

# Community Health Needs Assessment | 2016

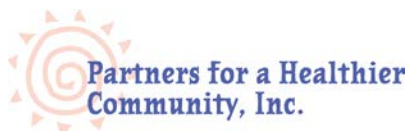
*Prepared for*

**Baystate Medical Center**

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

*By*

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



## 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.

## Table of Contents

Executive Summary .....	ii
Introduction .....	1
About Baystate Medical Center .....	1
The Coalition of Western Massachusetts Hospitals .....	1
Community Health Needs Assessment (CHNA) .....	2
Methodology for 2016 CHNA .....	3
Social and Economic Determinants of Health Framework .....	3
Assessment Methods .....	3
Prioritization Process .....	4
Community and Stakeholder Engagement .....	5
Limitations and Information Gaps .....	6
Hospital Service Area .....	7
Prioritized Health Needs of the Community .....	11
I. Community Level Social and Economic Determinants that Impact Health .....	11
Lack of Resources to Meet Basic Needs .....	11
Housing Needs .....	14
Transportation .....	14
Lack of Community Safety .....	15
Food Insecurity and Food Deserts .....	15
Environmental Concerns .....	17
Institutional Racism .....	18
II. Barriers to Accessing Quality Health Care .....	20
Limited Availability of Providers .....	20
Lack of Transportation .....	22
Lack of Care Coordination .....	23
Health Literacy, Language Barriers and Cultural Humility .....	23
III. Health Conditions and Behaviors .....	26
Chronic Health Conditions .....	26
Need for Increased Physical Activity and Healthy Diet .....	31
Mental Health and Substance Use .....	32
Infant and Perinatal Health Risk Factors .....	37
Sexual Health .....	39
IV. Vulnerable Populations of Concern .....	41
Community & Hospital Resources to Address Identified Needs .....	42
Impact of Actions Taken by Hospital Since Last Community Health Needs Assessment .....	43
Summary .....	47

References ..... 48  
Appendices ..... A-1

# Executive Summary

## Introduction and Methods

Baystate Medical Center (BMC) is a 710-bed academic medical center (including Baystate Children's Hospital) based in Springfield, Massachusetts and is Western New England's only tertiary care referral medical center, Level 1 trauma center, and neonatal and pediatric intensive care units. BMC is 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 Noble Hospital, Baystate Wing 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. BMC serves as a regional resource for specialty medical care and research, while providing comprehensive primary medical services to the community.

BMC is a member of the Coalition of Western MA Hospitals ("the Coalition"), a partnership between 10 non-profit hospitals, and 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. BMC worked in collaboration with the Coalition to conduct this assessment. The assessment was conducted to update the findings of BMC's 2013 CHNA so the hospital can better understand the health needs of the communities it serves and to meet its fiduciary requirement as a tax-exempt hospital.

The assessment focuses on Hampden County, the primary service area of BMC. When identifying the areas that can be addressed to improve the health of the population, the assessment used the social and economic determinants of health framework since it is recognized that these factors contribute substantially to population health. The prioritized health needs identified in this 2016 CHNA include community level social and economic determinants that impact health, access and barriers to quality health care, and health conditions and behaviors. The assessment included analysis and synthesis of 1) a variety of social, economic and health data; 2) findings from recent Hampden County assessment reports; and 3) information from six focus groups and 24 key informant interviews, some of which were conducted specifically for BMC and others which were conducted by other Coalition members and were relevant to this CHNA. Vulnerable populations were identified using a health equity framework with available data. Information from this CHNA will be used to inform the updating of BMC's hospital specific community health 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 BMC's 2013 CHNA and continue to impact the health of the population in BMC's service area. Social, economic, and community level needs identified in the 2016 CHNA include:

- **Lack of resources to meet basic needs** – Many Hampden County residents struggle with *poverty* and *low levels of income*, with 17% of Hampden County residents living in poverty and a median family income 30% lower than that of the state. Though unemployment rates have dropped, they continue to impact the county with rates of 8%. Lower levels of education contribute to unemployment and the ability to earn a livable wage.
- **Housing needs** – *Housing insecurity* is a need that continues to impact Hampden County residents. Almost half of the population is housing cost burdened, with more than 30% of their income going towards housing. *Poor housing conditions* also impact the health of residents. Older housing combined with limited resources to maintain the housing leads to conditions that can affect asthma, other respiratory conditions and safety.
- **Transportation** – Increased transportation options was identified as a regional need among public health officials. Lack of access to transportation can negatively impact access to education, employment, nutritious food, and physical activity opportunities.
- **Lack of community safety** – Lack of community safety was a prioritized health need in the previous CHNA and continues to impact Hampden County residents. Crime rates are high, with violent crime rates in Hampden County almost 50% higher than that of the state. In addition to crime, youth bullying was also identified as a concern in this assessment.
- **Food insecurity and food deserts** – *Food insecurity* continues to impact the ability of many Hampden County residents to have access to healthy food. Springfield, Holyoke, and Chicopee have high rates of food insecurity with over 20% of some areas in these communities experiencing food insecurity. In addition, parts of these communities and several others in Hampden County are also considered *food deserts*, which are areas where low-income people have limited access to grocery stores.
- **Environmental concerns** – *Air pollution* impacts the health of Hampden County residents. Springfield experiences poor ambient air quality due to multiple mobile and point sources. Near roadway air pollution impacts the community members that live, work, or attend school in close proximity to the highway. Air pollution impacts morbidity of several chronic diseases that have a high prevalence in Hampden County, including asthma, cardiovascular disease, and recent studies also suggesting an association with diabetes.
- **Institutional racism** – Addressing institutional racism has been identified as a prioritized health need in this CHNA. Large racial and ethnic disparities in health outcomes were found across a number of health concerns. Key informant interviews and focus groups conducted for both the 2013 CHNA and the 2016 CHNA identified institutional racism as a structural factor driving health inequities that needs to be addressed. Institutional racism has been defined as racial inequities in access to goods, services, and opportunities such as quality education, housing, employment opportunities, medical care and facilities, and a healthy physical environment. In particular, racial residential segregation corresponding with low levels of opportunity in communities of color was identified as one form of institutional racism that impacts health. The Springfield Metropolitan Statistical Area was identified as the most segregated in the U.S. for Latinos and 22<sup>nd</sup> most segregated for Blacks in an analysis conducted by the University of Michigan.

### ***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** – Hampden County residents experience challenges accessing care due to the shortage of providers. 54% of county residents live in a healthcare professional shortage area. Focus group participants reported long wait times for urgent care and wellness visits. Primary care and dental care were identified as shortage areas with high provider to patient ratios. 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 and key informant interviewees identified several barriers, including: the complexity of navigating the health insurance system; Medicaid policies that lead to substantial barriers to receiving care after missing several consecutive appointments (e.g. the closing of patient cases after missing three behavioral health appointments); and costs of co-pays and deductibles among rural Medicaid patients.
- **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 the most frequently cited barrier in key informant interviews and focus groups for the 2016 CHNA.
- **Lack of care coordination** – Increased care coordination continues to be a need in the community. Areas identified in focus group 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 schools as well as faith-based communities.
- **Health literacy, language barriers 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. The need for provider education about how to communicate with patients about medical information also arose. The need for training in *cultural humility* as a means to deliver *culturally sensitive care* was identified as a prioritized health need in this assessment. Public health leaders interviewed for this CHNA called for increased training in this area for health care providers to serve the needs of increasingly diverse community residents.

### ***Health Conditions and Behaviors***

- **Chronic health conditions** – High rates of **obesity, diabetes, cardiovascular disease, asthma,** and associated morbidity previously identified as prioritized health needs in the 2013 CHNA continue to impact Hampden County residents. An estimated 30% of adults in the population are obese with high rates also observed among children. Heart disease is the leading cause of death in Hampden County. One third of Hampden County adults have hypertension, a risk factor for cardiovascular disease, with rates increasing in older adults to an estimated 55%. Approximately 20% of the population has pre-diabetes or diabetes, and 12% of adults and 19% of school children have asthma. Asthma morbidity rates were particularly high among Latinos.
- **Need for increased physical activity and healthy diet** – The need for increased physical activity and consumption of fresh fruits and vegetables was identified among Hampden County residents. Low rates of physical activity and healthy eating contribute to high rates of chronic disease and also impact mental health.
- **Mental health and substance use disorders** – Substance use and mental health were identified as two of the top three urgent health needs impacting the area in interviews with local and regional public health and in the Springfield community. Substance use disorders overall (including alcohol) and opioid use were of particular concern. *Opioid use disorder*, which has been declared a public health emergency in Massachusetts, is impacting Hampden County

residents with fatality rates higher than that of the state. There was overwhelming consensus among focus group participants and health care providers and administrators about the need for increased education across all sectors to reduce the stigma associated with mental health and substance abuse as well as the need for more treatment options. *Tobacco use* remains high with an estimated 21% of adults that smoke. *Youth substance use* is also an issue with 15% of Springfield 8<sup>th</sup> grade students reporting drinking alcohol in the past 30 days and 12% using marijuana.

- **Infant and perinatal health risk factors** – Infant and perinatal health factors were identified as health needs in the 2013 CHNA and continue to impact Hampden County residents. Needs for increased utilization of prenatal care and a decrease in smoking during pregnancy were identified. This impacts rates of adverse birth outcomes, with 8-9% of Hampden County births born preterm or low birth weight.
- **Sexual health** – High rates of unsafe sexual behavior was previously identified as a health need and continues to remain a need in Hampden County. Sexually transmitted infection (STI) rates continue to be high, with Hampden County *chlamydia* and *HIV* rates approximately 40% higher than that of the state. *Youth STI rates* are particularly high with rates of chlamydia and syphilis 2-4 times higher than that of the state. Though teen pregnancy rates have decreased due to collaborative initiatives to address this issue, Hampden County *teen pregnancy* rates continue to be high with rates 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; refugees, both documented and undocumented; individuals with mental health and/or substance use conditions; 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 Hampden County.

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

### ***Summary***

The BMC service area of Hampden County, Massachusetts continues to experience many of the same prioritized health needs identified in BMC'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, LGBTQ youth, refugees, low-income individuals, homeless persons and those living in poverty. Additional data is needed to better understand the needs of these populations in order to reduce inequities. The BMC 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.



## Introduction

### About Baystate Medical Center

**Baystate Medical Center (BMC)**, a 710-bed academic medical center (including Baystate Children's Hospital) is based in Springfield, Massachusetts, is Western New England's only tertiary care referral medical center, Level 1 trauma center, and neonatal and pediatric intensive care units. BMC is 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 Noble Hospital, Baystate Wing 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. BMC serves as a regional resource for specialty medical care and research, while providing comprehensive primary medical services to the community.

**Mission:** 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

Baystate 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 areas 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 health improvement strategies to address select prioritized needs.

The 2016 CHNA was conducted to update the 2013 CHNA findings so that BMC can better understand the health needs of the community it serves and to meet BMC's fiduciary requirement as a tax-exempt hospital. The PPACA requires tax-exempt hospitals and insurers 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 health improvement strategies developed in 2013 and to identify regional needs and areas of action to address needs.

# Methodology for 2016 CHNA

## Social and Economic Determinants 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 biology.<sup>1</sup> Our health is largely determined by the social, economic, cultural, and physical environments that we live in and healthcare we receive (Figure 1.).

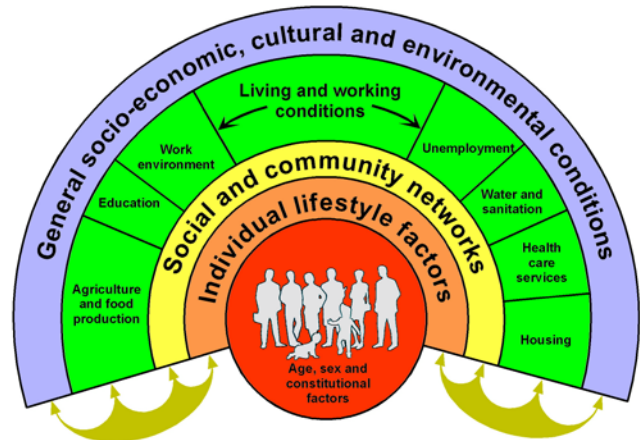
Among these “modifiable” factors that impact health, social and economic factors are estimated to have the greatest impact. The County Health Rankings model (Figure 2), developed by the Robert Wood Johnson Foundation and the University of Wisconsin Population Health Institute, estimates how much these 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%). According to County Health Rankings, Hampden County ranked last out of the 14 counties in Massachusetts in health outcomes and health factors.<sup>2</sup> See Appendix V for County Health Rankings information.

Health disparities occur as a result of inequities in social determinants of health. These differences are “not only unnecessary and avoidable but, in addition, are considered unfair and unjust.”<sup>3</sup> A health equity framework allows for actions to eliminate health disparities by addressing the social and economic factors that impact health.

### Assessment Methods

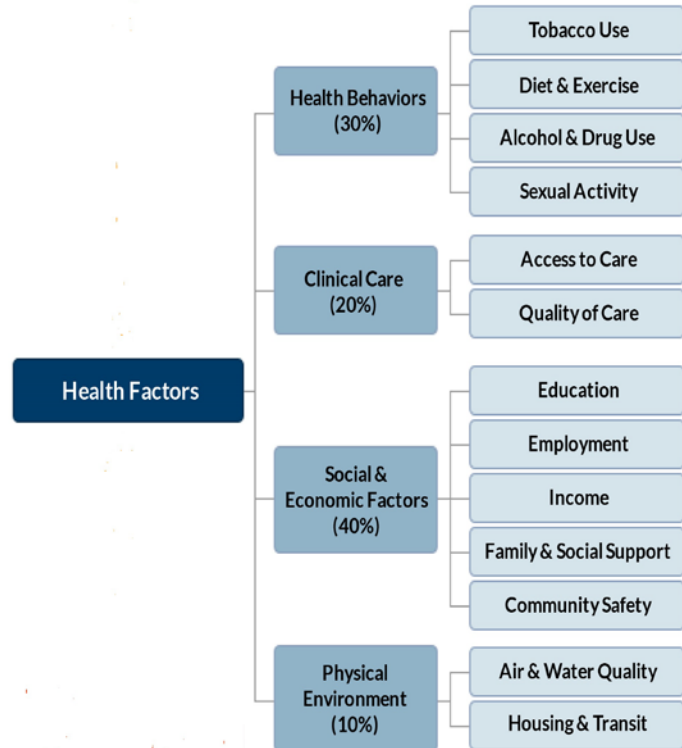
The primary CHNA goals were to update the list of prioritized community health needs identified in the 2013 CHNA conducted by

Figure 1. Determinants of Health



Source: Dahlgren & Whitehead, 1993

Figure 2. County Health Rankings Model - Health Factors



Source: County Health Rankings

Verité Healthcare Consulting and to the extent possible, identify potential areas of action. The prioritized health needs identified in the 2016 CHNA include **community level social and economic determinants that 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 Massachusetts 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 (CC), and a variety of other data sources;
- analysis of findings from two (2) **focus groups** and seven (7) **key informant interviews** conducted specifically for BMC (Appendix II);
- analysis of findings from an additional four focus groups and 17 key informant interviews conducted for other Coalition members and considered relevant for this CHNA (Appendix II);
- review of 17 existing assessment reports published since 2013 that were completed by community and regional agencies serving Hampden 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 located in the BMC service area and chosen by BMC. In these instances, analyses focused on Chicopee, Holyoke, Palmer, Springfield, West Springfield, and Westfield. 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 that serve medically underserved, low-income or communities of color populations 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 individuals, people of color), and other community stakeholders. Topics included: maternal and child health, mental health and substance use, access to health care for low-income populations, 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 community members and 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 the 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. 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 (Chicopee, Holyoke, Palmer, Springfield, West Springfield, and Westfield), counties, and the state. The 2013 dataset included data for counties and for all communities within Baystate Medical Center's service area, unless it was suppressed. 2013 data was used to identify communities with high rates within the service area. 2013 state-level data was not available. Rates presented for small communities should be interpreted with the understanding that 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.

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 Medical Center'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 Medical Center includes all 23 communities within Hampden County, including the third largest city in Massachusetts – Springfield (population over 150,000) (Table 1). Three adjacent cities (Holyoke, Chicopee and West Springfield) create a densely-populated urban core that includes over half of the population of the service area (around 270,000 people). Smaller, suburban communities exist to the east and west of this central core area. Many of these communities have populations under 20,000 people. Figure 3 illustrates urban populations within the service area as defined by the U.S. Census Bureau. Urban areas consist of census tracts and/or blocks meeting 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 service area has more racial and ethnic diversity than many other parts of western Massachusetts (Table 2). County-wide, 22% of the population is Latino, 9% is Black and 2% is Asian (ACS, 2010-2014), though this diversity is not equally spread throughout the region and tends to be concentrated in the urban core. The Pioneer Valley Transit Authority, the second largest public transit system in the state, serves 11 communities in the service area and connects suburban areas to the core cities and services. Paratransit service is also available for people with disabilities within  $\frac{3}{4}$  mile of a fixed route to facilitate access to medical care.

Economically, the Baystate Medical Center service area is home to many of the largest employers in the region as well as numerous colleges and universities, and provides a strong economic engine for the broader region. The largest industries and employers include health care, service and wholesale trade and manufacturing.<sup>4</sup> At the same time, the county struggles with higher rates of unemployment and poverty, lower household incomes and lower rates of educational attainment as compared to the state. The median household income in the service area is about \$50,000 (\$17,000 less than the state) (ACS 2010-2014). The poverty rate is more than 5% higher than that statewide, and the child poverty rate is an alarming 27%, more than 10% higher than the state rate (ACS, 2010-2014). Despite being at the core of the Knowledge Corridor region, only 26% of the population age 25 and over has a bachelor's degree (Table 2). Unemployment is somewhat higher than the state average. The unemployment rate is based on the number of people who are either working or actively seeking work. The median age for the service area is similar to that of Massachusetts (Table 2), though the population over 45 years old is growing as a percentage of the total population.

Table 1. Communities in Baystate Medical Center Service Area

Hampden County	2014 Population Estimate
Agawam	28,772
Blandford	1,255
Brimfield	3,723
Chester	1,365
Chicopee	55,795
East Longmeadow	16,123
Granville	1,620
Hampden	5,195
Holland	2,502
Holyoke	40,124
Longmeadow	15,882
Ludlow	21,436
Monson	8,754
Montgomery	860
Palmer	12,174
Russell	1,787
Southwick	9,689
Springfield	153,991
Tolland	492
Wales	1,878
Westfield	41,608
West Springfield	28,627
Wilbraham	14,509
<b>Total Service Area</b>	<b>468,161</b>

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

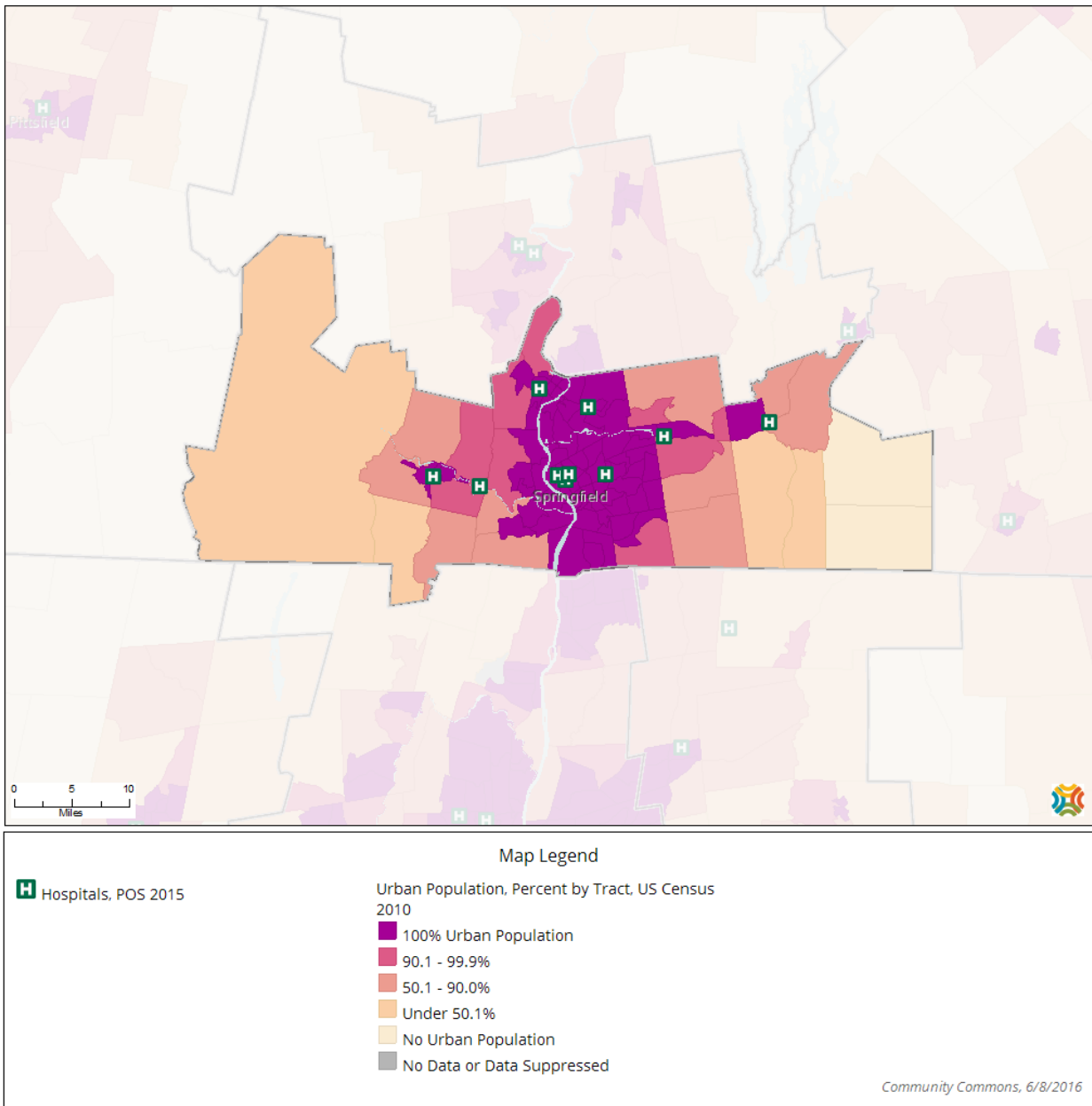


Table 2. Sociodemographic Characteristics of Baystate Medical Center Service Area

Sociodemographic Characteristic	Hampden County
<b>Age</b>	
Median age (years)	38.7
Under 5 years	5.9%
5 to 17 years	17.1%
18-64	62.3%
65 and over	14.7%
<b>Race and Ethnicity</b>	
One race	97.7%
White	78.2%
Black or African American	8.7%
American Indian and Alaska Native	0.3%
Asian	2.1%
Native Hawaiian and Other Pacific Islander	0.0%
Some other race	8.4%
Two or more races	2.3%
Latino or Hispanic origin (of any race)	22.1%
White , not Latino or Hispanic	66.1%
<b>Language Spoken at Home (population over 5)</b>	
Speaks language other than English at home	25.0%
<b>Educational Attainment</b>	
Population 25 years and over	
Less than high school graduate	15.9%
High school graduate (includes equivalency)	30.6%
Some college or associate's degree	28.1%
Bachelor's degree or higher	25.5%
<b>Income</b>	
Median income - individual	\$25,416

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

Figure 3. Urban Population in the BMC Service Area



Source: Community Commons 2016, U.S. Census Bureau, Decennial Census 2010; Source geography: tract

## Prioritized Health Needs of the Community

The following are the prioritized health needs identified for BMC's service area, Hampden County. The prioritized health needs of the community served by Baystate Medical Center are grouped into three categories: (I) community level social and economic determinants that impact health, (II) access and barriers to 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 BMC's service area, many of which were identified as prioritized community health needs in BMC's 2013 CHNA and continue to contribute to the health challenges experienced in its service area.

#### *Lack of Resources to Meet Basic Needs*

In BMC's service area of Hampden County, 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. In their key informant interviews for this CHNA, regional public health officials identified low-income residents as a vulnerable population of concern that face challenges in accessing care and advocating for their health needs.

