

2022  
Community Health  
Needs Assessment

Adopted by the Baystate Health Board  
of Trustees on September 13, 2022



Quaboag Connector vehicle with  
staff members, Jen Healy, Alexis  
Berrios, and Mel-Jean Gravel.  
Photo Credit: John Polak  
Ware, Massachusetts

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BAYSTATE WING HOSPITAL

# 1. Executive Summary

2022 COMMUNITY HEALTH NEEDS ASSESSMENT



# 1. Executive Summary

## Background

Serving seventeen communities across three counties—Hampden, Hampshire, and Worcester, **Baystate Wing Hospital** (Baystate Wing) is a 68-bed facility located in Palmer, Massachusetts. Baystate Wing is a member of **Baystate Health**, a not-for-profit, multi-institutional, integrated care organization serving more than 800,000 people throughout western Massachusetts. Baystate Health, with a workforce of 13,000 employees, is the largest employer in the region and includes Baystate Medical Center, Baystate Franklin Medical Center, Baystate Wing, Baystate Noble Hospital, Baystate Medical Practices, Baystate Home Health, and Baystate Health Foundation. The towns Baystate Wing serves are Brimfield, Hampden, Holland, Ludlow, Monson, Palmer, Wales, Wilbraham, Belchertown, Ware, East Brookfield, Brookfield, Hardwick, New Braintree, North Brookfield, Warren, and West Brookfield. East Brookfield was added to the list of communities served in 2022. Many of these towns are also part of the following rural clusters: Central Pioneer Valley, East Quabbin, and Quaboag Hills.

## Guiding Values and Assessment Methods

The **Coalition of Western Massachusetts Hospitals/Insurer** (Coalition) and a consultant team fostered an inclusive process to assess health needs. A **Regional Advisory Council** (RAC) was assembled and met monthly for a year and a half to provide guidance and make decisions that informed the assessment process and the prioritization of health needs. The Coalition members recognize that health equity cannot be achieved unless or until the root causes of inequity are addressed. These root causes include systemic racism and structural poverty as well as other forms of discrimination. Underlying these root causes are the dominant culture and stories that normalize the perpetuation of inequities. To make meaningful progress in addressing these root causes of poor health, the Coalition and the RAC worked to further incorporate aspects of these values into the Community Health Needs Assessment (CHNA) process: community-led change, anti-racism, cultural humility, and social justice.

The 2022 CHNA updates the prioritized community health needs identified in the 2016 and 2019 reports as they relate to the social and economic factors or “determinants” that

influence health, barriers to health care access, and health behaviors and outcomes. The 2022 CHNA assessment process included reprioritizing needs if data, including community feedback, indicated changes. The process consisted of (1) a review of existing assessment reports, (2) a survey of public health officials, (3) preliminary analysis of COVID-19's impact on the region, and (4) analysis of quantitative data, with efforts where possible to disaggregate (eg, by race, ethnicity, age, sexual orientation, and gender identity, rural) to understand health disparities. The consultant team also assembled qualitative data from Community Chats, key informant interviews, and focus groups conducted throughout the communities served and region. The interviews and focus groups were primarily about youth mental health.

During the process, the Coalition and the RAC made the decision to (1) assess the impact of COVID-19 on health needs in the region and (2) lift up the prioritized need of youth mental health as a regional focus area for additional data gathering. Further, Baystate Wing undertook its own prioritization process and chose three of the identified prioritized needs for a deeper dive and additional data gathering: Financial Health and Well-being; Violence and Trauma; and Lack of Access to Housing, Food, and Transportation. Baystate Wing chose to place greatest focus on inequities among youth and older adults.

## Prioritized Health Needs

Communities served by Baystate Wing continues to experience many of the same prioritized health needs identified in Baystate Wing's 2019 CHNA. The COVID-19 pandemic exacerbated many of the existing inequities related to these needs. Several prioritized needs receive deeper focus, as described below.

The prioritized health needs for communities served by Baystate Wing are:

- **Social and Economic Factors or “Determinants” that Influence Health:**
  - Financial Health and Well-being (Baystate Wing Focus Area – deeper dive)
  - Violence and Trauma (Baystate Wing Focus Area – deeper dive)
  - Lack of Access and Affordability of Housing, Food, and Transportation (Baystate Wing Focus Area – deeper dive)
  - Climate Crisis
- **Barriers to Health Care Access:**
  - Insurance and Health Care Related Challenges
  - Limited Availability of Providers

- Need for Increased Cultural Humility
- Need for Transportation
- Lack of Care Coordination
- Health Literacy and Language Barriers
- **Health Behaviors and Outcomes:**
  - Youth Mental Health (**Regional Focus Area – deeper dive**)
  - Mental Health and Substance Use
  - Chronic Conditions
  - Infant and Perinatal Health
  - Alzheimer’s Disease

## COVID-19

It has been three years since the last CHNA, and for two of those years and counting, our nation and region have battled a once-in-a-century health pandemic. COVID-19 has taken a tremendous toll on the communities served by Baystate Wing, and it continues to affect the current status of health in western Massachusetts. It strained the capacity of the regional health care system, from the doctor’s office to the emergency room, causing many people to have to delay care and treatment. Hampden and Hampshire counties had lower vaccination rates than other western Massachusetts counties and were among the lowest in the state. Barriers to vaccine access and vaccine hesitancy were likely factors.

In addition to impacting health outcomes, access to care, and quality of care, the pandemic undermined the region’s economy, causing unemployment rates to rise rapidly and business revenues to fall. The highest unemployment rate in the communities served was in Palmer, at 18% in April 2020. Economic destabilization negatively affected other social factors or “determinants” of health, including housing affordability, food security, education quality, and safety from violence and trauma. It exacerbated existing inequities in many of these prioritized needs, especially for Black and Latino/a/e residents, people who are unhoused, LGBTQIA+ (inclusive of lesbian, gay, bisexual, transgender, queer or questioning, intersex, asexual, agender, nonbinary, gender-nonconforming and all other people who identify within this community) individuals, people with a disability, older adults, those with limited income and other communities. The Massachusetts public health infrastructure, which is highly decentralized, had difficulties providing consistent pandemic response services such as contact tracing and vaccination clinics.

Despite these challenges, many hospitals, health care providers, public health departments, funders, and non-profit agencies rose to the challenge, adapting and pivoting to provide resources, services, care, and timely, accurate information to residents.

## Youth Mental Health

Before COVID-19 arrived in the region, mental health was already a prioritized health need. Then COVID-19 undermined mental well-being for almost everyone. The systems of behavioral health care, which were already found to be insufficient in the 2019 CHNA, could not handle the increased demands. The mental health challenges of youth and young adults (age 12-24) are acute. For example, at least half of students surveyed in Quaboag Hills school districts in 2021 reported feeling anxious or nervous more often, and a similar rate experienced higher levels of stress in their family. About 45% of students felt more lonely, sadder or more depressed. Inequities among some youth populations were already well documented in prior CHNAs. These were brought to the fore during the pandemic, especially for girls, LGBTQIA+ youths, rural students, and students of color. Key informants interviewed for this assessment reported that youth in the communities served have regressed in their coping skills and social skills during the pandemic.

Positive signs observed by youth development and mental health professionals are that adolescents are resilient and tend to turn to friends, teachers, other adults, and medical and mental health providers for help. Students will sometimes seek online help or resources for a friend who is struggling. Students also find support from relationships with sports teammates, coaches, activity leaders, and peers who participate in sports and other organized activities.

Several factors continue to affect youth mental health and access to care, including continued stigma among many parents and some youth; provider shortages; financial, transportation and insurance barriers; and lack of capacity of schools to provide prevention and counseling support. Technology innovations such as social media and telemental health have provided both opportunities and challenges. More trained mental health providers, pediatric screening for mental health issues, as well as youth peer counseling, mentoring and support groups, can help address the crisis.



## Financial Health and Well-being

Financial health and well-being remain a priority health need for Baystate Wing. Financial well-being is defined the state in which a person is able to meet all of their financial obligations, feel secure about their financial future, and be able to make decisions that allow them to enjoy life. Though similar to financial well-being, financial health is the dynamic relationship between a person's economic resources as they impact a person's physical, mental, and social well-being. Savings, financial literacy, homeownership, employment and income, educational attainment, and digital equity are important indicators of financial health and well-being.

Financial insecurity of older adults is an important health issue as housing and health care costs rise—a lack of finances leads to a lack of nutrition and challenges accessing transportation and other basic needs. Educational attainment is a building block for health, and levels of education are strongly correlated with employment status, the ability to earn a livable wage, and many health outcomes. Declining populations of school-age children and high operating and transportation costs in rural communities and small towns have forced many rural school districts to consider cost-cutting measures. These may include scaling back education enrichment, closing schools, or merging with other districts. That being said, 91% of youth in the communities served graduated from high school. In the communities served by Baystate Wing, the unemployment rate is 5% for those 16 years and older, and many residents struggle with a lack of resources to meet basic needs. Access to and availability of employment opportunities offering a living wage, homeownership, and access to the internet varies within the communities served. Average income and wealth also vary tremendously across the communities served. These inequities are partly due to historical policies that discriminated against those living in rural poverty and residents of color, private disinvestment, and more; and present-day forces, including the COVID-19 pandemic.

## Violence and Trauma

Many of the concerns about violence and trauma faced by residents in the communities served by Baystate Wing are still prioritized needs in 2022. Interpersonal and collective violence affects health directly, through death and injury, and indirectly through trauma that affects mental health and healthy relationships. Often the communities that experience higher levels of violence and trauma are marginalized. Women, those with limited income, people who identify as LGBTQIA+, and people with physical and

intellectual disabilities experience higher rates of violence. Structural factors such as access to transportation, high levels of poverty, and limited access to physical and mental health resources influence perpetration of intimate partner violence (IPV) and recovery for survivors of IPV. In Massachusetts, 1.6 million people experience some form of IPV over their lifetime. Thirty-four percent of women and 32% of men in Massachusetts report experiencing physical IPV, sexual IPV, and/or stalking in their lifetime. In 2019, 28 homicides in Massachusetts were due to domestic violence.

A survivor advocate reports that Berkshire, Franklin, Hampden, and Hampshire counties have the highest number of child sexual assault cases per capita in Massachusetts, and during the pandemic these counties reported 1.5 to 3 times more IPV than other counties. Youth and teen dating violence is an area of concern for those in communities served by Baystate Wing. About 7% of students who responded to the 2021 Quaboag Hills Region Prevention Needs Assessment Survey reported being forced into sexual activity. Students should never feel fearful of a partner or experience any type of abuse, whether it be physical, sexual, or digital. The rural nature of the communities served by Baystate Wing means residents have less access to the resources they might need to prevent violence or mitigate the harmful impacts of violence.

## Lack of Access and Affordability of Housing, Food, and Transportation

Access to and affordability of basic needs such as housing, food, and transportation are key building blocks of health, and they continue to be a prioritized need for many residents in the communities served by Baystate Wing. Inequities in wealth and income have meant that some groups experience greater impact. About 13% of residents in communities served by Baystate Wing have limited income and 7% live in poverty, with children (0–17) and communities of color being disproportionately impacted by poverty. Unemployment rates in April 2020 jumped to 18% in Hampden County, 13% in Hampshire County, and 16% in Worcester County. The communities served also continues to have food deserts (lack of nearby grocery stores), limiting access to affordable, healthy choices such as fruits and vegetables.

