Needs

Community and hospital resources to address identified needs can be found in Appendix IV.

Impact of Actions Taken by Hospital Since Last Community Health Needs Assessment

It is important to highlight that the actions taken by Baystate Franklin as described below are listed under one health priority, but many, if not all address more than one health priority.

BEHAVIORAL HEALTH/MENTAL HEALTH

- **Northwestern District Attorney's "Children's Advocacy Center"** – Bringing legal, medical and social services together under one roof, the CAC concept, which has been active elsewhere in the Pioneer Valley, took root in Franklin County with renovations beginning on a center in Greenfield. In addition to providing medical and administrative counsel to the Franklin County CAC, Baystate Franklin provided start-up funding to purchase medical equipment and support renovations.
- **Community Hospital Acceleration, Revitalization and Transformation (CHART) Investment Program**, a two-year initiative aiming to improve the effectiveness and efficiency of healthcare services throughout parts of the Commonwealth served by community hospitals. Baystate Franklin's CHART grant goal is to strengthen the support system for patients with complex medical, behavioral and social needs in Franklin County, and reduce potentially avoidable hospital visits and admissions. The project is funding and establishing a team of care providers who can connect with these patients both inside and outside the hospital to help them manage their health and avoid hospital visits when possible.

CARE COORDINATION

- **Franklin County Perinatal Support Coalition**, a multi-sector and provider initiative launched, convened monthly, and facilitated by nurse leaders from the Birthplace at the Baystate Franklin. Efforts include universal postpartum depression protocols for screening from first prenatal visit through second year post-partum, weekly support group, and a community resource and referral guide. The Coalition has now transitioned to improving coordination and resources for mothers with substance use disorders.
- **Community Action's Building Bridges for Coordinated Care** initiative seeks to improve coordination between the social service and medical sectors with the goal of improving health outcomes for patients in Franklin County. Built into the community organizing approach is a reliance on data as a means of identifying intervening variables (also sometimes referred to as risk and protective factors) that can effectively move the dial on desired outcomes. As a result, medical practitioners will receive an immediate benefit from a greater understanding of non-medical resources that support health, and the community will be better positioned to respond to federal and state initiatives.
- Baystate Franklin continues to provide much needed **financial counseling** services to its community and patients who have concerns about their health care costs. Financial Counselors are dedicated to: identifying and meeting their client's health care needs; providing assistance to apply for health insurance; navigating the health care industry; as well as determining eligibility for the Baystate Financial Assistance Program. They can also assist in linking their clients to health insurance and community resources. There has been an increase in providing additional

community support, including assisting patients with finding a new primary care physician, providing information on behavioral health services and also contacting pharmacies to straighten out insurance issues.

ALCOHOL, TOBACCO AND SUBSTANCE ABUSE

- **Northwest Opioid Overdose Reversal (NOOR) Project**, a partnership between Baystate Franklin, Opioid Task Force of Franklin County, Northern Berkshire Community Coalition, and North Quabbin Community Coalition, is funded through a federal HRSA grant. The goal of the project and partnerships is to reduce the incidences of morbidity and mortality related to opioid overdoses in the rural northwestern-central communities of Massachusetts through the purchase and placement of emergency devices used to rapidly reverse the effects of opioid overdoses and training of licensed healthcare professionals, emergency responders, substance abuse disorder treatment providers, family members of opioid users, and other lay responders on their use. NOOR will (a) strengthen and formalize connections to the local substance abuse treatment system enhance community strategic partnerships to reduce opioid overdoses, (b) widely disseminate medically accurate information about opioid overdose reversal to providers, law enforcement, emergency response personnel, and the general public, and (c) develop the accountability tools necessary to impact public policy and sustain the NOOR.
- **Communities that Care Coalition**, managed by the Franklin Regional Council of Governments is developing an evidence-based substance abuse and violence prevention curriculum within the schools in Franklin County and North Quabbin Region to address the growing use of narcotics use among middle and high school students. The priority health needs being addressed by this initiative include substance abuse prevention, support of mental health, and to improve the coordination of care within this population.
- **Opioid and Overdose Prevention Education Program** managed by Tapestry Health provides the community with competency-based education on opiates, overdose prevention and nasal naloxone administration throughout Franklin County and North Quabbin region. The priority health needs addressed by this initiative is substance abuse prevention and support of mental health.
- **Safe Prescriber Pledge Implementation**, managed by a healthcare coordinator and educator based at Valley Medical Group, provides guidance to area primary care and specialty practices, and to hospital-based physicians (Emergency, Hospital Medicine) in best practices to support care of patients who have been prescribed opioid medications for pain management and/or who may need assistance to cease opioid use. The priority health needs addressed by this initiative include access to behavioral health/substance abuse services.

Baystate Franklin and its Community Benefits Advisory Council continued to foster community partnerships and awarded grant funding to select partners through a request for proposal process to further address health needs identified in the 2013 community health needs assessment. The funded community partners and initiatives include:

- **YMCA in Greenfield**, “Exercise is Medicine” – Area providers write prescriptions for an exercise evaluation and plan, which are sent directly to the YMCA for follow-up. The program has been well received by participants, many of whom pay on a sliding scale. Baystate Franklin’s support

funded the existing cost gap which enabled the Y to further expand its program in the community.

- **Just Roots**, “Donor Supported Farm Shares” – While local produce abounds during the summer in Franklin County and North Quabbin, most low income families are not able to afford the full cost of these fresh fruits and vegetables. To bring weekly farm shares within reach of everyone, Just Roots – a food access organization that operates a Greenfield-based organic farm – created a donor-supported farm shares program.
- **Just Soup Project** managed by Just Roots provides members of the local community with a quick healthy eating option to assist with weight management and to bring attention to local agriculture. Funding also helped provide needed food into local shelters and food pantries. The priority health needs addressed by this project are chronic disease prevention and nutrition and physical activity.
- **Health Education and Literacy (HEAL)**, managed by The Literacy Project, is developed an evidence-based health literacy curriculum to improve the overall health and economic status of project participants. The priority health needs being addressed by this initiative include health literacy and knowledge of available services.
- **Rural Medication and Chronic Disease Self-Management Support**, managed by the Cooperative Public Health Service at the Franklin Regional Council of Governments, is providing walk-in clinics, care coordination and self-management counseling in four rural locations and home visits in nine rural towns. The priority health needs being addressed by this initiative include physical and social isolation, access to affordable and accessible medical care and health literacy and knowledge of available services.
- **Healthy Living Project**, managed by LifePath, provides courses to adults over the age of 40 on self-management of chronic conditions and encourages individuals to be more active in better managing their health and health care needs. The priority health needs being addressed by this initiative include chronic disease prevention and creating a system of care coordination.
- **Partners for a Healthier Community** provided content knowledge and expertise in the areas of chronic disease, mental health, health promotion, health education, behavior change, and systems and policy change to assist grantees in the development and implementation of evaluation plans to foster capacity-building.
- **Baystate Financial Assistance Program** – Baystate Health is committed to ensuring that the community has access to quality health care services provided with fairness and respect and without regard to a patients’ ability to pay. Baystate hospitals not only offers free and reduced cost care to the financially needy as required by law, but has also voluntarily established discount and financial assistance programs that provide additional free and reduced cost care to additional patients residing within the communities served by the hospitals. Baystate hospitals’ also makes payment plans available based on household size and income.

Summary

The Baystate Franklin Medical Center service area of Franklin County, MA continues to experience many of the same prioritized health needs identified in Baystate Franklin's 2013 CHNA. Social and economic challenges experienced by the population in the service area contribute to the high rates of chronic conditions and other health conditions identified in this needs assessment. These social and economic factors also contribute to the health disparities observed among vulnerable populations, which include children, older adults, Latinos, Blacks, and LGBTQ youth. Additional data is needed to better understand the needs of these populations in order to reduce inequities. The Baystate Franklin service area population continues to experience a number of barriers that make it difficult to access affordable, quality care, some of which are related to the social and economic conditions in the community, and others which relate to the healthcare system. Mental health and substance use disorders were consistently identified as top health conditions impacting the community, and the inadequacy of the current systems of care to meet the needs of individuals impacted by these disorders arose as an important issue that needs to be addressed. The opioid crisis has emerged as a top issue impacting the health of the community. Progress has been made to address some of the prioritized health needs previously identified, such as teen pregnancy and childhood obesity; however, rates remain high and work needs to be continued.

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Appendix I: Stakeholders Involved in CHNA Process

Steering Committee Members

Focus Group Participants

Key Informant Interviewees

Steering Committee Members

Name (Last, First)	Title	Organization	Organization Serving Broad Interests of Community	Organization Serving Low- Income, Minority, And Other Medically Underserved Populations	State, Local, Tribal, Regional, or Other Health Department Staff
Allard, Andrea	President/CEO	YMCA of Westfield	X	X	
Amador, Ruth	President	National Association of Hispanic Nurses – Western MA Chapter	X	X	
Ayres, Jim	Executive Director	United Way of Hampshire County	X	X	
Barber, Tania	President/CEO	Caring Health Center	X	X	
Blanchette, Mary Ellen	Nurse Leader	Palmer Public Schools	X	X	
Caisse, Ed	C3/Safe Neighborhood Initiative – South Holyoke	Hampden County Sheriff's Dept.	X	X	
Christopolis, Dave	Executive Director	Hilltown CDC	X	X	
Garozzo, Salvatore	Executive Director	United Cerebral Palsy Assoc. of Berkshire County, Inc.	X	X	
Graves, Marie	Program Director	Springfield Dept. Health & Human Services	X		X
Koehn Rudder, Shannon	Executive Director	MotherWoman	X	X	
Lee, Jennifer	Systems Advocate for Change	Stavros Center for Independent Living	X	X	
Lewandowski, Sue	Representative for Worcester County	Assumption College	X	X	
Lopez, Luz	Springfield Organizer	Stand for Children	X	X	
McCafferty, Gerry	Director of Housing	City of Springfield, Office of Housing	X	X	
Prullage, Beth	Clinical Social Worker	Providence Behavioral Health		X	
Reeves, Halley	Community Health Planning and Engagement Specialist	MA Dept. of Public Health			X

Name (Last, First)	Title	Organization	Organization Serving Broad Interests of Community	Organization Serving Low- Income, Minority, And Other Medically Underserved Populations	State, Local, Tribal, Regional, or Other Health Department Staff
Silverman, Risa	Coordinator, Office for Public Health Practice & Outreach	UMASS Amherst School of Public Health and Health Sciences	X	X	
Simmons, Tony	Community Liaison	Hampden County District Attorney's Office	X	X	
Simonds, Jane	Sr. Program Manager	Behavioral Health Network - Outpatient Services	X	X	
Walker, Phoebe	BFMC CBAC Co- chair	Franklin Regional Council of Governments (FRCOG)	X		X
Wilson, Gloria	Member	Western MA Black Nurses Association	X	X	
Wood, Ben	Healthy Community Design Coordinator	MA Dept. of Public Health			X

Focus Group Participants

Findings from four focus groups conducted informed this CHNA. Each focus group had a specific topic, and participants represented a range of age, gender, and race/ethnicity. Focus groups included:

Baystate Franklin Medical Center: Access to Health Care among the Elderly

- 16 participants
- Primarily females, aged ≤ 60
- Identified as white and Latino