*"Specifically at Baystate, the social work department needs to be doubled, or even tripled?"*

- Key informant interviewee,  
Baystate Medical Center

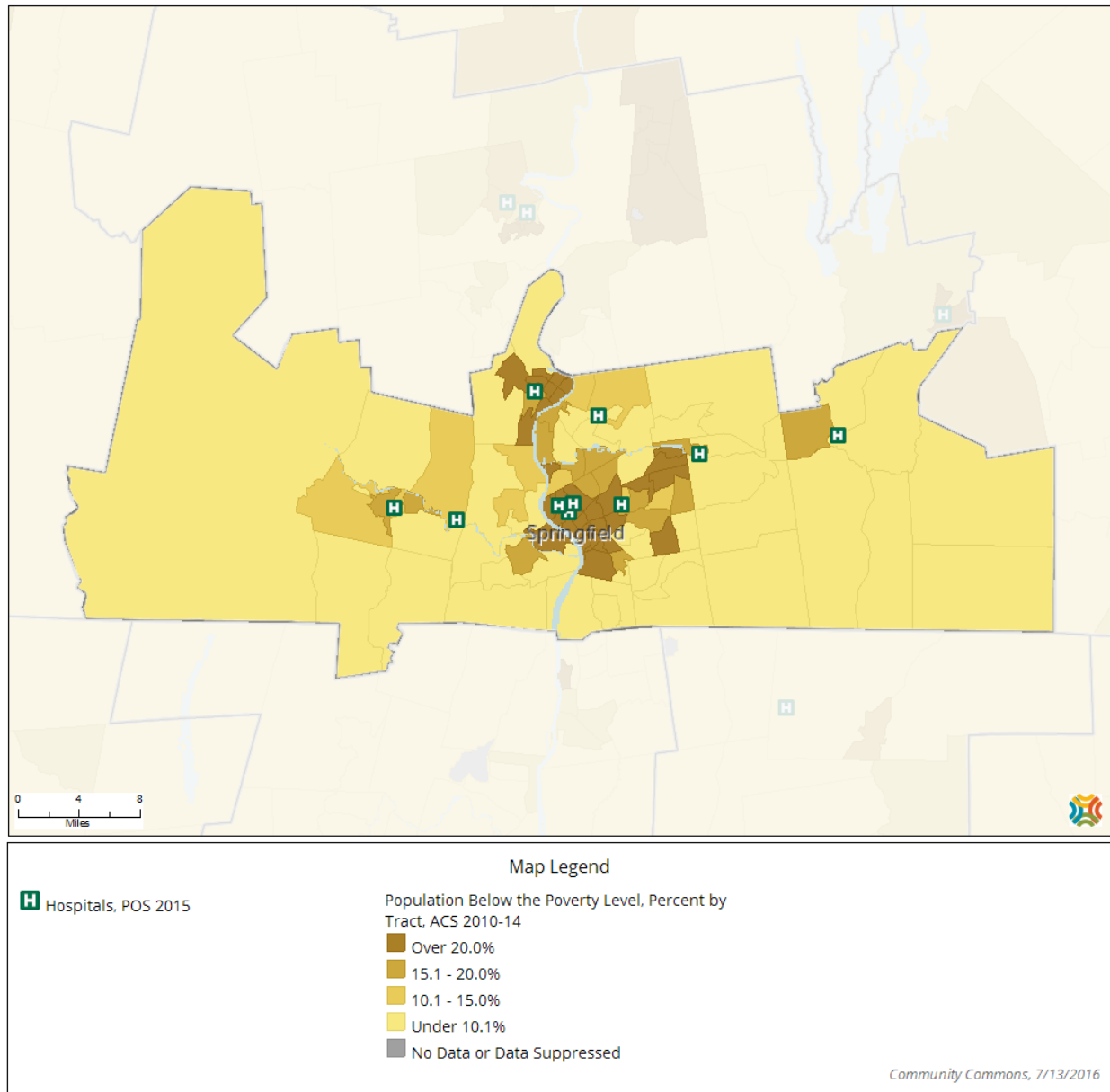
The median family income of \$61,989 in Hampden County is almost 30% lower than that of the state (Table 3). Similarly, rates of unemployment in Hampden County are 40% higher than the state. Just over 17% of county residents live in poverty with high rates of poverty concentrated in areas of Springfield and Holyoke (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 level 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 Hampden County to be self-sufficient in 2010 was \$55,286,<sup>5</sup> which was higher than the 2010 200% poverty level of \$44,226 for a family of four.<sup>6</sup> In Hampden County, over a third of the population lives in households with income at or below 200% of the federal poverty level. Across all four focus groups, 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

	Hampden County	Massachusetts
<b>Median Family Income*</b>	\$61,989	\$86,132
<b>Unemployment**</b>	6.8%	4.9%
<b>Poverty*</b>		
Population living below federal poverty level	17.7%	11.6%
Population living below 200% of federal poverty level	36.9%	25.0%
Children living below federal poverty level	27.4%	15.1%
<b>Children eligible for free or reduced lunch*</b>	59.9%	38.3%
<b>No high school diploma*</b>	15.9%	10.5%

Sources: \*Community Commons 2016, U.S. Census Bureau, 2010-2014; no high school diploma among adults age 25 and older  
 \*\*Community Commons 2016, US Department of Labor, Bureau of Labor Statistics. January 2015

Figure 4. Hampden County Poverty Rates



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

**Low levels of educational attainment** also contribute to availability of resources to meet basic needs. Levels of education are strongly correlated with both employment status and the ability to earn a livable wage. Approximately 16% of Hampden County residents age 25 and older do not have a high school diploma. In the communities of Springfield, Chicopee, and Ludlow, over 20% of eligible individuals do not have a high school diploma (CC, U.S. Census Bureau, ACS 2010-2014).

***Vulnerable Populations***

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

- Almost 60% of **children** living in Hampden County qualify for free or reduced lunch and 27% live below the poverty level.
- Median income levels are lower and poverty rates are higher among **Latinos** and **Blacks** (CC, ACS 2010-14).

### *Housing Needs*

Focus group participants and key informant interviewees identified housing as an influential stressor that contributes to poor health.

**Housing insecurity** is an issue that continues to impact BMC service area residents. Over a third of the population in BMC's service area is housing cost burdened, with rates close to 50% in Springfield. Among renters in the BMC service area, over 50% are housing cost burdened (U.S. Census Bureau, 2010-2014). Housing cost burden is defined as more than 30% of income going towards housing.

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 foods and medications. Hampden County experiences high rates of homelessness. 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 in Hampden County increased from 560 to 756 families.<sup>7</sup> In 2015, there were 287 homeless youth (age 24 and under) in Hampden County, and many of these youth identified as parents.<sup>8</sup> The number of homeless youth is likely an underestimate since homeless youth without children tend to avoid traditional shelters and services.<sup>9</sup> In a BMC focus group with mothers in the Springfield area, participants noted challenges finding housing while pregnant or parenting.

**Poor housing conditions** also impact the health of residents. In the BMC focus group with mothers in the Springfield area, one participant identified the stress associated with living with an infant in sub-standard housing with rodent or pest issues. 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 of children, elderly or disabled populations. Hampden County has a large older housing stock with 30% of housing built before 1940. Springfield and Holyoke have a greater number of older homes, with 41% and 50% of homes built before 1940, respectively (U.S. Census Bureau, 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 or participating in community-based programs that promote health, such as exercise and nutrition programs, or 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.

*“How do you relax when you don't know where you are going to live?”*

- Focus Group Participant,  
Maternal and Child Health Focus  
Group

An estimated 14% of households in Hampden County do not have vehicles, and in Springfield, rates are higher at 23% (U.S. Census Bureau 2010-2014). Public transit challenges previously identified relate to limitations in service options resulting in lengthy wait/trip time and limited access.<sup>10</sup> According to the Pioneer Valley Planning Commission, the Pioneer Valley Transit Authority has made some progress addressing needs cited by transit customers resulting in increases in ridership, (up 18.1% since 2010), however, challenges remain.<sup>11</sup>

### ***Lack of Community Safety***

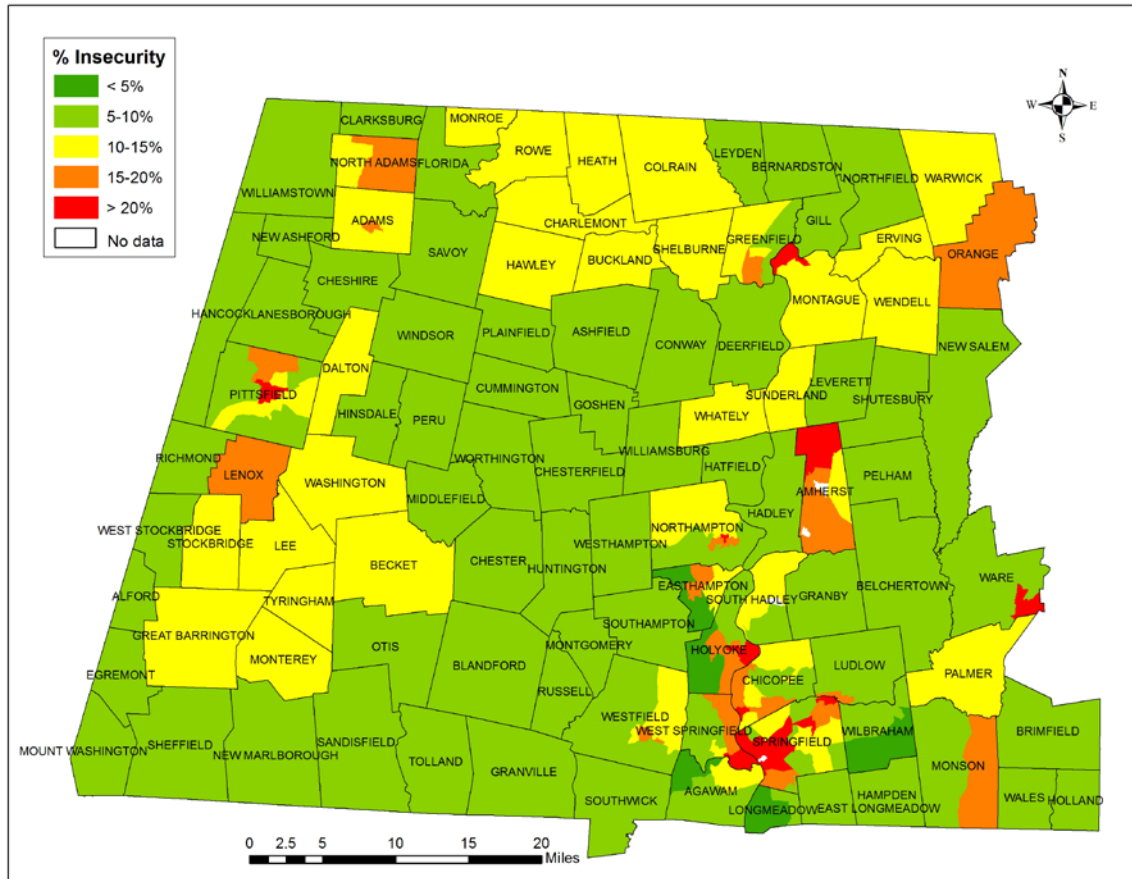
Lack of community safety was a prioritized health need in the previous 2013 CHNA and continues to impact Hampden County residents. Violence was noted by BMC key informant interviewees to be an emergent and urgent issue facing BMC service area residents and Springfield public school students. A safe community is one that is free from violence and danger. It is a place where people do not have to consider whether they will be safe or not when deciding where and when they will go outside of their homes. Crime rates are high, with violent crime rates in Hampden County almost 50% higher than that of the state. According to the FBI Uniform Crime Reports (2010-2012), rates of violent crimes in Hampden County were 641 per 100,000 compared to 431 in Massachusetts and 396 nationally (County Health Rankings, 2016). A criminal justice survey conducted by the city of Springfield in 2014 reported that 89% of overall arrests were males and 15% were gang related. Of all assault arrests, 67% were for domestic violence offenses.<sup>12</sup> Combined hospitalization and ER visit rates for nonfatal assaults were 46-54% greater than the state in Hampden and Berkshire Counties. Rates across the four Counties were highest among people aged 25 to 34 (MDPH 2013).

For youth, a safe community includes feeling safe at school. Bullying impacts youth feelings of safety. Findings from the Springfield Youth Health Survey (2015) indicate that 33% of Springfield 8th grade students were bullied in the past year.<sup>13</sup>

### ***Food Insecurity and Food Deserts***

**Food insecurity** continues to impact the ability of many Hampden County residents to access to healthy food. Eating nutritious food is good for promoting overall health and is important for managing many chronic health conditions, and was noted by regional public health officials interviewed for this CHNA as a need for residents in the region. However, not all individuals and communities have equal access to 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. The food insecurity rate in Hampden County is 12% overall and 18.8% among children.<sup>14</sup> As can be seen in a map of food insecure census tracts in western Massachusetts (Figure 5), large portions of Springfield, and parts of Chicopee, Holyoke, Ludlow, Monson, West Springfield, and Westfield have rates of food insecurity greater than 15%.

Figure 5. Food Insecurity Rates in Western MA

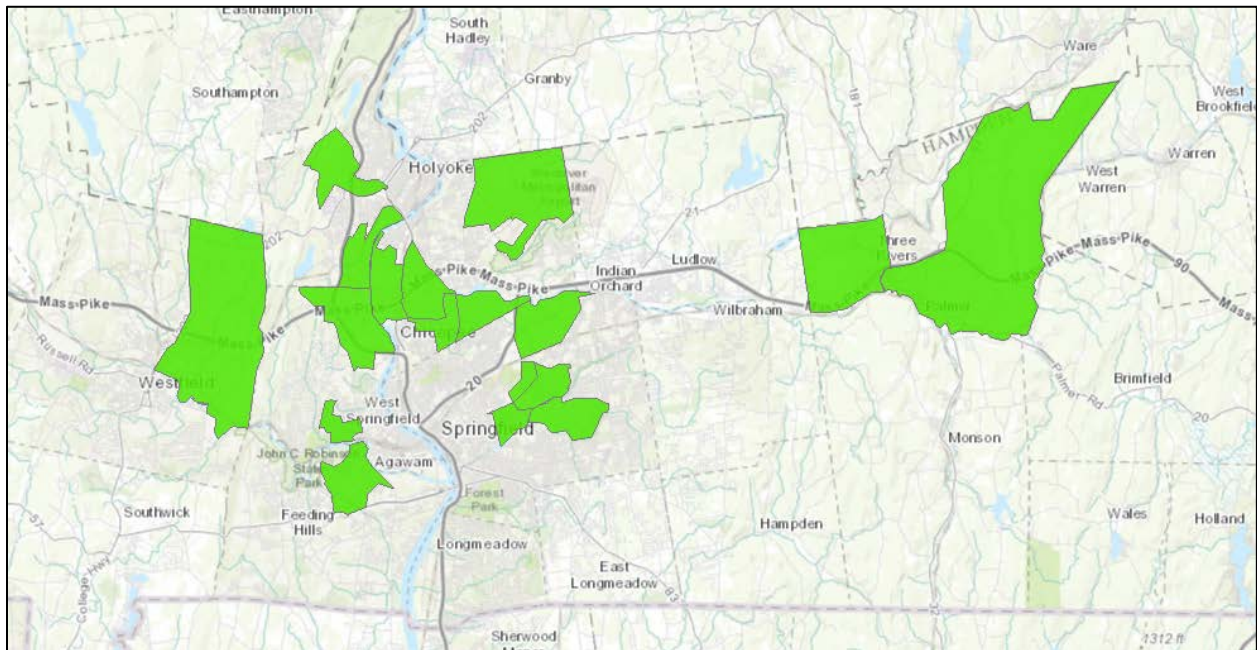


Data source: Gundersen, C., A. Satoh, A. Dewey, M. Kato & E. Engelhard. Map the Meal Gap 2015: Food Insecurity and Child Food Insecurity Estimates at the County Level. Feeding America, 2015. Feeding America. Source: Provided courtesy of the Food Bank of Western Massachusetts. Mapping: Provided courtesy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

Hampden County 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 where public transportation is limited. Figure 6 highlights in green the parts of Springfield, Holyoke, and surrounding communities that have areas that the USDA has identified as food deserts.



Figure 6. USDA Food Atlas Food Desert Areas in Hampden County



Source: USDA Food Access Research Atlas; accessed 4/25/16

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

### ***Environmental Concerns***

**Air pollution** impacts the health of Hampden County residents. Air pollution is associated with asthma, cardiovascular disease, and other illnesses. Springfield experiences poor ambient air quality due to multiple mobile and point sources including a large inter-state highway, several state highways, railroad lines running through the city and directly through its neighborhoods, and the fact that the city is in a valley into which air pollution travels from other sources and settles. In addition, exposure to near roadway air pollution has a particularly detrimental impact on health with the highway and heavily trafficked roadways running through or adjacent to some Springfield neighborhoods. Findings from key informant interviews conducted with regional public health for this CHNA identified the need for increased partnerships to improve air quality as a means to address high rates of asthma. An analysis conducted as part of the Western Massachusetts Casino Health Impact Assessment found that Springfield Latino populations, who experience disparities in asthma and other respiratory conditions, are particularly impacted by near roadway pollution along I-91 and several other busy roadways running through downtown and the I-91 corridor.<sup>15</sup> **Climate change** is expected to have impacts including rising temperatures, increased precipitation and flooding, and extreme weather events that will negatively affect the health of a large number of BMC service area residents, including those with asthma, COPD, stroke, hypertension, diabetes, obesity, and depression. Low income populations, communities of color, and immigrants have also been identified as vulnerable to negative impacts of natural disasters and climate change.<sup>16</sup> In addition, many parts of Hampden County are designated environmental justice communities. Almost all of Springfield, significant portions of Holyoke, Chicopee, and West Springfield, and some block groups in Agawam, Ludlow, Westfield, and Wilbraham include environmental justice populations. Environmental justice communities are those identified as having vulnerable populations that often experience disproportionate exposure to environmental hazards. The state of Massachusetts' Executive Office of Energy and Environmental Affairs established an Environmental Justice policy that aims to reduce potential added environmental burdens on Environmental Justice Communities

in Massachusetts, specifically focusing on neighborhoods that have a large percentage of low-income, minority racial/ethnic populations, immigrant, or non-English speaking populations.

### ***Institutional Racism***

**Institutional racism** was identified as a community factor impacting the health of BMC service area residents for this CHNA. Interviews conducted for some Hampden County Coalition Hospitals for the 2013 CHNA identified institutional racism as a factor driving health inequities, and a structural and social problem impacting the region that needs to be addressed to reduce these inequities. In their interviews for the 2013 CHNA key informants identified the need for people of color and non-English speakers to take more steps than others to receive the care they need as an example of institutional racism in the healthcare system.

Institutional racism contributes to racial and ethnic health disparities in our society and has been defined by Dr. Camara Jones, current President of the American Public Health Association (APHA) as racial inequities in access to goods, services, and opportunities such as quality education, housing, employment opportunities, medical care and facilities, and a healthy physical environment.<sup>17</sup> Dr. Jones explains that institutional racism has become normalized into society from the historical legacy of policies that excluded non-Whites from being equally integrated into society. Although institutional racism does not necessarily transpire at the individual level, it is structurally embedded in our systems, regulations, and laws and is perpetuated by structural barriers and inaction in the face of need.<sup>18</sup>

**Racial residential segregation** is a form of institutional racism that is considered to have one of the most detrimental impacts on health. Racial residential segregation creates limited opportunity environments and embeds communities with structural barriers that directly and negatively impact access to quality education, socioeconomic attainment, and a number of other social determinants of health, such as food, and quality housing.<sup>19</sup>

Based on 2010 U.S. Census Data, the University of Michigan's Center for Population Studies ranked the Springfield Metropolitan Statistical Area (Hampden, Hampshire and Franklin counties) as the most segregated in the U.S. for Latinos and 22<sup>nd</sup> in the country for Blacks,<sup>20</sup> with the largest number of Latinos and Blacks residing in Hampden County, particularly the urban cores of Springfield and Holyoke. More information can be found here:

<http://www.psc.isr.umich.edu/dis/census/segregation2010.html>

Springfield and Holyoke were identified in an analysis by Ohio State University's Kirwan Institute as "very low opportunity" communities, based on access and proximity to education, affordable housing, nutrition, and "sustainable employment" (Figure 7).<sup>21</sup> The Kirwan Institute utilizes opportunity mapping to promote data-driven equity and public health initiatives across the county. More information can be found here:

<http://kirwaninstitute.osu.edu/researchandstrategicinitiatives/building-healthy-communities-of-opportunity/>

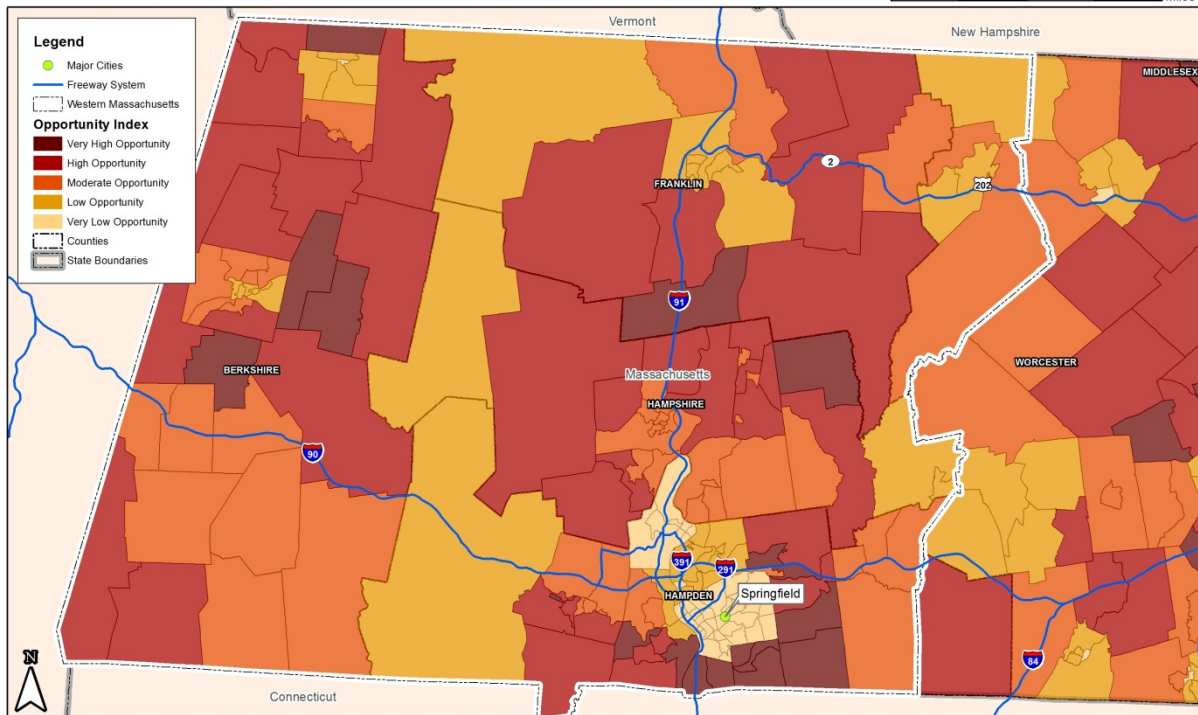
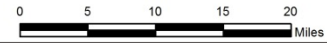
Figure 7. Kirwan Institute Comprehensive Opportunity Map of Western Massachusetts

### Comprehensive Opportunity Map WESTERN MASSACHUSETTS



This map displays the spatial pattern of distribution of opportunity based on Education, Economic & Mobility, and Housing & Neighborhood indicators

Source: US Census 2000; EPA; MA State Police; HUD Date: July 17, 2008



## 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*

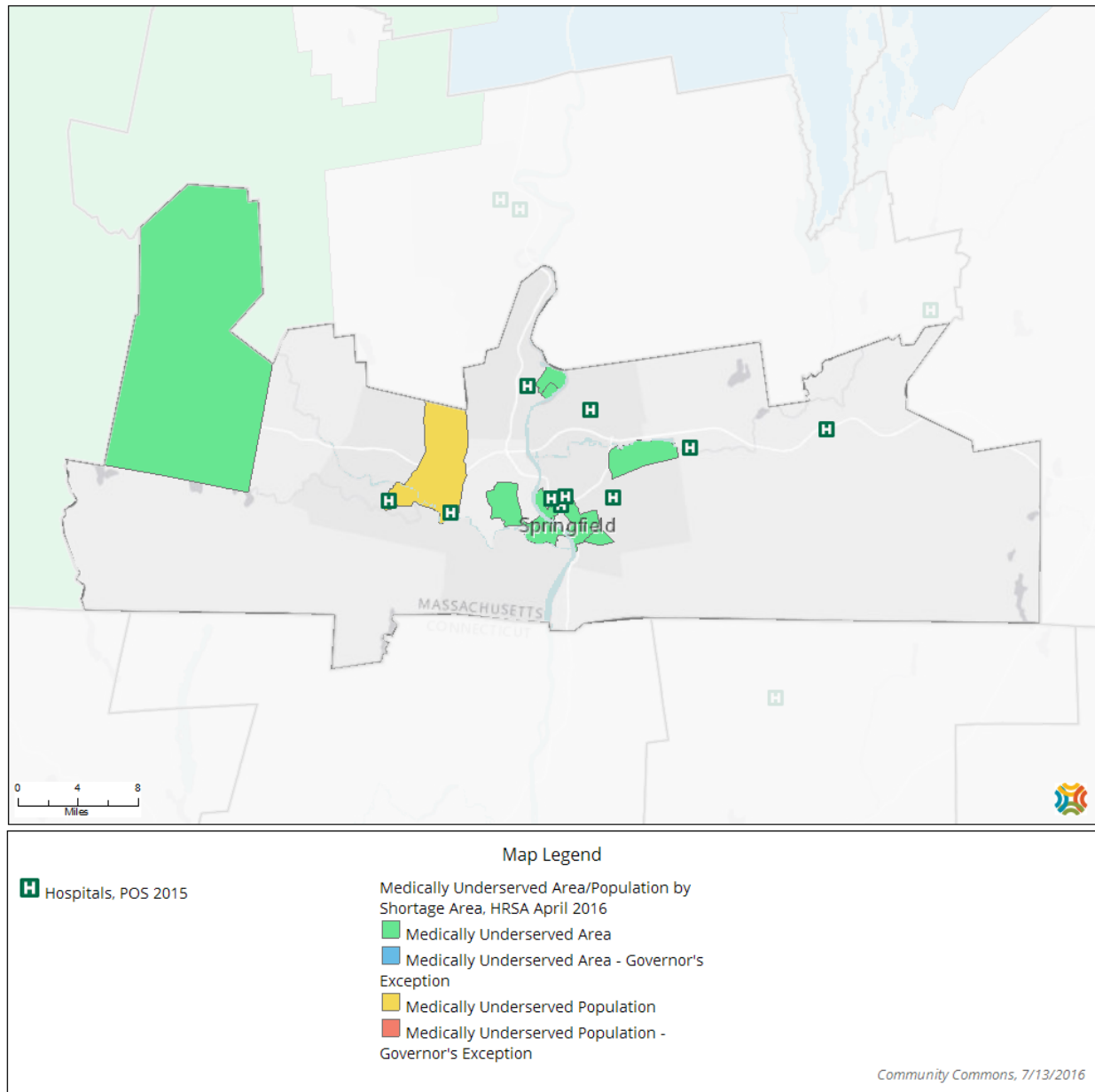
Hampden County residents experience challenges accessing care due to the shortage of primary care, mental health, substance use, and MassHealth covered dental providers as noted in focus group, interviews, and provider access data. Lack of primary care providers (PCPs) and specialty care providers pose 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.