COVID-19 caused high rates of unemployment, further undermining the ability of residents to meet their monthly expenses. It also triggered inflation, raising the cost of many basic needs. The pandemic also affected access to food—food insecurity jumped 42% from 2019 to 2020. Approximately 9% of adults and 13% of children in the communities served by

Baystate Wing are food insecure. People who do not have access to transportation have an even harder time meeting basic needs. Census data show that consistently 5% of residents do not have access to a vehicle. Since the 2013 CHNA, transportation continues to be one of the largest barriers to medical care. Telehealth offers a potential solution to that barrier for some residents, depending on the type of care they need.

## Other Prioritized Health Needs

We continue to see disparities in social and economic factors that affect health. Since the 2019 CHNA, overall educational attainment in the Baystate Wing service remains relatively unchanged, and racial inequities persist, with lower attainment rates among Black and Latino/a/e residents. Increased heat perhaps represents the greatest threat to public health brought on by climate change. As days with extreme heat become more commonplace, there may be increases in hospitalizations, illnesses, and deaths as a consequence of increased heat. Air quality will also suffer, and more frequent periods of extreme heat will beget increases in pollen production, ozone, and particulate matter. Along with increased heat, increased precipitation will contribute to declining public health through its effect on the natural environment. A hotter and wetter climate will make the region more hospitable to disease-bearing pests, and greater rainfall exposes residents to greater risk of property damage and loss of value due to floods and other environmental hazards.

Regarding barriers to care, access to health insurance, affordability of care, and lack of care coordination continue to be a problem. Chronic health conditions remain prioritized needs. About one in ten adults living in Hampden County (11%), Hampshire County (10%), and Worcester County (10%) have asthma. Chronic obstructive pulmonary disease (COPD), cardiovascular disease, and other chronic conditions that are also a risk factor for heart disease—diabetes and obesity—show disparities, with much higher rates among Black residents. The percentage of adults who have obesity has remained relatively the same since the last CHNA, at 27% in the communities served by Baystate Wing compared with 25% statewide. The infant mortality rate is 30% higher than the statewide average. Alzheimer's disease is the most common form of dementia and accounts for 60% to 80% of dementia cases. COVID-19 has had an effect on Alzheimer's disease; preliminary reports from the Centers for Disease Control and Prevention indicate that there were approximately 16% more deaths in 2020 from Alzheimer's and other forms of dementia compared with the five-year average before 2020. An estimated one in ten of Medicare fee-for-service beneficiaries in Hampden County (11%), Hampshire County (10%), and

Worcester County (10%) have Alzheimer's disease, which is comparable to the statewide rate (11%).

## Priority Populations

This CHNA identified many inequities in prioritized health needs among youth and older adults, which are priority populations in the communities served by Baystate Wing. Youth and older adults have specific health needs that will be highlighted in this report. Today's youth face lasting impacts of violence, struggles with mental health, and substance use. Older adults face financial insecurity, violence and trauma, and barriers to accessing health care, and they feel the impacts of chronic diseases.

The pandemic exacerbated existing inequities, and youth and older adults felt the impact of the pandemic. The disparate rates of infection and death in Hampden, Hampshire, and Worcester counties and national trends indicate that older adults and those with limited means suffered higher rates of infection and death. Based on national studies, the pandemic-induced upheaval in the economy and the shift to remote schooling and remote jobs impacted nearly everyone. Young people's mental health was heavily impacted, substance use increased, and education was impacted due to digital inequities. Older adults had to face challenges in accessing health care virtually, isolation impacted people's mental health, and chronic conditions were exacerbated.

For those who are unhoused or experiencing homelessness, access to basic needs and to consistent health care are particularly challenging. They were at higher risk of exposure to the virus if they sought shelter. They had less access to emergency room services—often the only place they can turn to for health care because of stretched hospital capacity. They faced higher costs for basic needs due to inflation caused by the pandemic. The many unhoused people who have mental health and substance use challenges were affected by the reduction in availability of providers. Children experiencing homelessness who previously received free or low-cost meals through school may have had to overcome barriers to access meals during the pandemic as well.

Other populations who experience inequities in health include LGBTQIA+ individuals, people with limited income, women, people with mental health and substance use disorders, people involved in the criminal legal system, and people living with disabilities. Data throughout the report describe how these populations experience inequities. For

example, LGBTQIA+ youths experienced higher rates of depression and anxiety during COVID-19 than other groups.

## Summary

Baystate Wing communities continued to experience many of the same prioritized health needs identified in the 2019 CHNA. Social and economic challenges, compounded by the COVID-19 pandemic, contributed to the health conditions and health inequities observed across demographic groups. Barriers to affordable, quality care remained, in part due to care coordination issues, and in part due to strains placed on the health care system. Populations of concern identified in this report are children, older adults, unhoused individuals, people with limited incomes, women, people with mental health and substance use disorders, LGBTQIA+ residents, and people living with disabilities. In nearly all instances, COVID-19 made existing hardships worse. Virtually every prioritized health need was affected by the pandemic. In sum, for so many facets of health and health care, COVID-19 deepened inequities.



## 2. Introduction

## 2. Introduction

### About the Hospital

**Baystate Wing Hospital** (Baystate Wing) located in Palmer, Massachusetts, is a 68-bed acute care community hospital that offers emergency care, primary care, surgery, gastroenterology, heart and vascular, rehabilitation, physical therapy, and audiology services. The hospital also has lab and imaging services. Baystate Wing is a member of Baystate Health, a not-for-profit, multi-institutional, integrated health care organization serving more than 800,000 people throughout western Massachusetts. Baystate Health, with a workforce of 13,000 employees, is the largest employer in the region and includes Baystate Medical Center, Baystate Franklin Medical Center, Baystate Wing Hospital, Baystate Noble Hospital, Baystate Medical Practices, Baystate Home Health, and Baystate Health Foundation.

Baystate Wing has more than 805 total employees, 221 nurses and 62 physicians on active and courtesy staff. Baystate Wing's expanded Emergency Department (ED) provides comprehensive emergency services for adults and children around the clock. The ED includes a six-bed critical care unit and is a primary stroke center designated by the Massachusetts Department of Public Health (MDPH). Baystate Wing offers comprehensive, personalized, and high-quality inpatient and outpatient behavioral health and addiction treatment services through the Griswold Behavioral Health Center and the Center for Geriatric Psychiatry.

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

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



## Communities Served by Hospital

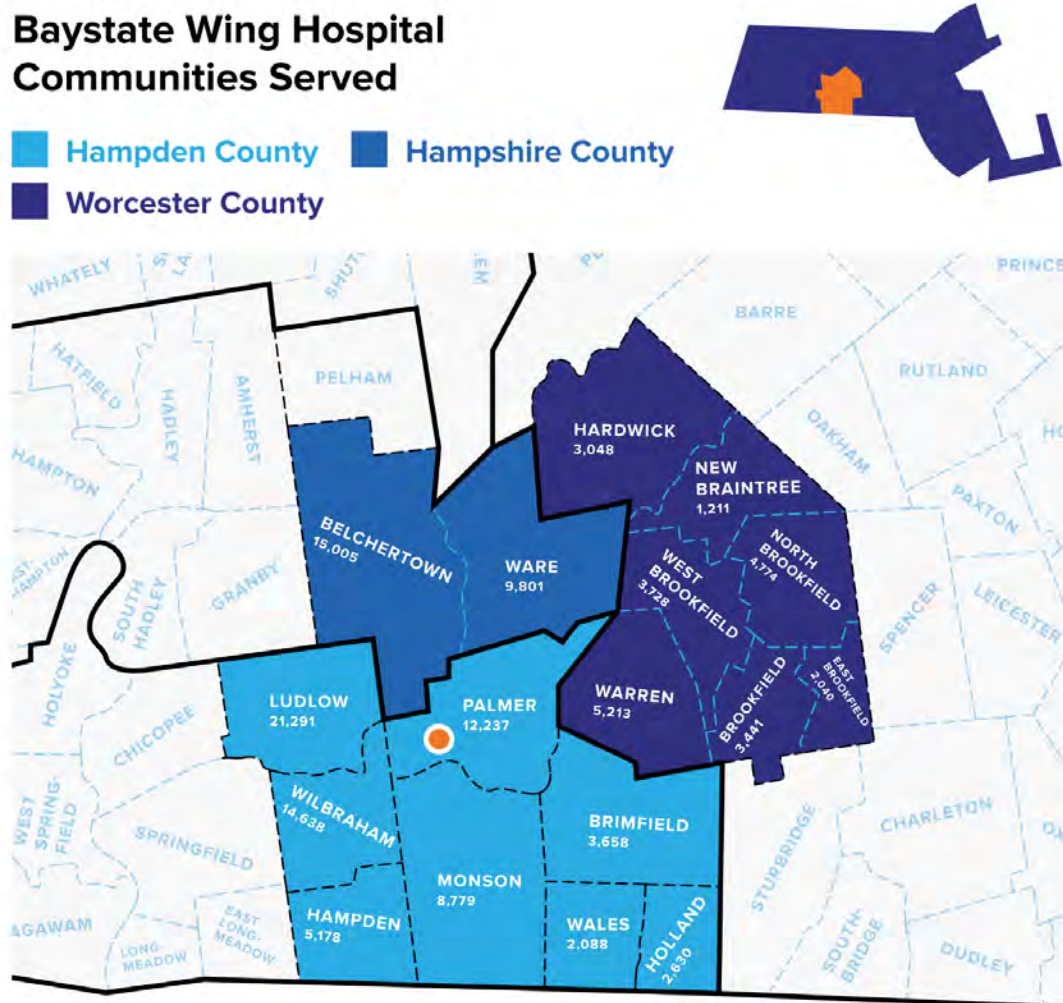
The communities served by Baystate Wing include 17 mostly small rural towns in the Central Pioneer Valley and Quaboag Hills Region (see rural clusters map in Appendix 1). The geographic area of communities served is 30 miles northeast of Springfield and represents a 440-square-mile region in west-central Massachusetts that spans parts of Hampden, Hampshire, and Worcester counties (Figure 1). The largest towns in this service area are Ludlow, Belchertown, Wilbraham, and Palmer (Figure 1).<sup>1</sup> Thirteen of the 17 towns have populations of less than 10,000, and 15 of the 17 towns meet the state definition of “rural,” defined as “a municipality in which there are fewer than 500 people per square mile.”<sup>2</sup> The geographic area is home to 118,760 people.<sup>3</sup> Demographically, the region is primarily White residents (more than 90%), with 5% Latino/a/e residents, 1% Black residents, and 3% of residents defined as “other.”<sup>4</sup> The median family income is \$90,067, which is lower than Massachusetts’ average family income at \$103,126.<sup>5</sup> At least 7% of the service area population is living in poverty,<sup>6</sup> and 13% of residents are considered “low income.”<sup>7</sup> The median age in the service area is 44, which is above the national average of 38.<sup>8</sup> Children under five make up 5% of the population,<sup>9</sup> children under 18 make up 20%

of the population,<sup>10</sup> and adults 65+ make up 18% of the population.<sup>11</sup> Figure 2 depicts life expectancy for the service area, which is slightly lower than the state.

In the 2022 Robert Wood Johnson Foundation County Health State Rankings Report, Hampden County ranks last (14th of 14 counties), Worcester County ranks 11th, and Hampshire County ranks 5th. This report focuses on how long and how well people live based on their location in each state and looks at indicators such as economic security and chronic health outcomes. These rankings do not show differences in health within a county or the magnitude of the differences in health.<sup>12</sup>

The Quaboag Connector, a local transit service, serves ten communities across the region and connects suburban and rural areas to urban areas and services. Community-based organizations, resources, and collaborations; arts and culture centers; education, health, and corporate institutions; and other assets contribute to the service area's status as a destination to live, work, and play.

