

COMMUNITY HEALTH NEEDS ASSESSMENT REGIONAL EXECUTIVE SUMMARY | 2016

Prepared for

The Coalition of Western Massachusetts Hospitals/Insurer



By

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



Executive Summary

Introduction

The Coalition of Western Massachusetts Hospitals/Insurer

The Coalition of Western Massachusetts Hospitals/Insurer (Coalition) is a partnership between nine non-profit hospitals and a health insurer in western Massachusetts: Baystate Medical Center, Baystate Franklin Medical Center, Baystate Mary Lane Hospital (now Baystate Mary Lane Outpatient Center), Baystate Noble Hospital, Baystate Wing Hospital, Cooley Dickinson Health Care, Holyoke Medical Center, Mercy Medical Center (a member of Trinity Health – New England), Shriners Hospitals for Children – Springfield, and Health New England. The Coalition formed in 2012 when seven of these partners joined together to work in partnership to conduct their community health needs assessments (CHNA) and address regional needs. The Coalition has since expanded membership and is currently conducting collaborative work to address mental health needs in the region.

Coalition Member Community Health Needs Assessments (CHNA)

Improving the health of western Massachusetts is a shared mission across the Coalition of Western Massachusetts Hospitals/Insurer. To better understand these needs, and as required every three years by the 2010 Patient Protection and Affordable Care Act (PPACA), Coalition members conducted community health needs assessments (CHNAs) that were completed in 2016. These needs assessments built upon their previous CHNAs which were finalized in 2013. Each Coalition member's CHNA report can be found on their website. Coalition members used information from their CHNAs to develop hospital/health plan specific community benefits implementation strategies. In addition, information from these CHNAs has been used to identify regional needs and potential areas of action to address needs.

Stakeholder Input

A wide range of stakeholders took part in the 2016 Coalition CHNA process, including local and regional public health and health departments, other local municipal agencies, diverse community-based organizations, advocacy organizations, healthcare providers, and community residents. These stakeholders provided input through focus groups, key informant interviews and participation in the CHNA Steering Committee. Additionally, community listening sessions were conducted to vet findings with community members.

Regional Executive Summary Methods

Findings from the Coalition member CHNAs informed this Regional Executive Summary. The regional summary findings were based on an assessment of county-level data from the four counties in western Massachusetts (Berkshire, Franklin, Hampden, Hampshire) (Table 1) and select community-level data. Given data constraints, the following highlighted communities were identified for the majority of the community level data analyses: Holyoke, Orange, Palmer, Ware, Amherst, Chicopee, Easthampton, Greenfield, Montague, Northampton, Pittsfield, Springfield, West Springfield, and Westfield. Other communities were included as data was available and as analysis indicated an identified health need for that community. To the extent possible given data and resource constraints, vulnerable populations were identified. More information on methods, data summaries and specific data points, and focus group and interview findings can be found in the 2016 Coalition member CHNA reports.

Table 1. Counties in Coalition Service Area

	2014 Population Estimate
Berkshire County	128,715
Franklin County	70,862
Hampshire County	160,939
Hampden County	468,161
Worcester County	*
Total Service Area	828,677

Source: Population Division, U.S. Census Bureau, <http://www.census.gov/popest/index.html>
 *Select Worcester County communities are part of the Baystate Mary Lane and Baystate Wing service areas. For data on these communities, please refer to their individual CHNA reports.

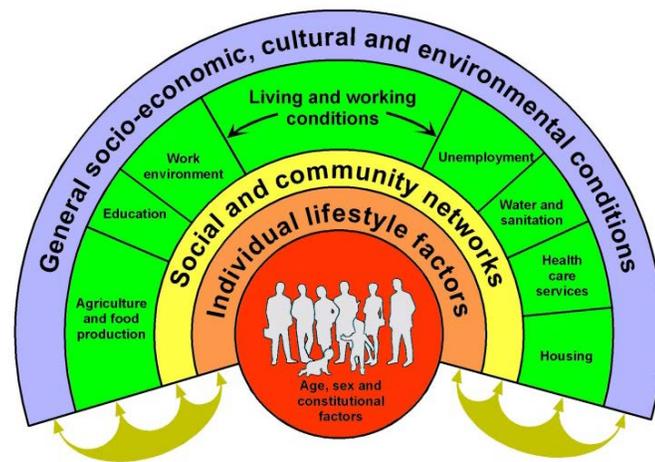
Social and Economic Determinant of Health Framework