*"I tell them to call me as soon as they get an appointment. I harass them every day."*

- Focus Group Participant, Maternal and Child Health Focus Group

Fifty-four percent of Hampden County residents live in a healthcare professional shortage area (HPSA), compared to 15% for Massachusetts residents overall (Community Commons, March 2016). In addition, the U.S. Health Resources and Services Administration (HRSA) has designated medically underserved areas and populations in Hampden County, which are found in Holyoke, Springfield, West Springfield, Westfield, Blandford, and Chester (Figure 8). 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.<sup>22</sup> Shortages were noted specifically for primary care physicians which have population to provider ratios of 1410:1 in Hampden County (statewide- 910:1 in MA) (County Health Rankings, 2016). Shortages contribute to long wait times with focus group participants commenting on long wait times for urgent and routine wellness care as a notable barrier to accessing care.

Figure 8. Medically Underserved Areas/Populations in Hampden County



Source: Community Commons, HRSA 2015

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

A need for increased access to dental services for individuals on MassHealth was also noted in focus groups conducted for this CHNA. 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. This was

echoed by focus group participants, who cited a need for dental services for Medicaid populations that offer more than “cleaning and pulling”. Although access to pediatric dentists has improved over the years, access to dental services remains a challenge for adults who are on MassHealth in this region.

### ***Insurance Related Challenges***

Issues related to insurance coverage present barriers to affordability and accessibility of care. Findings from a focus group conducted for the Coalition with low-income residents in western Massachusetts noted the high cost of deductibles and co-pays for medication and services as barriers to accessing the care and services they need. Findings from the BMC focus group conducted with pregnant and parenting women noted that money owed to a provider was a reason for cancelling appointments. Findings from focus groups conducted for BMC with faith-based leaders as well an additional focus group with low-income residents identified that the health care system is overwhelming, complex, and difficult to navigate and that this responsibility is primarily put on individuals.

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

- Key Informant Interviewee, Health Care Administrator, Coalition Hospital

Findings from focus groups and key informant interviews conducted with health care providers and administrators for another hospital in the Coalition identified multiple barriers imposed by the health insurance system that directly impact the treatment of health concerns. Issues identified include:

- gaps in service coverage for mental health and substance abuse treatment between public and private insurance;
- reimbursement policies that silo care;
- the limited number of providers that accept Medicaid patients due to state requirements (for example, the paperwork to become an approved provider and low reimbursement rates).

In addition, key informant interviews conducted for the Coalition with individuals that are employed by a regional health insurance provider identified the “three strikes and you’re out” guidelines for Medicaid patients that are determined by state regulations. 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. The key informant interviewees identified multiple barriers that can contribute to missing three consecutive appointments:

- lack of transportation;
- financial barriers;
- impacts of a health condition, such as a physical disability or mental health condition 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 for BMC, 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 most frequently cited as one of the most notable barriers to care. Similarly, mothers participating in a focus group in Springfield

conducted for BMC cited transportation as a barrier to accessing necessary routine and follow-up care.

### ***Lack of Care Coordination***

Regional public health officials interviewed for the 2016 CHNA identified lack of care coordination as a prioritized community health need, and a key to addressing health inequities in the region. Care coordination refers to the coordination of patient care, including the exchange of information between all parties involved in patient care.<sup>23</sup> Findings from focus groups and key informant interviews conducted for hospitals/insurer in the Coalition for this CHNA identified important areas where care provided by multiple providers continues to be uncoordinated and results in challenges. Challenges include:

- lack of coordination in managing the overlap between mental health and substance use;
- 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), which can impact patient ability to follow the treatment plan
- challenges of separate visits for postpartum and well-baby checkups for new mothers
- issues related to keeping track of appointments with multiple providers

Focus group participants and key informant interviewees identified a need for **stronger clinic-community linkages** as a means to improve health for Hampden County residents.

Community members identified:

- Increased connections between clinic/hospital and school system to help parents advocate for children with special needs;
- Clinic-school collaboration for intervention/early education around mental health and substance use;
- Connecting clinic to faith-based community to help patients better navigate the health care system;
- the need for community health workers (CHWs) to increase access and care coordination and to address issues related to transportation, health literacy, care coordination, and navigation of the health care system.

### ***Health Literacy, Language Barriers and Cultural Humility***

The need for health information to be understandable and accessible, and provided in a culturally sensitive manner was identified in this assessment.

*“Relationship building would benefit populations that we serve: [hospitals] could serve the target populations far better than they do [through] outreach and collaboration.”*

- Focus Group Participant, Leaders from the Faith-Based Community

*“If there was one place we could go, we would get there.”*

- Focus Group Participant, Maternal and Child Health Focus Group

*“Hispanic clinicians are like gold and I know we struggle to recruit and retain them”*

-Health Care Provider, Key Informant Interviewee

**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.”<sup>24</sup> Findings from BMC focus groups as well as additional focus groups and interviews conducted for other Coalition members identified the need for increased health literacy, including:

- the need for patient education about health information, types of services and how to access them;
- support for patients to better advocate for themselves to ensure they are getting the information and services they need;
- provider education to ensure that patients understand what they are being told during a clinical encounter, including:
  - giving them time to process information;
  - asking if they understand what they are being told;
  - using less medical jargon.

**Language barriers** can create multiple challenges for both patients and health care providers. Increasing availability of interpreters as well as translation of health material are specific actions that health care institutions can help to address this barrier. Focus group participants and key informant interviewees reported a need for more bilingual providers, more translators, and health materials translated in a wider range of languages. In the BMC faith-based focus group, participants noted this to be an increasing need in the area, due to the growing refugee and immigrant populations, and the increasingly diverse linguistic population in the Springfield area. In Hampden County, a quarter of the population speaks a language other than English at home, and 6% of Hampden County lives in households that are linguistically isolated (U.S. Census 2010-2014). Linguistic isolation is defined by the U.S. Census Bureau as a household in which all members older than age 14 speak a non-English language and have difficulty with English. The largest concentrations of linguistically isolated households in Hampden County are in Springfield, Holyoke, Chicopee, Ludlow, Westfield, and Feeding Hills (Community Commons- US Census 2010-2014).

#### Need for Cultural Humility

The need for culturally sensitive care was identified as a prioritized health need in the 2013 CHNA and continues to remain so. Increased training in cultural humility as a means to deliver more

*My experience in the community shows me that providers need to understand why people don't participate. Provider systems are not structured to give explanations - the providers need to make sure that families understand."*

- Key Informant Interviewee Regional Public Health Official

*"[To] find an answer to exact question is very difficult for people. They don't use official sources, word of mouth, sometimes it is not the real useful information."*

- Focus Group Participant, Leaders from the Faith-Based Community

*"[Moms] may not ask because they don't want to feel stupid."*

- Focus Group Participant, Maternal and Child Health Focus Group



culturally sensitive care was identified as a prioritized health need for this 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.<sup>25</sup>

2016 CHNA interviews with regional public health leaders as well as findings from BMC focus groups conducted with mothers and faith-based leaders identified cultural and language differences between the community and providers as a gap in service. They all called for increased training for health care providers in this area. In their focus group, faith-based community leaders noted that cultural sensitivity is not limited to a racial or ethnic culture, but also includes care for often-stigmatized groups such as people with mental health or substance use issues, veterans, LGBTQ individuals, ex-offenders, homeless individuals, and youth. Baystate Medical Center focus group participants also noted that in some cultures, asking providers a question is seen as disrespectful. 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 cultural barriers.

### 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 Medical Center. Data is summarized for each condition or behavior. See Appendix III for detailed hospitalization (overall and by race/ethnicity) and prevalence data as available for highlighted communities in Hampden County.

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 remain an area of prioritized health need for Hampden County residents. Residents continue to experience high rates of chronic health conditions and associated morbidity, particularly for **obesity, diabetes, cardiovascular disease** and **asthma**. 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.<sup>26</sup> A **healthy diet** and **physical activity** play an important role in preventing and managing chronic diseases.

#### **Obesity**

In their key informant interviews for the 2016 CHNA, regional public health officials identified obesity as an urgent health need in the BMC service area. In Hampden County almost 30% of adults struggle with obesity and 65% 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 remain high when examining school districts in select communities in Hampden County, with rates over 20% observed in Springfield, Palmer, Chicopee and Holyoke (Figure 9). County-level childhood obesity data was not available.

#### *Vulnerable Populations*

- Rates of obesity among **children** exceed that of the state in many communities in the BMC service area. Being overweight or obese in childhood increases the risk for adult onset chronic diseases such as diabetes as well as the risk for experiencing obesity and chronic disease as an adult.

Figure 9. Childhood Obesity Rates for Highlighted School Districts in Hampden County

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 (CVD)

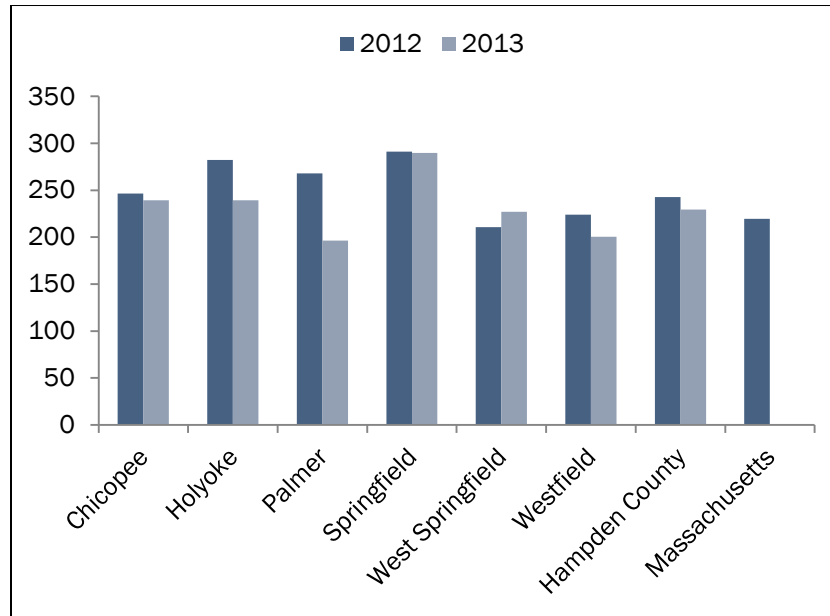
**Cardiovascular disease (CVD)** includes diseases that affect the heart and blood vessels, including coronary heart disease, angina (chest pain), heart attack (myocardial infarction), and stroke. Heart disease is the leading cause of death in Hampden County, along with cancer (MDPH, Massachusetts Deaths 2013). Stroke hospitalization rates were higher in some Hampden County communities, including Springfield, Holyoke and Palmer than hospitalization rates statewide in 2012 (220.0 in MA) (Figure 10). Figure 11 illustrates the Hampden County communities that had the highest stroke hospitalization rates in 2013.

**Hypertension**, or high blood pressure, and **high cholesterol** are conditions that increase risk for CVD and have a high prevalence in Hampden County. In 2011, approximately 34% of adults in Hampden County had hypertension and 38% had high cholesterol (BRFSS).

### Vulnerable Populations

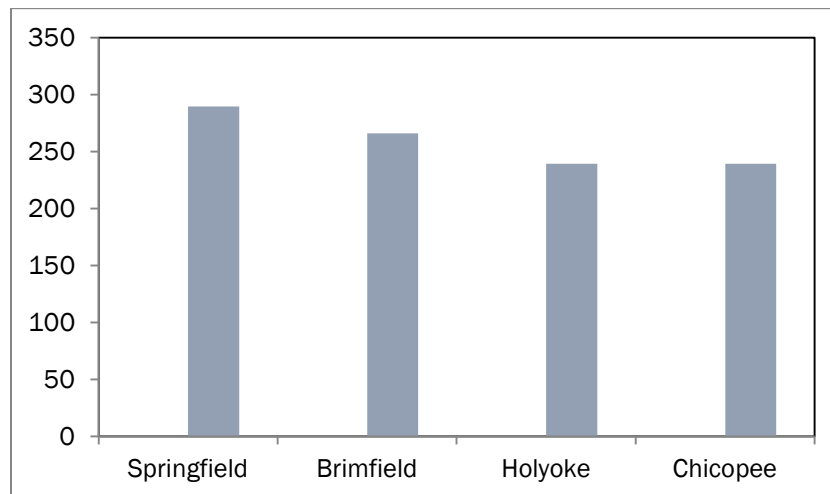
- **Older adults** experience higher rates of CVD. In Hampden County, nearly 23% of Medicare enrollees 65 years and older had heart disease (24% for Massachusetts). More than half of Medicare enrollees had hypertension (62%) which is reflective of the high rates in the state overall (60%) (Medicare 2014, one-year estimate).
- **Latinos** had stroke and heart disease hospitalization rates 50-60% higher than Whites. **Blacks** also experienced comparable disparities for stroke (MDPH 2012).

Figure 10. Hospitalization Rates for Stroke in Highlighted Communities in Hampden County, 2012-2013



Source: MDPH; age-adjusted per 100,000

Figure 11. Communities with the Highest Stroke Hospitalization Rates in Hampden County, 2013



Source: MDPH 2013, age-adjusted per 100,000

**Diabetes**

Approximately 13% of Hampden County residents have **diabetes**, which is greater than state and national rates. Almost one in five Hampden County residents has either **pre-diabetes or diabetes** (BRFSS, 2010-2012). 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, and approximately 28% of

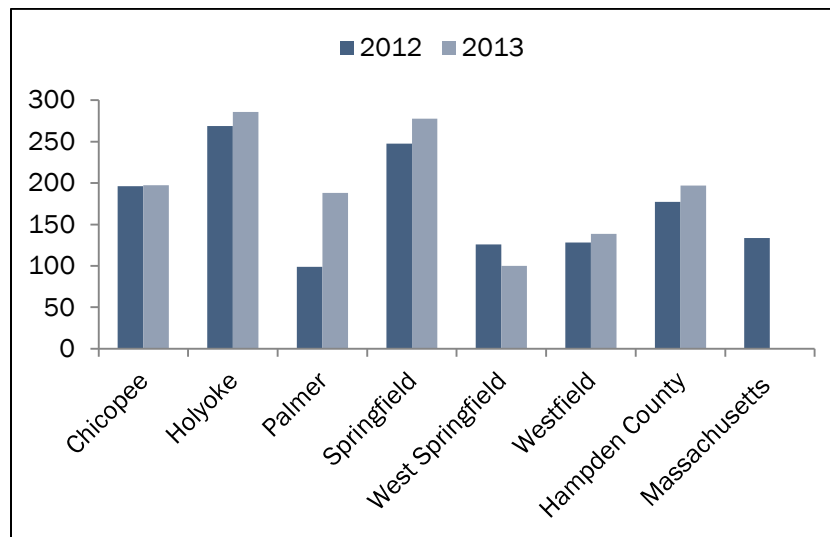
those cases are undiagnosed.<sup>27</sup> Pre-diabetes is when a person has high blood sugar levels that are not high enough for a diagnosis of diabetes. An estimated 15-30% of people with pre-diabetes will develop T2D within 5 years. T2D can be prevented and managed with a combination of weight loss, exercise, medication, and maintaining a healthy diet.<sup>28</sup>

Diabetes hospitalization rates, which are a measure of severe morbidity due to diabetes, were 30% higher in Hampden County in 2012 when compared to overall state rates (Figure 12). Among Hampden County Communities in 2013, the highest diabetes hospitalization rates were found in Southwick, Holyoke, Springfield, and Monson (Figure 13).

**Vulnerable Populations**

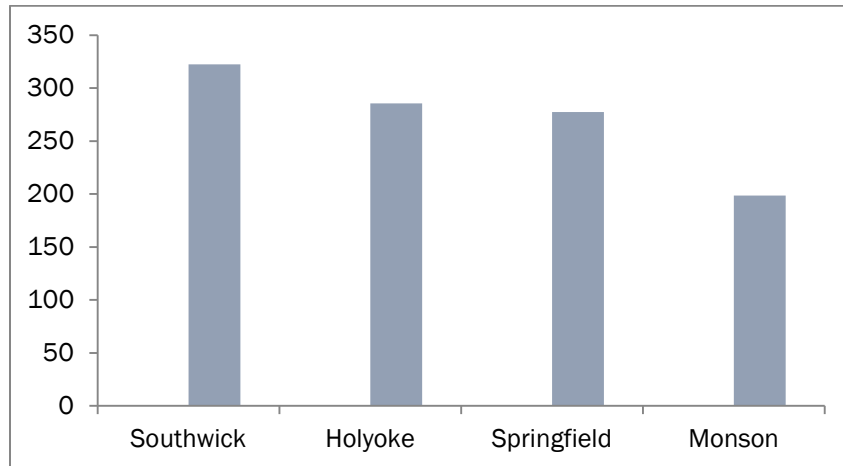
- **Older adults** experience higher rates of diabetes. Approximately 26% of Medicare enrollees age 66 and older in Hampden County have diabetes (Medicare 2014, one-year estimate).
- **Latinos** and **Blacks** experienced over three times the rates of diabetes hospitalizations compared to Whites in Hampden County and the statewide rate overall (MDPH2012). Rates among Latinos and Blacks were particularly high in Chicopee with rates six times higher than the statewide rate and four times higher than Whites in Chicopee. Rates were also high among Latinos and Blacks in Springfield and among Latinos in Holyoke.

Figure 12. Diabetes Hospitalization Rates in Highlighted Hampden County Communities, 2012-2013



Source: MDPH; age-adjusted per 100,000

Figure 13. Communities with the Highest Diabetes Hospitalization Rates in Hampden County, 2013



Source: MDPH; age-adjusted per 100,000

### ***Asthma***

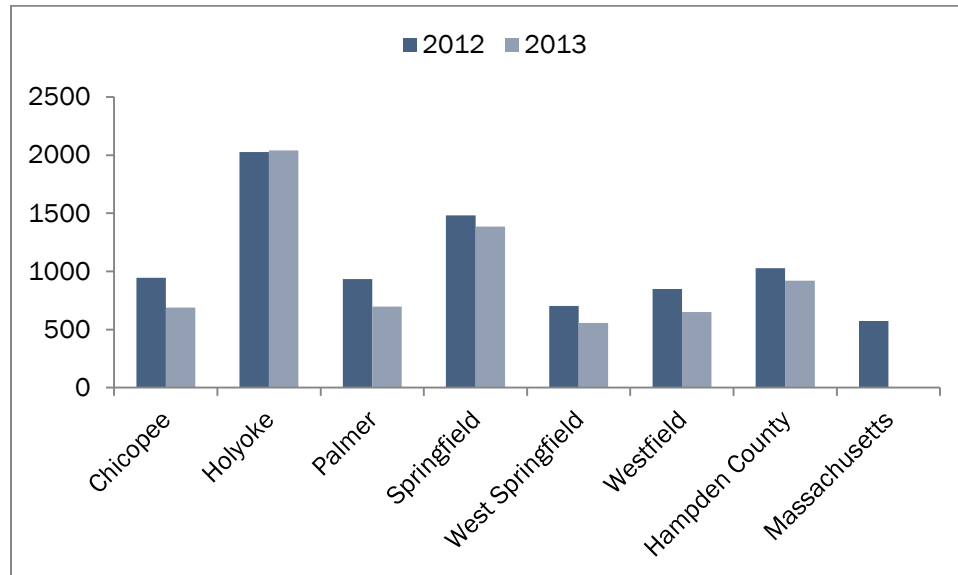
**Asthma** impacts many Hampden County residents. Approximately 12% of Hampden County adults (BRFSS 2008-2010) and 17% of Hampden County school children have asthma (12% statewide) (MDPH EPHT, 2013-2014). BMC key informant interviewees noted asthma to be one of the more urgent health needs faced by BMC service area residents and Springfield public school students. 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 tobacco smoke, second hand smoke, air pollution, pollen levels, and mold, dust, and other household contaminants or exposures.

The Hampden County asthma ER visit rates in 2012 was 80% higher than the statewide rate (Figure 14), and asthma hospitalization rate was nearly 30% higher than that of the state (MDPH2012). ER visit rates in 2012 and 2013 were highest among Holyoke and Springfield residents. Figure 15 illustrates the four communities with the highest asthma ER visit rates in 2013.

### ***Vulnerable Populations***

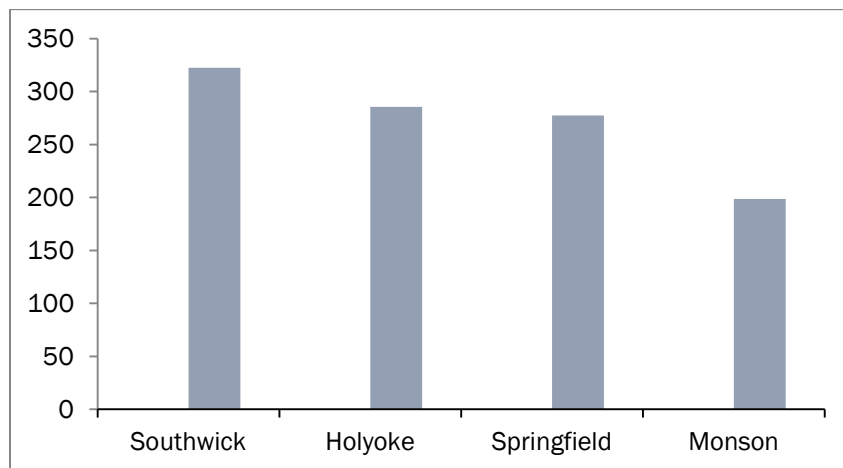
- **Children and older adults** are vulnerable populations for asthma. As identified above, childhood asthma prevalence rates are high in Hampden County. Though pediatric hospitalization (age 0-14) rates are slightly lower than that of the state (168.1 vs. 214.4 per 100,000), ER visit rates are almost double the rates statewide (1,662 vs. 881.6 per 100,000) (MDPH, 2012). Older adults in Springfield and Holyoke experience estimated asthma prevalence rates of 15%. Older adults in Hampden County experience slightly higher hospitalization (247 vs 210 per 100,000) and almost 50% higher rates of asthma ER visits (612 vs 419 per 100,000) (MDPH, 2012).
- **Latinos** experience large asthma related disparities, with hospitalization rates 5 times that of Whites and 4 times that of the state hospitalization rate overall (MDPH, 2012).

Figure 14. Asthma ER Visit Rates in Highlighted Hampden County Communities, 2012-2013



Source: MDPH; age-adjusted per 100,000

Figure 15. Communities with the Highest Asthma ER Visit Rates in Hampden County, 2013



Source: MDPH; age-adjusted per 100,000

***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 need for Hampden County residents. In addition, the need for increased youth programming that encourages physical activity, among other program area needs, was cited by individuals across all focus groups and key informant interviews conducted by Coalition members for this CHNA. Health care providers and administrators interviewed for the Coalition called for programs that can engage families in physical activity, more financial support for team sports, and after school programming that does not only focus on homework.