FIGURE 1: Communities Served by Baystate Wing: 2019 Population Estimates



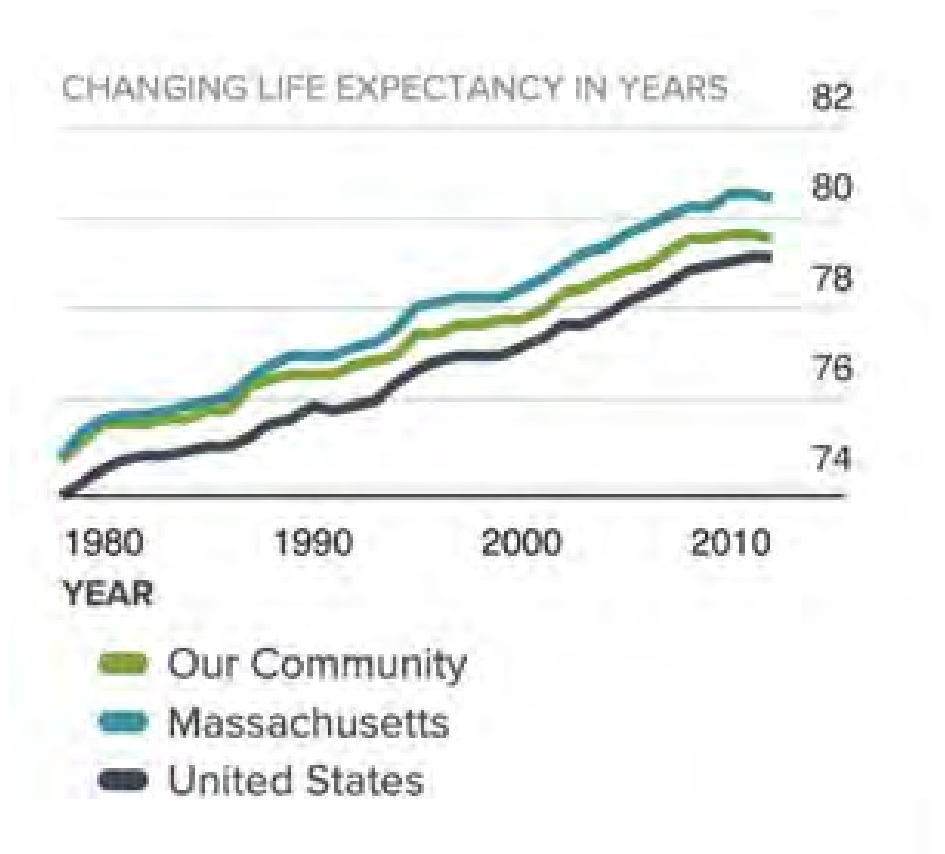
*Source: United States (U.S.) Census, American Community Service (ACS) 2019 5-Year Estimates Data Profiles, specifically table DP05, Demographic and Housing Estimates*

**Hospital Service Area or “HSA”** is defined as the local health care markets for a hospital. HAS is determined through the collection of zip codes whose residents receive most of their hospitalizations from the hospitals in that area. Data is based on case mix data (including inpatient discharges, emergency department visits, and observation stays) provided through the Center for Health Information and Analysis (CHIA).



**Hospital Community/ies Served** includes the cities and towns in the HSA, plus additional geographic areas, or considers target populations or other specialized functions. For each Baystate Health CHNA cycle the most recent HAS for the hospital is provided by the Strategy Department. The HSA is then reviewed by the hospital's Community Benefits Advisory Council (CBAC). Community stakeholders serving on the CBAC offer additional geographies, target populations, or specialized functions that should also be considered for the **hospital community/ies served** for the purpose of the CHNA. **For the 2022 CHNA the hospital uses the term "community/ies served".**

**FIGURE 2: Changing Life Expectancy in Communities Served by Baystate Wing**



**Source:** Changing Life Expectancy in Years in Our 23-ZCTA Area (ACS 2015–2019) vs. U.S. Benchmark (BroadStreet 2021)

As this report describes, income, housing, food security, and many other conditions worsened during the pandemic. This topic is examined more closely in the COVID-19 section and in other sections on prioritized health needs.

## About the Coalition of Western Massachusetts Hospitals/Insurer

Baystate Wing is a member of the **Coalition of Western Massachusetts Hospitals/Insurer** (Coalition), a partnership formed in 2012 that currently consists of nine non-profit hospitals, clinics, and insurers in the region: Baystate Medical Center, Baystate Franklin Medical Center, Baystate Noble Hospital, Baystate Wing Hospital, Cooley Dickinson Hospital, Mercy Medical Center, Shriners Children's New England, Health New England, a local health insurer whose communities served cover the four counties of western Massachusetts. In 2022 the Coalition expanded to include the Berkshire Health Systems. The Coalition members share resources and work in partnership to conduct their **Community Health Needs Assessments** (CHNA) and address regional needs, with the goal of improving health and equitable distribution of health outcomes.

To understand current needs, Coalition members collaboratively conducted CHNAs in 2021–2022 to update their 2019 CHNAs. The 2010 Patient Protection and Affordable Care Act (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.” Based on the findings of the CHNA and as required by the PPACA, each hospital develops a health improvement plan to address select prioritized needs. The CHNA data also inform County Health Improvement Plans (CHIPs) in all Coalition counties.

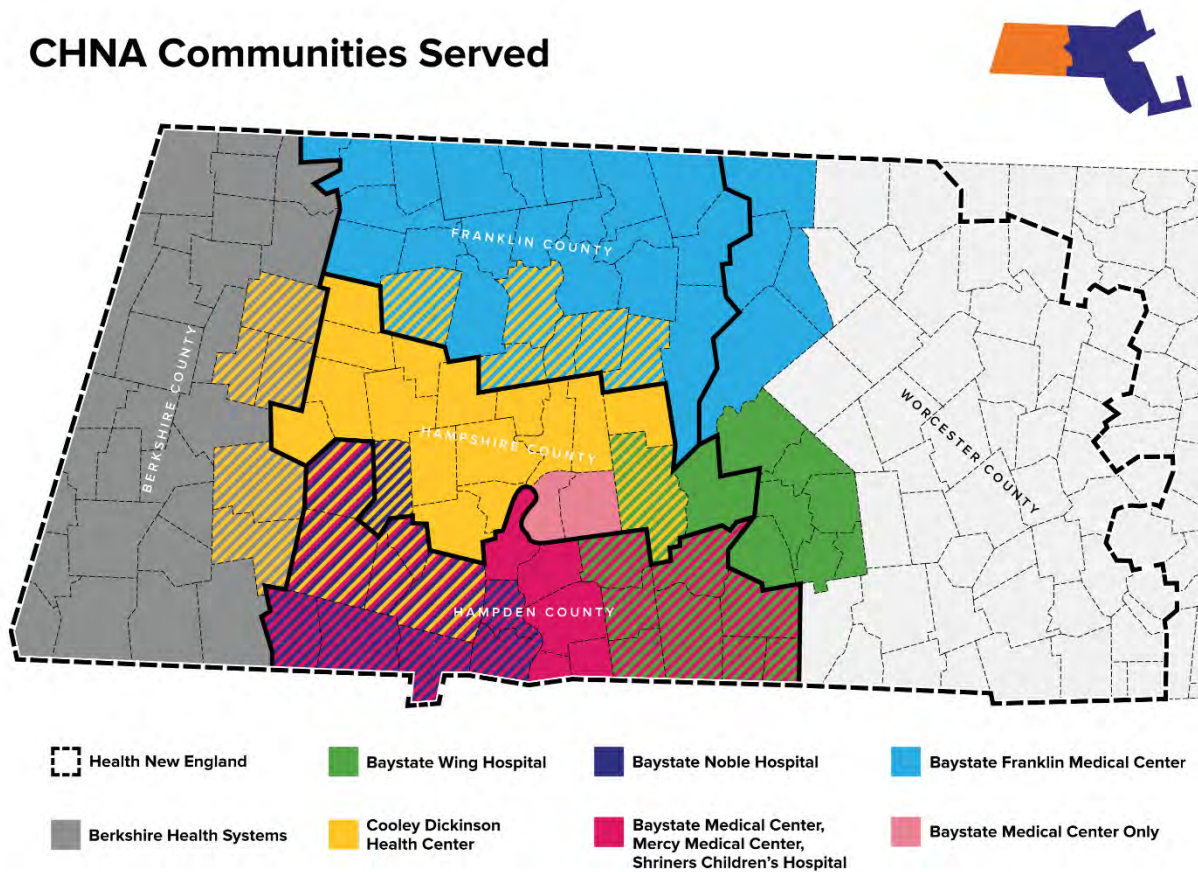
The CHNA was conducted by the Coalition in partnership with a **consultant team** led by the Public Health Institute of Western Massachusetts that consisted of: Collaborative for Educational Services, Franklin Regional Council of Governments, and Pioneer Valley Planning Commission (see Appendix 1 for more about the consultant team).

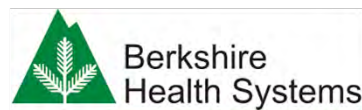
Community leaders and residents were also integral to the process. They provided input through the **Regional Advisory Council** (RAC), interviews, focus groups, and Community Chats. The Coalition engaged hundreds of residents across the counties of western Massachusetts in data collection and outreach about the CHNA.

We are coming into this space from different experiences and with different expectations regarding a process for assessing health needs across many different communities in many different locations with many different cultures impacted by many different power structures and assumptions for living and “access.”

*Cheryl L. Dukes, UMass Amherst Elaine Marieb College of Nursing  
RAC Member, Baystate Franklin CBAC Member*

**FIGURE 3: Communities Served by 2022 CHNA Coalition Members**





## Summary of the Previous CHNA

The communities served by Baystate Wing continue to experience many of the same prioritized health needs identified in the 2016 and 2019 CHNA reports. Social and economic challenges experienced by the population in the region 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 priority populations, which include youth and older adults. Individuals who are unhoused or experiencing homelessness, have limited income, or are living in poverty were also identified as priority populations. Additional data are needed to better understand the needs of these populations to reduce inequities. The population continues to experience barriers that make it difficult to access affordable high-quality care, some related to social and economic conditions in the community and others related to the health care 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 and other drug use, such as rising rates of youth vaping and consistent rates of adult alcohol use, have emerged as top issues impacting the health of the community. Domestic violence and youth dating violence and the impact on individuals, families, and entire communities remain significant public health and social concerns. Progress has been made to address some of the prioritized health needs previously identified, such as childhood obesity and food insecurity, but rates remain high and work on these issues needs to continue.