The 2016 Coalition CHNAs were conducted using a **determinant of health framework**. It has been estimated that less than a third of our health is influenced by our genetics or biology.ⁱ Though healthcare is an important factor that contributes to our health, our health is substantially impacted by the social, economic, cultural, and physical environments that we live in (Figure 1).

Among the “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 that social and economic factors account for 40% of our health, followed by health behaviors (30%), clinical care (20%), and the physical environment (10%).

Many health disparities occur as a result of inequities in social and economic determinants of health. These health inequities are “not only unnecessary and avoidable but, in addition, are considered unfair and unjust.”ⁱⁱ Improving health equity requires a broader focus than healthcare and health behaviors, and requires consideration of the social and economic factors that impact health.

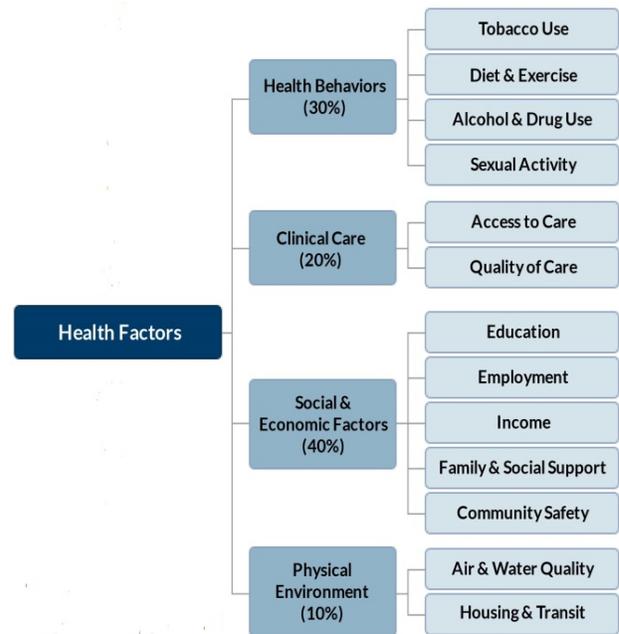
Figure 1. Determinants of Health



Source: Dahlgren & Whitehead, 1993

The County Health Rankings rank counties throughout the country on both health factors and health outcomes relative to other counties within their state. The health factor ranking is based on a composite measure of health behaviors, clinical care, social and economic factors, and environment. Among the four Western Massachusetts counties, Hampshire County ranked highest for health outcomes and health factors, and Hampden County ranked the lowest, ranking last in the state for both health factors and health outcomes (Table 2).

Figure 2. County Health Rankings Model - Health Factors



Source: County Health Rankings

Table 2. Western MA County Health Rankings, 2016

County Ranking within 14 Massachusetts Counties	Health Factors	Health Outcomes
Hampshire County	5 th	3 rd
Franklin County	7 th	8 th
Berkshire County	9 th	11 th
Hampden County Total	14 th	14 th

Source: University of Wisconsin Population Health Institute. County health rankings and roadmaps. <http://www.countyhealthrankings.org/>. Updated 2016. Accessed June, 2016.

Assessment and Prioritization Methods

The primary goal of the 2016 Coalition member CHNAs was to identify a list of prioritized community health needs and to the extent possible, identify potential areas of action. The prioritized health needs identified in the CHNAs 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 MA Department of Public Health, U.S Census Bureau American Communities Survey (ACS), the U.S. 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 **focus groups** and **key informant interviews**;
- review of existing assessment reports published since 2013 that were completed by community and regional agencies serving Hampden, Hampshire, Franklin, and Berkshire Counties.