Health New England: Access to Health Care for Low-Income Individuals

- 6 participants
- All females between 21-60
- Identified as white

Baystate Medical Center: Maternal and Child Health

- 7 participants
- All females between 21-30
- Identified as Black, Latina, and multi-racial

Mercy Medical Center and Baystate Medical Center: Faith-Based Leaders

- 11 participants
- Half male, half female
- Identified as white and Black

Key Informant Interviewees

Name (Last, First)	Title	Organization	Organization Serving Broad Interests of Community	Organization Serving Low- Income, Minority, And Other Medically Underserved Populations	State, Local, Tribal, Regional, or Other Health Department Staff
<i>Baystate Franklin Medical Center</i>					
Bouthillette, Marianne	Director of Child and Family Services	Parent Child Development Center, Community Action of the Franklin, Hampshire and North Quabbin Regions	X	X	
Cox, Jennifer	Director of Behavioral Health	Baystate Franklin Medical Center	X	X	
Cummings, Sara	Director of Community Services and Asset Development	Community Action of the Franklin, Hampshire and North Quabbin Regions	X	X	
Gerard, Mary Beth	WIC Director	Community Action of the Franklin, Hampshire and North Quabbin Regions		X	
Higgins, Clare	Executive Director	Community Action of the Franklin, Hampshire and North Quabbin Regions	X	X	
Manser, Katherine	WIC Senior Nutritionist	Community Action of the Franklin, Hampshire, and North Quabbin Regions		X	
Martocchia, Roseann	Executive Director	Franklin County Home Care Corp.		X	
Talati, M.D., Rakesh	Interim CMO and Chair of Emergency Medicine	Baystate Franklin Medical Center	X	X	
<i>Health New England</i>					
Azeez, Robert	Medicaid Behavioral Health Manager	Health New England		X	
LaBounty, Kerry	Medicaid Program Manager	Health New England		X	
Silva, David	Medicaid Community Leader	Health New England		X	

Name (Last, First)	Title	Organization	Organization Serving Broad Interests of Community	Organization Serving Low- Income, Minority, And Other Medically Underserved Populations	State, Local, Tribal, Regional, or Other Health Department Staff
Spain, M.D., Jackie	Medicaid Program Medical Director	Health New England		X	
<i>Public Health Personnel</i>					
Caulton- Harris, Helen	Commissioner of Public Health	City of Springfield	X		X
Dennis, Soloe	Western Region Director	Massachusetts Department of Public Health (MDPH)			X
Garcia, Luz Eneida	Care Coordinator	MDPH Division for Perinatal, Early Childhood and Special Needs, Care Coordination Unit			X
Hyry-Dermith, Dalila	Supervisor	MDPH Division for Perinatal, Early Childhood and Special Needs, Care Coordination Unit			X
Metcalf, Judy	Director	Quabbin Health District	X		X
O'Leary, Meredith	Director	Northampton Health Department	X		X
Steinbock, Lisa	Public Health Nurse	City of Chicopee	X	X	X
Walker, Phoebe	Director of Community Services	Franklin Regional Council of Governments (FRCOG)	X		X
White, Lisa	Public Health Nurse	Franklin Regional Council of Governments (FRCOG)	X		X

Appendix II: Focus Group and Key Informant Interview Summaries

Focus Group Reports

- Access to Health Care among the Elderly
- Access to Health Care for Low-Income Individuals
- Maternal and Child Health
- Leaders from Faith-Based Communities

Key Informant Interviews

- Baystate Franklin Medical Center
- Health New England
- Public Health Officials

Focus Group Report: Access to Health Care among the Elderly

Participants: Adults over 60

Primary Hospital/Insurer: Baystate Franklin Medical Center

Date: February 26, 2016

Executive Summary

This focus group consisted of 16 adults aged 60 years or older who were recruited through flyers distributed at senior facilities/agencies, emails, and Facebook postings. The focus group addressed needs, access and barriers to receiving health care among elders, with emphasis on overall health, mental health, life changes, and homecare, and also addressed circumstances and barriers for accessing primary and emergency care and medication.

Participants identified an array of needs, including more providers and geriatric specialists, opportunities to socialize, support with mental health and transitioning into being older adults, attention to issues of addiction, and education about follow up and self-care. Participants benefit from access to online information, minute clinics, nurse practitioners, and senior center programs. They need better access to transportation, more opportunities to socialize, and help navigating insurance coverage and the healthcare system. Finances and navigating insurance coverage are significant barriers for many elders. Many also experience a stigma around growing older, and struggle to connect with, and get support from, their peers and others in their community.

Participant Demographics

Sixteen white adults over 60 years old participated in the focus group, with only one identified as Hispanic/Latino. Ten participants identified as female and six identified as male. Ten participants identified as straight, three as lesbian or gay, one as bisexual, and one as other.

Areas of Consensus

- Opportunities for socialization and having a sense of community is important to the health of older adults (senior centers, support groups, etc.)
- Isolation is detrimental to health in general and mental wellbeing in particular, and that human interaction in itself is therapeutic.
- Coping with chronic illness and age-related issues can be difficult
- Health system is complex
- Cost & limitations of insurance coverage are a barrier to appropriate care and treatment
- Retiring/leaving providers have not been replaced
- Transportation barriers specific to elders and location (rural vs. urban)
- Elders have different support needs in regards to substance use/opioids

Recommendations

- More support groups and other venues for socialization, including outreach to those who don't tend to leave home
- More primary care doctors, especially geriatric specialists
- More clarity from health care providers regarding follow up care
- More education about chronic disease self-management
- Continued access to urgent care and more minute clinics
- Information about alternative medicine options
- Increased access to transportation
- Access to electronic health information (example: call-in line and patient portals)
- Assistance to help older adults navigate the healthcare system and insurance industry.

Quotes

- "We have support groups for diabetes, but we don't have any support groups for elders dealing with mental health issues."
- "A lot of problems, including mental health, are from lack of socialization, after people stop working...People are shell shocked once they leave work. It was their social life, and they didn't even know it"
- "There are special health needs relative to older bodies."
- "A lot of focus has been on young people with opiate drugs and that sort of thing, but I know a lot of older people with addiction issues. As they get older, especially if they retire, they indulge in more and more alcohol drinking, which can lead to depression... Addiction with seniors is a hugely different story than it is with a 22-year-old in terms of how it is visualized, recognized...Addiction among elders needs to be addressed and treated."
- "We need our physicians to be clearer on the orders you get when you leave a hospital or ER. Patients need to be able to understand these. When you're discharged from hospital you may

be groggy from whatever medication you were given...No one is coordinating your care. This lack of coordination of care results in people going to the ER when they otherwise wouldn't need to do that.”

- Elders of color are an “invisible group” with multiple health care needs

Key Issues

Question	Synthesis of Responses
<p>1. What supports and services do elders in our community need to support good health?</p>	<ul style="list-style-type: none"> • Opportunities for socialization (i.e. senior centers, senior living facilities, etc.) • Addiction services and treatment tailored to older adults, particularly for opiates and alcohol <ul style="list-style-type: none"> • One participant mentioned the loss of a local detox facility • Transportation to get to doctor's appointments, especially in rural areas with limited public transportation <ul style="list-style-type: none"> • Many elders have to give up their license at some point or have difficulty driving in inclement weather. • Other supports and services mentioned: <ul style="list-style-type: none"> • More providers and a full scale medical center • LGBT rights allowing visitation of hospitalized partners • Advocacy for people at home, in nursing homes, and in hospital
<p>2. What supports and services do elders in our community need but have a hard time accessing?</p>	<ul style="list-style-type: none"> • More providers, including gerontology specialists, general practitioners, nurse practitioners, and doctors who make house calls • Addiction recovery supports and services targeted to older adults • Chronic illness supports and services, especially for people living with multiple chronic illnesses • Alternative treatment options, including alternative treatment for chronic pain. One participant noted a need for accessible medical marijuana. • Outreach programs to visit older adults who cannot get out of their homes
<p>3. What kinds of issues do elders tend to go to their doctor for, and when might they have an issue but not call their doctor, and why?</p>	<ul style="list-style-type: none"> • Go online first to determine whether a doctor is necessary <ul style="list-style-type: none"> • Internet is good resource, but it can be difficult to determine what information is useful and accurate. • Use infoline to speak to a nurse to determine if they need to see a doctor. • Difficulty navigating the insurance system and determining what is covered prevents people from getting care. • High co-pays for medication and care prevents people from accessing care.

Question	Synthesis of Responses
<p>5. What kinds of issues do elders generally go to the emergency room for and why? Could any of these issues be prevented, or handled better elsewhere, and if so, where and how? What could be done to help elders avoid going to the hospital when it isn't necessary or the most effective way to get the care they need?</p>	<ul style="list-style-type: none"> • Minute clinics, urgent care facilities, and other off-hour care options help elders avoid unnecessary trips to the ER. • Specialty clinics for chronic disease management (diabetic clinics, congestive heart failure clinics), according to one participant, help people manage their own care and avoid trips to the ER. • Improved care coordination prevents unnecessary hospitalizations. • Clear discharge instructions prevent people from returning to the hospital. • Improved transportation options for non-emergency care. One participant noted that elders sometimes use ambulances to go to the ER because doing so solves the transportation issue and generally leads to shorter waits.
<p>7. Elders often experience feelings of loss, grief, loss of a sense of purpose, or to have a hard time coping emotionally with their failing health. Some struggle with severe anxiety, depression, or mood disorders. We think of these as mental health issues. What are some of the emotional, mental health issues faced by elders in our community? What could the hospital, or community or senior center offer for elders who are struggling emotionally and who could use some help with their mental health?</p>	<ul style="list-style-type: none"> • Socialization opportunities, ranging from informal activities to support groups, to help people adjust to and cope with aging • Outreach to elders that are less likely to leave home • Isolation can contribute to addiction among elders • Opportunities for socialization are important for mental health • Transportation to increase involvement in programs
<p>9. What needs do elders have for social services? What are the barriers they face in accessing these services?</p>	<ul style="list-style-type: none"> • Financial support for elders who do not qualify for subsidies but also don't make enough money to meet all of their needs (food, medical care, housing costs, etc.) • Assistance connecting to social service programs (example: fuel assistance) • Transportation
<p>10. What would help elders be able to continue to live at home?</p>	<ul style="list-style-type: none"> • Information and education home adaptations as you age • Education about when it's best to not stay home • Assistance at home • Assistance with finances

Focus Group Report: Access to Health Care for Low-Income Individuals

Participants: Mothers

Primary Hospital/Insurer: Health New England

Date: April 5, 2016

Executive Summary

The focus group consisted of six female residents of a low-income housing development in Greenfield, MA. Discussions revolved around access to healthcare, including gaps and barriers to obtaining needed services.

Poverty was an underlying theme of this focus group. Poverty is a significant barrier to health. Respondents spoke about their inability to afford medications, transportation to appointments, childcare, and gym memberships.