# 3.Setting Context

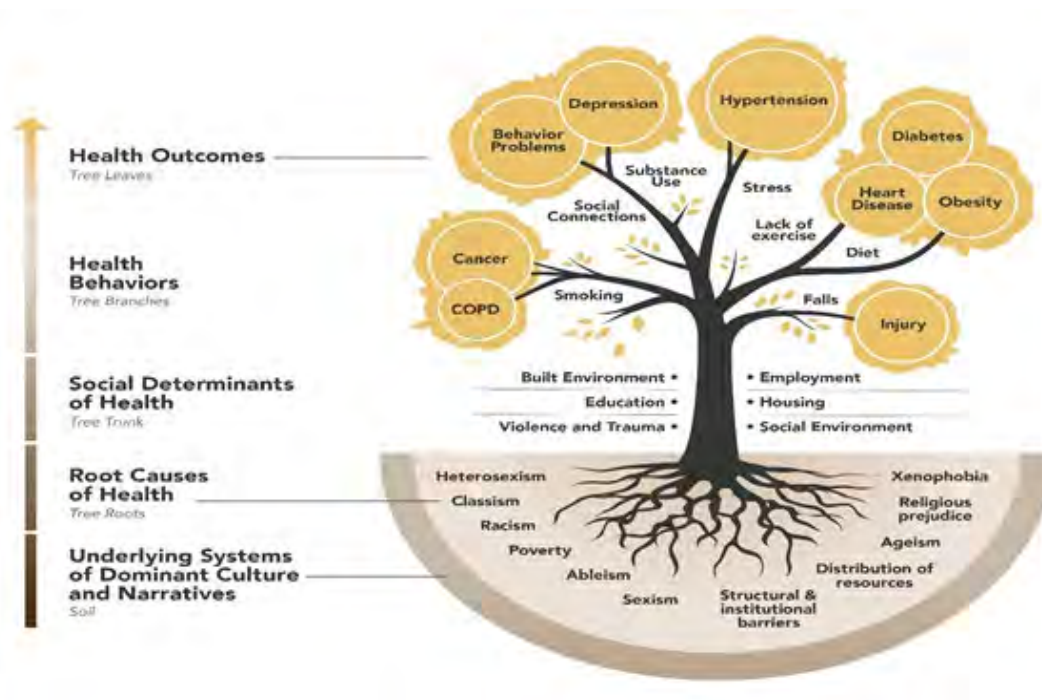


## 3. Setting Context

### Guiding Principles for the 2022 CHNA

The Coalition of Western Massachusetts Hospitals/Insurer was founded on a shared commitment to collaborate toward the common goal of health equity in the region. Health equity means achieving the conditions where everyone has the ability to live to their full health potential. The Coalition and the RAC for the 2022 CHNA share guiding principles rooted in an analysis of what prevents health equity, captured visually in Figure 4.<sup>13</sup> We acknowledge that the causes of inequity are the deep-rooted, longstanding belief systems and narratives that were historically developed to confer advantage and power to certain groups to disadvantage and disempower other groups. This emphasis on dominant narratives and structural racism has been incorporated by the MDPH into its health equity work, for example in its presentation of data from the COVID-19 Community Impact Survey.

**FIGURE 4: Health Tree Model: Understanding Root Causes of Health Behaviors and Outcomes**



*Source: Health Resources in Action*

Historically, advantaged groups that asserted power over others included White people, males, those with wealth and land, cisgender and heterosexual people, and people without disabilities. Groups that were dominated and excluded included Indigenous tribes, enslaved Africans and their descendants, people of Latin American origin, people of Asian and Pacific Islander origin, other immigrants, women, people without wealth, people with disabilities, LGBTQIA+ (inclusive of lesbian, gay, bisexual, transgender, queer or questioning, intersex, asexual, agender, nonbinary, gender-nonconforming and all other people who identify within this community) individuals and religious minorities.

Systemic racism, structural poverty, and the other “isms” in the graphic’s tree roots are each a means to perpetuate dominant advantage, and they continue today. They show up in public policies, institutional practices in general and in health care systems, and individual actions. As a result of these systemic hierarchies, race, ethnicity, age, gender, wealth and income, disability status, and other factors determine one’s access to quality health care and the ability to earn a living wage, live in safe and affordable housing, enjoy freedom from violence, receive a good education, and have access to healthy foods and physical activity.

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“Racism stays through the life  
of a person.”

*Age-friendly Coalition Member, Community Chat, Hampden County*

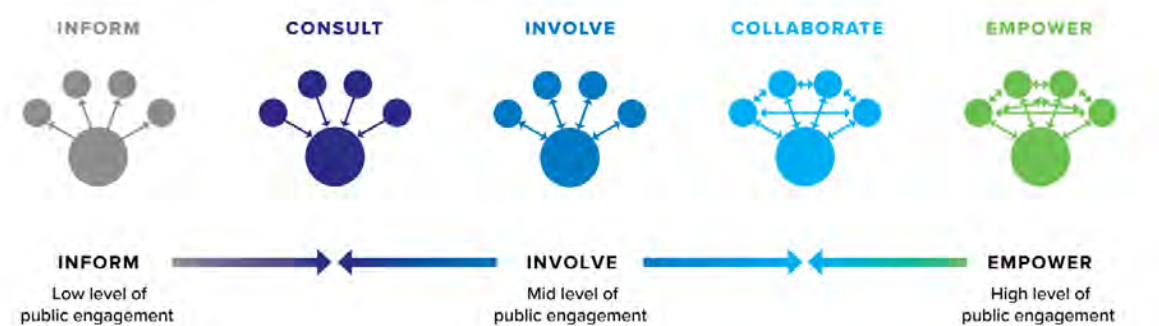
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To make meaningful progress to address these root causes of poor health, the CHNA process seeks to embody the values of community-led change, anti-racism, cultural humility, and social justice (see glossary in Appendix 3). The structure of CHNA decision-making shows the commitment to community-led change. The RAC is made up of the Coalition hospital/insurer members, residents with lived experience of poverty and discrimination, and people who work in health care and community services. The Coalition Steering Committee also includes community representatives. Our Coalition member

institutions and their leaders are each at different points in our journey to become anti-racist and culturally humble. We seek to learn and grow with and from each other and RAC members. Ultimately, we want to share decision-making more fully with those most directly affected by health inequities, to ensure residents can influence the environment we all live in to improve community health, and we will continue holding ourselves accountable to do this.

**FIGURE 5: Community Engagement Standards for Community Health Planning Guideline**

### COMMUNITY ENGAGEMENT SPECTRUM



**Source:** Massachusetts Department of Public Health, "Community Engagement Standards for Community Health Planning Guideline, January 2017, <https://www.mass.gov/doc/community-engagement-guidelines-for-community-health-planning-pdf/download>

In doing so, the Coalition and the RAC recognize that the tree image in Figure 4 does not represent the full story of our community or an inclusive vision for health equity. Our understanding of the complexity of these issues is evolving as we learn together, and we do not yet have adequate words and images to describe them. We will challenge ourselves to find or create visual representations that better speak to the inequities and assets of our region and our aspirations for its future.

Every three years the Coalition, the RAC, and consultants strive to improve the CHNA process and our practice of these values. For 2022, we all engaged in honest and often difficult discussions and decisions that advanced the process from 2019 in at least four meaningful ways:

1. Moved decision-making closer to the community-driven (“Empower”) end of the Community Engagement spectrum.
2. Further refined the equity values of the CHNA process, as described above.
3. Pursued a commitment to collective action around a regional focus area, Youth Mental Health.
4. Strove to make the CHNA reports more accessible – shorter, easier to read, more useful and actionable.

Finally, it is important to note that by federal mandate (the Affordable Care Act), this CHNA is required to provide an accounting of health needs. It also includes information on available resources to address those needs. Yet it does not paint a full picture of the vibrant, culturally diverse, and actively engaged communities that come together across sectors to make change in each of the communities served by the hospital and the region. The Coalition members honor community endurance and firmly embrace an asset-based lens in our vision for community wellness.

## Orientation to This Report

Research shows that less than a third of our health is influenced by our genetics or biology.<sup>14</sup> The Guiding Principles and Health Tree (see Figure 4) show that our health is largely determined by social and economic factors that are influenced by practices and policies such as in previous CHNA reports, this CHNA uses a health equity focus to identify needs. systemic racism and structural poverty, which continue to affect the health of *all* people in western Massachusetts. In fact, inequality that directly harms some of us ultimately harms all of us. And the converse is true—when we develop targeted solutions to end inequities, everyone benefits.

In describing prioritized health needs for the communities served by Baystate Wing, this report builds on the 2019 CHNA. In addition to identifying the 2022 prioritized health needs, it provides greater depth on several critical issues identified by community and hospital leaders:

- **Two regional priorities:**
  - Impact of COVID-19
  - Youth mental health crisis

- **Baystate Wing's three focus areas for deeper dive:**
  - Financial health and well-being
  - Lack of access and affordability of housing, food, and transportation
  - Violence and trauma
- **Baystate Wing's priority populations for greater focus:**
  - Youth and young adults
  - Older adults

To ensure the main report is accessible and easy to use, each section is clearly labeled and designed to be easily separated out as its own resource. Prioritized health needs that the Coalition or the hospital did not identify for deeper focus are summarized in fewer pages. We encourage readers to refer to the 2019 report<sup>15</sup> for richer context and information on many of these issues. Finally, though the needs are separated into sections, we acknowledge the cross-cutting nature of all the health issues and social factors presented and that people experience many barriers to health and wellness.

As you read this report, please think about how you, your community, and your organization can use it to support your health equity goals. We want to know how Baystate Wing can partner with you in promoting health and wellness in the communities served. We welcome opportunities for discussion and feedback about the CHNA. Here is how you can participate:

For questions or comments on the CHNA, or to request a hard paper copy of this document please contact:

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## Learn More

### Baystate Wing's CHNA Strategic Implementation Plan (SIP)

[www.baystatehealth.org/about-us/community-programs/community-benefits/community-health-needs-assessment](http://www.baystatehealth.org/about-us/community-programs/community-benefits/community-health-needs-assessment)



[www.pvpc.org/HCHIP](http://www.pvpc.org/HCHIP)



### QUABOAG HILLS COMMUNITY HEALTH IMPROVEMENT PLAN (QHCHIP)

*Working Together for a Healthier Quaboag Hills Region*

***QHCHIP is currently under development.***

**To learn more please contact:**

Gail Gramarosa

[ggramarossa@townofware.com](mailto:ggramarossa@townofware.com)

The Town of Ware is implementing a multi-sector partnership comprised of individuals with lived experience, community agencies/service providers, and a cluster of municipalities to plan and conduct a CHIP process in the Quaboag Hills region of central and western Massachusetts, spanning 17 municipalities in three counties. The purpose is to provide data that reflect this unique region comprised of outlying communities in three counties. The CHIP process and data will better describe the needs of the Quaboag region.



## STRIVE Project

Successful Teens: Relationships, Identity and Values Education (STRIVE), an initiative led by Dr. Aline Gubrium and Dr. Elizabeth Salerno Valdez, uses participatory research to examine how structural violence, like racism, and other systems of oppression contribute to inequitable adolescent sexual and reproductive health (ASRH) outcomes for youth.<sup>16</sup>

STRIVE is funded by the Massachusetts Department of Public Health (MDPH) and is based at the University of Massachusetts Amherst School of Public Health and Health Sciences. The research team works in partnership with two important communities across Massachusetts: Springfield, MA Metropolitan area and Lynn, MA on Boston's North Shore. Methods and activities of the study include engaging stakeholders in Community Advisory Boards, conducting Youth Participatory Action Research (YPAR) through Photovoice and Digital Storytelling, assessing ASRH frameworks used by youth serving organizations, and other activities. Emphasis on the importance of community and youth collaboration is paramount to the study. This CHNA features some of the photovoice photographs and words of participating youth in Springfield. Learn more at [www.striveproject.org/the-project](http://www.striveproject.org/the-project).

# 4. Methodology

## 4. Methodology

### Assessment Process and Methods

The 2022 CHNA updates the prioritized community health needs identified in the 2016 and 2019 reports in three areas: the social and economic factors or “determinants” that influence health, barriers to health care access, and health behaviors and outcomes. This CHNA focused on Hampden, Hampshire, and Worcester county-level data and data for select communities as available: Palmer and Ware.