A systematic process was conducted to develop a list of prioritized community health needs. Prioritized health conditions were identified based on magnitude of impact, severity of impact, populations impacted (including vulnerable populations), and rates compared to a reference population (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.

Limitations and Information Gaps

The CHNA assessment focused on health and health 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, which had data availability constraints. Limited data was available to assess and identify health needs among some vulnerable populations (e.g. refugees). We have included emergent health needs that were identified primarily through qualitative data, though additional data may be necessary to better understand the impact of the need or potential actions to address the need. See individual Coalition CHNA reports for additional information on limitations.

Findings

Below is a summary of the regional prioritized community health needs identified in the 2016 Coalition CHNAs.

Community level social and economic determinants that impact health

A number of social, economic and community level factors impact the health of the population in the region. Social, economic and community level factors identified as prioritized community health needs include:

- **Lack of resources to meet basic needs** – Many residents in western Massachusetts struggle with *poverty* and *low levels of income*. Across the four counties in western Massachusetts, 16% of residents live in poverty, and the median family income in three of the four counties is more than 20% lower than that of the state. Child poverty rates are high with 23% of children in the region living in poverty. Hampden County has the highest rates of poverty and *unemployment* in the service area and the lowest median income. *Lower levels of education* contribute to unemployment and the ability to earn a livable wage. Approximately 12% of residents age 25 and older in western Massachusetts do not have a high school diploma, with the highest rates observed in Hampden County (16%). In the communities of Springfield, Holyoke, Chicopee, Ludlow, West Springfield, and Pittsfield, over 20% of eligible individuals do not have a high school diploma, which is nearly double the statewide rate (CC, ACS, 2010-2014).
- **Housing needs** – *Housing insecurity* is a need that impacts western Massachusetts. Almost one third of the population is housing cost burdened, which is defined as over 30% of income going towards housing. *Lack of affordable housing* can contribute to homelessness and housing insecurity, which in turn can lead to increased stress, often forcing families to prioritize housing costs over factors that can influence health, such as medications or nutritious foods. Although overall *homelessness* has decreased in western Massachusetts, the number of homeless families has increased in the region. *Poor housing conditions* also impact residents throughout the region. Older housing combined with limited resources for maintenance can lead to poor housing conditions that can affect respiratory conditions such as asthma, as well as, safety and accessibility concerns for children, older adults, and individuals with disabilities.
- **Transportation** - Regional public health officials interviewed for the 2016 Coalition CHNAs identified increased transportation options as a need for the region as a whole and specifically for rural and low-income populations. Individuals who do not own a vehicle face difficulties accessing educational and employment options; community-based programs that promote health, such as exercise and nutrition programs; and other activities that promote social connection.
- **Lack of community safety** – Lack of community safety was identified as a prioritized health need because of the high rates of crime in parts of western Massachusetts. In particular, crime rates are high in Hampden County, with *violent crime* rates almost 50% higher than that of the state. In addition to crime, *youth bullying* was identified as a prioritized community health need in parts of western Massachusetts.
- **Food insecurity and food deserts** – *Food insecurity* continues to impact many western Massachusetts residents who subsequently live in hunger. Each of the four western Massachusetts counties has communities that experience high rates of food insecurity with rates over 20% found in areas of Amherst, Chicopee, Holyoke, Montague, Northampton, Pittsfield, Springfield, Ware, and West Springfield. In addition, some residents have limited access to healthy foods and live in

communities which are considered *food deserts*. *Food deserts* are areas where low-income people have limited access to grocery stores. The United States Department of Agriculture (USDA) identified food deserts throughout the region, including in portions of North Adams, Adams, Pittsfield, Orange, Turner's Falls, Amherst, Northampton, Palmer, Chicopee, Holyoke, Springfield, West Springfield, Agawam, and Westfield.