Among Massachusetts residents in the CDC's BRFSS 2013 survey, only 9% of respondents met the vegetable consumption recommendation and 14% met the fruit consumption recommendations,<sup>29</sup> which are comparable to national rates. Only half of Hampden County adults (53%) met the guidelines for aerobic physical activity, and only about a quarter (21%) met the guidelines for both aerobic and muscle-strengthening activity,<sup>30</sup> which are also comparable to national rates. These rates are affected by the availability of affordable healthy food and safe places to be active as well as individual knowledge and behaviors.

### *Mental Health and Substance Use*

Substance use and mental health were among the top three urgent health needs impacting the region as identified by CHDS key informant interviewees, as well as across all focus groups and interviews conducted for the Coalition to inform this CHNA. Substance use disorders overall, and opioid use specifically, were identified as top issues by BMC key informant interviewees and regional public health officials. There was overwhelming consensus among focus group participants and health care providers and administrators across the Coalition 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.

*"Mental health and substance abuse are overlapping - we should not look at them as separate"*

-Key Informant Interviewee, Substance Use Treatment Specialist

### **Mental Health**

Approximately 16% of Hampden 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."<sup>31</sup> Only 17% of U.S. adults are estimated to be "in a state of optimal mental health."<sup>32</sup> Mental health is an indicator of health itself, but also contributes to physical health and inequities.

*"Waiting for a bed to open is ridiculous- when you have a heart attack or a stroke, you get care in the ER and then they help you with all sorts of after care and follow up; where is that with mental health and addiction treatment services?"*

- Focus Group Participant, Mental Health and Substance Use Focus Group

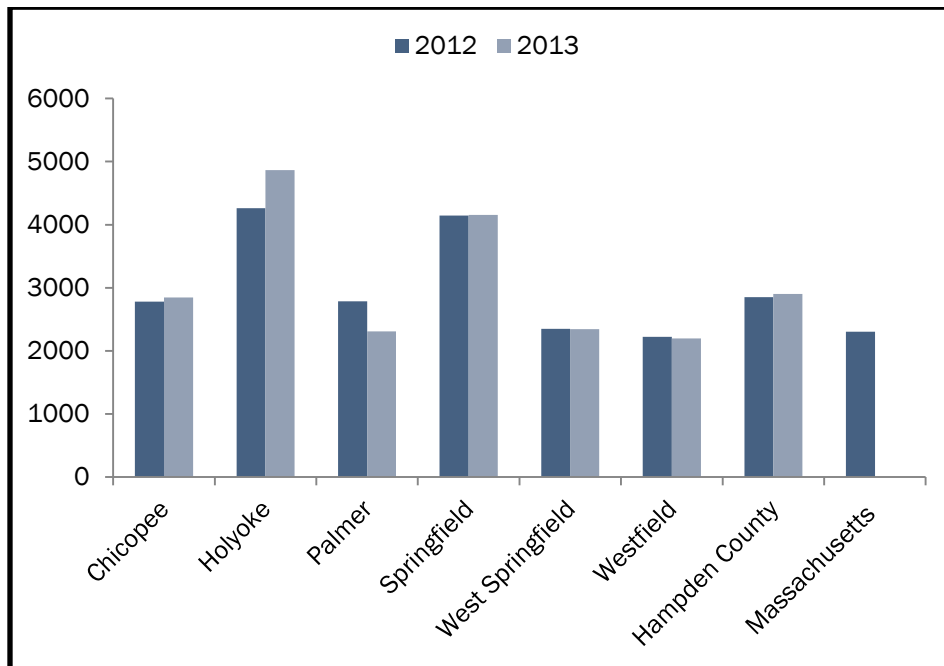


Depression is the most common type of mental illness, and it affects more than 26% of U.S adults.<sup>33</sup> It is estimated that by 2020, depression will be the second leading cause of disability worldwide, and youth are a particularly vulnerable population.<sup>34</sup> Mental illness often co-occurs with substance use disorders and impacts physical health as well. ER visit rates for mental disorders in Hampden County in 2012 were 24% higher than that of the state (Figure 16). Among all Hampden County communities in 2013, Holyoke and Springfield had the highest rates (Figure 17), with rates in 2012 80-85% higher than the state (MPDH, 2012-2013).

*“We can’t treat substance abuse and mental health together even though it is the most effective way. With the way it is funded, it has to be separate.”*

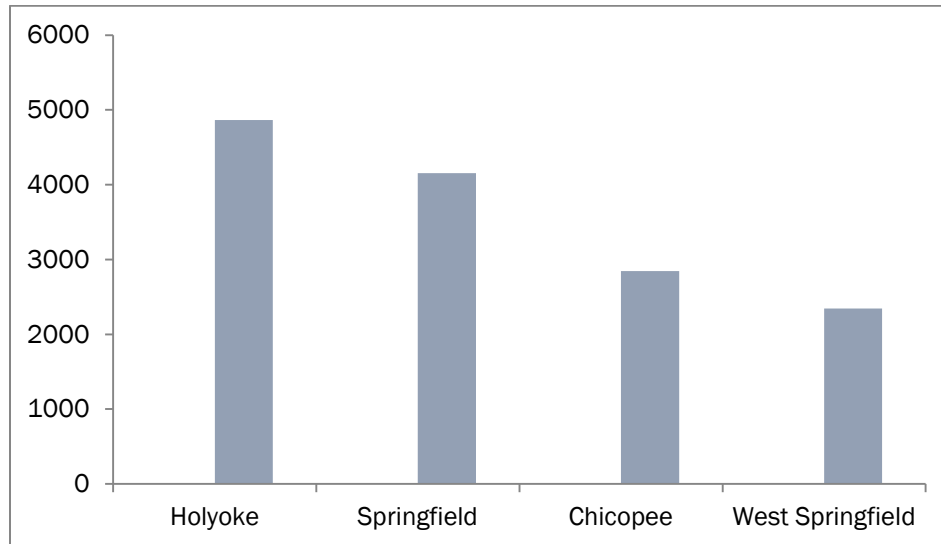
– Focus Group Participant, Mental Health and Substance Use Focus Group

**Figure 16. Mental Health Disorder ER Visit Rates in Highlighted Hampden County Communities, 2012-2013**



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

Figure 17. Communities with the Highest Mental Health ER Visit Rates in Hampden County, 2013



Source: MDPH; age-adjusted per 100,000

Note: mental health disorder ER visits include those related to substance use

### Vulnerable Populations

- **Youth** are disproportionately impacted with mental health issues. Data from the 2015 Springfield Youth Health Survey indicated that 34% of Springfield 8<sup>th</sup> graders “felt so sad or hopeless that they stopped doing their usual activities” (20% statewide).<sup>35</sup>
- **LGBTQ** youth are also disproportionately impacted with 56% of LGBTQ 10<sup>th</sup> and 12<sup>th</sup> grade students responding to the 2015 Springfield Youth Risk Behavior Survey reporting feeling sad or hopeless two weeks or more and 23% reporting that they tried to commit suicide in the past year.
- **Latinos** experienced high hospitalization rates for mental disorders with rates 65% greater than Whites and over 40% greater than Hampden County rates overall (MDPH 2012).
- **Older Adults** experience high rates of depression. In Hampden County, 16% of older adults had depression in 2014 (Medicare 2014, one-year estimate).
- Information from an administrator at a Springfield-based federally qualified community health center suggests that **refugee** populations seeking treatment for depression seem to be a growing vulnerable population in the Springfield area, although more data is needed to assess the needs of this growing population.

*“Kids are being raised by aunts, uncles, or grandparents because of parents’ drug use and mental health issues. This cycle continues unless it is nipped in the bud. We all need to start earlier.”*

- Focus Group Participant, Mental Health and Substance Use Focus Group

**Substance Use** High rates of *substance use*, including tobacco, alcohol, and drugs, continue to be a prioritized health need for the community. An estimated 21% of Hampden County residents smoke *tobacco* as compared to 16% statewide (BRFSS 2012-2014). Youth report high rates of alcohol and marijuana use with 15% of 8<sup>th</sup> graders in Springfield reporting that they drank *alcohol* in the last 30

days and 12% reporting *marijuana* use (Springfield Youth Health Survey, 2015). One Coalition key informant interviewee noted that marijuana use among youth was a rising concern with increased access due to medical dispensaries and possible legalization in MA.

**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 (including alcohol) emergency room visits in Springfield and Holyoke were particularly high in 2012 and 2013 with rates in 2013 50% higher than county rates (Figure 18). Figure 19 illustrates the Hampden County communities with the highest ER visit rates for substance use (including alcohol) in 2013. In feedback sessions for other Coalition members for this CHNA, health care providers and administrators 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.

**Opioid use disorder** has rapidly emerged as a public health crisis in Massachusetts and across the country. BMC key informant interviewees identified opioid use as the most urgent health need facing service area residents. Between 2002 and 2013 in the U.S, there has been an almost three-fold increase in opioid-related deaths.<sup>36</sup> In Massachusetts alone, the number of opioid-related deaths in 2014 represents a 65% increase from 2012.<sup>37</sup>

Opioid overdose fatalities in Hampden are higher than that of the state with 12.7 fatalities per 100,000 as compared to 10.7 statewide. This is despite lower opioid overdose hospitalization rates in Hampden County (79.4 vs. 103.9 per 100,000).<sup>38</sup> 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. In addition, 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.<sup>39</sup>

*"Addiction treatment needs to be longer, longer, longer; detox is not a treatment and it puts my child at risk for overdose."*

-Focus Group Participant, Mental Health and Substance Use Focus Group

*"There is a lot of work being done in all different areas, for families, active users, people in recovery, but there is not a lot of continuity of care. There isn't one overall agency or group tying it all together."*

-Key Informant Interviewee, Regional Public Health Official

*"We need comprehensive prevention work in the schools. It has been embraced in a patchwork fashion."*

-Key Informant Interviewee, Regional Public Health Official

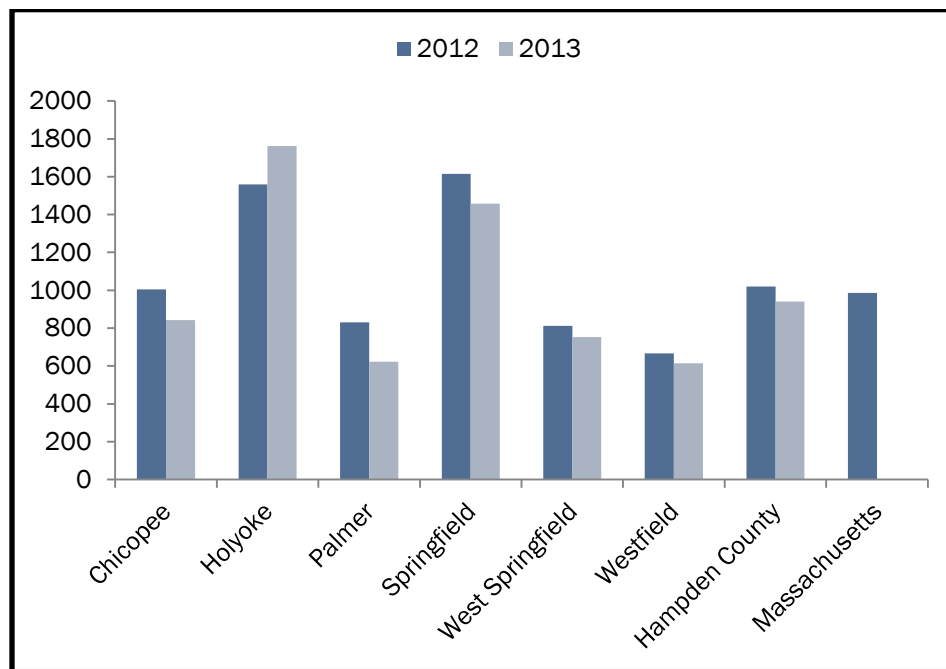
In key informant interviews conducted for this CHNA, substance use treatment specialists and health care providers and administrators identified the need for:

- 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 education and awareness of substance use issues overall;
- more collaboration among community agencies working on substance use prevention and education efforts in the area.

In addition, across key informant interviews and mental health and substance use focus groups conducted for this CHNA, health care providers and administrators identified the need for:

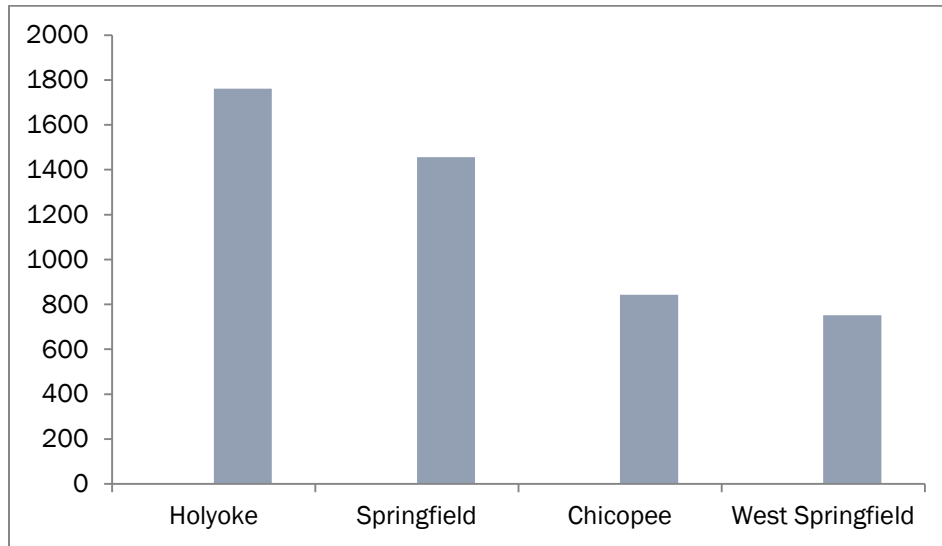
- more access to long-term medication assisted treatment (MAT) programming;
- continued focus on therapeutic, in addition to pharmaceutical, treatment of substance use disorders;
- more provider and patient education to reduce stigma to ensure individuals and families get the care and support they need;
- more integration between the treatment of mental health and substance use disorders;
- consideration of the impact of substance use on families;
- more support and prevention education for youth, particularly those with histories of trauma.

**Figure 18. Substance Use Disorder ER Visit Rates in Highlighted Hampden County Communities, 2012-2013**



Source: MDPH, age-adjusted per 100,000

Figure 19. Communities with the Highest Substance Use ER Visit Rates in Hampden County, 2013



Source: MDPH; age-adjusted per 100,000

**Vulnerable Populations**

- **Youth** substance use can affect the social, emotional and physical well-being of youth and lead to lifelong substance dependence problems. As described above, an estimated 16% of 8<sup>th</sup> graders drink alcohol and 12% use marijuana in Springfield.
- **Latinos** experienced high substance use ER visit rates at a rate double that of Whites in Hampden County (MDPH, 2012).

**Infant and Perinatal Health Risk Factors**

Infant and perinatal health risk factors were identified as health needs in both the 2013 and 2016 CHNA's. 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, 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.<sup>40</sup>

*“I had tons of morning sickness. [My doctor’s office’s policies are] if you are more than 15 minutes late, you have to reschedule. They should have more common courtesy and be flexible.”*

-Focus Group Participant, Baystate Medical Center

In Hampden County, approximately 9% of infants were born **preterm** and 8% were born **low birth weight** in 2014. County preterm birth rates were slightly higher than those of the state (MA-9%) and **low birth weight** rates were comparable to the state (MA-8%) (MDPH 2014), with higher rates of preterm birth and low birth weight observed in Longmeadow, Springfield and Westfield.

In Hampden County, an estimated 21% of women did not receive adequate **prenatal care** and 25% started prenatal care after their first 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 rates are comparable to the state, they indicate a continued area of need (MDPH 2012). Another area of need is smoking during pregnancy. Approximately 11% of Hampden County women reported smoking during pregnancy (MDPH, 2012) with the highest rates observed in Palmer, Chicopee and Westfield in 2012.

Participants from the BMC focus group focused on maternal and infant/child health 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, participants agreed on:

- the need for support related to their stress and anxiety;
- feelings of social isolation, particularly in the postpartum period;
- the need for increased parenting education and support for fathers;
- the need for family counselling to help new parents manage stress and work together;
- frustration with having different providers that give conflicting suggestions.

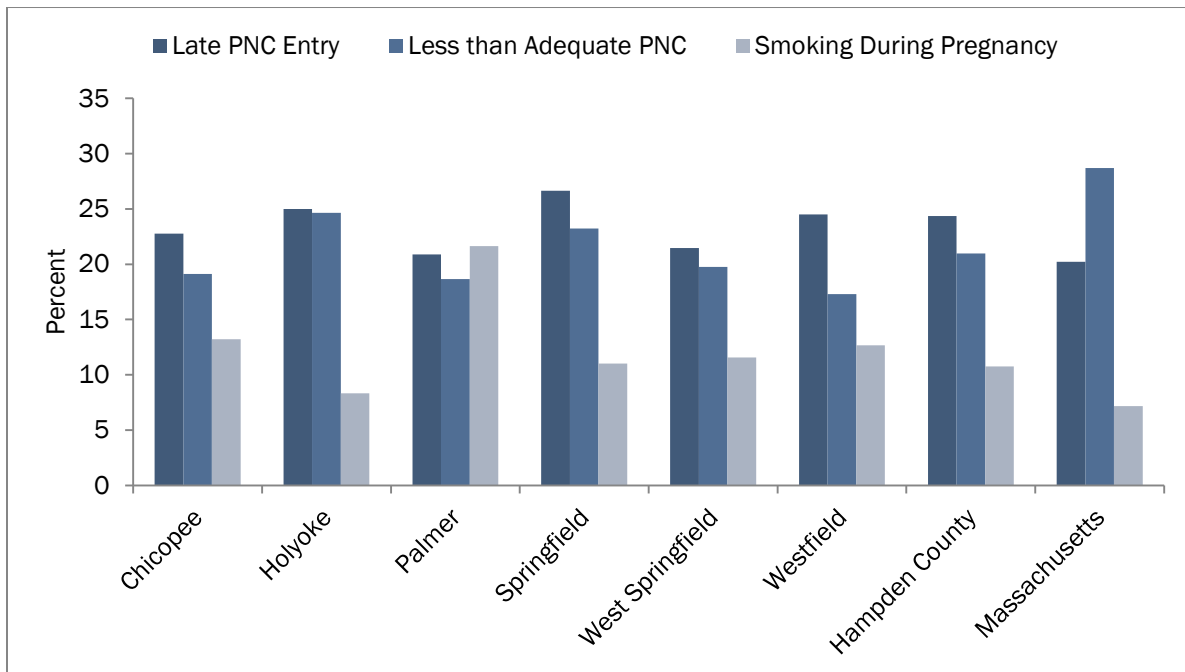
*“Don’t forget the fathers.”*

-Focus Group Participant, Maternal and Child Health Focus Group

In addition, focus group participants identified the following care improvements:

- group prenatal care;
- appointment reminder calls;
- patient-centered policies, such as having postpartum check-ups and well-baby visits scheduled at the same time.

Figure 20. Percent of Women with Late Entry to Prenatal Care, Less Than Adequate Prenatal Care, or that Smoked During Pregnancy in Highlighted Hampden County 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 first trimester

**Sexual Health**

High rates of STIs and teen pregnancy were identified as prioritized needs in the 2013 CHNA and continue to be elevated. **Unsafe sexual behavior** and lack of awareness and education about risk contributes to these high rates.

**Sexually Transmitted Infections**

**Chlamydia** rates are elevated in Hampden County with rates 37% higher than the state (506 vs. 369 per 100,000). The highest rates were observed in Springfield (904), Holyoke (670), Chicopee (607), and Ludlow (578) (MDPH, 2014). Rates of **HIV** are also elevated, with rates of 441 per 100,000 in Hampden County vs. 315 per 100,000 statewide (CDC 2013).

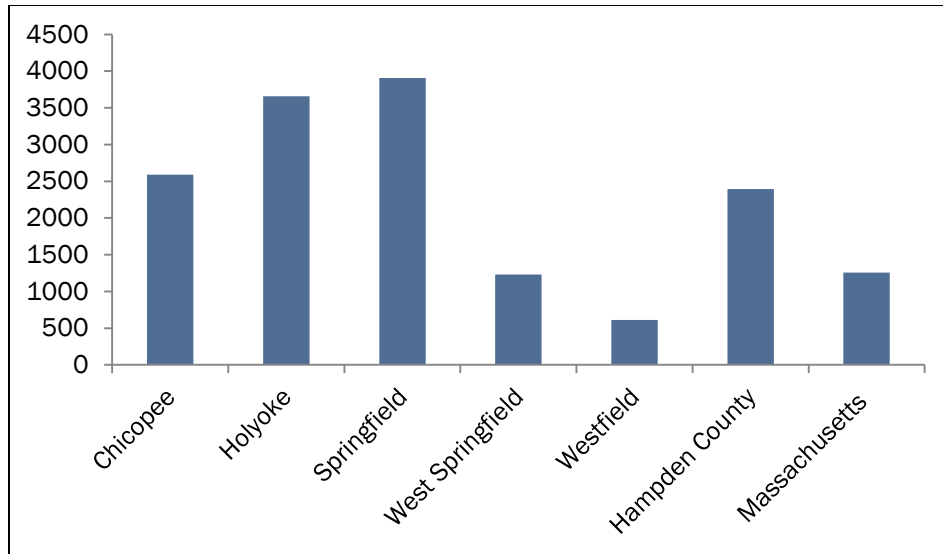
**Teen Pregnancy**

Though collaborative community efforts have made strides towards reducing pregnancy rates in Hampden County, teen pregnancy remain high, with rates double that of the state (21 vs. 11 per 1,000).

**Vulnerable Populations**

- Hampden County **youth** STI rates are high with chlamydia and syphilis rates 2-4 times higher than that of the state (MDPH, 2012) and particularly high chlamydia rates among Springfield and Holyoke youth (Figure 21).
- Teen pregnancy rates are approximately six times higher for **Latinas** as compared to the state (66 vs. 11 per 1,000 in MA).

Figure 21. Chlamydia Rates Among Youth Age 15-19 in Highlighted Hampden County Communities, 2012



Source: MDPH, rate per 100,000



## IV. Vulnerable Populations of Concern

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

- Children experienced high rates of asthma and are impacted by obesity and STIs.
- Older adults had higher rates of chronic disease and hypertension.
- Latinos and Blacks experienced higher rates of hospitalizations due to some chronic diseases, mental health, and substance use disorder.

Data also indicated increased risk for mental health conditions among **LGBTQ** (lesbian, gay, bisexual, transgender, queer) **youth, older adults** and **refugee populations**, including both documented and **undocumented**. Undocumented populations face additional challenges.

Individuals with **low income** levels, those living in **poverty**, especially children and people of color, and those who 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

Baystate Medical Center established a **Community Benefits Advisory Council (CBAC)** that meets regularly and is inclusive of employees, representatives of the community, and target populations that the hospital serves. The CBAC's core roles include advocacy for community benefits within Baystate and in the community, reviewing the hospital's annual community benefits reports, provide input into the hospital's community health needs assessment and implementation strategy, and help the hospital link its community benefit strategy to an overall vision of reducing health disparities, promoting community wellness, and improving access to care for vulnerable populations.

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

### ***RACIAL AND ETHNIC HEALTH DISPARITIES***

**American Hospital Association Health Equity Pledge** Campaign launched in 2015. On November 25, 2015, Dr. Mark Keroack, President & CEO, Baystate Health, signed the pledge to refocus and dedicate our health system's commitment to health equity and to begin taking action to accelerate progress in the following areas:

- Increasing the collection and use of race, ethnicity, language preference and other socio-demographic data;
- Increasing cultural competency training, and;
- Increasing diversity in leadership and governance.

The Baystate Health pledge incorporated both the standard set AHA #123 pledge commitments referenced above, as well as taking action to advance the organization's current work beyond the pledge goals to address health equity within the organization and in the community. Baystate Health's intent is to embed "health equity" within the organization and to use this framework to guide standard reoccurring health care practices and fundamental health policy decisions so that equity becomes the accepted mindset for how we serve patients and the community. The organization has taken the following actions:

- Created a Health Equity Data Project (HEDP) and Project Design Team (PDT)
- Currently building a proposal for a standing HEDP and Steering Committee (SC)
- Launched small experiments or action learning projects to:
  - Create a Neighborhood Health Equity Index
  - Create Quality & Equity Reports:
    - Dignity and Harm
    - Readmissions for select diseases (e.g., COPD)
  - Create Patient Experience/Equity Report
    - HCAPS (historical and baseline reports)
    - Press Ganey (prospective reporting)

Baystate provided funding support to the **Healing Racism Institute of Pioneer Valley**. Many in the Greater Springfield area believe that racism continues to afflict us and has an impact on our businesses, neighborhoods, schools and interpersonal relationships. A process that facilitates an understanding of the root causes and effects of racism, and the institutional nature of racism, will allow for the building of a better and more equitable community. The Institute's signature program is

its two-day Healing Racism sessions, which provide a safe environment to learn about the impact of racism on our nation and community in a process that is engaging and transformative. Under the leadership of Baystate's Office of Talent Management and Inclusion, Baystate 2020 Strategic Plan Objectives will require 90% of 12,500 employee's enterprise wide to complete a cultural competency module. These modules can also include community-based experiences and learning, such as participating in the Healing Racism Institute of Pioneer Valley. Baystate looks forward to more leadership and team members participating in this transformational program.