Assessment methods included:

- **Literature review: (Fall 2021):**
  - Review of existing assessment reports published since 2019 that were completed by community and regional agencies serving Hampden, Hampshire, and Worcester counties.
- **Quantitative data collection and analysis (Winter 2021-Spring 2022):**
  - Analysis of COVID-19 Community Impact Survey data from MDPH.
  - Analysis of social, economic, and health data from MDPH, the U.S. Census Bureau, the County Health Ranking Reports, Broadstreet, Baystate Wing and a variety of other data sources.
- **Qualitative data collection and analysis:**
  - Community Chats conducted by members of the RAC in the service area and regionally (Summer – Fall 2021).
  - Survey of public health officials in Hampden County and throughout western Massachusetts (Fall 2021).
  - Focus groups and interviews with key informants conducted by the consultant team (Winter 2021-Spring 2022).

### Prioritization Process

The 2022 CHNA used the 2016 and 2019 CHNA priorities as a baseline and then reprioritized needs where quantitative and qualitative data, including community feedback, warranted changes. In previous CHNAs, prioritized health needs were those

that had the greatest combined magnitude and severity or that disproportionately affected populations that have been marginalized in the community. Quantitative, qualitative, and community engagement data confirm that priorities from 2019 continue in 2022. Through this process, the Coalition members agreed that COVID-19 and Youth Mental Health warranted regional attention in the CHNA. Baystate Wing chose priority health needs that are influenced by social determinants of health: financial health and well-being; lack of access and affordability of housing, food, and transportation; and violence and trauma. The consultant team identified priority populations by disaggregating available data to reveal disparities, which led Baystate Wing to prioritize youth, young adults, and older adults.

## Limitations and Data Gaps

Given the limitations of time, resources, and available data, our analysis was not able to examine every health and community issue. Data for this assessment were drawn from many sources. Each source has its own way of reporting data, so it was not possible to maintain consistency in presenting data on every point in this assessment. For example, sources differed by:

- geographic level of data available (town, county, state, region).
- racial and ethnic breakdown available.
- time period of reporting (month, quarter, year, multiple years).
- definitions of diseases (medical codes that are included in counts).

Though not a problem when reporting data for larger cities such as Palmer and Ware, we encounter a problem with smaller towns due to small numbers. When the number of cases of a particular characteristic or condition is small, it is usually withheld from public reports to protect confidentiality and because of estimate variability. The availability of data and the problem of small numbers affect the reporting of data by race and ethnicity in this assessment. It is also important to consider intersectionality—the overlapping identities of residents. *What impact does being young and gay in a rural town have on health? Or being transgender and living on an income below the poverty line?* We were unable to explore these differences with the quantitative data available and had limited capacity to do so in focus groups. This CHNA process cannot begin to cover the full range of identities present in our community.

Finally, the MDPH COVID-19 Community Impact Survey (CCIS) gave insight into the impact of the early pandemic phase on people throughout western Massachusetts. Yet these findings are not generalizable to all people in the region. In the communities served by Baystate Wing, there were a limited number of youth respondents (less than 30). Therefore, we were not able to provide service area specific estimates for youth respondents. Instead, we analyzed western Massachusetts estimates to provide insight about youth in the service area.

## Language Used to Describe Demographic Groups

The Coalition and the consultant team honor the unique ways that individuals and communities describe and identify themselves. For the purposes of this report, we need to use consistent language when speaking about different groups of people, knowing that terms are always evolving and changing. We use the following descriptors where possible in the text: Black, Latino/a/e, Indigenous, Asian, people/communities of color, White, LGBTQIA+, and transgender. Throughout the report, you may see other terms or labels used in graphics because these labels were used in the source materials. The glossary in Appendix 3 offers further clarification of what we mean by these terms. For any term we use, we know there are community members for whom that term is not their preferred way to be identified. For example, we recognize that there are differences between those who identify as Puerto Rican, Mexican, or Cuban that aren't captured by the term "Latino/a/e," and differences among those who identify as Chinese, Japanese, or Korean that aren't captured by "Asian."

# 5. Impact of COVID-19 in Our Community



## 5. Impact of COVID-19 in Our Community

### Overview

It has been three years since the last CHNA, and for two of those years and counting, our nation and region have battled a once-in-a-century health pandemic. COVID-19 has taken a tremendous toll on the communities served by Baystate Wing, and it continues to affect the current status of health in western Massachusetts. We lost many of our aging loved ones and family members who were still in their prime but couldn't fight off the virus, often because they already had a chronic disease that compromised their immune system. We lost brave essential workers, many who chose to take the risk and others who had no choice but to keep working despite the risks. Although we cannot tell the story of every life lost and every person left grieving, we can provide data that capture the enormity of the impact.

The pandemic clearly exacerbated existing health inequities. Nationally, rural communities already had specific characteristics that put residents at greater risk of death, including older median age, more limited access to health care, further distances to travel to receive care, and higher rates of poverty than more populous areas. People with low wages, people of color, and people living in densely populated housing were more at risk early on in the pandemic, when less was known about how to effectively treat the virus or reduce its spread. Some communities of color experienced disproportionately higher rates of illness, hospitalization, and deaths from COVID-19 across the U.S.<sup>17</sup> For example, since the start of the pandemic, the Centers for Disease Control and Prevention (CDC) reports that the greatest age-adjusted death rates have been among Indigenous, Black, and Latino/a/e individuals, at rates more than double those of White individuals.<sup>18</sup> Over time, people of color living in rural areas experienced inequitable outcomes as well. A recent national study found that Black, Indigenous, and Latino/a/e residents suffered higher reported COVID-19 death rates in rural areas than in urban areas.<sup>19</sup>

Because structural poverty and systemic racism reduce access to quality jobs and housing and increase the prevalence of chronic disease, people with limited income and people of color were more likely to be essential workers and experience other risk factors, such as having higher rates of comorbidities.<sup>20</sup>

As the pandemic progressed and vaccination became available, inequitable access to vaccines and vaccine hesitancy continued to drive COVID-19 health inequities. As of January 2022, nationally 49% of rural adults had been vaccinated compared with 63% in urban counties, in part due to reduced vaccine access and vaccine hesitancy.<sup>21</sup>

## COVID-19 in Our Region and Communities Served

Since the pandemic began, COVID-19 has been ranked among the top three leading causes of death in the U.S. for most months.<sup>22,23</sup> Though we do not have up-to-date overall death data for the western Massachusetts counties, comparisons with 2017 data (the most recent available) indicate that COVID-19 is likely among the leading causes of death locally. Though touching all of us throughout the region, the impacts across our four western Massachusetts counties have varied, with communities that have historically experienced inequities bearing greater impact.

- As of June 28, 2022, 5,412 lives have been lost to COVID-19 between Berkshire, Franklin, Hampden, Hampshire, and Worcester counties (Table 1).
- The Baystate Wing area accounts for 3% of those deaths, with 188 total deaths, as of June 28, 2022 (see Table 1).
- As of June 28, 2022, Hampden County reported 1,845 total deaths from COVID-19, and Worcester County reported 2,660. These were among some of the highest counts in the state, and both were well above the total death counts of the other counties in the region (see Table 1).

**TABLE 1: Confirmed COVID-19 Cases and Deaths as of June 28, 2022**Live updates at <https://www.mass.gov/info-details/covid-19-response-reporting>

County	Total Cases	Total Cases per 100,000	Total Deaths	Total Deaths per 100,000
Berkshire County	28,841	22,353	393	305
Franklin County	12,242	17,235	149	210
Hampden County	146,695	31,491	1845	396
Worcester County	211,396	25,572	2,660	322
Hampshire County	33,408	20,583	365	225
<b>Regional Values</b>	<b>432,582</b>	<b>26,140</b>	<b>5,412</b>	<b>327</b>
<b>Communities Served by Baystate Wing</b>	<b>28,494*</b>	<b>23,969*</b>	<b>188*</b>	<b>158*</b>
State	1,762,215	25,067	20,910	297

*Source: MDPH COVID-19 Dashboard**\*Communities served by Baystate Wing data is only through December 2021.**Note: For all figures, please note that case and death counts are updated based on the most up-to-date definition of COVID-19 determined by the MDPH. Therefore, you may notice fluctuations in counts to ensure accuracy.<sup>24</sup>*

Many more people have tested positive for COVID-19 and experienced illness than those who died from it. The number of confirmed cases across the four counties of western Massachusetts and Worcester County as of June 28, 2022, was 432,582 (see Table 1). Communities served by Baystate Wing saw more than 28,000 cases as of December 2021.

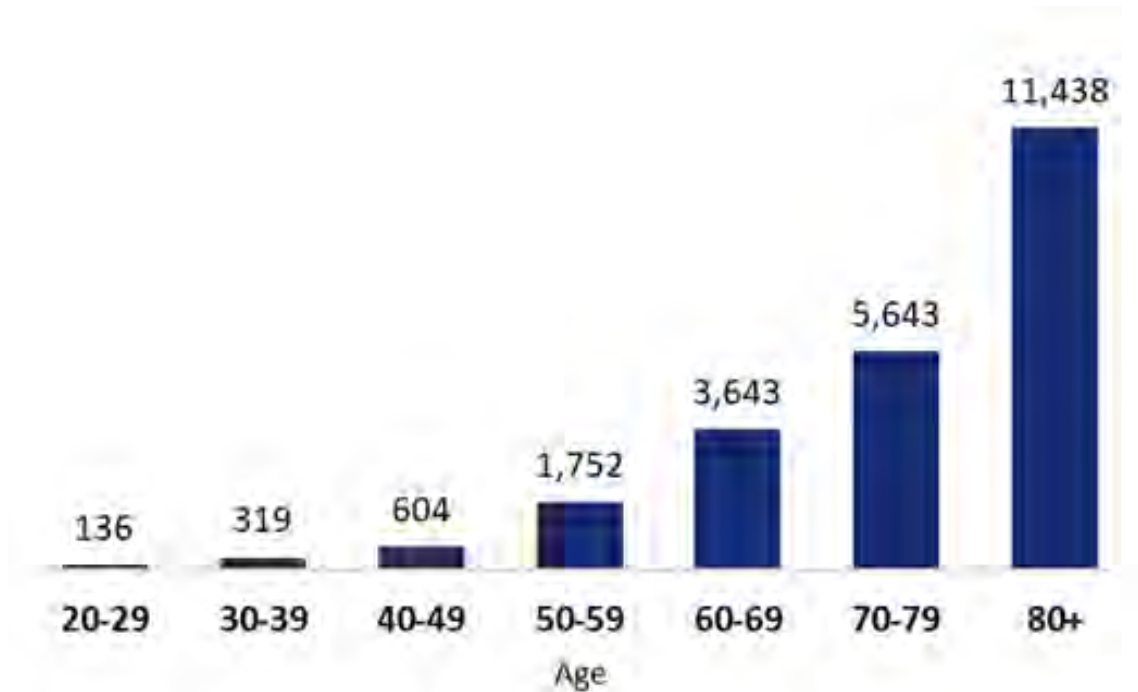
Data disaggregated by race/ethnicity are not available at a county level in Massachusetts. State data have limitations because a large percentage of cases (varies weekly; as of January 27, 2022: 27%) are classified as “unknown” or “other.” As of June 28, 2022, there were 158 deaths per 100,000 in the communities served by Baystate Wing (see Table 1).