- **Environmental concerns** - *Air pollution* impacts the western Massachusetts region as a whole, but has a particular impact on health in Hampden County. Springfield experiences poor ambient air quality due to multiple mobile and point pollutant sources. Near roadway air pollution impacts the community members who 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 diabetes. Findings from key informant interviews conducted with regional public health leaders for the 2016 Coalition CHNAs identified the need for increased partnerships to improve air quality as a means to address high rates of asthma.
- **Institutional racism** - Addressing *institutional racism* was identified as a prioritized health need because of the impact it has on racial and ethnic health inequities found in Hampden County and across the region. Large racial and ethnic disparities in health outcomes were found in Hampden County and among a number of health conditions in the other three western Massachusetts counties. Key informant interviews and focus groups conducted for both Hampden County hospitals' 2013 CHNA and the 2016 CHNAs 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.ⁱⁱⁱ In particular, the connection between *racial residential segregation* and low levels of opportunity in communities of color was identified as one form of institutional racism that impacts health. The Springfield Metropolitan Statistical Area, which includes Hampden, Hampshire and Franklin Counties, was identified as the most segregated in the U.S. for Latinos and 22nd most segregated for Black or African-Americans in an analysis of 2010 U.S. Census data conducted by the University of Michigan.^{iv}

Barriers to Accessing Quality Health Care

The lack of affordable and accessible medical care was identified as a need in the region. The following barriers were identified.

- **Limited availability of providers** - Western Massachusetts residents experience challenges accessing care due to the shortage of providers. Approximately 43% of service area residents live in a Healthcare Professional Shortage Area. Low-income focus group participants reported long wait times for urgent care and routine wellness visits, as well as a need for expanded dental coverage. Limited access to primary care providers was identified in Hampden, Franklin, and Berkshire Counties. Access to dental providers who accept MassHealth was also identified as a need. Findings from focus groups and key informant interviews conducted for the Coalition overwhelmingly identified a need for increased access to mental health and substance use treatment services for acute, maintenance, and long-term care.
- **Insurance related challenges** - Low income and older adult focus group participants identified the cost of co-pays and other out-of-pocket costs as a barrier to accessing the care and services needed to maintain good health. Key informant interviewees also identified state MassHealth insurance policies that negatively impact access to providers and services and contribute to siloed care delivery barriers. They noted in particular the impact of those policies related to the delivery of care for

patients with both mental health and substance use conditions.

- **Lack of transportation** - Transportation was one of the most frequently cited barriers to accessing care by regional public health officials. This barrier also arose in a number of focus groups and interviews. Limited frequency and range of transit service routes were identified as having the largest impact on the health needs of older adults, low-income and rural populations.
- **Lack of care coordination** - Lack of care coordination was identified in the 2013 CHNAs and continues to be a need for western Massachusetts residents. Findings from focus groups and interviews indicate the need for coordinated care between providers in general; a need for increased coordination to manage co-morbid substance use and mental health disorders; and the need for increased connections between hospitals, community organizations, and schools.
- **Health literacy, language barriers and cultural humility** - The need for health information to be understandable and accessible was identified in the CHNAs. Findings from focus groups indicate the need for increased *health literacy*, which includes the need to better understand health information; types of services and how to access them; and how to advocate for oneself in the healthcare system. Vulnerable populations identified in interviews as less likely to advocate for themselves include low-income, refugee and immigrant populations. The need to educate providers about how to communicate with patients about medical information also arose. Focus group participants and key informant interviewees in some parts of western Massachusetts identified *language barriers* and noted the need for more bilingual providers and interpreters, as well as the translation of health materials into a wider range of languages. 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 the increasingly diverse service area population.