Participant Demographics

6 participants, recruited through the housing coordinator at a low-income housing complex located in Greenfield

- All participants were females: all identified as straight
- Age distribution:
 - 1: 21-30 years old
 - 1: 41-50 years old
 - 2: 51-60 years old
 - 2: >60 years old
- All identified as White, and not Hispanic/Latino

Areas of Consensus

- Participants generally agreed that lack of transportation is a significant barrier to accessing needed care. Most participants rely on others for rides or use public transportation.
- Public transportation was reported to run infrequently, and/or have limited drop off locations that require a secondary form of transport (or walking in areas that are not pedestrian friendly.)
- “TP1’s” (insurance funded transportation system) have to be scheduled in advance, and do not make accommodations for accompanying a dependent.
- Participants agreed that waiting for appointments is a barrier. They reported that it can take a few days to see a doctor when sick, a few weeks to see a specialist, and up to a year to schedule a routine physical. Limited access to transportation compounds this issue.
- Participants agreed that they have limited input in setting the goals and priorities for their health.

- Most participants reported feeling rushed during appointments; not having enough time for questions; and having a limited understanding of medical jargon when discussing medical conditions.
- Half of the participants reported limited dental coverage.
- Changes in prescription coverage as a result of recent insurance changes were a frustration for most participants.

Recommendations

- Increased availability of transportation options for those that don't own cars.
- More free venues for exercise and more nutrition/diet support services.
- More comprehensive dental and vision coverage.
- Better training for customer service representatives at insurance companies and doctor's office.
- More social workers/patient navigators to assist with paperwork, scheduling appointments, transportation, and support during (and to prepare for) doctor's appointments.

Quotes

- "My son has been on his medication for 13 years, and now they are saying that they cannot cover it. They offer an alternative, but we have already done all of the alternatives- Why step backwards?"
- "Everyone in my house was sick last month. I had already taken too much time from work. I couldn't get appointment with primary care doctor that worked with my schedule, so I went to the clinic. Then the clinic made me wait for authorizations."
- "TP1s only apply to that one person. It is difficult for single parent- you can't bring your kids with you."
- "You have to wait 45 minutes for a 5-minute appointment. I think of things afterwards because they rush you and you don't have time to think about it sometimes."

Key Issues

Question	Synthesis of Responses
<p>1. What has you/your family member's experience with the health care system been like</p>	<p>Participants primarily focused on barriers to obtaining prescription medication, including:</p> <ul style="list-style-type: none"> • The cumbersome and timely preauthorization process • Insurance company stopping coverage of certain prescription drug benefits • Co-pays for prescription medications • Waiting for prescriptions to be filled • In response to this question, participants primarily focused on service coverage as opposed to interpersonal interactions when seeking care

Question	Synthesis of Responses
<p>2. Please tell me about barriers you've experienced when trying to get care</p>	<ul style="list-style-type: none"> • Most participants agreed that transportation was a significant barrier to getting care • Although transportation vouchers ("TP1's") are available, they are limited to doctor's appointments (i.e. not pharmacy visits) and are only valid for the patient receiving services (and therefore do not cover the cost of bringing or accompanying a child/dependent to an appointment) • TP1 vouchers must be scheduled nearly a week in advance, so are not helpful in emergency situations • Specialty services (i.e. optician) that accept their insurance are not located on a bus line- this requires paying for taxi fare, or walking on the shoulder of the road • Services that are not housed in one location are more difficult to access; this means more time away from work to access all services • A few participants noted barriers surrounding vision care, specifically limited optician services within a reasonable distance • Insurance only covers one pair of glasses/year, which can be challenging for children who are prone to damage them; when broken, it can take up to 6 months to repair • Other barriers mentioned included difficulty getting appointments to see Primary Care Provider (PCP) with short notice, long office waits, and cumbersome authorizations required to visit urgent care clinics. • Although some providers have e-portals for communication, participants reported the cost of Internet service and availability of computers as a barrier to accessing this service • Most reported missing appointments that have to be booked far in advance • If three consecutive appointments are missed, the patient it required to find a new PCP • Most reported long wait times for appointments (2 days for urgent care, a few weeks for specialty care, 1 year for primary care)
<p>3. When you have gotten medical care (PCP, ER, specialty), what has your experience been like?</p>	<ul style="list-style-type: none"> • The majority of participants reported long wait times in doctor's offices, and short appointment times • One participant expressed feelings of not being listened to • Participants report feeling rushed during appointments, and forgetting to ask questions • The use of medical jargon is frustrating

Question	Synthesis of Responses
<p>4. Who do you call if you or a family member has a health crisis? (i.e. family member, clergy, doctor, mental health professional, friends, police, emergency room, hotline?) Who do you contact if you have a concern about your treatment or recovery?</p>	<ul style="list-style-type: none"> • Answers varied: some participants call 911, others call a family member to avoid the high cost of taking an ambulance • Some participants reported calling their doctor's office if they have concern about their treatment or recovery • One participant noted that you sometimes get a faster response if you call to speak to a nurse • Most participants referred to seeking professional input (call lines at doctor's office) versus seeking input from family or other social support connections
<p>5. How much input do you have in setting the goals and priorities in taking care of your health?</p>	<ul style="list-style-type: none"> • Most participants reported having limited input or choices in the services and care they receive. • This is linked to limited appointment time and use of medical jargon that confuses patients
<p>6. What health services are valuable/not valuable, what services do you need to meet your health goals, where do you get services?</p>	<ul style="list-style-type: none"> • Participants generally agreed that follow-up appointments seemed like they were for no reason, and were a waste of time • It appears that individuals could benefit from increased education about what conditions need immediate care and/or prescription medication • Two participants shared stories about their doctors making recommendations that they could not afford, including attending a specific seminar and buying PediaSure • Half of the participants spoke about needing to have medications and conditions explained in plain language, and requested less medical jargon overall • Two participants reported their doctors told them to go home and Google their questions

Question	Synthesis of Responses
<p>7. What other services would help you achieve your health needs/recovery goals?</p>	<p>Participants mentioned the following services:</p> <ul style="list-style-type: none"> • Services for diet and exercise, including diet educators, nutritionists, and no-cost exercise facilities • Participants were either unaware of gym membership reimbursements, or were unable to pay out of pocket at the time • The length of time to get reimbursed was noted to be a barrier to using this service • More dental services • Childcare for appointments and in general • Patient navigators/social workers to help with insurance sign-ups, paperwork, transportation, coordinating appointments, etc. • Patient advocates/navigators to help prepare questions while waiting for appointments, elucidate medical jargon and navigate appointments • Increased transportation services • Job training
<p>8. If you could change any aspect of the health care system that you have experienced, what one or two things would you change that would have the most positive impact?</p>	<ul style="list-style-type: none"> • The majority of participants focused on training customer service professionals at insurance companies and doctors' offices to ease a patient's ability to navigate the system and get prompt responses. • Need for expanded dental coverage (more than just "pulling and cleaning") • For doctor appointments: more time, be listened to more, have more input and choices, simplify language
<p>9. IF TIME: Are there some health or other services available now but you cannot access them because of when or where they are offered? What are they and what are the barriers?</p>	<ul style="list-style-type: none"> • Participants mentioned limited accessibility to women's health services • When asked, all 6 participants reported not receiving routing OB GYN care • Other services mentioned throughout the focus group include: <ul style="list-style-type: none"> • Glasses- better replacement options for young children • Dental Care- increased services, such as dentures

Focus Group Report: Maternal and Child Health

Participants: Mothers

Primary Hospital/Insurer: Baystate Medical Center

Date: March 7, 2016

Executive Summary

Participant Demographics

The 7 participants were recruited through informal networks primarily by CHNA Steering Committee members. Several worked or had previously worked in health related field.

- All participants were women who had at least one child.
- 6/7 were in the 21-30 age range.
- 4 identified as Hispanic/Latino; 3 as African-American; 2 as more than one race.

Areas of Consensus

- Women face a variety of challenges in terms of managing medical care for themselves and their families, among many other responsibilities (work, child care, children's education, housing, etc.).
- Stress, anxiety, depression all make it difficult to make decisions, manage health care, and take care of oneself as a new parent.
- Appointment scheduling: women are consistently frustrated with challenges in scheduling timely appointments. They often have to wait for weeks to address immediate needs.
- Payment/cost frequently hinders access to care.
- Women rely on informal support systems (family and friends) for information, guidance, and shared resources. They would be very interested in health services that work with or build support systems among mothers.
- Many are interested in expanded supports and education for fathers, so they can be more effective and active in the parenting role.
- Many women feel that medical providers are working from a protocol, rather than tuning in to a specific woman's needs. They identify several instances where providers don't follow-up on issues or appropriately attend to patient concerns.

Recommendations

- **Build (on) informal support systems:** women expressed an interest in accessing health care that has built into informal support systems (for example, a support group that is initiated early in prenatal care). They tend to share information through family members, who could potentially be recruited to help women access appropriate care.
- **Build formal support structures:** for example, include a patient advocate, social worker, or case manager early in prenatal care to support care coordination for mothers and their children. This role would check in with mothers on mental and physical health, barriers to

accessing care, and other stressors and help women to navigate the various support systems.

- **Identify ways to make health care service delivery more patient-centric:**
 - Use accessible (non-technical) language; translate documents
 - Ease access to appointments: Recognize that pregnant and parenting women have many obstacles to getting to appointments on time. Increase flexibility to allow for short-term appointment scheduling and late arrivals for appointments.
 - Prior to any testing or treatment, provide relevant and accessible information; time for parents to process information, ask questions, and make decisions; and a clear consent process.
 - Immediately after delivery, women are engaged in intense physical recovery and emotions. Hospital staff should look at policies and practices to alleviate the pressure on mothers to make decisions and prepare for discharge.
 - Add some luxury services to help relieve stress (e.g., massage, manicure).
- **Coordination and Access:**
 - Provide multiple services under one roof: let women and children access health care appointments in one location.
 - Facilitate sharing of information among patients and their providers including, prenatal, postpartum, pediatricians, and specialists. For example, women are more likely to see their newborn's pediatrician over the first six months than their own ob/gyn. Consider how staff in pediatric offices could follow-up with mothers on mental and physical health issues.
- **Communication:** Use multiple methods of communication, and communicate information more than once. Follow-up with mothers before and after appointments.