Older adults have been at high risk for severe illness and death from COVID-19. (See Figure 6)

- Although we do not have local data, we see trends at the state level that are comparable to those across the country, with a median age of death of 75 years.
- Examination of available statewide data from August 12, 2020, through March 1, 2022 (age-specific death data is only available as of August 12, 2020) indicates that 74% of deaths occurred among those who were 70 or older.
- Twenty-four percent of deaths have occurred among those residing in an elder care facility in Massachusetts.<sup>25</sup>

A Community Chat with service providers and residents of the communities served highlighted that the COVID-19 pandemic hit the region hard and will likely leave lasting effects on mental health, domestic violence, stress, employment, community connection, and stability. These issues were already areas of concern in the communities served by Baystate Wing, but the pandemic exacerbated the situation.<sup>26</sup>

**FIGURE 6: COVID-19 Deaths by Age in Massachusetts, Age 20+ (August 12, 2020–March 24, 2022)**



*Source:* MDPH COVID-19 Dashboard, COVID-19 Raw Data—March 28, 2022, <https://www.mass.gov/info-details/covid-19-response-reporting>

Another population living in congregate care settings that was at high risk of COVID-19 infections were incarcerated individuals and staff members working in prisons. We have state-by-state comparisons for some mortality and morbidity statistics, but these data were not available for the region or communities served by Baystate Wing:

- Data collected by the Marshall Project through June 22, 2021, estimated that in Massachusetts 2,574 incarcerated individuals (1 in 3) were infected, and 21 individuals (1 in 379) died. This was a higher proportion than the national median of 1 in 493.<sup>27</sup>
- According to the same database, 954 prison staff members (1 in 5) were infected, but no staff deaths were reported.

Massachusetts has one of the highest COVID-19 vaccination rates in the U.S., though vaccination rates vary across the Commonwealth.

- 76% of the state's population had been fully vaccinated and 53% of those fully vaccinated had received a booster dose as of February 24, 2022.
- By June 2021, 72% of incarcerated individuals in Massachusetts had been vaccinated and 60% of prison staff members.<sup>28</sup> Data on boosters were not available.
- At the county level, the lowest rates are in Hampden (67%) and Hampshire (70%) counties (along with Bristol County in eastern Massachusetts).<sup>29</sup>
- As of July 2022, 68% of the population per capita in Palmer and Ware was fully vaccinated. For all of the communities served by Baystate Wing, 70% of the population per capita was fully vaccinated.<sup>30</sup>

Barriers to vaccine access and vaccine hesitancy were likely factors in Hampden and Hampshire counties' lower rates. Vaccination obstacles include getting time off from work, needing childcare, limited access to transportation, limited physical mobility, and caring for other family members at home. Reluctance to get vaccinated among people of color has been driven in part by distrust resulting from this country's history of racist experimentation and unethical medical treatment among Black and Indigenous populations.<sup>31</sup> These lower vaccination rates have contributed to higher COVID-19 case rates, hospitalizations, and deaths, particularly during the Delta and Omicron phases of the disease. Hospital capacity in western Massachusetts was also extremely limited

during the Delta and Omicron phases as a result of high COVID-19 hospitalization rates and hospital staff shortages.

### **2020 MASSACHUSETTS COVID-19 COMMUNITY IMPACT SURVEY (CCIS)**

In response to the ongoing COVID-19 pandemic, MDPH conducted the COVID-19 Community Impact Survey in fall 2020 to better understand the needs of populations that have been disproportionately affected by the pandemic, including social and economic impacts. MDPH intentionally sought to reach key populations such as people of color, LGBTQIA+ individuals, people with disability, older adults, etc. Throughout this CHNA report, relevant findings are highlighted for the communities served by Baystate Wing and in western Massachusetts. Caution should be used when interpreting the survey results; these findings are only representative of those who participated in the survey and may not be representative of the experiences of everyone in the communities served by Baystate Wing.

#### **In the communities served by Baystate Wing:**

- There was a total of 434 respondents
- Respondents were predominantly female (81%)
- 10% non-White
- 13% identified as LGBTQIA+
- 70% live in a rural area
- 11% had an income below \$35,000
- 8% speak a language other than English at home



## Other COVID-19-related Impacts and Inequities

Not only has the disease caused illness, hospitalization, and death, but the numerous measures that have been taken to control the pandemic (such as lockdowns and remote learning) have affected well-being in our communities. These ripple effects of COVID-19 compromised the building blocks of health by causing higher rates of unemployment, food insecurity, and housing instability among those who already experience inequities. The pandemic also led some people to delay preventive, emergency, or urgent care out of concern for risk of exposure to COVID-19 or because of the need for medical facilities to prioritize COVID-19 patients.<sup>32</sup> Some impacts are described below, and others are woven into later sections of this CHNA.

### *Business, the Economy, and the Labor Force*

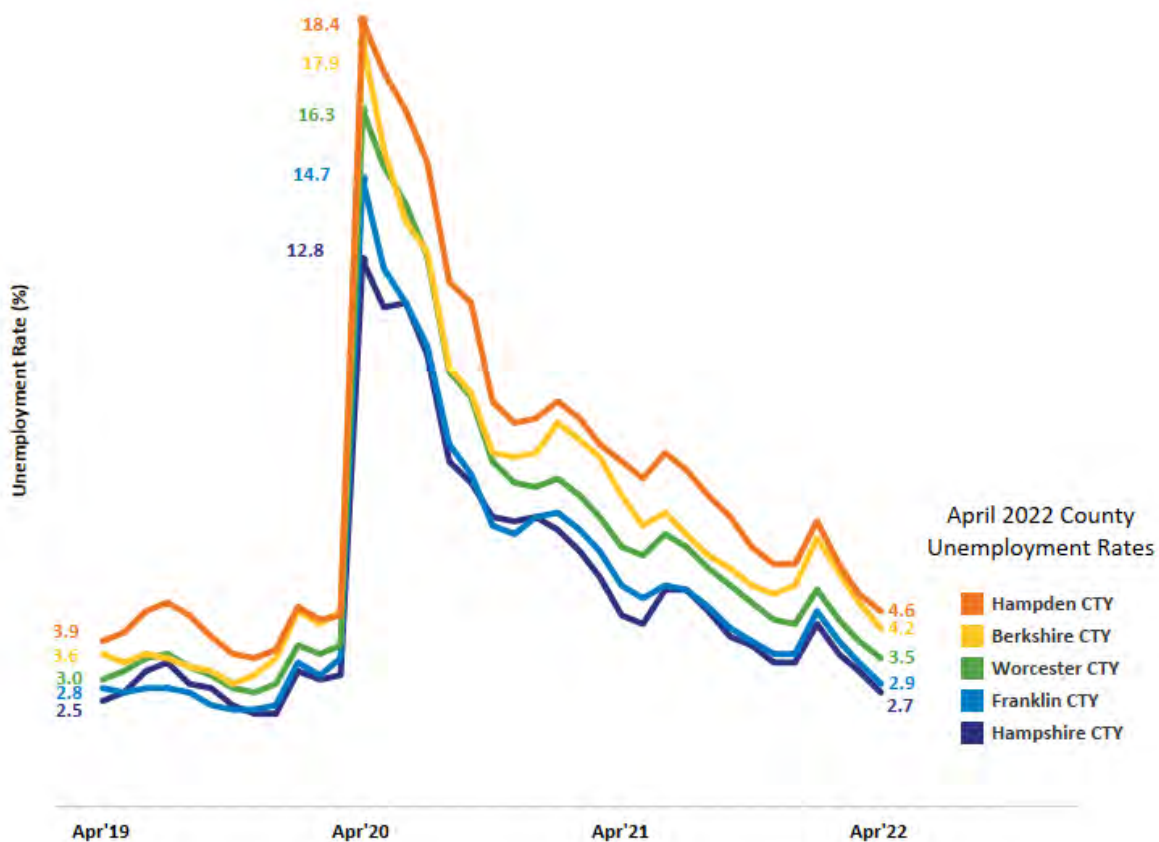
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In 2020, each of the counties in the region saw substantial decreases in the size of their economies and small business revenues (see Appendix 5). As the pandemic recession took hold, unemployment rates spiked and had not returned to pre-pandemic levels by the end of 2021 (Figure 7). Further data reveal the impacts of the pandemic on the area's economy:

- Palmer and Ludlow were among the ten communities with the highest unemployment rates in the region.<sup>33</sup>
- The highest unemployment rates in the service area occurred in April 2020. The highest unemployment rate was in Palmer at 18%. Ludlow, Wales, North Brookfield, and Warren all had an unemployment rate of 17%.<sup>34</sup>
- The inflation-adjusted value of goods and services produced (ie the Gross Domestic Product or GDP) declined by \$1.6 billion (more than 5%) in the Pioneer Valley in 2020.<sup>35</sup>
- In 2020, Hampshire County's GDP shrank by an estimated 8%, Hampden County's GDP shrank by an estimated 5%, and Worcester County's GDP shrank by an estimated 3%. Variation between counties in decline of economic activity in part reflects the mix of industries making up the county economy.<sup>37</sup>

- Small business revenues declined steeply in the initial weeks of the COVID-19 shutdowns, down 66% in Hampshire County, 52% in Worcester County, and 45% in Hampden County.<sup>38</sup>
- Revenues remained depressed throughout 2020 and into 2021 in Hampden and Hampshire counties, with small business revenues still down 27% in February 2021. In Worcester County, however, small business revenues were up by 2%.<sup>39</sup>

**FIGURE 7: County Unemployment Rates, April 2019 –April 2022**



**Source:** U.S. Bureau of Labor Statistics, Local Area Unemployment Statistics

Though local unemployment and workforce participation data are not available disaggregated by gender or race/ethnicity, we know based on national studies that women, and especially women of color, were disproportionately harmed by the pandemic-induced upheaval in the economy and the shift to remote schooling.<sup>40,41</sup>

These wrenching economic shifts and the resulting loss of wages led to challenges with housing, food access, and other basic needs for many residents. Data on these impacts can be found in Section 6d of this report. The pandemic and its economic and social consequences also had a profound impact on mental health for people of all ages and demographics. Section 6e of this report looks at mental health and substance use in adults, and Section 6a explores the youth mental health crisis.

Rural communities have had particular challenges driven by limited access to the internet during the pandemic, which affected their access to employment, school, and health care. CCIS data for three rural geographic clusters—Central Pioneer Valley, East Quabbin, and Quaboag Valley—showed a disparity in concern about internet access, with 23% of rural respondents citing this concern compared with 17% of urban respondents. See more on internet access and telehealth in Section 6e of this report. Other sections also contain data on rural needs and challenges affected by the pandemic.

### *Challenges of the Statewide Public Health System on the Pandemic Response*

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People's health outcomes are strongly impacted by the quality of local public health protections in each community. In our region, the local public health system is chronically underfunded and understaffed. The state's decentralized structure has led to 351 independent boards of health,<sup>42</sup> each with many responsibilities, including to:

- ensure environmental, water, food, and housing safety,
- enforce compliance with tobacco and lead laws,
- prepare for and respond to public health emergencies,
- investigate infectious diseases and issue guidance and quarantine or isolation orders, including for COVID-19, and
- offer local vaccine clinics, wellness clinics, and public education on health hazards.

Most local health departments were already overstretched before the beginning of the pandemic because Massachusetts does not fund this important local function and has no standards or workforce requirements. This weak system led to vast differences in the pandemic protections offered to residents of our region. If a town did not have a public health nurse, as most did not, no one was available to conduct contact tracing. The Commonwealth invested significant funds in a private non-profit solution, the Community Tracing Collaborative (CTC), so many local communities could fulfill their contact tracing responsibilities during the pandemic. During surges in COVID-19, however, local public

health officials reported that the CTC was unable to reach people in a timely fashion due to the extreme demand on its staff, which resulted in significant disparities in COVID-19 contact tracing between towns using the state system and those with local public health nurses.