Health Conditions and Behaviors

- **Chronic health conditions** - High rates of *obesity, diabetes, cardiovascular disease, asthma, chronic obstructive pulmonary disease (COPD)* and associated morbidity impact western Massachusetts residents. Though national and regional rates of childhood obesity have been falling, they remain high. Over 50% of adults in the four western Massachusetts counties are overweight or obese. *Heart disease* is the leading cause of death in Hampden and Berkshire Counties, and one third of Hampden County adults have *hypertension*. Hampden County had the highest rates of diabetes when compared with other western Massachusetts counties with one in five residents having prediabetes or diabetes. Similarly, Hampden County had the highest rates of asthma in the service area, with Latinos and youth most impacted. Emergency Room (ER) visit rates for COPD were higher than the state in Berkshire, Franklin, and Hampden Counties.
- **Need for increased physical activity and healthy diet** - The need for increased *physical activity* and consumption of fresh fruits and vegetables was identified for western Massachusetts residents. Low rates of physical activity and healthy eating contribute to high rates of chronic disease and can negatively impact mental health status. Lack of access to physical activity opportunities and nutritious foods are a notable barrier to promoting health. Although most insurance companies offer reimbursements for gym membership, key informant interviewees note that this benefit is underutilized among MassHealth enrollees.
- **Mental health and substance use disorders** - *Substance use* (including tobacco, alcohol, and drugs) and mental health were noted to be two of the most urgent health needs impacting the region in all

interviews and focus groups conducted for the 2016 Coalition CHNAs. ER visits for mental health needs were higher than the state in Greenfield, Holyoke, North Adams, and Pittsfield. LGBTQ youth were identified as a vulnerable population for depressive disorders with over 50% of youth in Franklin/North Quabbin County, Hampshire County, and Springfield reporting depressive symptoms in youth surveys. *Substance use disorders* and opioid use were of particular concern. *Opioid use disorder*, which has been declared a public health emergency in Massachusetts, is impacting Hampden, Franklin and Berkshire County residents with fatality rates higher than that of the state. There was overwhelming consensus among focus group participants, health care providers, and healthcare administrators regarding the need for 1) increased education across all sectors to reduce mental health and substance use stigmas, and 2) more integrated and long-term treatment options. *Tobacco* use continues to remain high in Hampden, Berkshire, and Franklin County, where one in four adults smoke. *Youth substance use* was also identified as a concern in Hampden, Franklin County/North Quabbin and Hampshire Counties, and substance use among older adults was identified as an often overlooked issue.

- **Infant and perinatal health risk factors** - Infant and perinatal health risk factors impact residents of the four counties of western Massachusetts. The need for increased utilization of *prenatal care* and a decrease in *smoking during pregnancy* were specifically identified. Rates of smoking during pregnancy were highest in Berkshire and Franklin Counties. Late entry to prenatal care was most notable in Hampden County, and the rate of less than adequate prenatal care was highest in Berkshire County.
- **Sexual Health** - High rates of unsafe sexual behavior were identified as a health need for parts of the service area, particularly Hampden County. Sexually transmitted infection (STI) rates are high, with Hampden County rates of *chlamydia* and *HIV* approximately 40% higher than that of the state. Hampden County *Youth STI rates* are particularly high with rates of chlamydia and syphilis two to four times higher than that of the state. Though teen pregnancy rates have decreased due to ongoing community initiatives, Hampden and Franklin County *teen pregnancy* rates continue to be higher than the state.

Vulnerable Populations

Available data for the 2016 Coalition CHNAs indicate that **children and youth; older adults; some communities of color, particularly Latinos and Blacks; LGBTQ individuals, especially LGBTQ youth; refugees; and veterans** experience disproportionately high rates of some health conditions or associated morbidities when compared to that of the general population. Individuals with **low income** levels, those living in **poverty**, and those who are **homeless** are also disproportionately impacted by poor health. Overall, more data is needed to understand the unique factors that impact the health of each of these vulnerable populations.

Summary

Western Massachusetts counties continue to experience many of the same prioritized health needs identified in the 2013 CHNAs of Coalition members. 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, including children, older adults, Latinos, Blacks, LGBTQ youth and adults, refugees, low-income individuals, homeless persons, those living in poverty and veterans. Additional data is needed to better understand the needs of these populations in order to reduce inequities. Western Massachusetts residents 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 with the opioid crisis identified as particularly affecting community health. Improving the current systems of care to meet the needs of individuals impacted by mental health and substance use disorders arose as an important issue that needs to be addressed. Though progress has been made to address some of the prioritized health needs, such as teen pregnancy and childhood obesity, rates remain high and work needs to be continued.

References

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