Quotes

- **Scheduling challenges:**
 - *"I tell them to call me as soon as they get an appointment. I harass them every day?"*
 - *"My daughter is always sick, so I need to be able to get in. I can't wait for a long time for an appointment."*
 - *"I had tons of morning sickness. [My doctor's office policies are] if you are more than 15 minutes late, you have to reschedule. They should have more common courtesy and be flexible."*
- **Provider sensitivity and communication:**
 - *"[hospital staff] see people having babies everyday; it's no big deal. They don't see it from a new mom's eyes."*
 - Providers need to talk in "regular English" – break it down; Moms "may not ask because they don't want to feel stupid."
- **Ease of access/ one-stop shopping:**
 - *"If there was one place we could go, we would get there."*

Key Issues

Question	Synthesis of Responses
1. Urgent health needs among pregnant and parenting women:	<ul style="list-style-type: none"> ● Responsive prenatal care ● Mental health: stress reduction, postpartum depression, anger mgmt ● Follow-up medical/emotional care and supports after postpartum visit(s) ● Diabetes management and follow-up ● Providers to pay attention to women's concerns and issues that arose in previous pregnancies
2. Other supports needed:	<ul style="list-style-type: none"> ● Groups for parents of children with special needs (managing health and school issues) ● Childcare ● Individualized Educational Program (IEP) advocacy with schools
3. Barriers to accessing appropriate care:	<ul style="list-style-type: none"> ● Difficult to schedule appts ● Insurance; high cost of services; lack of money to cover co-pay ● Provider-centric policies (e.g., scheduling, late arrivals) put women off ● Mother's feeling that providers are not listening or following-up on issues ● Awareness of appropriate services ● Transportation ● Understanding all the information and making decisions (e.g., vaccine information given at birth) ● Lack of knowledge/information regarding birthing classes
2. How did you find a health care provider (for PNC or Ped):	<ul style="list-style-type: none"> ● Mother, sister ● ER ● Internet/google ● Hospital (where gave birth) recommended pediatrician ● MD/nurse recommendations ● School referral for counselors ● Early Intervention ● Rick's Place ● Square One
3. Trusted sources of information:	<ul style="list-style-type: none"> ● Pediatrician (but some don't trust MD recommendation) ● Family/Friends ● WIC ● Family/personal history with specific MD ● Knowledge/reputation of area hospitals strengths and weaknesses for OB (e.g., liked Riverbend/Mercy for PNC and likes patient portal; like Baystate for delivery because the NICU is there)

Question	Synthesis of Responses
4. Ever had trouble finding a provider:	<ul style="list-style-type: none"> ● Yes, for mothers and for kids, particularly for mental health for moms, and special therapeutic services for kids ● Helps to be connected through one provider: e.g., Square One
5. What works about health care services you have received:	<ul style="list-style-type: none"> ● Convenient location: my OB was in the same place I worked ● Had own transportation ● Hours worked around work schedule ● Doctor made me feel really comfortable ● Meeting pediatrician in hospital (at delivery) and continuing to work with that MD ● WIC is good at frequently reminding/checking-in with women about service options, decisions that need to be made
6. Would you recommend to others?	<ul style="list-style-type: none"> ● “Absolutely” ● Others will warn friends about providers they were dissatisfied with
7. What didn't go well:	<ul style="list-style-type: none"> ● Scheduling appointments for routine and urgent care: <ul style="list-style-type: none"> ○ Difficult to get appointment quickly ○ If need to re-schedule may have to wait for a long time ○ Had to switch doctors because couldn't get an appointment ○ Difficult to get through to scheduling ● Switching doctors ● Unfriendly/insensitive nurses, doctors ● Providers going through their “checklists,” but not paying attention to individual patient responses and needs; patient is treated as a diagnosis, not as a person ● Payment challenges: <ul style="list-style-type: none"> ○ providers say we won't see you any more if you can't pay; one mother had to find a new provider for PNC, because she owed money to previous provider ○ If supposed to bring co-pay at time of visit, often postpone appts ○ Huge co-pays for labs, visits, and prescriptions ● Lack of information about procedures and options; <ul style="list-style-type: none"> ○ One mother reported routine drug, STD testing without information or consent

Question	Synthesis of Responses
<p>8.How could we do it better:</p>	<ul style="list-style-type: none"> ● Provide easy-to-read handouts with clear explanations of what patient can expect, and what lab work they are doing. ● Flexibility in scheduling appointments – be more accessible on short notice. Follow-up promptly on needed appointments. ● Recognize the demands and challenges for moms – if they are late for an appoint, figure out how to accommodate ● Be more sensitive to patient perspective and needs; speak in easy-to-understand language (avoid technical jargon) ● Home visits for PNC and post-partum ● Attention to individual woman’s issues and follow-up (e.g., don’t just ask once how the mom is feeling postpartum; ask again in a week or a month; pay attention to stressors). <ul style="list-style-type: none"> ○ Assign a counselor or therapist that really pays attention to mom’s status and needs ● Moms need someone to talk to; providers or other supports services need to find time to listen and talk ● Cover mom’s post-partum health and baby visits at the same time ● Don’t do treatment, tests, or even little things (e.g., pacifier) without getting consent ● Skype call (“mobile doctor”) so you can get quick access to a MD ● Group visits: appealed to many; create support group early in pregnancy. Women who can share information and ideas with each other. Perhaps they can have medical visits at the same time. ● Includes supports for fathers and families; family counseling to help manage stress and help new parents work together. ● Should have all services together in one place!! <ul style="list-style-type: none"> ○ Services are set up at convenience of doctors and hospitals; patients/women are not at the center of the service design ● Let mom rest for the hours after delivery; <i>“don’t rush us out and try to cram everything in”</i> ● Pregnant/postpartum: women are feeling “fat and ugly” and tired. Provide “feel good” services: e.g., manicure, massage, hair cut
<p>9.What prenatal services did you not receive that you wish you had:</p>	<ul style="list-style-type: none"> ● Education, support resources for fathers

Question	Synthesis of Responses
<p>10. What advice would you give your friend or sister about prenatal care:</p>	<ul style="list-style-type: none"> • Go to the birthing classes • Request frequent reminders about different service options, decisions they will need to make • Get ongoing support for nursing • Get more information for after the baby is born: what to expect from baby and what you can expect (e.g., hair loss)
<p>11. WHEN YOU WERE PREGNANT, what was the most helpful advice/information you received:</p>	<ul style="list-style-type: none"> • MD said: “just relax”; relax and be calm; one day at a time • Nothing: “I’m pregnant now, and I can’t think of one helpful thing that anyone has told me”
<p>12. Where did you turn for information about <u>pregnancy</u>:</p> <p>Where did you turn for information about <u>parenting</u>:</p>	<ul style="list-style-type: none"> • Mom, sisters, sister-in-law • Internet • Nurses • No one • Family, mother-in-law • Early Intervention “helps more than doctors’ offices” <ul style="list-style-type: none"> ○ El came to house to evaluate child and helped get them the stuff she needed for her child (braces, shoes) • DCF sponsored parenting class
<p>13. How do you prefer to get information:</p> <p>Information challenges:</p>	<ul style="list-style-type: none"> • Text messages and emails • Mail - hard copies • Needs to be translated • In person • Want test results whether they are normal or abnormal. • Patient portal – can see all your results • Online videos: yes interested, but how are you going to know what’s out there • Davis Foundation: has texting campaign to let people know about things going on in Springfield • Baystate Pediatrics is very helpful <ul style="list-style-type: none"> • Can’t always make it to everything and then you miss out on information, <ul style="list-style-type: none"> ○ Often don’t find out about things until after it’s over (e.g., free shoes and hair cut for your kids) • Phone calls: often too rushed; don’t get complete information • Need more coordination among different providers, so getting same information from everyone

Question	Synthesis of Responses
<p>14. How many different doctor's offices do you have between yourself and your children:</p>	<ul style="list-style-type: none"> • Some just have one doctor (pediatrician) • Several said 3 • Ranged up to 5, including primary care/gyn, pediatrician, therapists, and specialists • Others included ER as one of their providers • Most have to go to multiple buildings or practices for parents and children • Get different information from different providers: "crazy"; huge waste of time and money
<p>15. Are you able to use the same practice for prenatal and postpartum:</p>	<ul style="list-style-type: none"> • Many "yes",
<p>16. How do you navigate multiple providers:</p>	<ul style="list-style-type: none"> • Good calendar systems • Moms as navigator for family • Reminder calls are really helpful • Patient care coordinator – they were going to get the patients calendars and help patient follow-up on appointments
<p>17. Things that you need to have to take care of a baby or children:</p>	<ul style="list-style-type: none"> • Money: <i>"this is what gets you access to everything else"</i> • Shelter/housing • Support system • Information • Patience • Milk/formula – when you first come out of the hospital; food • Clothing • Support group for sharing resources (e.g., knowledge and needed resources, e.g., formula) • Transportation to get to appointments • Free services • Timely appointment (ease of access to medical appointments) • Need help addressing the multiple challenges: education, job, child care • Supportive employers– <i>"really, really hard to go back to work after you've had a baby"</i> <ul style="list-style-type: none"> ○ Employee assistance program • Car seats • Father support/education • Child care

Question	Synthesis of Responses
<p>18. Which have you had difficulty obtaining:</p>	<ul style="list-style-type: none"> • Milk/formula • Child care • Education • Resources for fathers • Father groups/supports • Father education • Fathers don't know what it entails to take care of a baby/family • They need to be educated on how to support mom • Lack of access to support system • Timely appointments: <ul style="list-style-type: none"> ○ E.g., son having a reaction to a medication, and they say wait for 3 weeks for an appointment ○ Don't schedule time-sensitive appointments 1-2 weeks out • Information on short-term decisions/things to do for your baby (e.g., circumcision)
<p>19. Challenges with housing while pregnant or parenting:</p> <p>Could health care providers help with housing?</p>	<ul style="list-style-type: none"> • YES! And know many other moms • Some live with mother, other family members • Unforeseen circumstances, out of their control, can change stability quickly: <i>"How do you relax when you don't know where you are going to live"</i> • Have a newborn in far below acceptable housing is very stressful (e.g., with rodents) • Could have someone helping with all social services – make sure all essential supports are in place • How do they help people who aren't eligible for services? <ul style="list-style-type: none"> ○ Services aren't there if you are in the upper low-income range: <i>"they want you to give up your car, take the bus, and then you are late for appointments ..."</i>
<p>20. Last thoughts:</p>	<ul style="list-style-type: none"> • Interest in awareness/support groups for various issues: sickle-cell, pain management, IEP needs and advocacy, sharing material goods • <i>"Don't forget the fathers."</i> • Provide postpartum mental health supports • Build and build on support systems! • Provide "really lovely" treatment for stressed moms (e.g., massage)

Focus Group Report: Faith-Based Leaders

Participants: Faith Based Leaders

Primary Hospital/Insurer: Baystate Medical Center and Mercy Medical Center

Date: February 29, 2016

Executive Summary

Participant Demographics

The focus group included 11 faith-based leaders from Hampden County, including Springfield, Holyoke, and several other towns. A small number specifically referenced their work with low-income or homeless populations. Several reflected primarily on the needs of working or middle class and older populations. The group included:

- 6 women and 5 men
- 9 White and 2 African-American participants

Areas of Consensus

- Faith leaders are clearly interested in enhanced communication and coordination with hospital staff. Several agreed they want to be able to count on communication from the hospital when congregants are hospitalized or need community supports. They see personal outreach from hospital chaplain's office as an effective way to build relationships and bridges. Several would facilitate health outreach and education efforts aimed at their parishioners/community.
- There was general consensus about the breadth of substance use and addiction problems affecting diverse populations. The opioid crisis is appearing in all communities. All noted that drug use is prevalent among youth, and many pointed to alcohol addiction in older populations. Some are particularly concerned with the dual challenges of homelessness and addiction. All agreed on the need for enhanced short and long term treatment options for those with and without insurance.
- Many pointed to the widespread need for greater health literacy; access to information about wellness, health promotion, diseases, and service options. Several said they would work with the hospital to organize community events promoting wellness, at which health care providers could provide education, information, and referral services.
- For many consumers, navigating and advocating within the health care system is a major challenge. Many consumers simply don't know where to go or how to access certain services. Particularly those with multiple issues—several mentioned increasingly complex health concerns faced by seniors—have trouble finding providers and coordinating among multiple providers, treatments, and medications.
- Faith leaders identified a number of issues affecting health equity. These include: financial status, noting that MassHealth doesn't offer the same quality and access to services as private insurance and that those above the MassHealth threshold face greater challenges in

accessing care; cultural insensitivity among providers; education and cultural background affecting patient advocacy skills; and stigma relative to certain populations (those who use drugs, ex-offenders, homeless, mentally ill, e.g.).