## *Long COVID*

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As we experience the COVID-19 pandemic transition to becoming endemic, ie a cyclically occurring virus, finding, and measuring the potential long-term health impacts is instrumental in supporting our community. A recent study<sup>43</sup> suggests that most people will recover from COVID-19 and not have long lasting effects. However, some people may have symptoms that persist beyond the duration of infection (often referred to as “long COVID”). Ongoing research seeks to learn more about who experiences post-COVID conditions, including whether groups disproportionately impacted by COVID-19 are at higher risk. Best estimates from the CDC suggest that over 13% of people who contracted the virus may have extended health impacts at one month or longer, and that more than 30% of hospitalized patients may experience symptoms six months out.<sup>44</sup> As of July of 2021, long COVID may be considered a disability under the Americans with Disabilities Act (ADA)<sup>45</sup>, and later that year, a specific billing code was created for long-haul COVID.<sup>46</sup> Previous data shows that people with disabilities looking for work experience an unemployment rate twice that of workers without disabilities.<sup>47</sup> Not only can persistent symptoms disrupt the lives of individuals and affect their quality of life, but there are also potential impacts on employment, access to adequate health care, affordability of care, and more. This is an area that must be explored further so that we are able to comprehensively support local residents with long-term complex symptoms.



Baystate Infectious Disease Physicians L-R  
Dr. Durane Walker, Dr. Amanda Westlake,  
Dr. Esteban DelPilar-Morales  
Photo Credit: Baystate Health



## Assets and Resources

Baystate Wing responded to the COVID-19 in myriad ways. Internally, Baystate Wing supported staff in providing the community with safe, compassionate, and expert care by:

- Educating staff, patients, and families.
- Optimizing personal protective equipment (PPE), on-demand COVID-19 testing, and vaccination for all employees.
- Providing latest available treatments.
- Managing bed capacity through appropriate staffing, reductions in elective procedures, and in collaboration with area hospitals.
- Upgrading facilities to minimize spread.

To learn more about Baystate Health’s response to COVID-19 please view our Annual Report on [www.baystatehealth.org](http://www.baystatehealth.org), click on “About Us” at the top, and then click “Annual Reports”.

- To view our 2021 Annual Report please visit <https://2021.bhannualreport.org/>
- To view our 2020 Annual Report please visit [www.2020.bhannualreport.org](http://www.2020.bhannualreport.org)

Once in the Annual Report, click on “Year in Review” tab at the top, then click “COVID-19”.

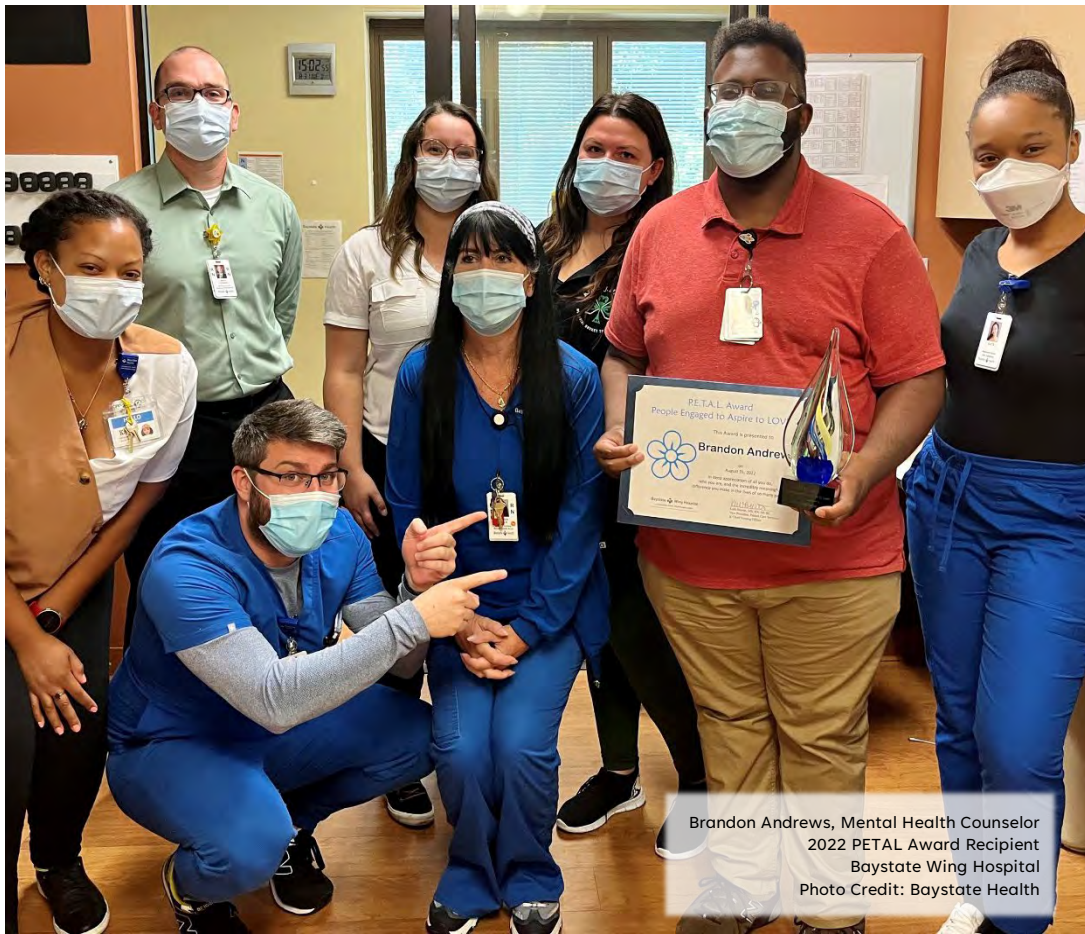


Sue Keenan, Personal Protective Equipment (PPE) Coach during COVID-10 Pandemic at Baystate Wing Hospital  
Photo Credit: Baystate Health





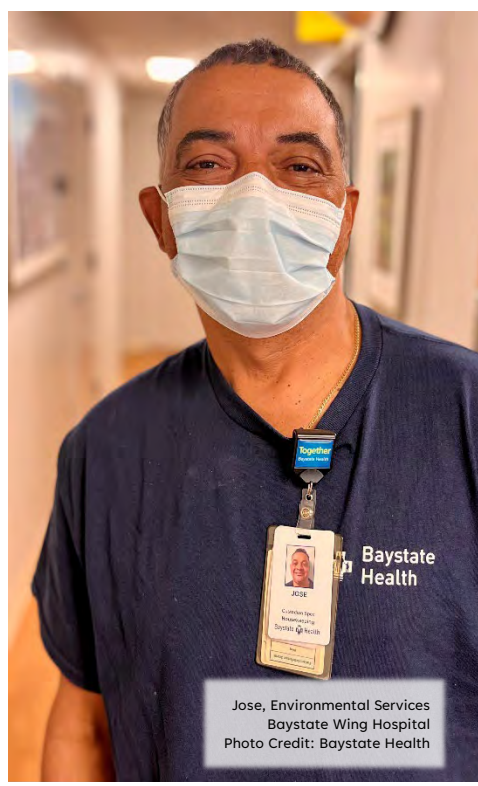
Dr. Seth Gemme, Chief of Emergency Medicine  
with Therapy Dog Merlot  
Baystate Wing Hospital  
Photo Credit: Baystate Health



Brandon Andrews, Mental Health Counselor  
2022 PETAL Award Recipient  
Baystate Wing Hospital  
Photo Credit: Baystate Health



Food Service Team  
Baystate Wing Hospital  
Photo Credit: Baystate Health



Jose, Environmental Services  
Baystate Wing Hospital  
Photo Credit: Baystate Health





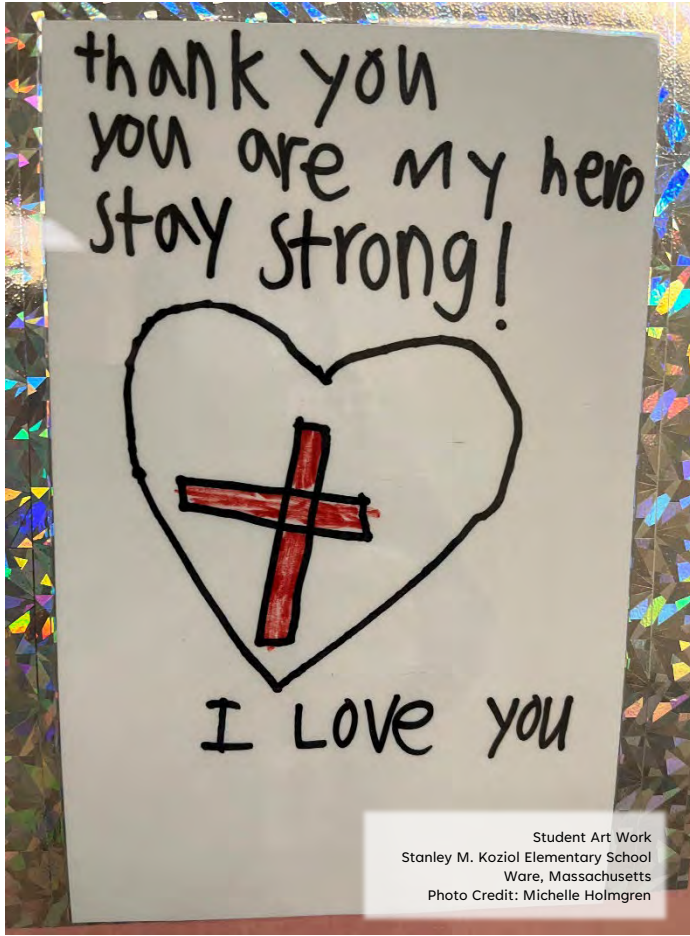
COVID Safety Campaign  
Baystate Wing Hospital  
Photo Credit: Baystate Health



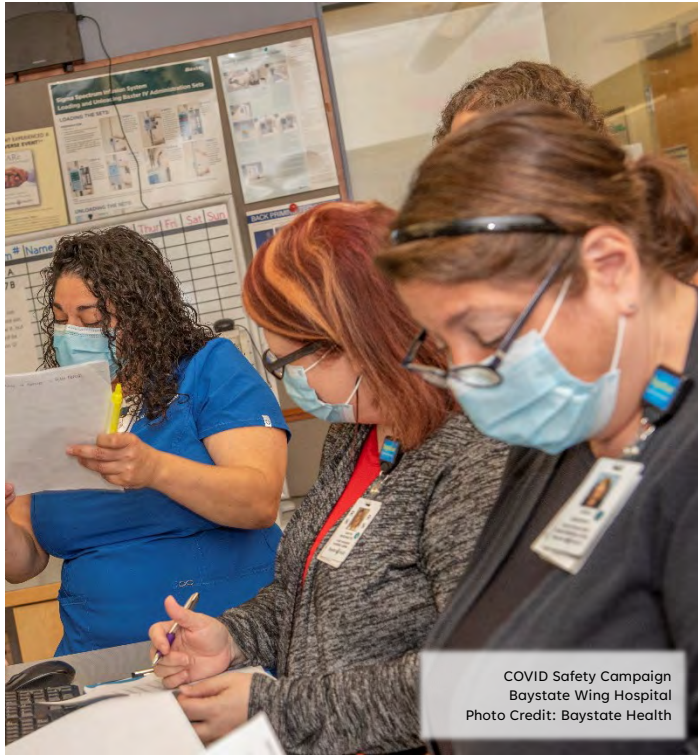
COVID Safety Campaign  
Baystate Wing Hospital  
Photo Credit: Baystate Health



COVID Safety Campaign  
Laboratory Team  
Baystate Wing Hospital  
Photo Credit: Baystate Health



Student Art Work  
Stanley M. Koziol Elementary School  
Ware, Massachusetts  
Photo Credit: Michelle Holmgren



COVID Safety Campaign  
Baystate Wing Hospital  
Photo Credit: Baystate Health

# 6. Prioritized Health Needs

## 6. Prioritized Health Needs

The communities served by Baystate Wing in parts of Hampden, Hampshire, and Worcester counties continue to experience many of the same prioritized health needs identified in Baystate Wing's 2019 CHNA. The COVID-19 pandemic exacerbated many of the existing inequities related to these needs. Several prioritized needs received deeper focus, as noted below.