Poverty is a reality for many individuals and families and is often portrayed as a stand-alone issue. But unless you've experienced poverty, it's difficult to truly understand how complex and interconnected issues of poverty really are. Baystate's Academic Affairs Department is tasked with onboarding and training incoming medical residents. To help these medical residents and other clinical team members be better prepared to care for our patients with cultural humility, especially our more vulnerable patients they participating in a poverty simulation. A **Poverty Simulation** is an interactive immersion experience that bridges the gap from misconceptions of living in poverty to ones of understanding and awareness by breaking down stereotypes and sensitizing participants to the realities and stresses of poverty. The Poverty Simulation is not a game; but rather is based on real individuals and families and their lives. The goals of a Poverty Simulation are to promote poverty awareness, increase understanding, and inspire local change. The hope is that by participating in the Simulation, Baystate's medical residents will deliver patient-centered care with cultural humility and be inspired to make change in our local community. Similar to the Healing Racism program, Poverty Simulation will be included as learning module for cultural competency at Baystate Health.

Baystate is an active member of the **Western MA Health Equity Network**. The Western Massachusetts Health Equity Network (WMHEN) formed in October 2014 to continue to find ways to advance health equity in western Massachusetts. The Network concentrates in four areas, one of which is racial justice. The other three include finding ways to make community health data available, developing a cross sector collaboration to address health inequities, and identifying important new policies to support that will create more health equity in western Massachusetts. The WMHEN is coordinated out of the School of Public Health and Health Sciences at UMass Amherst. The central mission of WMHEN is to bring together those interested in health equity in western Massachusetts and determine what steps we can take as a region to advance health equity in our over 100 cities and towns in four counties.

#### ***CARE COORDINATION/CULTURALLY SENSITIVE CARE***

Baystate is committed to reducing health disparities in Springfield and has invested significant resources in three **community-based health centers** and pediatric clinic located in Springfield's low-income neighborhoods that have both HPSA and MUA/MUP designation. Baystate health centers are primary care first-contact sites for thousands of underserved, low-income people. In FY15, these community training sites for our Medical Residency Program provide continuity of care for 27,083 unduplicated patients and over 118,360 patient encounters/visits annually, most of whom reside in an MUA/MUP. Through the various sponsored programs (grants), BMC is able to provide enhanced services such as HIV/STI/Hep C screening and treatment to high risk, vulnerable populations, who share a disproportionate burden of certain diseases. Our health centers are Patient-Centered Medical Homes, which means our patients have a direct relationship with their doctor who coordinates a team of health care professionals who all work together to manage your care.

#### ***BEHAVIORIAL AND MENTAL HEALTH***

**Baystate Family Advocacy Center** provides help for families in crisis. Children and families that have been traumatized by child abuse, sexual assault or exploitation, or exposure to violence or homicide can find help at the Baystate Family Advocacy Center (BFAC), a nationally accredited Child Advocacy

Center (CAC) serving children and families in Hampden county and surrounding areas. The BFAC's multi-disciplinary team provides culturally sensitive, comprehensive assessment of treatment needs, advocacy, and coordination of services for children and families after a forensic interview, a child abuse medical assessment, or a call on the intake hotline. We also provide evidence-based, trauma-focused individual and family therapy as well as group therapy for children and non-offending caregivers.

**Baystate Transgender Support Group**, a partnership with UNITY of Pioneer Valley, continues to be a primary and critical link for transgender individuals in western Massachusetts. As the only transgender support group in the region, UNITY has been active for over 10 years. It provided participants access to information on services such as mental health services, social and spiritual support networks as well as links to primary health care within Baystate Health. Support group participants and UNITY of Pioneer Valley increase public awareness of transgender needs by participating in educational community events, health fairs, and open forums that promote education of transgender care and services.

### ***MATERNAL, INFANT, CHILD HEALTH***

**Baystate Children's Hospital 4C Program:** the Collaborative Consultative Care Coordination Program (4C) was created to help parents and pediatricians coordinate care for the most medically complex children in western Massachusetts. The 4C team includes a complex care pediatrician, nurse care coordinator, social worker, family navigator, behavioral health specialist and nutritionist. Our goal is to provide a new model of care delivery with increased communication among providers, improved health outcomes and reduced caregiver stress.

Through an expansion grant from the MA Department of Public Health Baystate High Street Pediatrics Health Center is implementing the **Project LAUNCH** model. This model is focused on integrating a "power team" of an early childhood mental health clinician and a family partner with lived experience in a pediatric primary care setting. LAUNCH staff support families in addressing sources of stress, and partner with families and pediatricians to promote children's social-emotional wellness. High Street Pediatrics serves a diverse group of high-need families, including immigrants and refugees from different cultural and linguistic backgrounds.

### ***PROMOTE DIET AND EXERCISE***

**Mason Square Health Task Force** received funding to continue their community coalition work to eliminate racial health disparities in Mason Square through information sharing, capacity building & policy change, with a focus on nutrition and healthy food access, diabetes & chronic heart disease.

**MIGHTY (Moving, Improving and Gaining Health Together at the Y)** is a community-based multi-disciplinary pediatric obesity treatment program. It is held at the Springfield YMCA and includes 14 - 2 hour sessions which include physical activity, nutrition and behavior modification. It targets children and adolescents age 5-21. Sessions are augmented by weekly phone calls, monthly group activities, cooking classes and a gardening experience. In addition participants and their families are given a free six-month long membership to their local YMCA. Ongoing monthly maintenance groups are available to all previous program participants.

Baystate addressed other community health needs through additional programming and support, including:

The **Baystate Springfield Educational Partnership (BSEP)** builds relationships with interested and committed students from the City of Springfield and guides these students' experiences towards careers in health care. The BSEP program offers a variety of hospital-based learning experiences that

provide opportunities to explore different careers, engage in more comprehensive observation experiences, and prepare for potential internship or employment opportunities. This is not an employment program and internship and employment opportunities are not a guaranteed program activity.

Baystate continued 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.

**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 patient's 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.

The Baystate Medical Center 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:

- Revitalize CDC's Healthy Homes Initiative
- HAP Housing's Healthy Hill Initiative
- Project Coach
- Men of Color Health Awareness (MOCHA) Ludlow Jail Project
- Prison Birth Project's Doula Care Program
- Springfield Food Policy Council's Policy and Advocacy Training Initiative
- MA Public Health Association's Stronger Together Hampden County Policy and Advocacy Training Initiative
- River Valley Counseling Transgender Health Conference

In addition, Baystate contracted with **Partners for a Healthier Community** to provide 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.

## Summary

The Baystate Medical Center service area of Hampden County, Massachusetts continues to experience many of the same prioritized health needs identified in BMC'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, LGBTQ youth, refugees, low-income individuals, homeless persons, and those living in poverty. Additional data is needed to better understand the needs of these populations in order to reduce inequities. The BMC 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.

## References

- 1 McGinnis M, Williams-Russo PN. Race, race-based discrimination, and health outcomes among African Americans. *Annu Rev Psychol.* 2007;58:201-25.
- 2 University of Wisconsin Population Health Institute. County health rankings and roadmaps. <http://www.countyhealthrankings.org/>. Updated 2016. Accessed June, 2016.
- 3 Whitehead M. The concepts and principles of equity and health. Copenhagen: World Health Organization, Regional Office for Europe. 1990.
- 4 Massachusetts Executive Office of Labor and Workforce Development. Employment and wages (ES-202). [http://lmi2.detma.org/lmi/lmi\\_es\\_a.asp](http://lmi2.detma.org/lmi/lmi_es_a.asp). Updated 2013. Accessed May, 2016.
- 5 Crittendon Women's Union. Massachusetts economic independence index 2010. Boston; 2010 March.
- 6 U.S. Census Bureau. Poverty thresholds by size of family and number of children. <http://www.census.gov/data/tables/time-series/demo/income-poverty/historical-poverty-thresholds.html>. Accessed August, 2016
- 7 Western Massachusetts Network to End Homelessness. Western Massachusetts opening doors: A collective impact framework to prevent and end homelessness. 2015.
- 8 Western Massachusetts Network to End Homelessness. Western Massachusetts opening doors: A collective impact framework to prevent and end homelessness. 2015.
- 9 Western Massachusetts Network to End Homelessness. Western Massachusetts opening doors: A collective impact framework to prevent and end homelessness. 2015.
- 10 Pioneer Valley Planning Commission under the direction of the Pioneer Valley Metropolitan Planning Organization for the Pioneer Valley Transit Authority, Pioneer Valley Regional Non-transit User Study, Oct 2011
- 11 Szegda, K, and Klingensmith, J. Western Massachusetts casino health impact assessment report. Springfield, MA: Partners for a Healthier Community; 2014.
- 12 City of Springfield. City of Springfield Massachusetts byrne criminal justice innovation program implementation plan. Springfield, MA: City of Springfield; 2014
- 13 Partners for a Healthier Community. Youth health in Springfield, MA: highlights from the 2015 youth health survey of eighth graders. Springfield, MA: Partners for a Healthier Community; April 2016.
- 14 Feeding America. Child food insecurity in Massachusetts. <http://map.feedingamerica.org/county/2014/child/massachusetts/>. Updated 2014. Accessed June, 2016.
- 15 Szegda, K, and Klingensmith, J. Western Massachusetts casino health impact assessment report. Springfield, MA: Partners for a Healthier Community; 2014.
- 16 City of Springfield. Climate change risk analysis: Assessment of future natural disaster threats and impact on springfield. Prepared by Partners for a Healthier Community, 2015. and Impact on Springfield
- 17 Jones, C. Levels of racism: A theoretic framework and a gardener's tale. *Am J Public Health.* 2000;8:1212-1216.
- 18 Jones, C. Levels of racism: A theoretic framework and a gardener's tale. *Am J Public Health.* 2000;8:1212-1216.



- 19 Williams D. Miles to go before we sleep: racial inequities in health. *J Health Soc Behav.* 2012;53:279-295.
- 20 University of Michigan Population Studies Center. New racial segregation measures for large metropolitan areas: analysis of the 1990-2010 decennial census. <http://www.psc.isr.umich.edu/dis/census/segregation2010.html>. Updated 2016. Accessed May 2016.
- 21 Kirwan Institute Center for the Study of Race and Ethnicity. The geography of opportunity: building communities of opportunity in Massachusetts. <http://kirwaninstitute.osu.edu/opportunity-communities/>. Updated 2014. Accessed August 2014.
- 22 U.S. Department of Health and Human Resources, Health Resources and Services Administration. MUA/Ps: Dictionary. <http://www.hrsa.gov/shortage/mua/dictionary.html>. Accessed May 2016.
- 23 U.S. Department of Health and Human Services, Agency for Healthcare Research and Quality. Care coordination. <http://www.ahrq.gov/professionals/prevention-chronic-care/improve/coordination/index.html>. Updated 2007. Accessed May 2016.
- 24 Centers for Disease Control and Prevention (CDC). Learn about health literacy. <http://www.cdc.gov/healthliteracy/Learn/index.html>. Updated September 2015. Accessed May 2016.
- 25 Tervalon, M, Murray-Garcia, J. Cultural humility versus cultural competence: a critical distinction in defining physician training outcomes in multicultural education. *J Health Care Poor Underserved.* 1998;9(2):117-125.
- 26 University of Michigan Center for Managing Chronic Disease. <http://cmcd.sph.umich.edu/>. Updated 2016. Accessed May 2016.
- 27 Centers for Disease Control and Prevention (CDC). 2014 National diabetes statistics report. <http://www.cdc.gov/diabetes/data/statistics/2014StatisticsReport.html>. Updated May 2015. Accessed May 2016.
- 28 Centers for Disease Control and Prevention (CDC). Diabetes. <http://www.cdc.gov/diabetes/basics/index.html>. Updated October 2015. Accessed May 2016.
- 29 Centers for Disease Control and Prevention (CDC). Morbidity and mortality weekly report July 2015, vol 64, no. 26. <http://www.cdc.gov/mmwr/pdf/wk/mm6426.pdf>. Updated July 2015. Accessed May 2016.
- 30 Centers for Disease Control and Prevention (CDC). Exercise or physical activity. <http://www.cdc.gov/nchs/fastats/exercise.htm>. Updated February 2016. Accessed May 2016.
- 31 World Health Organization. Strengthening mental health promotion, fact sheet number 220. <http://www.who.int/mediacentre/factsheets/fs220/en/>. Updated 2014. Accessed July 2014.
- 32 Centers for Disease Control and Prevention (CDC). Mental health basics. <http://www.cdc.gov/mentalhealth/basics.htm>. Updated October 2013. Accessed May 2016.
- 33 Centers for Disease Control and Prevention (CDC). Mental health basics. <http://www.cdc.gov/mentalhealth/basics.htm>. Updated October 2013. Accessed May 2016.
- 34 Centers for Disease Control and Prevention (CDC). Mental health basics. <http://www.cdc.gov/mentalhealth/basics.htm>. Updated October 2013. Accessed May 2016.
- 35 Partners for a Healthier Community. Youth health in Springfield, MA: highlights from the 2015 youth health survey of eighth graders. Springfield, MA: Partners for a Healthier Community; April 2016.
- 36 Centers for Disease Control and Prevention (CDC). Today's heroin epidemic. <http://www.cdc.gov/vitalsigns/heroin/index.html>. Updated July 2015. Accessed May 2016.

---

37 Massachusetts Department of Public Health. Data brief: opioid-related overdose deaths among Massachusetts residents. <http://www.mass.gov/eohhs/docs/dph/quality/drugcontrol/county-level-pmp/data-brief-overdose-deaths-ma-residents-january-2016.pdf>. Updated January 2016. Accessed May 2016.

38 Partners for a Healthier Community. Issue brief: opioid overdose in western Massachusetts. Springfield, MA: Baystate Health; 2015.

39 Hampshire Hope. [Presentation]. March 7, 2016. Presentation data cited from Office of the Northwestern District Attorney, Massachusetts State Police, 2015.

40 Centers for Disease Control and Prevention (CDC). Smoking during pregnancy. [http://www.cdc.gov/tobacco/basic\\_information/health\\_effects/pregnancy/](http://www.cdc.gov/tobacco/basic_information/health_effects/pregnancy/). Updated March 2016. Accessed May 2016.

## **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	

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
Reeves, Halley	Community Health Planning and Engagement Specialist	MA Dept. of Public Health			X
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 six focus groups 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 Medical Center: Maternal and Child Health***

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

### ***Baystate Noble Hospital: Mental Health and Substance Use***

- 8 participants
- 3 women and 5 men; aged 31-60 years old
- All identified as White, Non-Hispanic
- Most identified as straight

### ***Mercy Medical Center: Mental Health and Substance Use***

- 13 family member participants (mostly parents)
- Most identified as White, Non-Hispanic
- Majority aged 51-60 years old

### ***Holyoke Medical Center: Mental Health and Substance Use***

- 9 participants
- Primarily male, aged 51-60
- Identified as White, Hispanic, and African-American

### ***Mercy Medical Center and Baystate Medical Center: Leaders from the Faith-Based Community***

- 11 participants
- Half male, half female
- Identified as White and African-American

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

- 6 participants
- All participants were females: all identified as straight
- Most over 51 years old
- All identified as White, and Non-Hispanic

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
<b><i>Baystate Medical Center</i></b>					
Dr. Evan Benjamin	Chief Quality Officer and Sr. VP of Quality and Population Health	Baystate Health	X	X	
Dr. Stephen Boos	Medical Director	Family Advocacy, Baystate Health	X	X	
Joni Beck-Brewer	Vice President	Patient Services, Square One	X	X	
Dr. Joeli Hettler	Chief	Pediatric Emergency Medicine, Baystate Health	X	X	
Yolanda Johnson	Executive Officer for Student Services	Springfield Public Schools	X	X	
Dr. Niels Rathlev	Chair	Emergency Medicine, Baystate Health	X	X	
Nancy Shendell-Falik	President, Baystate Medical Center and Sr. VP, Hospital Operations	Baystate Health	X	X	
<b><i>Health New England</i></b>					
Robert Azeez	Medicaid Behavioral Health Manager	Health New England		X	
Kerry LaBounty	Medicaid Program Manager	Health New England		X	
David Silva	Medicaid Community Leader	Health New England		X	
Jacqueline Spain, MD	Medicaid Program Medical Director	Health New England		X	
<b><i>Mercy Medical Center</i></b>					
Dr. Andrew Balder	Director	Mason Square Neighborhood Health Center and Health Care for the Homeless	X	X	
Dr. Maria Russo-Appel	Chief Medical Officer	Providence Behavioral Health Hospital (PBHH)	X	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
Dr. Robert Roose	Chief Medical Officer	Addiction Services for the Sisters of Providence Health System; Member of the Governor's Task Force on Opioid Abuse	X	X	
Dr. Louis Durkin	Director of Emergency Medicine	Mercy Medical Center	X	X	
<b><i>Public Health Personnel</i></b>					
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

- HNE
- Mental Health and Substance Abuse
- Baystate Noble Hospital
- Mercy
- Leaders from the Faith-Based Community
- Maternal and Child Health

### Key Informant Interviews

- BMC
- HNE
- Mercy
- Public Health Personnel

## 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
<p><b>1. Urgent health needs among pregnant and parenting women:</b></p>	<ul style="list-style-type: none"> <li>• Responsive prenatal care</li> <li>• Mental health: stress reduction, postpartum depression, anger management</li> <li>• Follow-up medical/emotional care and supports after post-partum visit(s)</li> <li>• Diabetes management and follow-up</li> <li>• Providers to pay attention to women’s concerns and issues that arose in previous pregnancies</li> </ul>
<p><b>2. Other supports needed:</b></p>	<ul style="list-style-type: none"> <li>• Groups for parents of children with special needs (managing health and school issues)</li> <li>• Childcare</li> <li>• Individualized Educational Program (IEP) advocacy with schools</li> </ul>
<p><b>3. Barriers to accessing appropriate care:</b></p>	<ul style="list-style-type: none"> <li>• Difficult to schedule appointments</li> <li>• Insurance; high cost of services; lack of money to cover co-pay</li> <li>• Provider-centric policies (e.g., scheduling, late arrivals) put women off</li> <li>• Mother’s feeling that providers are not listening or following-up on issues</li> <li>• Awareness of appropriate services</li> <li>• Transportation</li> <li>• Understanding all the information and making decisions (e.g., vaccine information given at birth)</li> <li>• Lack of knowledge/information regarding birthing classes</li> </ul>
<p><b>2. How did you find a health care provider (for PNC or Pediatrics):</b></p>	<ul style="list-style-type: none"> <li>• Mother, sister</li> <li>• ER</li> <li>• Internet/google</li> <li>• Hospital (where gave birth) recommended pediatrician</li> <li>• MD/nurse recommendations</li> <li>• School referral for counselors</li> <li>• Early Intervention</li> <li>• Rick’s Place</li> <li>• Square One</li> </ul>

Question	Synthesis of Responses
<p><b>3. Trusted sources of information:</b></p>	<ul style="list-style-type: none"> <li>• Pediatrician (but some don't trust MD recommendation)</li> <li>• Family/Friends</li> <li>• WIC</li> <li>• Family/personal history with specific MD</li> <li>• Knowledge/reputation of area hospitals strengths and weaknesses for OB (e.g., liked Riverbed/Mercy for PNC and likes patient portal; like Baystate for delivery because the NICU is there)</li> </ul>
<p><b>4. Ever had trouble finding a provider:</b></p>	<ul style="list-style-type: none"> <li>• Yes, for mothers and for kids, particularly for mental health for moms, and special therapeutic services for kids</li> <li>• Helps to be connected through one provider: e.g., Square One</li> </ul>
<p><b>5. What works about health care services you have received:</b></p>	<ul style="list-style-type: none"> <li>• Convenient location: my OB was in the same place I worked</li> <li>• Had own transportation</li> <li>• Hours worked around work schedule</li> <li>• Doctor made me feel really comfortable</li> <li>• Meeting pediatrician in hospital (at delivery) and continuing to work with that MD</li> <li>• WIC is good at frequently reminding/checking-in with women about service options, decisions that need to be made</li> </ul>
<p><b>6. Would you recommend to others?</b></p>	<ul style="list-style-type: none"> <li>• "Absolutely"</li> <li>• Others will warn friends about providers they were dissatisfied with</li> </ul>

Question	Synthesis of Responses
<p>7.What didn't go well:</p>	<ul style="list-style-type: none"> <li>• Scheduling appointments for routine and urgent care:                             <ul style="list-style-type: none"> <li>○ Difficult to get appointment quickly</li> <li>○ If need to re-schedule may have to wait for a long time</li> <li>○ Had to switch doctors because couldn't get an appointment</li> <li>○ Difficult to get through to scheduling</li> </ul> </li> <li>• Switching doctors</li> <li>• Unfriendly/insensitive nurses, doctors</li> <li>• 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</li> <li>• Payment challenges:                             <ul style="list-style-type: none"> <li>○ 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</li> <li>○ If supposed to bring co-pay at time of visit, often postpone appts</li> <li>○ Huge co-pays for labs, visits, and prescriptions</li> </ul> </li> <li>• Lack of information about procedures and options;                             <ul style="list-style-type: none"> <li>○ One mother reported routine drug, STD testing without information or consent</li> </ul> </li> </ul>

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

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



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

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

# Focus Group Report: Access to Care for Individuals with Mental Health and Substance Abuse Issues

**Participants:** Professionals working in the area of mental health and/or substance abuse services.

**Primary Hospital/Insurer:** Baystate Noble Hospital

**Date:** February 26, 2016

## Executive Summary

This focus group explored mental health and substance abuse services and access to care for pediatric and adult populations. Participants had backgrounds working and/or engaging with populations with mental health and/or substance abuse issues, ranging from direct services, to educational contexts, to public service.

Participants concurred that the severe need for mental health and substance abuse care and services for both adults and youth far exceeds what is available. The most significant issue for participants was the shortage of inpatient and outpatient mental health and substance abuse treatment providers and facilities. Many individuals seek care in the emergency room, and the lack of discharge options contributes to long waiting periods in the ER. In addition, individuals are subjected to long gaps for follow-up care, which is a serious barrier to recovery and a hazard. An overall system of training and treatment that separates mental and substance use care was also discussed as a significant issue given frequency of dual diagnoses in these areas.

The other major issue for participants related to the insurance system dictating care through coverage, limiting access with high deductibles, and discouraging practitioners from serving low-income populations with non-commercial insurance due to bureaucracy and low reimbursement rates. Participants repeatedly noted that the time spent obtaining approval for care or submitting claims detracted from time spent with patients. This, along with the powerful role of the pharmaceutical industry in shaping care systems, was the dominant theme among participants.

## Participant Demographics

Eight individuals participated in the focus group. Three participants were women and five were men. All eight participants identified as White and Non-Hispanic. Participants ranged in age between 31-over 60. Most participants identified as straight, while two identified as gay or lesbian.

## Areas of Consensus

- Shortage of providers and facilities for emergency and long-term inpatient and outpatient care for adult and pediatric mental health and substance abuse.
- Community lacks information about available services.
- Difficulty recruiting and retaining sufficient number of qualified clinicians, especially psychiatrists, especially in practices that take Mass Health and treat youth.
- Limited access and availability of services forces patients needing intensive and long-term treatment to seek care in the emergency department.
- Limited or no follow-up options after leaving emergency department, or placement on long waitlists that put patients at serious risk and more likely to return to ED.
- Culture that emphasizes quick fixes in the training and treatment of mental and substance use issues.
- Mental health and substance use treatment are siloed, despite frequent comorbidity. Both require long term, multifaceted, responsive, high touch treatment.

- The insurance system and pharmaceutical industry present some of the most significant barriers to care.
- Dictates patient options for treatment.
- High deductibles deter people from accessing care.
- Extensive paperwork and low reimbursement rates reduce a practitioner's time with patients and deter practitioners from serving low-income populations.
- Pharmaceutical industry has a significant role in catalyzing the current opioid crisis through proliferating read access to opiate drugs.
- Paradigm shift needed in which mental health and substance abuse is treated with the same urgency and system of substantive long-term support as other chronic diseases.

### *Recommendations*

- More mental health and substance abuse providers, services, and facilities.
- More information for patients about how to access mental health and substance abuse services and resources.
- Support for patients and families to deal with severe stigma attached to mental and substance abuse issues.
- Expanded proactive early education on substance use.
- Systems change how mental health and substance abuse services are insured so patients can access the care they need and so providers can focus on patients rather than negotiating coverage and treatment options with insurers.
- Paradigm shift so mental health and substance abuse are treated as medical conditions, comparable to chronic diseases, with implications for training treatment, insurance coverage, available services.
- Integrated treatment of mental and substance use issues.