Recommendations

- Hospitals are well-positioned to collaborate with churches on outreach and education. This process needs to respect community stakeholders as equal partners who have essential knowledge about community needs and engagement. Church leaders would welcome hospital representatives to provide education on specific health issues and to offer community-based health services at church organized events. Collaboration with parish nursing programs could benefit health providers and faith communities by enhancing or expanding health education and screening opportunities for congregants. However, only a few of the churches have such programs or other informal health care educators (e.g., retired health professionals).
- One particular area to address is coordination of care and managing transitions for seniors. Hospitals could consider expanding on municipal senior service programs to reach a broader swath of the elderly. Collaboration between churches and hospital services could promote effective communication with the seniors and family members and help get community supports in place as seniors require an expanded array of services.
- Faith leaders often find themselves ill-informed or lack the time to help congregants with health advocacy and navigation. They suggested that health care providers could help to train church representatives on service availability, resources, and advocacy skills, so that these lay leaders could support congregants in accessing appropriate care. Hospital and faith leaders could work together to identify other ways to create a “health care clearinghouse.”
- This focus group provided a forum that faith leaders were excited to participate in. They welcomed the opportunity to come together to share ideas and challenges. Baystate and Mercy should consider opportunities to follow-up with these participants and those from other faith communities. Personal outreach and relationships will offer a foundation for creating a stronger network of health system and faith community leaders working together to address community health issues.

Quotes

- **Substance use:**
 - *“Immensity of [opioid use] overwhelms me.”*
 - *“Especially when dealing with drug addiction, a parishioner’s depression when not well managed can lead to drug abuse. Insurance may be done but his health needs are far from done. People need ongoing care to stay clean.”*
- **Health literacy and access to information:**
 - *“In general people need a little more education. And easy access [to information on health care options], [it’s] available on websites, but to find an answer to an exact question is very difficult for people. They don’t use official sources, word of mouth, sometimes it is not the real useful information.”*

- *“People need services and don’t know to ask for them, don’t know they exist, don’t know who to ask.”*
- **Coordination of care:** *“[A big problem is] parishioners that have many medications and many doctors. Miss the days one doctor was looking at all of it.”*
- **Collaboration between hospitals and communities/churches:**
 - *“How do you collaborate with community with integrity? ... Agencies from health care go to organizations with credibility, credibility means we [community stakeholders] have to have say.”*
 - *“Relationship building that would benefit populations that we serve: [hospitals] could serve the target populations far better than they do [through] outreach and collaboration.”*
- **Navigation and advocacy:**
 - *“Sometimes we are the only rational person in the room, have to broker a lot of deals. [We could use] local formal training. We know the people and they know us.”*
 - *“One minute I’m a pastor, the next I’m navigating their care. They are looking at their doctor like what are they talking about.”*
 - *“When these things happen, people are in crisis. [It’s] hard to navigate, make [the needed] phone calls.”*
- **Health care coverage:**
 - [This is] *“a moral issue! When did healthcare become for profit, immoral to me.”*

Key Informant Interview Report: Baystate Franklin Medical Center

Dates:

February 10th - February 19th, 2016

Interview Format:

Phone interviews, approximately 1 hour in length.

Participants:

- Jennifer Cox, Director of Behavioral Health, Baystate Franklin Medical Center
- Rakesh Talati, MD, Interim CMO and Chair of Emergency Medicine, Baystate Franklin Medical Center
- Roseann Martoccia, MPA, Executive Director, Franklin County Home Care Corp.
- Clare Higgins, Executive Director, Community Action of the Franklin, Hampshire, and North Quabbin Regions
- Sara Cummings, Director of Community Services and Asset Development, Community Action of the Franklin, Hampshire, and North Quabbin Regions
- Mary Beth Gerard, WIC Director, Community Action of the Franklin, Hampshire, and North Quabbin Regions
- Katherine Manser, WIC Senior Nutritionist, Community Action of the Franklin, Hampshire, and North Quabbin Regions
- Marianne Bouthillette, Director of Child and Family Services, Parent Child Development Center, Community Action of the Franklin, Hampshire, and North Quabbin Regions

Areas of consensus across interviewees:

- The opioid epidemic is an urgent and increasing health issue.
- Mental health/substance use is an urgent need, and it is difficult for people to access the care they need.
 - Need for more inpatient and outpatient care, especially for pediatric and geriatric populations
 - Young adults that are ineligible for youth and elderly programs are a concern
 - Lack of follow up care
 - Stigma
- Some vulnerable populations experience greater barriers to accessing care.
 - Low-income individuals, homeless populations
- There are many barriers that make it difficult for residents to access care.
 - Transportation
 - Health literacy
 - Complexity of health care system
- There is a need for more wrap around services and collaboration.

Key Issues

Question	Synthesis of Responses
<p>1. What are the 3 most urgent health needs/problems in your community/service area?</p>	<ul style="list-style-type: none"> • Addiction, most notably the opioid epidemic • Mental health: scarcity of inpatient beds and outpatient care; especially urgent among geriatric, pediatric patients, and all low-income individuals • Other urgent needs include: <ul style="list-style-type: none"> • Memory loss and dementia among older adults • Care for people with multiple diagnoses • Dental care • Affordable supportive housing for the chronically mentally ill • Nutrition
<p>2. What health issues have emerged and/or dramatically increased in prevalence in the last 1-2 years in your area?</p>	<ul style="list-style-type: none"> • Opioid use • Violent behaviors among psychiatric patients • Other emerging or increasing health issues mentioned once include: <ul style="list-style-type: none"> ○ Stroke ○ Inadequate diets ○ Memory loss and dementia ○ Multiple diagnoses
<p>3. What specific vulnerable populations are you most concerned about?</p>	<ul style="list-style-type: none"> • Mentally ill people, especially pediatric and geriatric populations as well as the chronically mentally ill • Adults who have aged out of programs for youth but are not old enough to benefit from programs for seniors, particularly the chronically mentally ill and people with multiple health and behavioral issues • Low-income people- unstable housing, limited education, unemployment, and intergenerational poverty as critical health factors • Older Adults- memory loss, dementia, financial concerns • Youth • People with substance abuse disorders

Question	Synthesis of Responses
<p>4. What specific gaps to health care are you most concerned about? For whom are these most critical?</p>	<ul style="list-style-type: none"> • Mental Health: lack of supportive housing and group homes; shortage of available inpatient and outpatient mental health care • Addiction: shortage of detox facilities/beds; shortage of supportive housing; support after detox (sobriety programs, sober houses with wraparound services); resources for elders with addiction • Dental Care: improved dental education for youth; shortage of dental providers that are accessible to low-income people, especially pediatric population • Other gaps mentioned: <ul style="list-style-type: none"> • Resources for adults who don't qualify for youth or senior services • Resources for youth with complex medical problems • Transportation • Prenatal care and education
<p>5. What specific barriers to health care are you most concerned about? For whom are these most critical?</p>	<ul style="list-style-type: none"> • Absence of follow-up care for mental health and addiction issues, which is exacerbated by the fact that many people do not have primary care providers • Insurance dictates what facilities, providers, and services patients can access • Transportation and the distance to receive care • Insufficient health literacy, education, and knowledge about services and resources • Difficulty navigating the medical system • Poverty- significant barrier not only because of the cost of services, but because people in poverty expend a significant amount of energy on meeting basic needs, leaving little energy to follow through on health care; intergenerational poverty; • Stigma surrounding mental health- mental health and substance abuse problems are treated as personal flaws rather than chronic medical conditions, and this stigma is reinforced by the insurance system. • Homelessness, unstable housing, and mobility/transiency
<p>6. What does the available data NOT show about health needs and gaps, meaning, what's missing?</p>	<ul style="list-style-type: none"> • Connection between socioeconomic factors (intergenerational poverty, income, employment, education, etc.) and health outcomes. • Multiple diagnoses of ER/Hospital patients – the data only capture the primary diagnosis • Patients without primary care provider • The total impact and ripple effect of addiction, not just on addicts, but on children, parents, and the larger community • Transportation issues

Question	Synthesis of Responses
<p>7. What are the opportunities for better prevention to keep people you serve out of the hospital?</p>	<ul style="list-style-type: none"> • Youth Education around substance abuse and dental health • Improved clinic-community linkages <ul style="list-style-type: none"> • Example: Helping elderly, low-income patients with programs such as fuel assistance • Support/resources for people with chronic conditions to improve quality of life • Services for young children • Expansion of food pantries, grocery stores, and mobile markets to reduce food insecurity • Systemic changes related to insurance and reimbursement rates to increase access to care
<p>8. In addition to more funding, what other resources do you need to better address emerging or increasing health concerns?</p>	<ul style="list-style-type: none"> • Better coordination of services, both clinical and non-clinical, to reach common goals while honoring confidentiality • Appropriate non-emergency care to reduce overuse of emergency room for primary care • Recognition and commitment by the community to take care of those who can't care for themselves—those who are mentally ill, addicted, and impoverished
<p>9. Externally, what do you wish you could refer people to?</p>	<ul style="list-style-type: none"> • Detox facilities and aftercare programs • Sober living housing with wraparound services • Better day programming like the clubhouse model • Vocational rehab for younger adults with mental illness • Accessible outpatient services, supports, and clinics • Flexible, affordable transportation options • Affordable, alternative pain management treatments • Dentists, especially pediatric • Nutrition education
<p>10. How would you recommend that the western Massachusetts Hospital Coalition work in closer partnership with local and regional public health organizations after the CHNA is completed?</p>	<ul style="list-style-type: none"> • Work together on common goals and priorities • Sustain partnership through accessible and easy forms of communication (example: message boards) • Act as a change agent and push for policy and systemic changes as well as needed resources: <ul style="list-style-type: none"> • At state-level, address funding and incentives in the insurance system • At state-level seek support to provide needed services • Bridge the gap with social service agencies and track what happens after referrals
<p>11. What specific ways can such a partnership be supported and sustained?</p>	<ul style="list-style-type: none"> • Regular, accessible, easy communication • Common goals • Collective Impact Model

Quotes:

- “We need to value people with substance abuse problems and mental illness as people with a lot to contribute to life that have an illness and not a personal moral failing. Addiction is a disease. It's not a personality flaw. So is mental illness.”
- “In the last year we've seen more violence in our psychotic population than we've ever seen before. I think that is a symptom of a larger failure in our area to hold these chronically mentally ill people in our area. You can't exactly draw a line to connect the dots, but it's a matter of the general stress on the system. Our sickest are not feeling safe, and so they decompensate more. When they're sick, they are less safe in their sickness. “
- “There are a huge number of people who are not functional in unsupported housing. We have people who need a staffed, safe residence because they cannot manage their activities of daily living”
- “Inpatient beds are scarce; people come and have to wait a long time for any inpatient services. Those who come to us, once they're medically cleared, go home but don't get help they need.”
- “Substance abuse is a chronic and relapsing disease, and it requires intense high touch care to keep people sober, and as a society, we do not provide the kind of care required to keep people sober in detox. There are zero systems in place to fund this. Giving people a list of AA meetings and telling them to go to 90 meetings a month, you might as well just drop them off in front of the liquor store. These issues are hard enough for someone with education, a job, solid housing, people who love them to deal with. But if you are a low-income person without coping strategies, with limited education and psychiatric abilities, and the only people you have are substance abusers, it creates a system of dysfunction.”

Key Informant Interview Report: Health New England

Dates:

February 3rd - February 15th, 2016

Interview Format:

Phone interviews, approximately 1 hour in length.

Participants:

- David Silva, Medicaid Community Leader
- Robert Azeez, Medicaid Behavioral Health Manager
- Kerry LaBounty, Medicaid Program Manager
- Jackie Spain, MD, Medicaid Program Medical Director

Summary:

Interviewees range in their professional roles within Health New England, yet there were multiple areas of consensus, including:

- Increased capacity to treat substance use disorder and mental health needs within primary care
- More care coordination, including increased access to transportation and multiple services offered in one location/in closer proximity to each other
- Need for more patient education about what constitutes “good care” (for example, more intervention is not always appropriate, but is often expected/defined as receiving good care)
- Rural areas face multiple barriers to health, including limited programming, transportation barriers, low access to healthy foods
- A need to collect more data
- Insurance policies (lose coverage or provider after missing 3 consecutive appointments) significantly impact patients with behavioral health needs (mental health and addiction) who often miss appointments as a result of their health condition
- Need for patient education to improve overall health literacy
- Need for provider training to improve cultural sensitivity/competency

Key Quotes:

- “Heart of improving health care, giving people that ability to lead a healthy lifestyle”
- “Need to get beyond ‘we deliver care, they pay for care’ to ‘where can we bring common resources to bear?’
- “Do not make assumptions about what we think that problems are- get a better sense of community needs, and act based on data and not what you think.”
- “Use community agencies, churches, etc. to reach people to make differences.”
- “How we get care and who we trust may depend on who we are.”
- “If we are truly patient centered, then we really need to be patient center.”

Key Issues

Question	Synthesis of Responses
1. What are the 3 most urgent health needs/problems impacting your members?	<ul style="list-style-type: none"> • Poverty • Lack of access to nutritional foods (food deserts) • Lack of transportation • Homelessness- difficult for member engagement and follow up • Untreated Behavioral Health (BH) conditions • Unmet maternal, Child, Health (MCH) needs (i.e.-access to contraception, late entry to prenatal care, poor birth outcomes) • Diabetes, hypertension, CVD, diabetes block
2. What health issues have emerged and/or dramatically increased in prevalence in the last 1-2 years in your area?	<ul style="list-style-type: none"> • Opioid use disorder • Hepatitis C from chronic alcohol use and opioid use (current treatment carries an extremely high internal cost) • Unmet behavioral health needs • Obesity, cardiovascular disease, Type 2 Diabetes block • Asthma
3. What specific vulnerable populations are you most concerned about? And why?	<ul style="list-style-type: none"> • Minority populations, specifically African American and Latino/a • Disparities in cancer screening rates by race/ethnicity • Homeless individuals/families • Rural poor (who have the highest ER and ambulance utilization rates) • Those with Substance use (SA) issues • Youth not engaging in routine PC- lack of immunizations • Socially isolated individuals • Obese and underactive children and the earlier onset of adult diseases • Children in foster care system (fragmented care, hard to follow) • Incarcerated adults/adolescents (fragmented care, hard to follow)

Question	Synthesis of Responses
<p>4. Please discuss the barriers to accessing care such as (1) logistical, family, psychosocial, financial, geographical; (2) health insurance (coverage of benefits, cost sharing, etc.); (3) type of care people are seeking (primary, dental, behavioral, specialty); (4) lack of providers (if so, what kind); and (5) other.</p>	<p><u>Structural/logistical:</u></p> <ul style="list-style-type: none"> • Access to and affordability of transportation (MassHealth transportation system is not accessible for unplanned medical needs) • Distance to providers (rural areas) • Distance between services required to be compliant (ex. if x-ray, lab, and pharmacy are all in different places, people may be more likely to end up seeking all of those services in the ER) • State regulations- can change plan daily, this impacts continuity of care • Rules for BH care for Medicaid population: cases are closed after 3 no-shows, but various barriers can contribute • BH issues themselves pose barrier to care (ex. depression) <p><u>Providers:</u></p> <ul style="list-style-type: none"> • Lack of providers in rural areas that accept Medicaid • Lack of specialty providers that accept (ex. dental and dermatology) • Lack of BH providers, overall • Long wait times for specialty and primary care (leads to high emergency room (ER) utilization) <p><u>Housing instability:</u></p> <ul style="list-style-type: none"> • Housing instability makes tracking members challenging, changing contact info means some might lose insurance because they don't see notices • Notices sent re: maintaining insurance are not always at the appropriate literacy level/translated <p><u>Cultural:</u></p> <ul style="list-style-type: none"> • Latino population, less importance placed on timeliness in terms of making appointments (mentioned by ¾ interviewees) • White populations have less family support systems as compared to AA and Latino populations • Fear of losing benefits if health improves • Cultural ideas of what good care is (for some, lots of med and interventions are seen as good quality care, if not received from PCP, go to ER to get- this relates more to overuse)

Question	Synthesis of Responses
<p>5. Please discuss quality of care as reported by members and/or clinicians (perceptions of quality of care members are receiving- i.e. do people believe that the care they are getting has value?)</p>	<ul style="list-style-type: none"> • Members are frustrated by access to and time to get appointments • Providers are frustrated by lack of compliance and rates of no shows • Need for more integration of BH care into routine PC (primary care) • Need for more culturally sensitive care (more training for specialty populations- transgender individuals, adolescents, varying ethnic groups)
<p>6. Please discuss the access to and availability of community resources needed to be healthy (built or community environment (e.g.- food, safety); fitness/gym facilities; benefits covered by health insurance; community organizations).</p>	<ul style="list-style-type: none"> • Rural areas- programming is limited, or spread out/located in pockets that can be difficult to get to • Urban areas- programs exist, but often people are unaware of what is available • Need for lower cost gyms, afterschool programs not just focused on homework • Lack of culturally tailored programming, especially in rural areas • Lack of access to healthy, culturally relevant foods • Lack of safe areas for recreation

Question	Synthesis of Responses
<p>7. Please discuss health behaviors of concern (ex. tobacco use, alcohol & drug use, lack of physical activity, etc.) and the barriers to engaging in healthy behaviors among members.</p>	<p><u>Exercise and nutrition:</u></p> <ul style="list-style-type: none"> • Lack of exercise options for children: team sports are cost-prohibitive, and transpiration is an issue (4/4 mentioned) • HNE offers reimbursement for gym memberships, vastly underutilized in Medicaid pop- not exactly certain why • Food deserts • Lack of education about portion size • Come cultural practices/beliefs: a “fat baby is a healthy baby” • Lack of cultural support for breastfeeding • SNAP benefits for farmers market underutilized in urban area due to lack of culturally relevant foods; more utilized in rural areas, <i>if</i> members can get transport to farmers market <p><u>Non-compliance with medication/treatment protocols</u></p> <ul style="list-style-type: none"> • Lack of comprehension about chronic health conditions- (i.e. feel better, stop meds) • Lack of understanding about preventative health, importance of continuous care to manage chronic conditions • Cultural beliefs and attitudes and expectations of western medications • Lack of understanding about medications (e.g. antibiotics, stimulant meds) • Education for Latino population about new diagnoses is not given enough time; often need 1-1 and more time to understand diagnosis and importance of adherence to meds and lifestyle recommendations <p><u>Multigenerational health patterns:</u></p> <ul style="list-style-type: none"> • Parental lack of education and modeling (3/4 interviewees) • Multigenerational patterns of SA and MH • Need more opportunities for fun, physical activity (ex. adult sports leagues/softball to get entire families active)

Question	Synthesis of Responses
<p>8. How would you recommend that your local hospitals/insurers and/or Western Massachusetts Hospital Coalition work in closer partnership with local and regional municipal public health entities after the CHNA is completed? What specific ways can such a partnership be supported and sustained? Specifically, what can Health New England do to help impact the health of its most vulnerable members?</p>	<p><u>Overall:</u></p> <ul style="list-style-type: none"> • More support for peer education model (2/4 mentioned) • More collaboration across multiple sectors- business community, faith-based, hospitals, etc.) • More grassroots education in rural areas about substance use • More accessible resources • Shift perception of hospital as a stand-alone entity, increase its role in screening people for unmet health needs, link people to resources to address social determinants of health • Bundled rates that support education and visit, support/fund peer educators, support providers <p><u>For HNE specifically:</u></p> <ul style="list-style-type: none"> • Explore alternative reimbursement models • Community perception that HNE is not involved in the community- perhaps sponsor a sports team, or support transportation efforts for rural sports programs • Partner more with providers to explore alternative models of health care delivery by using shared resources
<p>9. If time: Is there anything else you would like to share?</p>	<ul style="list-style-type: none"> • Need to collect better data on who is being seen and what their needs are • Need to improve cultural competence/sensitivity

Key Informant Interview Report: Public Health Personnel

Dates:

January 2nd - February 1st, 2016

Interview Format:

Phone interviews, approximately 45 minutes in length.

Participants:

- Helen Caulton Harris, Commissioner of Public Health, City of Springfield
- Soloe Dennis, Western Region Director, Massachusetts Department of Public Health (MDPH)
- Dalila Hyry-Dermith, Supervisor, MDPH Division for Perinatal, Early Childhood and Special Needs, Care Coordination Unit
- Luz Eneida Garcia, Care Coordinator, MDPH Division for Perinatal, Early Childhood and Special Needs, Care Coordination Unit
- Judy Metcalf, Director, Quabbin Health District
- Meredith O’Leary, Director, Northampton Health Department
- Lisa Steinbock, Public Health Nurse, City of Chicopee
- Phoebe Walker, Director of Community Services
- Lisa White, Public Health Nurse, Franklin Regional Council of Governments

Question	Synthesis of Responses
<p>1. What local policies and social conditions predispose people in your community/service area to good health and mental wellness? Are there groups of people who benefit from these policies/social conditions more than others?</p>	<p>All respondents agreed that the region provides excellent health services, but many talked about the difficulty some populations have in accessing them. Lack of transportation is a major issue for some groups of people throughout the service area.</p> <p>Respondents from Hampden county had difficulty naming local policies and service conditions other than health care institutions that promote health and wellness. One mentioned Mass Health as expanding access to most people. In Franklin and Hampshire counties, respondents named access to fresh local food, compliance policies around tobacco and alcohol, town-based programs such as senior centers, Mass in Motion, public transportation, and access to mental health providers as predisposing people toward good health.</p>