Key Issues

Question	Synthesis of Responses
<p><b>1. What are the 3 most urgent health needs/problems in your service area?</b></p>	<ul style="list-style-type: none"> <li>• Access issues:                             <ul style="list-style-type: none"> <li>○ Financial burden of care</li> <li>○ Lack of sufficient outpatient and inpatient services for youth and adults with behavioral health issues</li> <li>○ Lack of awareness within the community about services and resources for mental health and substance abuse</li> <li>○ Difficulty navigating the system relative to getting treatment and insurance coverage</li> </ul> </li> <li>• Systemic problems with the insurance system and government regulations- wasted time getting authorization for care, paperwork, coding systems, insurance dictates care</li> <li>• Mental/Behavioral health services, outpatient and inpatient services</li> <li>• Other urgent needs/problems:                             <ul style="list-style-type: none"> <li>○ Stress, Depression, Anxiety</li> <li>○ Dental Care</li> <li>○ Homelessness</li> <li>○ A culture which prioritizes quick fixes at a low cost. This is reinforced by mental health and substance abuse training</li> </ul> </li> </ul>

Question	Synthesis of Responses
<p><b>2. What specific vulnerable populations are you most concerned about and why?</b></p>	<ul style="list-style-type: none"> <li>• Youth</li> <li>• Prevention and early interventions for substance abuse and mental health issues</li> <li>• Medicating and overmedicating youth can have long-term negative consequences</li> <li>• Elderly</li> <li>• Other vulnerable populations:                             <ul style="list-style-type: none"> <li>○ People with substance abuse issues and their families</li> <li>○ People with chronic conditions</li> <li>○ People with comorbid mental health and substance abuse disorders.</li> <li>○ Low-Income people, who are at the mercy of insurance companies and struggle with other issues like transportation</li> <li>○ People who don't earn enough to afford care but earn too much to qualify for subsidized care</li> <li>○ Pregnant teens and overwhelmed parents</li> <li>○ Veterans, who may have PTSD or other mental illnesses and are using substances as a coping strategy</li> </ul> </li> </ul>

Question	Synthesis of Responses
<p><b>3. What are the most serious barriers or service gaps that adult consumers face in accessing mental health and substance use care?</b></p>	<ul style="list-style-type: none"> <li>• Severe shortage of providers and services offering inpatient and outpatient treatment for mental health and substance use</li> <li>• Insurance system and the pharmaceutical industry:               <ul style="list-style-type: none"> <li>○ Even with insurance, the cost of care (high deductibles) may deter people from getting services</li> <li>○ Control insurance companies exert over care and access to treatment</li> <li>○ Insurance industry has influenced the availability of services and created service gaps, most particularly the shortage of outpatient and inpatient services for mental health and substance abuse</li> <li>○ Low reimbursement rates and excessive paperwork are barriers to providers, many of whom opt to only accept private insurance, further limiting services for low-income consumers</li> <li>○ Many practitioners would rather spend time with patients than on the phone with insurance companies determining and negotiating coverage for treatment</li> <li>○ Low insurance reimbursement rates are also barriers for hiring practitioners; practices have difficulty recruiting qualified practitioners in all areas, and acutely in both adult and pediatric psychiatry</li> </ul> </li> <li>• Severe shortage of detox facilities</li> <li>• The industry is slanted toward pharmaceutical solutions and away from longer-term relationship-based therapeutic treatment</li> <li>• Financial barriers and the prohibitive cost of care for many and especially for low-income adults and families.               <ul style="list-style-type: none"> <li>○ People in the middle who don't qualify for health subsidies but are also not earning enough to comfortably pay for care</li> <li>○ Disparities in coverage between public and commercial insurance</li> </ul> </li> <li>• Burden of accessing care falls on the patient. The system is already incredibly difficult to navigate, but when you are struggling with a mental health or substance abuse issue, you may not be able to manage appointments and medication</li> </ul>

Question	Synthesis of Responses
<p><b>4. What are the most serious barriers or service gaps that children, adolescents, and young adults face in accessing mental health and substance use care?</b></p>	<ul style="list-style-type: none"> <li>• HIPAA-- barrier to continuity of care, particularly when providers are prohibited from obtaining information about previous or on-going patient treatment or student</li> <li>• Insurance system, both commercial and governmental-- limits access to care, in an arena where options for youth are already limited. Government regulations and paperwork have sacrificed a provider's time with patients. Some practices actually avoid Medicaid patients because of the bureaucratic burden.</li> <li>• Lack of mental health services for youth, including limited options and long waitlists. It is more difficult to find mental health outpatient care for youth than adults. The shortage of mental health outpatient care options impacts continuity of care, leaving inappropriate and even dangerous gaps between inpatient and outpatient care.</li> </ul>
<p><b>5. In light of the opioid use epidemic, what are the most pressing issues and needs around access to care for detox, long-term treatment, criminalization, and stigma? What are other needs or trends in opioid addiction in your service area and what impact does that have on providers and services?</b></p>	<ul style="list-style-type: none"> <li>• More treatment and detox beds in the area. In addition to a shortage in detox beds, there is a shortage of post-detox treatment and follow-up care.</li> <li>• Need to treat substance abuse and mental health together, or to at least remove the barriers of addressing these co-morbid conditions. Funding and regulations perpetuate this separation even though treating these conditions together is more effective.</li> <li>• Liability issues influencing access to care. Risk aversion deters providers from using harm reduction models even though they more effective in the long run. Higher liability working with certain populations (i.e. youth).</li> <li>• Need more proactive treatment, including resources to catch substance abuse early before it escalates to full blown addiction. Narcan and detox beds are considered reactive responses.</li> <li>• The pharmaceutical industry has perpetuated the opioid crisis by pushing pain medication, and now drugs like Narcan.</li> <li>• The opioid crisis has made it difficult for terminally ill cancer patients to access pain medication.</li> </ul>
<p><b>6. What are the major needs, service gaps or barriers for accessing mental health and substance use care in a crisis situation, such as urgent/emergency care in the emergency department? What is working well and what can be improved?</b></p>	<ul style="list-style-type: none"> <li>• Shortages in inpatient and outpatient beds. When there no discharge options, patients end up waiting in the hospital.</li> <li>• Model of aftercare used by Westfield State brings together the individual, their family, their providers, and the school has been effective to ensure the individual doesn't fall through the cracks.</li> <li>• Having a community of support is needed for recovery</li> </ul>



Question	Synthesis of Responses
<p><b>7. What about long-term mental health and substance use care needs for adults and youth? What are the needs for such services and who is most vulnerable when those services are not available?</b></p>	<ul style="list-style-type: none"> <li>• Education for youth about substance abuse both in the school and outside.</li> <li>• Other needs: Peer group based support for youth, more resources, and improvement in the insurance realm</li> </ul>
<p><b>8. What do you think community leaders think about the philosophy of harm reduction for addiction including the use of Narcan and needle exchange?</b></p>	<ul style="list-style-type: none"> <li>• Narcan is necessary but does not treat the problem or root cause of why people are using opioids in the first place                         <ul style="list-style-type: none"> <li>◦ People are not mandated to go into treatment after receiving Narcan</li> </ul> </li> <li>• Shift in the use of Methadone and Suboxone from temporary treatment to long-term maintenance</li> </ul>
<p><b>9. If you could change any aspect of the mental health and substance abuse care system, what one or two things would you change that would have the most profound positive impact on access and care for the populations we've been discussing?</b></p>	<ul style="list-style-type: none"> <li>• Changes in the insurance system. Treatment/care and profit are opposing forces and insurance should be nonprofit.</li> <li>• Institute mental health screenings for youth, comparable to annual physicals and vaccinations</li> </ul>
<p><b>10. What kind of structural and social changes are needed to tackle health inequities in your community/service area?</b></p>	<ul style="list-style-type: none"> <li>• Improve the insurance system</li> </ul>
<p><b>11. How would you recommend that your local hospitals/insurers and the Western Massachusetts Hospital Coalition work in closer partnership with local and regional municipal public health entities and other community partners after the CHNA is completed? What specific ways can such partnerships be supported and sustained?</b></p>	<p>Recommendations included:</p> <ul style="list-style-type: none"> <li>• Create more opportunity for providers to be heard. A practitioner will have a better sense of what treatments are successful, and these recommendations should be brought up the ladder and to government.</li> <li>• Involve and inform policy makers.</li> <li>• Create a complaint/feedback process.</li> <li>• The Hospital should take the lead role in bringing together care providers and groups that are already working towards common goals but are disconnected.</li> <li>• Accountability and action.</li> </ul>

*Quotes*

- “Substance abuse and mental health are definitely connected, but based on how they are funded and regulated, they are completely separate. In the mental health hospital, we can’t treat someone for substance abuse; we have to treat them for mental health. At an outpatient mental health clinic, if someone has a problem with heroin, we have to make sure to find a mental health condition too otherwise we can’t bring him in. We can’t treat substance abuse and mental health together even though it is the most effective way. With the way it is funded, it has to be separate.”
- “It’s about continuity of care...We know from 24-hour care a day into 1-hour of care bi-weekly in two months from now is a really long inappropriate gap. It makes it really hard, and it makes it really dangerous. We’ve seen these people come back to the ED again and again and again.”
- “You can’t treat an opioid addiction in the Emergency Room and that’s what we’re doing.”
- “‘You really need to be in detox, but there are no detox beds so go home and call detoxes tomorrow. If that doesn’t work, call them the next day.’ If there aren’t, call another hospital, and then the next day do the same. Maybe in a few weeks some hospital will say we have a bed, come in. That is the reality of what is going on.”
- “Lots of the stuff we do is reactive. For a child who is starting to have problems with Percocet, you call a program and they say to call back in 2 months. By then, it evolves into a full addiction. The system doesn’t allow us to address substance abuse issues early on before they evolve into more serious issues.”

## Focus Group Report: Mental Health and Substance Use

**Participants:** Families of Consumers of Mental Health and Substance Use Treatment Services

**Primary Hospital/Insurer:** Mercy Medical Center

**Date:** February 11, 2016

### Executive Summary

#### **Participant Demographics**

The 13 participants were family members (primarily the parents) of consumers of mental health and substance use treatment services; they were also members of the Holyoke *Learn to Cope* meeting held weekly at Providence Behavioral Health Hospital. Demographically, the participants were:

- 82% female
- 90% white
- 10% Asian
- 100% not Hispanic
- 10% were between the ages of 31-40
- 63% were between the ages 51-60
- 27% were over the age of 60

#### **Areas of Consensus**

- Care is extremely fragmented; there needs to be better communications between primary care and behavioral health programs and services.
- Stigma is applied to both the consumers/patients and their families members and is a tremendous barrier to accessing care and feeling welcome into systems of care; this stigma significantly adds to the stress faced by families in a complex and disjointed system of behavioral health care.
- Physicians and the pharmaceutical industry should be held accountable for contributing to the opioid crisis and industry must make amends for their actions.
- Widespread education and media campaigns to educate the public about addiction and mental health needs are essential to reduce the stigma associated with behavioral health issues.

#### **Recommendations**

- More staff training around the disease of addiction and mental illnesses and how behavior is affected by the disease process.
- Treatment services need to be better matched to disease progression and take into account the chronic, progressive and relapsing characteristics of mental illness and substance use disorders.
- Look at models like Mass General Hospital where they have an ARMS (Addiction recovery management Services) team that meets with families in the ED when young adults are seen for mental or substance use crisis needs.
- More patient navigators and facilitators to help families navigate through the system know more about levels of care and types of treatments and what is available for long-term support and recovery services.
- More treatment services need to be longer and in much greater supply; we need significantly more in-patient beds and insurance must cover services for much longer periods of time.
- Staff communications with patients and family need to be more consistent and frequent – staff need to return phone calls and have to engage in more mutual planning of treatment with patients and families.

*Quotes*

- “Addiction treatment needs to be longer, longer, longer; detox is not a treatment and it puts my child at risk for overdose.”
- “We need to treat mental health and addiction just like we treat cancer or diabetes; it’s a chronic, progressive disease.”
- “Why is it that when my mother has dementia I get all of this support and help and the ability to make decisions for her, but when my addicted son is not capable of making decisions based on his illness, I am told I can’t do that?”
- “We should not have to work so hard to get access to services for our loved ones, we need more navigators and supports to find out about and use services, this waiting for a bed to open is ridiculous - when you have a heart attack or a stroke, you get care in the ER and then they help you with all sorts of after care and follow-up; where is that with mental health and addiction treatment services? Why is that not as available to us?”
- “At the very least, I should be given adequate information about follow-up services and resources when my family member is in crisis and is in the ER.”
- “Many of the staff and organizations that are treating mental illness and addictions are caring and want to help, but many also need significantly more training and understanding of the disease progression that is part of addiction; some staff should not be in the field at all.”
- “The behavioral health and addiction treatment systems seem to be designed so that you have to fail over and over before you get what you really need.”

Key Issues

Question	Synthesis of Responses
<p><b>1. What has you/your family member’s experience with the mental health care system been like?</b></p> <ul style="list-style-type: none"> <li>▪ What has worked well? Why?</li> <li>▪ What has not worked well? Why?</li> <li>▪ Can you share any positive experiences with the hospital’s mental health care services? What about negative experiences?</li> </ul>	<ul style="list-style-type: none"> <li>• Care is episodic and fragmented</li> <li>• Section 35 rules are confusing and cumbersome</li> <li>• HIPPA can be a barrier to family engagement and support</li> <li>• More information should be provided in terms of resources, pamphlets, websites , etc. to family members to tap into after the crisis</li> <li>• Primary care and other doctors seem to know little about addiction and mental illness yet are treating patients for them</li> </ul>
<p><b>2. What are the most serious barriers or service gaps that have you/your family faced in accessing mental health care?</b></p>	<ul style="list-style-type: none"> <li>• lack of information about what the system and levels of care look like and how to enroll into hem</li> <li>• system that requires families to make the calls and pursue empty beds for treatment on a daily basis</li> <li>• lack of access to care locally when the family member is ready to engage in treatment</li> <li>• insurance coverage does not adequately pay for the lengths of stay need for MH and SA care</li> </ul>
<p><b>3. If you have used crisis services in the ER, what has your experience been like?</b></p>	<ul style="list-style-type: none"> <li>• ED care can be helpful to stabilize someone in crisis, but also lacks follow-up and continuity</li> <li>• EDs need to have more privacy and staff training in how to more appropriately work with patients with behavioral health needs</li> <li>• Overdose patients are released too soon after seeking ED care</li> </ul>
<p><b>4. When you think about how you currently connect to mental health services, what would make it easier or more helpful for you?</b></p>	<ul style="list-style-type: none"> <li>• More information about local supports earlier in the process and at the first time of a crisis</li> <li>• More availability of beds and services in the region</li> <li>• Staff need to return phone calls and be more engaged with patients and families</li> </ul>
<p><b>5. How does the integration of primary care and Mental Health care work for you or your family? What are the up-sides and down-sides of this?</b></p>	<ul style="list-style-type: none"> <li>• Many primary care providers are not well-versed in behavioral health needs and issues and the current standards of care, especially around pain management and risks of addiction</li> <li>• There is not enough screening for behavioral health needs and referral being done by primary care providers</li> </ul>

Question	Synthesis of Responses
<p><b>6. Are there some services available now but you cannot access them because of when or where they are offered? What are they and what are the barriers?</b></p>	<ul style="list-style-type: none"> <li>• Too few inpatient beds and supports for long-term recovery</li> <li>• Insurance is a barrier to enrolling into and sustaining certain types of care for the recommended length of time</li> </ul>
<p><b>7. What are the most pressing issues around access to care for detox, long-term treatment, criminalization, and stigma, especially in light of the emerging opioid use epidemic?</b></p>	<ul style="list-style-type: none"> <li>• Need many more options for longer term care and supports for stabilization after initial care</li> <li>• Need much more peer supports for ongoing care and treatment</li> <li>• Post-treatment needs for stable housing, employment, training, etc.</li> <li>• Need a massive education and public awareness campaign to address stigma</li> </ul>
<p><b>8. How much input do you have in setting the goals and priorities in your or your family member's treatment plan? How much input and choice do you have about which services you receive to help you meet those treatment plan goals and priorities?</b></p>	<ul style="list-style-type: none"> <li>• Participants feel that choices are severely limited by the short supply of treatment services and rigid eligibility criteria</li> <li>• Laws and regulations often prohibit family from being involved with the planning and decision-making for young adults in need of treatment</li> </ul>
<p><b>9. What would recovery look like for you/family member?</b></p>	<ul style="list-style-type: none"> <li>• Stable living situation with hope for employment, healthy family relationships and social connections</li> <li>• Supports are available for long-term recovery and self-management of illness</li> <li>• Well-managed symptoms and improved functionality</li> </ul>

## Focus Group Report: Mental Health and Substance Use

**Participants:** Service Providers and Public School Leaders

**Primary Hospital/Insurer:** Holyoke Medical Center (HMC)

**Date:** February 18, 2016

### Executive Summary

#### **Participant Demographics**

The 9 participants were service providers and leaders from the local public schools; Hampden County Sheriff's Department/corrections; Massachusetts Department of Public Health; Holyoke Community College; Homework House; Behavioral Health Network; Holyoke Health Center and Holyoke Medical Center. Demographically, the participants were:

- 63% male; 37% female
- 87% white
- 13% African-American
- 0% Asian
- 87% not Hispanic
- 13% Hispanic
- 13% were between the ages of 31-40
- 25% were between the ages of 41-50
- 50% were between the ages 51-60
- 13% were over the age of 60

#### **Areas of Consensus**

- The recent increase in opioid abuse is a major health issue, but the drug trade and negative impact of substance use and addiction on the Holyoke community is not necessarily anything new.
- There is still a widespread need for more bilingual services, providers and educational materials that are written in accessible ways with attention to low-literacy rates in both English and Spanish; need to look at materials and online resources written at a 3<sup>rd</sup> grade level.
- Trauma, intergenerational substance use, gang violence, and mental health issues are closely tied together and result in significant need for mental health and substance use disorder treatment services; there is a lack of adolescent psychiatric and shelter services; substance use prevention, intervention and mental health support services must start at much younger ages.
- The HMC service area still faces a significant percentage of community members who are not insured; there is a significant homeless population or families “doubling up” and that have a huge impact on young children and school age youth.
- Holyoke is a small enough community that with leadership and enough collaboration, we could go after money on a larger scale; with a significant amount of funding, could do something like the Harlem Children’s Zone which includes intensive wraparound services for children and families. The Flats, South Holyoke - these neighborhoods are small enough to make a huge impact on education, jobs, and resources for the parents.

#### **Recommendations**

- We need to focus on our collaborations more. There are a variety of networks and partnerships in Holyoke, but they are not talking to each other. Around issues of drug and alcohol dependence, the Hospital could work with and convene other entities, in order to continue this type of collective ‘big picture’ dialogue and problem-solving. The hospital can play a leadership role to bring people together. We can then advocate for more services in the schools and community, and strategize on

ways to better address underlying social-economic issues that impact health. A strong collaborative network would be important.

- There is a need for more mental health counselors in the schools and community; we need to find a way to collaborate with school nurses and work toward creating a better and more standardized referral process for behavioral health services in the community.
- We need to look more closely at the LGBTQ+ community’s health needs, as this population may need more support, but may currently get the least.

**Quotes**

- “Kids are being raised by aunts, uncles, grandparents or other relatives because of parents’ drug use and mental health issues. This cycle continues unless it is nipped in the bud. We all need to start earlier.”
- “We can’t talk about this (the opioid abuse crisis) without mentioning big pharma; they are pushing opioids, now they push drugs for opioid-induced constipation. One of our doctors works here and in Greece; in Greece, they don’t prescribe opioids, just Tylenol. Here, everyone gets opioids. Drugs are pushed in the U.S.”
- “My instincts are that there is more of a stigma around behavioral health and mental health than substance abuse. We have gotten numb to addiction issues.”
- “The heroin trade is not new in Holyoke. In 1999, the drug trade in Holyoke was estimated at \$50 million annually. We have always dealt with families that are gang involved, involved with drug abuse.”

**Key Issues**

Question	Synthesis of Responses
<p><b>1. What are the 3 most urgent health needs/problems in your service area?</b></p>	<ul style="list-style-type: none"> <li>• opioid abuse; (opiates are a problem, but also substance abuse in general; with marijuana seen as legalized, there has been an increase in marijuana smoking and use in youth)</li> <li>• obesity</li> <li>• asthma</li> <li>• mental health issues, especially among children</li> </ul>
<p><b>2. What specific vulnerable populations are you most concerned about? And why?</b></p>	<ul style="list-style-type: none"> <li>• Youth ages 15-25 , because of the availability of drugs;</li> <li>• alcohol use starting with younger kids; age 10+ as shown by alcohol drinking on the school bus, coming to school drunk and what incarcerated persons tell us about their use of drugs at very young ages</li> </ul>
<p><b>3. What are the most serious barriers or service gaps that consumers face in accessing mental health and substance use care?</b></p>	<ul style="list-style-type: none"> <li>• Lack of transportation.</li> <li>• Language; there is need for more bilingual capacity in services and educational materials</li> <li>• Kids who are inappropriately medicated is a big issue; too many kids are suffering from trauma and not being treated.</li> <li>• Lack of insurance; people think everyone has insurance, but if you live under a bridge, you do not have insurance.</li> </ul>



Question	Synthesis of Responses
<p><b>4. What are the major needs, service gaps or barriers accessing mental health and substance use care in a crisis situation, such as urgent/emergency care in the emergency department? What is working well and what can be improved?</b></p>	<ul style="list-style-type: none"> <li>• Need to allocate funds to organizations working with schools and the hospital around improving crisis and emergency care</li> <li>• Kids don't get the follow-up care they need once they're in the system. For example, a child whose mom or dad is in the criminal justice system, or kids go into foster care, they go off the radar completely and are disconnected from care.</li> <li>• There are no placement options for children after crisis care; lack of emergency youth shelters, even temporary ones.</li> <li>• If a student is homeless, there is no place to take them after the crisis; they can easily get disconnected from school, and other services.</li> </ul>
<p><b>5. What about long-term mental health and substance use care needs? What are the needs for such services? Who is most vulnerable when those services are not available?</b></p>	<ul style="list-style-type: none"> <li>• Geriatric patients are lacking placement options. Nursing homes don't take behavioral patients outside of small dementia units. With Medicaid/ Mass Health, some nursing homes don't accept these because of payment issues.</li> <li>• LGBTQ - this population needs the most and gets the least.</li> <li>• At Holyoke Community College, there is a growing population of students facing issues of homelessness, bullying and behavioral health needs. In the LGBTQ student group, there is concern about bullying, discrimination; levels of stress are very high.</li> </ul>
<p><b>6. What are other needs or trends in opioid addiction in this area and what impact does that have on providers and services?</b></p>	<ul style="list-style-type: none"> <li>• Holyoke Health Center has been proactive in educating staff about opioid overdose prevention. Staff members are trained in the use of Narcan; they have Narcan kits and information in English and Spanish. What is not working as well is that people are still afraid to talk about it.</li> <li>• There is a lot of education going on right now to train providers in safer prescribing.</li> <li>• MDPH working with medical schools in MA on teaching doctors about opioid overuse.</li> <li>• Overdose deaths have been significant in past year and this is waking up people. All of a sudden, wealthy children are dying and this is opening up minds and resulting in more media attention</li> <li>• There's also a problem with social acceptability of drug use. People have in their minds that marijuana use is OK.</li> </ul>

Question	Synthesis of Responses
<p><b>7. What kind of structural and social changes are needed to tackle health inequities in your community/service area?</b></p>	<ul style="list-style-type: none"> <li>• We need more sports, things to do, to keep youth involved, and have conversations. Get to know kids, families. Not just sports, also arts, music, crafts, computers.</li> <li>• We have the Youth Task Force and it got money from SAMHSA, but not in that kind of coordinated, big-picture way. We need more capacity than any small organization can manage. Coalitions are doing a great job, but coalitions come, make an impact, move on; we need more permanence.</li> <li>• Universal Pre-K is a huge need in a community like Holyoke; the sooner kids are in the system, the better they will be. Starting earlier, we can identify issues before they become big problems. By the time they start school, it's harder to address them.</li> </ul>
<p><b>8. What do you think community leaders think about the philosophy of harm reduction for addiction including the use of Narcan and needle exchange?</b></p>	<ul style="list-style-type: none"> <li>• No clear consensus about it depends how you define community. There is more acceptances in some communities than others.</li> <li>• The majority believes that harm reduction is the way to go, but strong vocal minority (45%) don't think it's right. In some sense, it's all political noise. The real data need to come from health organizations.</li> <li>• In looking at first responders (police and fire departments), do they have Narcan, and are they willing to administer it? In departments within the HMC service area, some do, some don't.</li> <li>• HCC has Narcan and some public schools have it. We need to advocate for all schools to have it and for it to be accessible.</li> <li>• There should be a bigger effort to educate about Narcan.</li> </ul>
<p><b>9. How would you recommend that your local hospitals/insurers and the Western Massachusetts Hospital Coalition work in closer partnership with local and regional municipal public health entities and other community partners after the CHNA is completed? What specific ways can such partnerships be supported and sustained?</b></p>	<ul style="list-style-type: none"> <li>• There are limited resources. Organizations must collaborate with others to seek out best practices, find a way to solve the problem. There are a lot of programs, but limited resources, need to develop a mindset of working together. The MA DPH can assist as possible.</li> <li>• There is a lot of collaboration already going on. We need to cultivate more positive influences on young people. Need supports like Homework House, different after school programs; connections to mentors and more mentor volunteers;</li> <li>• Need to include higher education as it is critical to process. There is currently a disconnect between academia and community groups. Holyoke Community College is in the process of developing an office to engage higher education around opioids and other health needs so that we can write grants, help solve problems.</li> </ul>

## Focus Group Report: Leaders from the Faith-Based Community

**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 a 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!”*

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

Question	Synthesis of Responses
<p><b>2. Please tell me about barriers you've experienced when trying to get care</b></p>	<ul style="list-style-type: none"> <li>• Most participants agreed that transportation was a significant barrier to getting care</li> <li>• 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)</li> <li>• TP1 vouchers must be scheduled nearly a week in advance, so are not helpful in emergency situations</li> <li>• 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</li> <li>• Services that are not housed in one location are more difficult to access; this means more time away from work to access all services</li> <li>• A few participants noted barriers surrounding vision care, specifically limited optician services within a reasonable distance</li> <li>• 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</li> <li>• 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.</li> <li>• 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</li> <li>• Most reported missing appointments that have to be booked far in advance</li> <li>• If three consecutive appointments are missed, the patient is required to find a new PCP</li> <li>• Most reported long wait times for appointments (2 days for urgent care, a few weeks for specialty care, 1 year for primary care)</li> </ul>
<p><b>3. When you have gotten medical care (PCP, ER, specialty), what has your experience been like?</b></p>	<ul style="list-style-type: none"> <li>• The majority of participants reported long wait times in doctor's offices, and short appointment times</li> <li>• One participant expressed feelings of not being listened to</li> <li>• Participants report feeling rushed during appointments, and forgetting to ask questions</li> <li>• The use of medical jargon is frustrating</li> </ul>



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

Question	Synthesis of Responses
<p><b>7. What other services would help you achieve your health needs/recovery goals?</b></p>	<p>Participants mentioned the following services:</p> <ul style="list-style-type: none"> <li>• Services for diet and exercise, including diet educators, nutritionists, and no-cost exercise facilities</li> <li>• Participants were either unaware of gym membership reimbursements, or were unable to pay out of pocket at the time</li> <li>• The length of time to get reimbursed was noted to be a barrier to using this service</li> <li>• More dental services</li> <li>• Childcare for appointments and in general</li> <li>• Patient navigators/social workers to help with insurance sign-ups, paperwork, transportation, coordinating appointments, etc.</li> <li>• Patient advocates/navigators to help prepare questions while waiting for appointments, elucidate medical jargon and navigate appointments</li> <li>• Increased transportation services</li> <li>• Job training</li> </ul>
<p><b>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?</b></p>	<ul style="list-style-type: none"> <li>• 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.</li> <li>• Need for expanded dental coverage (more than just "pulling and cleaning")</li> <li>• For doctor appointments: more time, be listened to more, have more input and choices, simplify language</li> </ul>
<p><b>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?</b></p>	<ul style="list-style-type: none"> <li>• Participants mentioned limited accessibility to women's health services</li> <li>• When asked, all 6 participants reported not receiving routine OB GYN care</li> <li>• Other services mentioned throughout the focus group include:             <ul style="list-style-type: none"> <li>○ Glasses- better replacement options for young children</li> <li>○ Dental Care- increased services, such as dentures</li> </ul> </li> </ul>

# Key Informant Interview Report: Baystate Medical Center

**Dates:**

February 3rd - February 15th, 2016

**Interview Format:**

Phone interviews, approximately 30-45 minutes in length.