Question	Synthesis of Responses
<p>2. What kind of structural and social changes are needed to tackle health inequities in your community/service area?</p>	<p>Again, the most frequently mentioned issue is lack of transportation. Other changes that would help improve inequities included:</p> <ul style="list-style-type: none"> ● Help families understand what resources are available to them ● Follow through beyond initial outreach ● Workforce development ● Affordable/improved housing ● Continuity of care around addiction treatment ● Healthy markets ● Workplace wellness programs ● Education around harm associated with marijuana ● Coordination of care/avoiding readmission
<p>3. What are the 3 most urgent health needs/problems in your service area?</p>	<p>This list shows the issues named and the number of people who named each one:</p> <ul style="list-style-type: none"> ● Substance abuse/addiction/treatment (5) ● Mental health (3) ● Poverty (2) ● Communicable diseases (2) ● Obesity (1) ● Diabetes (1) ● Teen pregnancy (1) ● Lack of prevention services in schools (1) ● Smoking (1) ● Lack of youth engagement (1) ● Perception of city as drug-friendly (1) ● Chronic diseases (1) ● Need to improve workforce development in health care (1)
<p>4. What health issues have emerged and/or dramatically increased in prevalence in the last 1-2 years in your area? What evidence/data do you have to illustrate this increase?</p>	<p>Every respondent mentioned substance abuse as an emerging issue, with four specifically referencing opioids. Other issues, each noted by one respondent, were:</p> <ul style="list-style-type: none"> ● Mental health ● Pertussis ● Lyme disease ● Obesity ● Sexually transmitted diseases

Question	Synthesis of Responses
<p>5. What gaps in services exist in addressing these needs? What are barriers to filling these gaps?</p>	<p>Some respondents spoke of gaps around connecting people with services - the services exist, but people are not aware of them or unable to reach them because of barriers including lack of transportation, waiting lists, cultural and language differences between the community and providers, and lack of information about what is available.</p> <p>Other gaps included lack of services for substance abuse, the lack of coordination among agencies doing similar work, lack of comprehensive prevention work in some schools, lack of mental health providers, lack of access to exercise and healthy food. Barriers cited included lack of funds, lack of time for coordination and planning, and lack of consensus in the community about the importance of the issues.</p>
<p>6. In addition to more funding, what resources do you need to better address these emerging or increasing health concerns?</p>	<p>Several respondents mentioned the need for increased coordination and communication among hospitals concerning the services that are available and what is needed (one person noted that the CHNA is a good start).</p> <p>Other needed resources that respondent noted were:</p> <ul style="list-style-type: none"> ● Support for families as they navigate the healthcare system ● Better transportation, either public or provided by hospitals ● Better-trained, more diverse health care staff
<p>7. What specific vulnerable populations are you most concerned about? And why?</p>	<p>Three respondents mentioned the elderly, and two each mentioned mentally ill people, homeless people, and low-income people. Reasons given usually addressed these populations' lack of access to services that meet their needs. These are populations which are less able to advocate for themselves and find help.</p>
<p>8. Externally, what resources or services do you wish people in your area had access to?</p>	<p>These responses varied, but three respondents mentioned better transportation options. Other resources and services mentioned included:</p> <ul style="list-style-type: none"> ● Mental health care ● Better care coordination ● More workforce development ● Partnerships or services around improving air quality (high asthma rates) ● More money for community outreach ● Universal child care/after school care ● Support groups and behavioral interventions ● Access to healthy food

Question	Synthesis of Responses
<p>9. How would you recommend that your local hospitals/insurers and/or Western Massachusetts Hospital Coalition work in closer partnership with local and regional municipal public health entities after the CHNA is completed? What specific ways can such a partnership be supported and sustained?</p>	<p>Respondents often did not have a clear idea of what this could look like. Two respondents addressed community benefit programs and expressed an interest in or questions about how these programs relate to coalition-building, particularly with regard to hospitals acquired by Baystate. Both said it was unclear what these programs look like in their communities. One respondent spoke of the need for greater coordination among and also within hospitals, including sharing information on individual patients (within the hospital) and letting people know what is available in the community. Hospitals could also work together to identify and fill local service gaps. Some specific suggestions included involving hospitals in community discussions around:</p> <ul style="list-style-type: none"> ● where people who been treated for overdoses can go after release from the hospital ● reducing re-admissions ● workplace health screenings <p>Ideas around sustaining and supporting this collaboration included:</p> <ul style="list-style-type: none"> ● Regular meetings ● Open forums to discuss issues and problems ● Discussion of what resources are available ● Funds are available as part of capitation - hospitals are changing the kind of work that they do, supporting efforts to keep people out of hospitals ● Developing a common vision for improving health ● Making it an ongoing effort with partners who are engaged with the process
<p>10. Is there anything else you would like to share?</p>	<p>Only one person took the opportunity to add to the conversation. She suggested that more efforts need to be placed on prevention programs, and suggested that hospitals partner with the YMCA or other organizations to offer vacation and afterschool programs for youth. This would motivate young people to exercise and also keep them out of trouble.</p>

Appendix III: Data Tables

Hospitalizations and Emergency Room Visits among Select Communities in Franklin County, 2012 and 2013

Hospitalization and ER Visit Rates for Select Franklin County Communities by Race/Ethnicity, 2012

Behavioral Risk Factor Surveillance System (BRFSS) Prevalence Estimates for Health Behaviors and Conditions by County

Hospitalizations and Emergency Room Visits among Top Communities, 2013

Hospitalizations and Emergency Room Visits among Select Communities in Franklin County, 2012 and 2013

Geography	Hospitalizations				ER Visits						
	Stroke (Cerebrovascular)		Diabetes		Asthma		COPD	Mental Disorders		Substance Use	
	2012	2013	2012	2013	2012	2013	2012	2012	2013	2012	2013
Greenfield	232.4	209.4	147.7	124.5	762.3	733.6	1228.3	4509.1	5128	1109.4	1045.8
Montague	286.2	206.1	196.8	185.8	838.9	589.7	1270.8	3409.2	2640	842.9	896.6
Orange	244.2	109.8	198.4	217.7	897.6	675.2	2100.9	3217.6	2983.5	779.2	709.0
FRANKLIN COUNTY	199.2	203.5	110.7	132.3	570.6	538.7	972.5	2570.0	2634.7	629.4	608.8
Massachusetts	219.5	NA	133.7	NA	571.9	NA	867.9	2304.4	NA	986.5	NA

Hospitalization and ER Visit Rates for Select Franklin County Communities by Race/Ethnicity, 2012

Geography	Race / Latino Ethnicity	Hospitalizations		ER Visits			
		Stroke	Diabetes	Asthma	COPD	Mental Disorders	Substance Use
Greenfield	White	239.3	145.8	673.6	1142.4	4466.4	1133.9
Greenfield	Black	0	NA	NA	4668.8	NA	NA
Greenfield	Latino	0	0	929.1	1084.2	6557.6	NA
Greenfield	Asian / Pacific Islander	0	NA	NA	NA	NA	0
Montague	White	282.2	191.3	810.1	1246.5	3448.7	828.1
Montague	Black	0	NA	NA	NA	NA	NA
Montague	Latino	NA	0	NA	NA	2533.1	NA
Montague	Asian / Pacific Islander	0	NA	0	0	0	0
Orange	White	237.5	196.3	898.2	2142.4	3352.8	829.5
Orange	Black	NA	NA	NA	NA	NA	0
Orange	Latino	0	0	NA	NA	0	0
Orange	Asian / Pacific Islander	NA	NA	0	0	0	0
FRANKLIN COUNTY	White	194.2	108.1	527.3	933.4	2554.2	642.5
FRANKLIN COUNTY	Black	NA	NA	2729.6	3570.7	3604.8	NA
FRANKLIN COUNTY	Latino	NA	0	1024.4	1488.6	3375.1	656.1
FRANKLIN COUNTY	Asian / Pacific Islander	NA	NA	NA	NA	NA	0
Massachusetts Total	White	208.2	115.9	416.9	698.4	2315.4	1019.5
Massachusetts Total	Black	309.5	320.2	1279.1	1635.1	3101.9	1301.8
Massachusetts Total	Latino	246.7	222.8	1162.1	1584.5	2610.7	1107.6
Massachusetts Total	Asian / Pacific Islander	149.7	43.1	147.8	220.7	423.8	126.1

Behavioral Risk Factor Surveillance System (BRFSS) Prevalence Estimates for Health Behaviors and Conditions By County

Geography	Obese*	Over-weight or Obese*	Heart Disease**	Stroke*	Heart Attack or MI*	Diabetes*	Pre-diabetes*	Poor Mental Health (15+ days)*	Current Smoker*	Binge Drinker*
Berkshire County	22.0	56.3	6.7	3.1	5.3	9.4	6.8	10.8	20.6	18.4
Hampden County	28.8	64.7	7.9	3.4	5.1	13.2	7.6	15.9	21.5	16.1
Hampshire County	20.0	55.9	5.5	2.6	3.7	4.7	8.6	12.1	15.5	23.0
Franklin County	22.4	54.4	4.4	NA	3.6	8.7	10.3	12.4	19.7	17.8
Worcester County	27.3	63.0	5.8	2.4	3.8	10	8.0	11.2	19.0	19.1
Massachusetts	23.6	59.0	6.1	2.4	4.0	9.0	7.3	11.1	16.1	18.7

*Direct estimates 2012-2014

**Direct estimates 2011, 2012, 2014

NA - estimate unavailable

Hospitalizations and Emergency Room Visits among Top Communities, 2013

Rank	Hospitalizations		ER Visits		
	Stroke	Diabetes	Asthma	Mental Disorders	Substance Use
1	Shelburne 527.2 (276.58-777.79)	Deerfield 292.9 (153.66-432.13)	Shelburne 1042.1 (514.72-1569.47)	Greenfield 5128.0 (4785.25-5470.71)	Greenfield 1045.8 (895.51-1196.1)
2	Bernardston 392.6 (170.48-614.74)	Athol 226.6 (142.65-310.50)	Athol 781.3 (614.20-948.36)	Shelburne 3437.0 (2536.77-4337.17)	Montague 896.6 (692.33-1100.91)
3	Deerfield 277.5 (145.58-409.41)	Orange 217.7 (114.20-321.16)	Greenfield 733.6 (598.37-868.91)	Athol 3344.6 (3010.04-3679.1)	Athol 810.5 (642.12-978.91)
4	Athol 227.7 (150.016-305.4)	Montague 185.8 (102.24-269.31)	Orange 675.2 (482.16-868.22)	Orange 2983.5 (2600.43-3366.63)	Orange 709.0 (524.96-893.11)

Appendix IV: Community and Hospital Resources to Address Identified Health Needs

Priority Health Need	Resource Organization Name	Description of Services Provided	Website Address
Income and Employment	Community Action! of Hampshire and Franklin Counties	Federally designated Community Action Agencies serving low-income individuals and families	http://www.communityaction.us/index.html
	Worcester Community Action Council, Inc. for towns in Worcester County		http://www.wcac.net/
Education	The Literacy Project; sites in Greenfield and Orange	Provides free adult education classes at 3 levels: basic literacy, pre GED, through GED. provides access to post-secondary education and job training skills	http://www.literacyproject.org/
Housing	Franklin County Regional Housing and Redevelopment Authority	Helps Franklin County municipalities finance and implement affordable housing and community development programs <i>Housing and supportive services to homeless and formerly homeless individuals towards the community goal of ending homelessness in Worcester County</i>	http://www.fchra.org/index.php/about-hra/programs-and-services
	Greater Worcester Housing Connection		http://www.smoc.org/greater-worcester-housing-connection.php
Transportation	Franklin Regional Transit Authority (FRTA)		http://frrta.org/
	Worcester Regional Transit Authority		http://www.therta.com/