**Participants:**

- Dr. Evan Benjamin, Chief Quality Officer & Sr. VP, Quality & Population Health
- Joni Beck Brewer, Vice President, Parent Services, Square One
- Dr. Stephen Boos, Medical Director, Family Advocacy Ctr., Baystate Health
- Dr. Joeli Hettler, Chief, Pediatric Emergency Medicine
- Yolanda Johnson, Executive Officer for Student Services, Springfield Public Schools
- Dr. Niels Rathlev, Chair, Emergency Medicine
- Nancy Shendell-Falik, President, Baystate Medical Center & Sr. VP, Hospital Operations, Baystate Health

## Key Issues

Question	Synthesis of Responses
<p><b>1. What are the three (3) most emergent and/or urgent health issues facing Baystate Medical Center (BMC)/Springfield Public Schools and/or its community/service area?</b></p>	<p>The most common response, noted by five people, was drug abuse and particularly opioids. Diabetes and behavioral health issues were each cited by three people, and two each cited asthma and violence.</p>
<p><b>2. What additional resources (internal and external) are needed to better address these emerging/urgent health issues?</b></p>	<p>Several respondents spoke of the need for accessible, high-quality behavioral health services, and not just limited to those with serious mental illnesses. Without access and transportation, people in need of behavioral health services can wind up in the emergency department, where they face long waits for placement and strain the ED resources.</p> <p>One respondent noted that greater prevention efforts are needed - that so much time and energy is spent treating problems, when supporting people early on will lead to fewer problems. Another supported this, saying that parents need to be engaged and supported with positive parenting practices, and early childhood education and care needs to provide enriching experiences.</p> <p>There is also a need for patients to be supported after they leave the hospital, with step-down or partial hospitalization programs. Lack of transportation for follow-up visits is a related issue.</p>

<p><b>3. Are there vulnerable populations about whom you are particularly concerned? Please describe.</b></p>	<p>These responses varied by respondent and included:</p> <ul style="list-style-type: none"> <li>• The frail elderly</li> <li>• The dual-eligible (disabled and poor, eligible for Medicaid and Medicare)</li> <li>• Teenagers involved with sex trafficking (this was also mentioned as an issue by a different respondent later in the interview)</li> <li>• The African-American population</li> <li>• Young men who are not engaged with the health care system</li> <li>• Children of preschool age who are not enrolled in preschool</li> <li>• Older teens who drop out of school</li> </ul>
<p><b>4. What gaps in services do these vulnerable populations face?</b></p>	<p>Responses to this were similar to that of Question 2, and included:</p> <ul style="list-style-type: none"> <li>• Need for more in-house social support services related to navigating the medical care system and following up on treatment (noted by two respondents)</li> <li>• Lack of adequate behavioral health services, including both mental health and substance abuse treatment options (noted by two respondents)</li> <li>• A lack of public transportation</li> <li>• More activities for older teens to engage them with school</li> </ul>
<p><b>5. Does BMC have a prevention strategy to keep vulnerable populations out of the hospital? If yes, describe how the strategy presents in practices and operations. If not, why?</b></p>	<p>Some Baystate employees were not aware of a comprehensive strategy and did not feel they could comment on it. Those who did cited:</p> <ul style="list-style-type: none"> <li>• Three community health centers, which do outreach and offer preventive as well as acute care</li> <li>• The infectious diseases division, which offers care management for people living with HIV</li> <li>• Involvement of their Trauma Services department with local police and public safety officials</li> <li>• Task forces around addiction in various parts of the community</li> <li>• The Family Advocacy Center, dealing with issues of abuse and child protection.</li> <li>• Project Launch, which brings in behavioral health screening and services.</li> </ul>

<p><b>6. How does BMC/SPS define health equity? Describe how BMC is addressing health inequities.</b></p>	<p>The consensus among BMC stakeholders is that the hospital cares for everyone as best they can, regardless of income, insurance, race, ethnicity, or other variables. There is tracking data that would indicate if certain sub-populations were not getting equal levels of care, and the data indicate that this is not a problem.</p> <p>One respondent cited the Jail Health program, which connects doctors with inmates while they are in prison. The inmates see the same doctor throughout their incarceration and then continue the relationship after they are released, at the community health centers.</p> <p>A community member said that the perception in the community is that Baystate serves those who come to them, but does not do outreach. This person is aware of the Family Advocacy Center, but says that this organization does outreach to other organizations and not to individuals.</p> <p>Another Baystate stakeholder said, “No money, no mission.” While there are structures in place, such as the community health centers, that could support health equity, as funding is tightened they are not prioritized.</p> <p>At Springfield Public Schools, this is primarily the work of the nursing supervisor. Ms. Johnson was not familiar with the details of her work.</p>
<p><b>7. Describe the top urgent health determinants of school success in the SPS for the general population. Do these vary by educational level (elementary, middle and high school)? If so, how?</b></p> <p><b>Are there programs and services being offered by SPS to address these health determinants? If so, please describe. What effect, if any, have these programs and services had on these determinants?</b></p>	<p>Ms. Johnson noted that physical and behavioral health issues can both cause kids to miss school and to fall behind in their learning. When home environments lack the capacity to respond to health needs and crises, this also impacts learning. She noted that there is a need for children and families to establish better strategies to cope with life’s stressors, so that the children are able to attend school and engage in learning when they are there. She also spoke of the need for quality health insurance, so they can take advantage of existing health care opportunities.</p> <p>She did not address the question about programs and services directly, but spoke to the importance of the schools broadening their perspectives on what learning can look like, and their understanding of how to engage them in learning. This includes not assuming students are not learning simply because they are not sitting properly in their seats.</p>

<p><b>8. Problems exist with current social welfare and public policies, including institutional racism, which predispose people in our community to poor health. Does Baystate/SPS have internal policies/programs in place to address these problems? Do you have suggestions for solutions to address these problems in the Baystate/SPS community?</b></p>	<p>These responses varied greatly, and focused more on suggestions than on existing policies and programs. A Baystate stakeholder did note that the hospital has applied for grants to fund asthma prevention programs, and Ms. Johnson noted several programs including:</p> <ul style="list-style-type: none"> <li>● City Connects</li> <li>● A school-based counselor who connects families with services in the community</li> <li>● A school-based clinic</li> <li>● Partnerships with DFC and DYS</li> <li>● Collaboration with the courthouse around juvenile issues.</li> </ul> <p>Suggestions for solutions included:</p> <ul style="list-style-type: none"> <li>● Doing an internal assessment of who gets investigated for child abuse (noted by two respondents)</li> <li>● Recognizing that this work requires partnerships with organizations outside of the hospital system</li> <li>● Public investment in private determinants of health</li> <li>● Figuring out how to overcome internalized racism in institutions, and the mistrust this engenders in the community</li> <li>● Partnerships with local housing authorities to promote the use of clinics, or perhaps mobile health care units, rather than the Emergency Department for primary care</li> </ul>
<p><b>9. How do you recommend that BMC/SPS and/or the Coalition of Western MA Hospitals work in closer partnership with local and regional municipal public health entities following the completion of the CHNA? Describe specific ways such a partnership can be supported and sustained.</b></p>	<p>Respondents spoke generally about the importance of collaboration and aligning the work that each hospital does, in order to have more impact in an era of declining resources. Reducing readmissions was named as a basic goal that hospitals could work together to support. Another was providing mental health counseling in emergency departments, along with links to service providers.</p> <p>One respondent noted that what is needed is a consistent, causative model that will direct money to addressing root causes of poor health, perhaps by focusing on early childhood issues and preventive care.</p>

<p><b>10. Is there anything else you would like to share? Perhaps the one thing you were waiting for us to ask (or dreading that we would ask) and we did not ask.</b></p>	<p>One doctor noted that the ED is overused by parents who need to get a (required) note allowing their sick children to return to school. PCPs sometimes require an appointment before they will verify that the child is well, and parents don't want to do this. This overburdens the ED, not only with providing the service but also with all the documentation involved.</p> <p>Another noted that Baystate is an ACO (Accountable Care Organization), which moves beyond fee-per-service to include taking care of the population overall and rewarding for high achievement. The problem is that this will result in reduced payments to some doctors, especially in specialty fields, and the medical education model with its high debt loads. For that reason, the AMA is not likely to support this model.</p>
--	--

*Quotes:*

- “The state of behavioral health care in America is abysmal.”
- “Specifically at Baystate, the social work department needs to be doubled, or even tripled.”
- “America’s health care system is wonderful, but it’s all on the back end, and it’s expensive. In other countries, for every dollar they spend on health care, they spend \$2 on the social determinants of health. In the US, we spend 60 cents.”
- “We’re at 30,000 feet right now - if a decision (about working in closer partnership) is made and committed to, we’re going to have to come down and start working, having more conversations.”

## 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
- Jacqueline 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.

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

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"> <li>• Access to and affordability of transportation (MassHealth transportation system is not accessible for unplanned medical needs)</li> <li>• Distance to providers (rural areas)</li> <li>• 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)</li> <li>• State regulations- can change plan daily, this impacts continuity of care</li> <li>• Rules for BH care for Medicaid population: cases are closed after 3 no-shows, but various barriers can contribute</li> <li>• BH issues themselves pose barrier to care (ex. depression)</li> </ul> <p><u>Providers:</u></p> <ul style="list-style-type: none"> <li>• Lack of providers in rural areas that accept Medicaid</li> <li>• Lack of specialty providers that accept (ex. dental and dermatology)</li> <li>• Lack of BH providers, overall</li> <li>• Long wait times for specialty and primary care (leads to high emergency room (ER) utilization)</li> </ul> <p><u>Housing instability:</u></p> <ul style="list-style-type: none"> <li>• Housing instability makes tracking members challenging, changing contact info means some might lose insurance because they don't see notices</li> <li>• Notices sent re: maintaining insurance are not always at the appropriate literacy level/translated</li> </ul> <p><u>Cultural:</u></p> <ul style="list-style-type: none"> <li>• Latino population, less importance placed on timeliness in terms of making appointments (mentioned by ¾ interviewees)</li> <li>• White populations have less family support systems as compared to AA and Latino populations</li> <li>• Fear of losing benefits if health improves</li> <li>• 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)</li> </ul>
<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"> <li>• Members are frustrated by access to and time to get appointments</li> <li>• Providers are frustrated by lack of compliance and rates of no shows</li> <li>• Need for more integration of BH care into routine PC (primary care)</li> <li>• Need for more culturally sensitive care (more training for specialty populations- transgender individuals, adolescents, varying ethnic groups)</li> </ul>

Question	Synthesis of Responses
<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"> <li>• Rural areas- programming is limited, or spread out/located in pockets that can be difficult to get to</li> <li>• Urban areas- programs exist, but often people are unaware of what is available</li> <li>• Need for lower cost gyms, afterschool programs not just focused on homework</li> <li>• Lack of culturally tailored programming, especially in rural areas</li> <li>• Lack of access to healthy, culturally relevant foods</li> <li>• Lack of safe areas for recreation</li> </ul>
<p>7. Please discuss health behaviors of concern (ex. tobacco use, alcohol &amp; 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"> <li>• Lack of exercise options for children: team sports are cost-prohibitive, and transpiration is an issue (4/4 mentioned)</li> <li>• HNE offers reimbursement for gym memberships, vastly underutilized in Medicaid pop- not exactly certain why</li> <li>• Food deserts</li> <li>• Lack of education about portion size</li> <li>• Come cultural practices/beliefs: a “fat baby is a healthy baby”</li> <li>• Lack of cultural support for breastfeeding</li> <li>• 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</li> </ul> <p><u>Non-compliance with medication/treatment protocols</u></p> <ul style="list-style-type: none"> <li>• Lack of comprehension about chronic health conditions- (i.e. feel better, stop meds)</li> <li>• Lack of understanding about preventative health, importance of continuous care to manage chronic conditions</li> <li>• Cultural beliefs and attitudes and expectations of western medications</li> <li>• Lack of understanding about medications (e.g. antibiotics, stimulant meds)</li> <li>• 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</li> </ul> <p><u>Multigenerational health patterns:</u></p> <ul style="list-style-type: none"> <li>• Parental lack of education and modeling (3/4 interviewees)</li> <li>• Multigenerational patterns of SA and MH</li> <li>• Need more opportunities for fun, physical activity (ex. adult sports leagues/softball to get entire families active)</li> </ul>

Question	Synthesis of Responses
<p><b>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?</b></p>	<p><u>Overall:</u></p> <ul style="list-style-type: none"> <li>• More support for peer education model (2/4 mentioned)</li> <li>• More collaboration across multiple sectors- business community, faith-based, hospitals, etc.)</li> <li>• More grassroots education in rural areas about substance use</li> <li>• More accessible resources</li> <li>• 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</li> <li>• Bundled rates that support education and visit, support/fund peer educators, support providers</li> </ul> <p><u>For HNE specifically:</u></p> <ul style="list-style-type: none"> <li>• Explore alternative reimbursement models</li> <li>• Community perception that HNE is not involved in the community- perhaps sponsor a sports team, or support transportation efforts for rural sports programs</li> <li>• Partner more with providers to explore alternative models of health care delivery by using shared resources</li> </ul>
<p><b>9. If time: Is there anything else you would like to share?</b></p>	<ul style="list-style-type: none"> <li>• Need to collect better data on who is being seen and what their needs are</li> <li>• Need to improve cultural competence/sensitivity</li> </ul>

# Key Informant Interview Report: Mercy Medical Center

**Dates:**

February 3rd - February 15th, 2016

**Interview Format:**

Phone interviews, approximately 1 hour in length.

**Participants:**

- Dr. Andrew Balder; Director of the Mason Square Neighborhood Health Center and Health Care for the Homeless
- Dr. Louis Durkin; Director of Emergency Medicine at Mercy Medical Center
- Dr. Robert Roose; Chief Medical Officer of Addiction Services for the Sisters of Providence Health System and member of the Governor’s Task Force on Opioid Abuse
- Dr. Maria Russo-Appel; Chief Medical Officer of Providence Behavioral Health Hospital (PBHH)

## Key Issues

Question	Synthesis of Responses
<p><b>1. What are the 3 most urgent health needs/problems in your service area?</b></p>	<ul style="list-style-type: none"> <li>• addiction, especially opioid addiction in relation to pain management issues</li> <li>• untreated mental health needs such as depression and anxiety</li> <li>• overlay of poverty, poor housing, lack of 'living wage' employment and other social determinants of health that contribute to poor health</li> </ul>
<p><b>2. 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?</b></p>	<ul style="list-style-type: none"> <li>• the opioid abuse crisis has shed more light on underlying fragmented systems of care and the mechanisms to pay for it</li> <li>• lack of access to care for substance abuse treatment is now more pressing with increased demand</li> <li>• ‘silos’ of care where co-location of services is not true integration</li> <li>• lack of beds for longer-term treatment options for mental health and addictions</li> </ul>
<p><b>3. What specific vulnerable populations are you most concerned about? And why?</b></p>	<ul style="list-style-type: none"> <li>• Elders with co-morbid mental health and medical care needs</li> <li>• Homeless person and families</li> <li>• Homeless alcoholic and addicted patients</li> <li>• Young parents with limited resources</li> <li>• “Working poor” who do not have health insurance, can’t afford self-pay; in most cases, self-pay means no pay</li> </ul>
<p><b>4. What kind of structural and social changes are needed to tackle health inequities in your community/service area?</b></p>	<ul style="list-style-type: none"> <li>• need to significantly improve housing stock and options for affordable housing</li> <li>• need employment at living wages</li> <li>• need better and more accessible transportation</li> <li>• medical care that is not "siloed" based on condition or payer</li> <li>• overcome underlying racism and other discrimination</li> <li>• eliminate the prior approval process for an in-patient MH or SA bed</li> </ul>

<p><b>5. What are the most serious gaps and needs for Mental Health (MH) services?</b></p>	<ul style="list-style-type: none"> <li>• need longer-term behavioral health care at the community level working in collaboration and as part of a truly integrated medical care team</li> <li>• lack of adequate in-patient and out-patient mental health and substance use care services drives people to use the Emergency department</li> <li>• lack of psychiatrists on the region; (also a national level problem)</li> </ul>
<p><b>6. What about long-term Mental Health care? What are those needs and who is most vulnerable?</b></p>	<ul style="list-style-type: none"> <li>• need more sober living and long-term care options for people in recovery from addictions</li> <li>• fragmented care is nothing new but it is most problematic for mental health patients whose cognition and executive functioning are compromised by the disease</li> </ul>
<p><b>7. What are the needs for bilingual Mental Health care capacity, especially psychiatrists?</b></p>	<ul style="list-style-type: none"> <li>• systems can often adequately address needs for bilingual services and translation with frontline staff and patient navigators, but recruiting bilingual mental health clinicians and psychiatrists is a huge challenge</li> </ul>
<p><b>8. What are the most pressing issues around access to care for detox, long-term treatment, criminalization, and stigma, especially in light of growing opioid abuse?</b></p>	<ul style="list-style-type: none"> <li>• lack of access to beds in timely fashion</li> <li>• detox is not a treatment</li> <li>• lack of resources drive people to use ED for pathway into the system</li> <li>• not enough long-term SA care resources as part of comprehensive systems of recovery</li> <li>• many still believe that addiction is a volitional choice</li> </ul>
<p><b>9. What about substance use disorder prevention? What is needed and what is working?</b></p>	<ul style="list-style-type: none"> <li>• more evidence- based programs in schools at much earlier ages</li> <li>• more training for prescribers and medical care professionals in training</li> <li>• media campaigns to broadly educate the public and work to reduce stigma and shame associated with substance use</li> </ul>
<p><b>10. What do you think community leaders think about the philosophy of harm reduction for addiction including Narcan and needle exchange?</b></p>	<ul style="list-style-type: none"> <li>• medical care professionals have seen the value of harm reduction for quite some time, but community leaders and officials have been less quick to adopt;</li> <li>• the opioid crisis may spur action on harm reduction approaches such as needle exchange and “safe rooms” for users to prevent overdose</li> </ul>
<p><b>11. How does the integration of primary care and MH care (with primary care providers prescribing psych meds) work for providers? What are the up-sides and down-sides of this?</b></p>	<ul style="list-style-type: none"> <li>• it must be deeper integration with shared access to EHRs and other practical aspects where the team is fully functioning together;</li> <li>• co-location is not integration and the paradigm of what constitutes full integration must shift to be shared system of care for all complements and phases of treatment</li> <li>• should be seamless to patients</li> <li>• integrating primary care with behavioral health provides for a more holistic approach</li> </ul>

<p><b>12. Where do you think the uninsured ‘pockets’ of patients are – the patients that don’t show up in overall stats about how the percentage of insured populations is near 100%?</b></p>	<ul style="list-style-type: none"> <li>• Geriatric patients who are “Medicaid Pending” are not being placed in long-term care facilities; there can be a wait for up to 3 months and up to 10 years for out-of state patents</li> <li>• Some insured patients are not able to comply with communications for renewing submitting paperwork/forms and then lose insurance coverage; suffer from recurring gaps in health insurance coverage</li> </ul>
<p><b>13. How would you recommend that your local hospitals/insurers and the 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?</b></p>	<ul style="list-style-type: none"> <li>• more data sharing across in-house departments and across hospitals and community providers throughout the region</li> <li>• more frequent case conferences about ‘high utilizer’ patients who are seen in EDs in region</li> <li>• need more collaboration and information-sharing about ways to serve new ethnic/cultural communities that are growing in Western Mass</li> <li>• collaboration and advocacy on larger social issues that impact health such as economic development; child-rearing supports; life cycle planning for individuals and communities; environmental justice issues</li> </ul>

*Quotes:*

- “Mental health and substance use are overlapping; we should not look at them as separate.”
- “I see us being 3 generations into addiction with heroin – how do we get grandma into treatment and stop parents from giving drugs to their children to begin to break the intergenerational cycle?”
- “We need relationships with new communities and their health beliefs and ways to adapt our systems for mutual understanding about their cultures.”
- “I want hospitals and other community partners to support an environment where our patients can be the healthiest family possible.”

# 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
- Merridith 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

## Key Issues

Question	Synthesis of Responses
<p><b>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?</b></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><b>2. What kind of structural and social changes are needed to tackle health inequities in your community/service area?</b></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"> <li>• Help families understand what resources are available to them</li> <li>• Follow through beyond initial outreach</li> <li>• Workforce development</li> <li>• Affordable/improved housing</li> <li>• Continuity of care around addiction treatment</li> <li>• Healthy markets</li> <li>• Workplace wellness programs</li> <li>• Education around harm associated with marijuana</li> <li>• Coordination of care/avoiding readmission</li> </ul>
<p><b>3. What are the 3 most urgent health needs/problems in your service area?</b></p>	<p>This list shows the issues named and the number of people who named each one:</p> <ul style="list-style-type: none"> <li>• Substance abuse/addiction/treatment (5)</li> <li>• Mental health (3)</li> <li>• Poverty (2)</li> <li>• Communicable diseases (2)</li> <li>• Obesity (1)</li> <li>• Diabetes (1)</li> <li>• Teen pregnancy (1)</li> <li>• Lack of prevention services in schools (1)</li> <li>• Smoking (1)</li> <li>• Lack of youth engagement (1)</li> <li>• Perception of city as drug-friendly (1)</li> <li>• Chronic diseases (1)</li> <li>• Need to improve workforce development in health care (1)</li> </ul>
<p><b>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?</b></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"> <li>• Mental health</li> <li>• Pertussis</li> <li>• Lyme disease</li> <li>• Obesity</li> <li>• Sexually transmitted diseases</li> </ul>

Question	Synthesis of Responses
<p><b>5. What gaps in services exist in addressing these needs? What are barriers to filling these gaps?</b></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><b>6. In addition to more funding, what resources do you need to better address these emerging or increasing health concerns?</b></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). Other needed resources that respondent noted were:</p> <ul style="list-style-type: none"> <li>• Support for families as they navigate the healthcare system</li> <li>• Better transportation, either public or provided by hospitals</li> <li>• Better-trained, more diverse health care staff</li> </ul>
<p><b>7. What specific vulnerable populations are you most concerned about? And why?</b></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><b>8. Externally, what resources or services do you wish people in your area had access to?</b></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"> <li>• Mental health care</li> <li>• Better care coordination</li> <li>• More workforce development</li> <li>• Partnerships or services around improving air quality (high asthma rates)</li> <li>• More money for community outreach</li> <li>• Universal child care/after school care</li> <li>• Support groups and behavioral interventions</li> <li>• Access to healthy food</li> </ul>

Question	Synthesis of Responses
<p><b>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?</b></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"> <li>• where people who been treated for overdoses can go after release from the hospital</li> <li>• reducing re-admissions</li> <li>• workplace health screenings</li> <li>• Ideas around sustaining and supporting this collaboration included:                             <ul style="list-style-type: none"> <li>○ Regular meetings</li> <li>○ Open forums to discuss issues and problems</li> <li>○ Discussion of what resources are available</li> <li>○ 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</li> <li>○ Developing a common vision for improving health</li> <li>○ Making it an ongoing effort with partners who are engaged with the process</li> </ul> </li> </ul>
<p><b>10. Is there anything else you would like to share?</b></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

Hospitalization and Emergency Room Visit Rates for Select Communities, 2012 and 2013

Hospitalization and Emergency Room Visit Rates for Select Communities by Race/Ethnicity, 2012

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

Hospitalization and Emergency Room Visits for Conditions by Top Communities with Confidence Intervals, 2013

## Hospitalization and Emergency Room Visit Rates for Select Communities, 2012 and 2013

Geography	Hospitalizations					
	Stroke		Heart Disease	CVD	Diabetes	
	2012	2013	2012	2013	2012	2013
Chicopee	246.5	239.2	302	1480.7	196.3	197.3
Holyoke	282.4	239.3	405.3	1615.3	268.7	285.7
Palmer	268.1	196.4	269	1263.1	98.7	188.1
Springfield	291.0	289.6	264.1	1708.6	247.6	277.6
Westfield	223.9	200.5	264.0	1194.8	128.0	138.5
West Springfield	210.6	227.1	229.3	1138.9	125.8	99.9
Hampden County	242.7	229.2	268.0	1391.0	177.4	197.0
Massachusetts	219.5	NA	264.5	NA	133.7	NA
Geography	ER Visits					
	Asthma		Mental Health Disorders		Substance Use	
	2012	2013	2012	2013	2012	2013
Chicopee	944.1	689.3	2782.2	2846.1	1005.1	843.0
Holyoke	2028.2	2040.2	4261.5	4864.6	1559.3	1761.6
Palmer	932.7	697.5	2787.6	2309.6	829.8	622.8
Springfield	1483.0	1386.3	4143.3	4155.3	1614.2	1456.9
Westfield	849.2	649.2	2221.3	2196.5	665.8	613.4
West Springfield	702.7	555.4	2346.9	2346.1	811.5	752.0
Hampden County	1027.6	920.2	2850.4	2899.8	1019.1	940.2
Massachusetts	571.9	NA	2304.4	NA	986.5	NA

## Hospitalization and Emergency Room Visit Rates for Select Communities by Race/Ethnicity, 2012

Geography	Race / Latino Ethnicity	Hospitalizations			ER Visits		
		Diabetes	Stroke	CVD	Asthma	Mental Disorders	Substance Use
Chicopee	White	151.2	227.5	287.1	614.0	2619.7	1021.8
Chicopee	Black	602.2	NA	NA	1559.0	2629.0	NA
Chicopee	Latino	609.6	656.3	432.3	2186.8	4075.2	1097.8
Chicopee	Asian / Pacific Islander	NA	NA	NA	NA	NA	0
Holyoke	White	134.8	222.8	320.2	754.6	2728.9	980.9
Holyoke	Black	NA	NA	NA	2710.2	4143.0	1196.7
Holyoke	Latino	443.8	462.6	586.4	3174.5	5918.3	2366.6
Holyoke	Asian/Pacific Islander	NA	NA	NA	NA	6343.1	3721.4
Palmer	White	85.9	258.8	248.9	896.8	2777.8	821.6
Palmer	Black	NA	NA	NA	NA	NA	NA
Palmer	Latino	NA	NA	NA	NA	NA	NA
Palmer	Asian/Pacific Islander	NA	NA	NA	NA	NA	NA
Springfield	White	169.0	233.9	276.2	589.2	3668.7	1723.2
Springfield	Black	312.9	381.6	150.2	1213.6	3433.7	1177.0
Springfield	Latino	347.0	366.5	321.6	2591.6	5345.4	1879.2
Springfield	Asian/Pacific Islander	NA	NA	638.28	NA	651.5	NA
West Springfield	White	108.8	201.6	229.8	486.4	2256.4	920.5
West Springfield	Black	NA	NA	NA	1863.9	2467.8	NA
West Springfield	Latino	NA	NA	NA	2503.9	4384.2	451.0
West Springfield	Asian/Pacific Islander	NA	NA	NA	NA	NA	0
Westfield	White	115.9	208.7	241.4	725.2	2149.7	662.3
Westfield	Black	NA	NA	NA	2304.8	7178.2	NA
Westfield	Latino	NA	NA	681.9	2247.0	2728.2	863.6
Westfield	Asian/Pacific Islander	NA	NA	NA	NA	0	0
Hampden County	White	126.4	212.7	249.7	494.4	2240.9	869.8
Hampden County	Black	326.5	386.5	165.2	1250.7	3355.2	1111.2
Hampden County	Latino	386.6	396.4	397.6	2577.9	5107.2	1784.4
Hampden County	Asian / Pacific Islander	NA	NA	272.6	196.7	724.6	255
Massachusetts Total	White	115.9	208.2	257.9	416.9	2315.4	1019.5
Massachusetts Total	Black	320.2	309.5	244.4	1279.1	3101.9	1301.8
Massachusetts Total	Latino	222.8	246.7	290.5	1162.1	2610.7	1107.6
Massachusetts Total	Asian / Pacific Islander	43.1	149.7	137.0	147.8	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

### Hospitalization and Emergency Room Visits for Conditions by Top Communities with Confidence Intervals, 2013

Rank	Hospitalizations			ER Visits		
	Diabetes	Stroke	CVD	Asthma	Mental Disorders	Substance Use
1	Southwick 322.5 (214.1-430.9)	Springfield 289.6 (261.9-317.2)	Brimfield 1734.0 (1336.2-2131.7)	Holyoke 2040.2 (1898.6-2181.7)	Holyoke 4864.6 (4644.2-5085.0)	Holyoke 1761.6 (1628.3-1894.8)
2	Holyoke 285.7 (233.0-338.4)	Brimfield 265.8 (115.4-416.3)	Springfield 1708.6 (1641.0-1776.1)	Springfield 1386.3 (1327.1-1445.4)	Springfield 4155.3 (4052.1-4258.5)	Springfield 1456.9 (1395.6-1518.2)
3	Springfield 277.6 (250.2-305.0)	Holyoke 239.3 (195.0-283.6)	Holyoke 1615.3 (1499.3-1731.2)	Russell 828.7 (409.3-1248.1)	Chicopee 2846.1 (2704.1-2988.1)	Chicopee 843.0 (766.6-919.4)
4	Monson 198.5 (101.2-295.8)	Chicopee 239.2 (202.8-275.6)	Chicopee 1480.7 (1391.0-1570.5)	Palmer 697.5 (543.7-851.3)	West Springfield 2346.1 (2168.9-2523.2)	West Springfield 752.0 (653.1-850.9)



## Appendix IV:

# Community and Hospital Resources to Address Identified Needs

Priority Health Need	Resource Organization Name	Description of Services Provided	Contact/Website
<b>Income and Employment</b>	Springfield Partners for Community Action	Federally designated Community Action Agency (CAA) for the greater Springfield area, serving low-income individuals and families.	<a href="http://www.springfieldpartnersinc.com">http://www.springfieldpartnersinc.com</a>
<b>Education</b>	Baystate Springfield Educational Partnership	Provides career pathway programming to Springfield students with an expressed interest in the health care professions.	<a href="mailto:peter.blain@baystatehealth.org">peter.blain@baystatehealth.org</a>
<b>Limited Availability of Providers</b>	Baystate Community Health Centers	Located in Springfield's low-income neighborhoods that have both HPSA and MUA/MUP designation, BMC health centers are primary care first-contact sites for thousands of underserved, low-income people.	<a href="https://www.baystatehealth.org/locations/mason-square-neighborhood-health-center">https://www.baystatehealth.org/locations/mason-square-neighborhood-health-center</a> <a href="https://www.baystatehealth.org/locations/high-street-health-center">https://www.baystatehealth.org/locations/high-street-health-center</a> <a href="https://www.baystatehealth.org/locations/brightwood-health-center-centro-de-salud">https://www.baystatehealth.org/locations/brightwood-health-center-centro-de-salud</a>
	Baystate Springfield Educational Partnership	Provides career pathway programming to Springfield students with an expressed interest in the health care professions.	<a href="mailto:peter.blain@baystatehealth.org">peter.blain@baystatehealth.org</a>
<b>Insurance Barriers</b>	Baystate Financial Assistance and Counseling	Baystate Health provides financial counseling services to inpatient and outpatient individuals. This assistance includes linking patients to available funding sources such as Medicaid and Medicare and determining whether they are eligible for Health Safety Net or Baystate's Financial Assistance Program.	<a href="https://www.baystatehealth.org">https://www.baystatehealth.org</a>
<b>Health Literacy</b>	Consumer Health Library	The Consumer Health Library was established by Baystate Health to offer free library resources and services to patients and their families.	<a href="https://www.baystatehealth.org/patients/support/consumer-health-library">https://www.baystatehealth.org/patients/support/consumer-health-library</a>

Priority Health Need	Resource Organization Name	Description of Services Provided	Contact/Website
Housing	HAP Housing	Provides housing assistance to tenants, homebuyers, homeowners and rental property owners; largest nonprofit developer of affordable housing in Western Massachusetts.	<a href="http://www.haphousing.org/default">http://www.haphousing.org/default</a>
Transportation	Pioneer Valley Transit Authority	Public transportation for the Pioneer Valley.	<a href="http://www.pvta.com/">http://www.pvta.com/</a>
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.	<a href="https://www.foodbankwma.org/get-help/brown-bag-food-for-elders/">https://www.foodbankwma.org/get-help/brown-bag-food-for-elders/</a>
Obesity	MIGHTY (Moving, Improving and Gaining Health Together at the Y)	MIGHTY is a pediatric obesity treatment program for ages 5-21 years old held at the Springfield YMCA and includes 14 - 2 hour sessions which include physical activity, nutrition and behavior modification.	<a href="https://www.baystatehealth.org/services/pediatrics/specialties/weight-management-program">https://www.baystatehealth.org/services/pediatrics/specialties/weight-management-program</a>
	Baystate Health Support Groups	Support groups, exercise, and education workshops that cover topics related to weight loss, nutrition and exercise	<a href="https://www.baystatehealth.org/services/weight-management/support-services/support-groups">https://www.baystatehealth.org/services/weight-management/support-services/support-groups</a>
	Comprehensive Adult Weight Management Program	Proven methods for weight management tailored to individuals' unique health needs and lifestyle	<a href="https://www.baystatehealth.org/services/weight-management">https://www.baystatehealth.org/services/weight-management</a>
	Caring Health Center's Wellness Center:	Free group-based exercise, nutrition education, and chronic disease self-management services	<a href="http://caringhealth.org/chcwellnessctr.html">http://caringhealth.org/chcwellnessctr.html</a>
	Live Well Springfield	Community-based coalition to improve health equity in Springfield through improved access to healthy eating and active living.	<a href="http://www.livewellspringfield.org">http://www.livewellspringfield.org</a>

Priority Health Need	Resource Organization Name	Description of Services Provided	Contact/Website
<b>Cardiovascular Disease</b>	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 trials.	<a href="https://www.baystatehealth.org/services/heart-vascular">https://www.baystatehealth.org/services/heart-vascular</a>
<b>Diabetes</b>	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	<a href="https://www.baystatehealth.org/services/diabetes-endocrinology">https://www.baystatehealth.org/services/diabetes-endocrinology</a>
	Diabetes Self-Management Program	Help adult patients and their families learn to manage their diabetes and live full and productive lives.	<a href="https://www.baystatehealth.org/services/diabetes-endocrinology">https://www.baystatehealth.org/services/diabetes-endocrinology</a>
<b>Nutrition</b>	Brown Bay Food for Elders Program	The 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.	<a href="https://www.foodbankwma.org/get-help/brown-bag-food-for-elders/">https://www.foodbankwma.org/get-help/brown-bag-food-for-elders/</a>
	Caring Health Center's Wellness Center	Provides free group-based exercise, nutrition education, and chronic disease self-management services.	<a href="http://caringhealth.org/chcwellnessctr.html">http://caringhealth.org/chcwellnessctr.html</a>
	Baystate Nutrition Services	Resources and information, registered dietetic staff available for individual and group nutrition counseling sessions.	<a href="https://www.baystatehealth.org/services/nutrition-services">https://www.baystatehealth.org/services/nutrition-services</a>

Priority Health Need	Resource Organization Name	Description of Services Provided	Contact/Website
	Live Well Springfield (LWS)	LWS is a community-based coalition of over 20 organizations working to improve health equity in Springfield through improved access to healthy eating and active living opportunities.	<a href="http://www.livewellspringfield.org">http://www.livewellspringfield.org</a>
<b>Physical Activity</b>	YMCA of Greater Springfield	Recreation and physical health classes for youth through adults, including nutrition and diet. MIGHTY pediatric obesity prevention program.	<a href="http://www.springfieldy.org">www.springfieldy.org</a>
	Caring Health Center's Wellness Center	Provides free group-based exercise, nutrition education, and chronic disease self-management services.	<a href="http://caringhealth.org/chcwellnessctr.html">http://caringhealth.org/chcwellnessctr.html</a>
	Shriners Hospital for Children-Springfield	Offers specialty programs to promote physical activity.	<a href="http://www.shrinershospitalforchildren.org/Locations/springfield">http://www.shrinershospitalforchildren.org/Locations/springfield</a>
	Physical Therapy Services	Information, resources, coaching and education, stretching, core strengthening, walking and strength training to improve or restore physical function and fitness levels.	<a href="https://www.baystatehealth.org/services/rehabilitation">https://www.baystatehealth.org/services/rehabilitation</a>
	Live Well Springfield	LWS is a community-based coalition of over 20 organizations working to improve health equity in Springfield through improved access to healthy eating and active living opportunities.	<a href="http://www.livewellspringfield.org">http://www.livewellspringfield.org</a>
	Dunbar Community Center	Provides martial arts, fitness sessions, dance classes, after-school care, summer camp, senior health initiatives and mentoring opportunities.	<a href="http://www.springfieldy.org/family-centers/dunbar-y-family-community-center/">http://www.springfieldy.org/family-centers/dunbar-y-family-community-center/</a>

Priority Health Need	Resource Organization Name	Description of Services Provided	Contact/Website
<b>Asthma</b>	Pioneer Valley Asthma Coalition	Community partnership that works to improve the quality of life for individuals, families and communities affected by asthma.	<a href="http://www.pvasthmacoalition.org">www.pvasthmacoalition.org</a>
	Springfield Healthy Home Collaborative	City-wide collaboration to address health issues faced by residents due to poor housing conditions, including asthma.	<a href="http://springfieldhealthyhomes.org/asthma-triggers/">http://springfieldhealthyhomes.org/asthma-triggers/</a>
<b>Mental Health</b>	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.	<a href="https://www.baystatehealth.org/services/behavioral-health">https://www.baystatehealth.org/services/behavioral-health</a>
	Gandara Center's Outpatient Mental Health Services	Gandara's outpatient mental health clinic in Springfield provides a range of traditional mental health outpatient services, including programs for individuals with a long-standing history of psychiatric or substance abuse.	<a href="https://gandaracenter.org/counseling-therapeutic-services/#outpatient-mental-health">https://gandaracenter.org/counseling-therapeutic-services/#outpatient-mental-health</a>
	Baystate Family Advocacy Center	The Baystate Family Advocacy Center provides assessment, treatment and crisis support to child abuse victims and their non-offending caretakers affected by child abuse, domestic violence and homicide in western Massachusetts.	<a href="https://www.baystatehealth.org/services/pediatrics/family-support-services/family-advocacy-center">https://www.baystatehealth.org/services/pediatrics/family-support-services/family-advocacy-center</a>
	Gandara Center's Outreach Programs for Youth	The Gandara Center provides in-home therapy as well as in-home behavioral health services for youth.	<a href="https://gandaracenter.org/child-adolescent-family-services/#in-home-therapy-services">https://gandaracenter.org/child-adolescent-family-services/#in-home-therapy-services</a> and <a href="https://gandaracenter.org/child-adolescent-family-services/#in-home-behavioral-services">https://gandaracenter.org/child-adolescent-family-services/#in-home-behavioral-services</a>

Priority Health Need	Resource Organization Name	Description of Services Provided	Contact/Website
	Transgender Support Group	In partnership with UNITY of Pioneer Valley, this support group is a peer lead and psychosocial support group for Transgender individuals, their allies and all GLBTs.	<a href="https://groups.yahoo.com/neo/groups/unity-of-the-pioneer-valley/info">https://groups.yahoo.com/neo/groups/unity-of-the-pioneer-valley/info</a>
	Behavioral Health Network's Outpatient Services	Through 6 licensed clinics, BHN provides services to chronically mentally ill adults, seriously emotionally disturbed children, adolescents, and families.	<a href="http://bhninc.org/content/outpatient">http://bhninc.org/content/outpatient</a>
<b>Substance Use Disorder: Tobacco</b>	Smoking Cessation Programs	Monthly hypnosis program designed to help residents quit smoking. Fee and pre-registration are required.	<a href="http://www.baystatewinghospital.org/patients-visitors/patient-resources/support-groups/smoking-cessation-through-hypnosis">http://www.baystatewinghospital.org/patients-visitors/patient-resources/support-groups/smoking-cessation-through-hypnosis</a>
	Caring Health Center's Tobacco Treatment Services	Individual, group counseling, and pharmacological treatment.	<a href="http://caringhealth.org/tobaccotreatmentservices.html">http://caringhealth.org/tobaccotreatmentservices.html</a>
<b>Substance Use Disorder: Opioids and Other Substances</b>	Gandara Center's Addiction Services	Outpatient treatment services and a structured "partial hospitalization" program.	<a href="https://gandaracenter.org/counseling-therapeutic-services/#outpatient-addiction-recovery-services">https://gandaracenter.org/counseling-therapeutic-services/#outpatient-addiction-recovery-services</a>
	CleanSlate Addiction Treatment Center (Suboxone Treatment)	Patient-focused treatment for opioid, alcohol and other drug addictions; appointment-based outpatient treatment.	<a href="http://cleanslatecenters.com/">http://cleanslatecenters.com/</a>
	Behavioral Health Center's Addiction Services:	Provides comprehensive addiction services including detox, post-detox residential series, long-term residential, day treatment programs, and outpatient services.	<a href="http://bhninc.org/content/addiction-services">http://bhninc.org/content/addiction-services</a>

Priority Health Need	Resource Organization Name	Description of Services Provided	Contact/Website
	Gandara Center’s Recovery Supportive Housing:	The Supportive Housing Programs work in collaboration with HAP Housing, area recovery homes, and shelters to provide safe, sober, and affordable bilingual housing options to individuals and families in recovery. Location in Holyoke for women and in Springfield for men.	<a href="https://gandaracenter.org/adult-services/#recovery-supportive-housing">https://gandaracenter.org/adult-services/#recovery-supportive-housing</a>
	Hope for Holyoke Recovery Support Center: Located at 100 Suffolk Street, Holyoke, MA 01040. Contact: 413-561-1021,	Free peer-to-peer support groups, relapse preventions and tobacco cessation support groups, social events, job readiness activities, advocacy, and recovery coaching. Participants must be 18 years of age or older.	<a href="https://gandaracenter.org/hope-for-holyoke/#HFH">https://gandaracenter.org/hope-for-holyoke/#HFH</a>
	Needle Exchange Program	Needle exchange programs in Holyoke and Northampton, sterile needles to injection drug users, trainings on Naloxone, education and counseling.	<a href="http://www.tapestryhealth.org/index.php/services/prevention/needle-exchange">http://www.tapestryhealth.org/index.php/services/prevention/needle-exchange</a>
	Stop Access Drug-Free Communities Springfield:	City-wide coalition, coordinated by the Gandara Center, works to prevent and reduce underage drinking and marijuana use in the Mason Square, South End, and Forest Park neighborhoods of Springfield.	<a href="https://gandaracenter.org/child-adolescent-family-services/#stop-access">https://gandaracenter.org/child-adolescent-family-services/#stop-access</a>
	Springfield Coalition for Opioid Overdose Prevention:	Coalition whose mission is to train, educate, advocate, and provide support and resources to all who are affected by opiate abuse and overdoses.	<a href="http://www.springfield-ma.gov/hhs/index.php?id=scoop-about">http://www.springfield-ma.gov/hhs/index.php?id=scoop-about</a>



Priority Health Need	Resource Organization Name	Description of Services Provided	Contact/Website
<b>Prenatal and Perinatal Care</b>	Baystate Obstetrics and Gynecology	Locations throughout the Pioneer Valley including Springfield area.	<a href="https://www.baystatehealth.org/services/ob-gyn">https://www.baystatehealth.org/services/ob-gyn</a>
<b>Teen Pregnancy and Parenting</b>	Young Parent Support (YPS) Young Fathers Program	Martin Luther King Jr. Family Services provides services to young fathers between the ages of 15-24.	<a href="http://www.mlkjrfamilyservices.org/child--parent-services.html">http://www.mlkjrfamilyservices.org/child--parent-services.html</a>
	YEAH! Network	Youth empowerment adolescent health network, focused on improving adolescent sexual health outcomes in the Springfield area.	<a href="http://www.yeahnetwork.org/about-us/">http://www.yeahnetwork.org/about-us/</a>
	Springfield Pregnant & Parenting Teen Program:	Network of Springfield based service providers established by the YEAH! Network and coordinated through Partners for a Healthier Community to deliver comprehensive, integrated services for pregnant and parenting teens, aged 12-24.	<a href="http://www.partnersforahealthiercommunity.org/springfield-pregnant-parenting-teen-program">http://www.partnersforahealthiercommunity.org/springfield-pregnant-parenting-teen-program</a>
<b>Sexually Transmitted Infections</b>	Gandara Center's Project Health-Case Management for People with HIV/AIDS	Medical case management for HIV positive clients in the Springfield area. Staff are fluent in Spanish; case management assists clients to access medical, mental health and substance abuse services and to maintain a positive lifestyle.	<a href="https://gandaracenter.org/adult-services/#project-health">https://gandaracenter.org/adult-services/#project-health</a>

## Appendix V:

### 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
<b>Health Outcomes</b>		5	14	8	11	7
<b>Length of Life</b>		5	14	7	12	8
Premature deaths	5,100	4,700	6,600	5,500	6,200	5,500
<b>Quality of Life</b>		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%
<b>Health Factors</b>		3	14	7	9	11
<b>Health Behaviors</b>		6	14	8	7	11
Adult smoking	15%	15%	18%	15%	15%	16%
Adult obesity**	24%	21%	29%	22%	23%	26%
Food environment index**	8.3	8.1	7.9	8.1	7.9	8.2

	Massachusetts	Hampshire County	Hampden County	Franklin County	Berkshire County	Worcester County
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
<b>Clinical Care</b>		<b>2</b>	<b>12</b>	<b>7</b>	<b>3</b>	<b>9</b>
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%
<b>Social &amp; Economic Factors</b>		<b>3</b>	<b>14</b>	<b>7</b>	<b>11</b>	<b>9</b>
High school graduation**	85%	90%	73%	84%	84%	86%
Some college	71%	78%	59%	67%	63%	67%
Unemployment	5.8%	5.0%	7.8%	5.3%	6.5%	6.2%

	Massachusetts	Hampshire County	Hampden County	Franklin County	Berkshire County	Worcester County
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
<b>Physical Environment</b>		<b>10</b>	<b>13</b>	<b>11</b>	<b>14</b>	<b>12</b>
Air pollution - particulate matter	10.5	10.7	10.7	10.6	10.8	10.5
<b>Drinking water violations</b>		<b>Yes</b>	<b>Yes</b>	<b>Yes</b>	<b>Yes</b>	<b>Yes</b>
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%