Priority Health Need	Resource Organization Name	Description of Services Provided	Website Address
Food Insecurity, Food Deserts	Brown Bag-Food for Elders Program	Food Bank of Western Massachusetts provides a free bag of healthy groceries to eligible seniors once a month at local senior centers and community organizations.	https://www.foodbankwma.org/get-help/brown-bag-food-for-elders/
	Worcester County Food Bank	Collects and inspects perishable and non-perishable food and distributes it through a network of 131 Partner Agencies in all 60 cities and towns of Worcester County	http://foodbank.org/
	Center for Self Reliance at Community Action!	Offers food to families, information and referrals to other services and programs; hosts fresh food and cooking demonstrations and nutrition workshops	http://www.communityaction.us/center-for-self-reliance-food-pantry.html
Obesity	Comprehensive Adult Weight Management Program	Proven methods for weight management tailored to individuals' unique health needs and lifestyle	https://www.baystatehealth.org/services/weight-management
	Baystate Health Support Groups	support groups, exercise, and education workshops that cover topics related to weight loss, nutrition and exercise	https://www.baystatehealth.org/services/weight-management/support-services/support-groups
	Mass In Motion Franklin County	Community-based coalition to improve health equity through improved access to healthy eating and active living	http://frcog.org/what-is-mass-in-motion/
Cardiovascular Disease	Heart & Vascular Care Services	Comprehensive diagnostics, and treatment options for coronary artery disease (CAD), heart rhythm disorders (arrhythmias) heart failure; cardiac surgeries for adults and children; cardiology clinical trails	https://www.baystatehealth.org/services/heart-vascular
Diabetes	Diabetes Education Center	complete range of services for the evaluation, treatment, and management of diabetes and other endocrine disorders; education, information, classes and support groups	https://www.baystatehealth.org/services/diabetes-endocrinology
	Diabetes Self-Management Program	Help adult patients and their families learn to manage their diabetes and live full and productive lives.	https://www.baystatehealth.org/services/diabetes-endocrinology

Priority Health Need	Resource Organization Name	Description of Services Provided	Website Address
Nutrition	Baystate Nutrition Services	Resources and information, registered dietetic staff available for individual and group nutrition counseling sessions	https://www.baystatehealth.org/services/nutrition-services
	Mass In Motion Franklin County	Community-based coalition to improve health equity through improved access to healthy eating and active living	http://frcog.org/what-is-mass-in-motion/
Physical Activity	Physical Therapy Services	information, resources, coaching and education, stretching, core strengthening, walking and strength training to improve or restore physical function and fitness levels	https://www.baystatehealth.org/services/rehabilitation
	Greenfield YMCA Athol Area YMCA	Fitness sessions, swimming, dance classes, after-school care, summer camps, senior health initiatives, yoga, Live Strong, weight loss programs	http://www.ymcaingreenfield.org/ http://ymcaathol.org/
Asthma	Pioneer Valley Asthma Coalition	Community partnership that works to improve the quality of life for individuals, families and communities affected by asthma	www.pvasthmacoalition.org
Mental Health	Baystate Behavioral Health Care	Continuum of high-quality inpatient and outpatient care, information, support groups and education. Child and Adolescent Psychiatric Care, services for families, Adult Psychiatric Care and Geriatric Psychiatric Care.	https://www.baystatehealth.org/services/behavioral-health

Priority Health Need	Resource Organization Name	Description of Services Provided	Website Address
	Baystate Franklin Behavioral Health Services	Inpatient Mental Health Unit for patients age 18 and older for Franklin, and surrounding counties and a Partial Hospitalization Program who also serves adults who require outpatient intensive care Eating Disorder Program for women, ages 16 and up, who suffer from Anorexia, Bulimia, and Overeating disorders	https://www.baystatehealth.org/services/behavioral-health/behavioral-health-at-baystate-franklin-medical-center
	Clinical & Support Options	Comprehensive behavioral health corporation; provides Emergency & Acute Services, Community Based Family Support Services, Outpatient Mental Health and Substance Abuse Services, and Clubhouses	http://www.csoinc.org/
Substance Use Disorder: Tobacco	Massachusetts Department of Public Health	Quit smoking resources and information; toll-free support line: 1-800-QUITNOW	http://makesmokinghistory.org/quit-now/health-insurance-benefits/
Substance Use Disorder: Opioids and Other Substances	CleanSlate Addiction Treatment Center (Suboxone Treatment); sites in Greenfield and Athol	Patient-focused treatment for opioid, alcohol and other drug addictions; appointment-based outpatient treatment	http://cleanslatecenters.com/
	Behavioral Health Network (BHN) Addiction Services	Comprehensive addiction services including detox, post-detox residential series, long-term residential, day treatment programs, and outpatient services.	http://bhnc.org/content/addiction-services

Priority Health Need	Resource Organization Name	Description of Services Provided	Website Address
	Needle Exchange Program	Needle exchange programs in Holyoke and Northampton, provides sterile needles to injection drug users, trainings on Naloxone, education and counseling, health education and screening on infectious disease	http://www.tapestryhealth.org/index.php/services/prevention/needle-exchange
	Opioid Task Force of Franklin County and the North Quabbin	Regional coalition that works to prevent and reduce opioid abuse and substance use; supports and advocates for expanded support and recovery services; train, educate, advocate, and provide support and resources on opiate abuse and overdoses	http://opioidtaskforce.org/
	Partnership for Youth	Promotes teen health Franklin County and North Quabbin region; works with school and community partners to establish and support effective youth development and health-promotion programs, provides training and technical assistance on evidence-based practices, involves and empowers youth	http://frcog.org/program-services/partnership-youth/
Prenatal and Perinatal Care	Baystate Franklin OB/GYN	Pregnancy and high risk pregnancy; Infertility; Ultrasound; Fetal echocardiogram; Nonstress testing; Amniocentesis Chorionic villous sampling (CVS); Fetal blood sampling; High risk pregnancy counseling; Genetic consultation and testing	https://www.baystatehealth.org/services/ob-gyn

Priority Health Need	Resource Organization Name	Description of Services Provided	Website Address
	Baystate Medical Practices - Pioneer Women's Health - Greenfield The Birthplace at Baystate Franklin Medical Center	Nursing and midwifery services; labor and delivery services	https://www.baystatehealth.org/locations/48-sanderson-street/pioneer-womens-health https://www.baystatehealth.org/services/ob-gyn/labor-and-delivery/birthplace-at-bfmc
	MotherWoman	Developed the Western Massachusetts Perinatal Support Coalition Network; provides support groups and training	http://www.motherwoman.org/
Teen Pregnancy	Community Action!	Healthy Families: free home visiting support program for first time parents, age 20 and under, living in the Franklin, Hampshire, and North Quabbin regions	http://www.communityaction.us/healthy-families-support-for-parents-under-21.html
	North Quabbin Community Coalition	Online youth programs directory including prevention and health promotion programs	http://nqcc.org/youth_directory.html

Priority Health Need	Resource Organization Name	Description of Services Provided	Website Address
	Massachusetts Department of Public Health Teen Pregnancy Prevention Program	Promotes healthy behavior, responsible decision making and increased opportunities for at-risk youth using evidence-based programs in targeted communities	http://www.mass.gov/eohhs/gov/departments/dph/programs/community-health/primarycare-healthaccess/adolescent-health/overview.html

Appendix V: County Health Rankings, 2016

County Health Rankings, 2016

Shaded columns are rankings based on the 14 counties in Massachusetts. Lower numbers indicate better status. A rank of 14 indicates a county is ranked last in the state.

The Rankings are based on a model of population health that emphasizes the many factors that, if improved, can help make communities healthier places to live, learn, work and play. The County Health Rankings measure the health of nearly all counties in the nation and rank them within states. The Rankings are compiled using county-level measures from a variety of national and state data sources. These measures are standardized and combined using scientifically-informed weights.

For more information, visit: <http://www.countyhealthrankings.org/>

	Massachusetts	Hampshire County	Hampden County	Franklin County	Berkshire County	Worcester County
Health Outcomes		5	14	8	11	7
Length of Life		5	14	7	12	8
Premature deaths	5,100	4,700	6,600	5,500	6,200	5,500
Quality of Life		5	14	8	10	7
Poor or fair health	14%	12%	19%	12%	13%	12%
Poor physical health days	3.5	3.3	4.4	3.5	3.4	3.1
Poor mental health days	3.9	3.9	4.5	4.0	4.1	3.6
Low birthweight	8%	6%	8%	7%	8%	7%
Health Factors		3	14	7	9	11
Health Behaviors		6	14	8	7	11
Adult smoking	15%	15%	18%	15%	15%	16%
Adult obesity**	24%	21%	29%	22%	23%	26%

	Massachusetts	Hampshire County	Hampden County	Franklin County	Berkshire County	Worcester County
Food environment index**	8.3	8.1	7.9	8.1	7.9	8.2
Physical inactivity**	22%	16%	26%	18%	20%	23%
Access to exercise opportunities	94%	86%	94%	72%	79%	91%
Excessive drinking	20%	24%	18%	20%	18%	19%
Alcohol-impaired driving deaths	29%	28%	32%	27%	21%	31%
Sexually transmitted infections**	349.2	222.2	576.5	257.2	320.0	278.0
Teen births	17	4	37	20	21	19
Clinical Care		2	12	7	3	9
Uninsured	4%	4%	5%	4%	4%	4%
Primary care physicians	940:1	690:1	1,410:1	1,420:1	910:1	960:1
Dentists	1,070:1	1,550:1	1,300:1	1,540:1	1,310:1	1,500:1
Mental health providers	200:1	140:1	160:1	160:1	150:1	250:1
Preventable hospital stays	56	47	63	49	44	55
Diabetic monitoring	90%	89%	89%	90%	91%	89%
Mammography screening	74%	77%	71%	72%	73%	70%
Social & Economic Factors		3	14	7	11	9
High school graduation**	85%	90%	73%	84%	84%	86%
Some college	71%	78%	59%	67%	63%	67%

	Massachusetts	Hampshire County	Hampden County	Franklin County	Berkshire County	Worcester County
Unemployment	5.8%	5.0%	7.8%	5.3%	6.5%	6.2%
Children in poverty	15%	13%	26%	17%	20%	15%
Income inequality	5.4	4.9	5.7	4.5	4.9	5.0
Children in single-parent households	31%	31%	47%	33%	36%	29%
Social associations	9.5	9.6	8.7	12.4	11.8	8.8
Violent crime**	434	245	641	379	403	447
Injury deaths	46	42	53	49	58	48
Physical Environment		10	13	11	14	12
Air pollution - particulate matter	10.5	10.7	10.7	10.6	10.8	10.5
Drinking water violations		Yes	Yes	Yes	Yes	Yes
Severe housing problems	19%	17%	19%	16%	18%	16%
Driving alone to work	72%	71%	83%	78%	79%	82%
Long commute - driving alone	41%	35%	27%	35%	23%	41%