The prioritized health needs for communities served by Baystate Wing are:

- **Social and Economic Factors or “Determinants” that Influence Health:**
  - Financial Health and Well-being (**Baystate Wing Focus Area – deeper dive**)
  - Violence and Trauma (**Baystate Wing Focus Area – deeper dive**)
  - Lack of Access and Affordability of Housing, Food, and Transportation (**Baystate Wing Focus Area – deeper dive**)
  - Climate Crisis
- **Barriers to Health Care Access:**
  - Insurance and Health Care Related Challenges
  - Limited Availability of Providers
  - Need for Increased Cultural Humility
  - Need for Transportation
  - Lack of Care Coordination
  - Health Literacy and Language Barriers
- **Health Behaviors and Outcomes:**
  - Youth Mental Health (**Regional Focus Area – deeper dive**)
  - Mental Health and Substance Use
  - Chronic Conditions
  - Infant and Perinatal Health
  - Alzheimer's Disease



## 6a. Regional Focus Area: Youth Mental Health

### *Overview*

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Youth mental health is about well-being, and it requires collective resources and responsibility to be achieved. Many factors contribute to a sense of mental wellness. Activities described in the quote above create a sense of connection and care and are critical prevention strategies.

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“Healthy mental health comes when you feel seen and heard, when you feel connected to something bigger than yourself—you belong at school, in your family, faith community, sports team, whatever. Healthy mental health comes when you move when you get fresh air. Healthy mental health comes when you feel that your gifts align with the world's needs, when you're engaged in things you are passionate about.”

*-- Youth Mental Health Key Informant Interview*

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Many other factors erode a young person's sense of well-being. For some, structural poverty and rural isolation are factors. For youth of color, LGBTQIA+ youth and other marginalized young people, mental well-being has been affected by racism and discrimination in communities and schools. As Figure 8 effectively conveys, the systems of care typically used in our society to treat mental health issues are not generally designed to be able to dig below the surface to unearth and address these root causes. Many providers may seek to understand physical or social environments affecting their client and desire to approach treatment from a holistic, integrated perspective. Yet the large systems they must operate within are rarely set up to support this approach.

Another facet of this issue is the variety of systemic, cultural, family, and community perceptions and responses to the topic of mental health. Having the language to talk about one's mental well-being, and feeling heard and supported by providers, peers, family members, and caring adults, influences how a young person experiences a mental health challenge.





## STRIVE RESULTS: The impact of racism and classism on minoritized youth

### Chains

"I think of it as the barriers that we can write down and say, this is something there's a reason why it's systemic, you know, there's something fundamental about how much how many things are against us. ...Being a first generation Puerto Rican, having to go through, not only, you know, dealing with my dad and the language barriers, just feeling that sense of less than...The memory that came back, was when I was trying to tell an instructor back in high school. I was like, yeah, so my name is \_\_\_\_\_. Like, that's how you say it. And he was like, no one's ever gonna listen to you. Cause your, your demographic, you're not going to get to who you want to. So I was like, that's a chain, but ima break it...So I thought of words, of the chain has to be broken with action, so you have to do something about it"

-Sandro, 16



### *Impact of COVID-19 on Youth Mental Health*

Past CHNAs found that youth across the region struggled with mental health issues and were increasingly susceptible to opioid use and overdose.<sup>48</sup> Prior to the pandemic, local leaders recognized that youth mental health was a serious public health issue and sought to address it. For this CHNA, the Coalition chose youth mental health as the focus area for shared assessment and action.

COVID-19 exacerbated this prioritized health need by increasing mental health challenges, taking away the prevention activities that support wellness, and straining already strapped mental health provider systems. The shift to remote schooling in March 2020 and the related lockdown to reduce transmission of COVID-19 had an enormous mental health impact on families. The sustained period of limited in-person interaction, online learning, social distancing, and masking affected children of all ages. This section focuses on youths aged 12–24.

*“I see youth coming to treatment to address symptoms related to increased anxiety, both generalized and social, depression, and for grief and loss support for relatives that may have died during the pandemic both from COVID and non-COVID diagnosis.”*

**—Mental Health Provider in Baystate Wing communities served, Key Informant Interview**

In the communities served by Baystate Wing, recent data attest to the mental strain of the pandemic on youth. The six school districts in Quaboag Hills conducted a Prevention Needs Assessment in 2021 that received 1,032 responses across 8th-, 10th- and 12th-grade students.

- It found that during COVID-19, at least half of students reported feeling anxious or nervous more often (51%), and a similar percentage (52%) experienced higher levels of stress in their family.
- About 45% of students reported that they felt lonelier, and the same proportion reported that they felt sadder or more depressed. Gender differences in response to these questions are substantial. For example, 57% of female students reported feeling sad more often compared with 29% of male students.<sup>49</sup>
- The survey results also showed that LGBTQIA+ students and students of color reported more acute poor mental health experiences than their counterparts. They were more likely to report that they were anxious and/or depressed most days, engaged in self-harm, or considered suicide. The disparity was particularly wide between LGBTQIA+-identifying students and those who did not identify as LGBTQIA+. <sup>50</sup>

Broader regional data revealed similar trends. The MDPH CCIS gave insight into the mental state of hundreds of young people in western Massachusetts early in the pandemic. The CCIS provides important information, yet readers should use caution when interpreting these findings as they are not generalizable to all youth in the region. In the Baystate Wing region, there were a limited number of youth respondents (less than 30). Therefore, we were not able to provide survey results specific to the area. We look to western Massachusetts estimates to provide insight about youth in the region. The following data are for all western Massachusetts youth respondents:

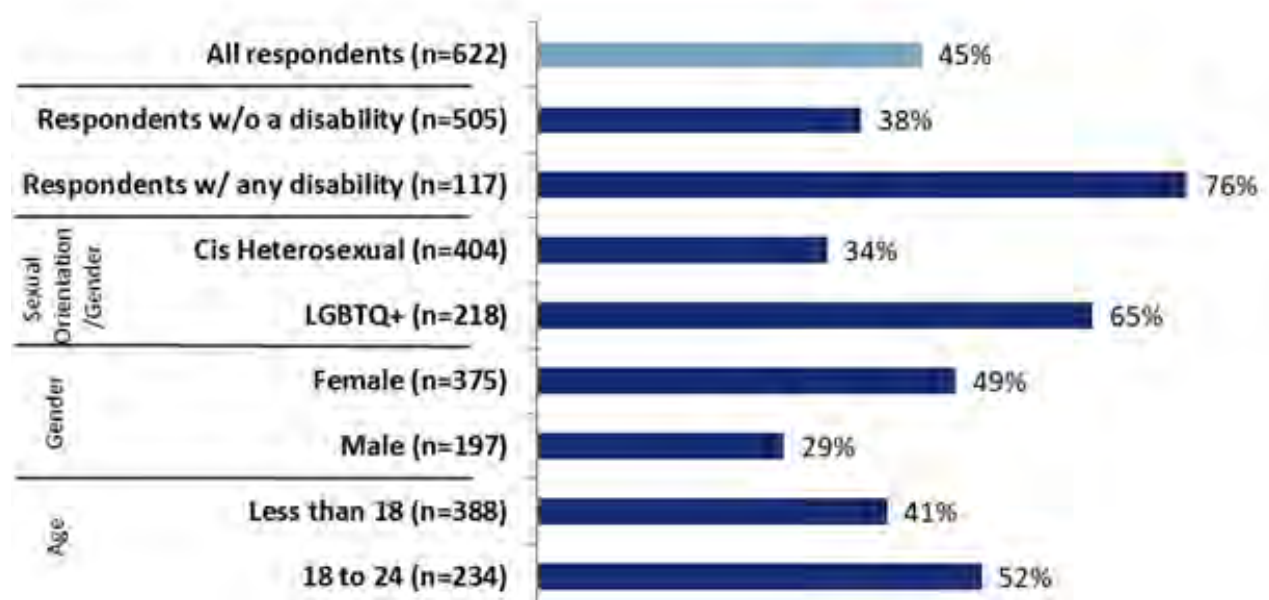
- Almost half of youths who responded to the survey (45%) reported feeling so sad or hopeless almost every day for two weeks or more in a row that they stopped doing

usual activities (Figure 9). The rate for rural respondents (n=104) was similar (44%). These high rates of depressive symptoms correspond with the high rates seen in youth surveys administered this past spring across the region.

- Inequities in mental health challenges that preceded the pandemic continued to manifest, especially among rural, LGBTQIA+, female, youths with a disability, and young adults 18–24 (see Figure 9).
- Particular inequities of note are that (1) respondents with a disability (n=117) were twice as likely as youths with no disability to show depressive symptoms and (2) LGBTQIA+ youths (n=221) were almost three times more likely than other youths to experience multiple symptoms similar to post-traumatic stress disorder (PTSD) due to the pandemic.
- When asked what types of mental health resources would be most helpful, youth CCIS respondents expressed the greatest preference for information on (1) how to access a therapist, (2) how to have an in-person meeting with a therapist, and (3) opportunities to use an app for mental health support.

**FIGURE 9: Western Massachusetts Youth Who Reported Feeling Sad or Hopeless, 2020**

*Youth up to age 24 who reported feeling so sad or hopeless almost every day for two weeks or more in a row that they stopped doing usual activities.*



**Source:** MDPH COVID-19 Community Impact Survey, 2020

***Tip for interpreting graph:** The percentages shown represent the percentage of that particular population that reported feeling sad or hopeless. For example, 49% of females reported feeling so sad or hopeless almost every day for two weeks or more in a row that they stopped doing usual activities.*

Youth up to age 24 who reported feeling so sad or hopeless almost every day for two weeks or more in a row that they stopped doing usual activities.

Key informant interviews with mental health providers and youth development professionals in the communities served by Baystate Wing confirmed high levels of anxiety, grief, and depression among the youths they serve. They also pointed to a regression in social skills and coping skills during the pandemic. Young people have missed several of the typical rights of passages and milestones (such as prom, graduation, starting or finishing college) due to the pandemic and missed opportunities to learn new skills (such as job-seeking). The key informants shared that some young adults have reported being afraid to get their driver's license while others are concerned about the lack of work, education, and transportation opportunities.

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“There are a lot of kids with a lot of concerns, a lot of things going on in their lives that they don't know how to deal with, and they're responding poorly. I don't know if that's through their actions, their behaviors, how they interact with each other, or substance use, or through violent activities, through bullying and things like that.”

—Youth Program Coordinator

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Key informants working in mental health and youth development in the communities served by Baystate Wing said that adolescents tend to turn to friends, teachers, other adults, and medical and mental health providers for help. Students will sometimes seek online help or resources for a friend who is struggling. Students also find support from relationships with sports teammates, coaches, activity leaders, and peers who are involved in sports and other organized activities. Despite observing some youths with less than age-appropriate coping skills, key informants frequently spoke to young people's

resilience. One clinician noted that students have been proactive and assertive in advocating for awareness and respect for themselves and other students.

Because more youths felt increasingly depressed and anxious during the pandemic, key informants working in mental health and youth development in the communities served by Baystate Wing cited the following factors that affected youths' ability to receive support and care.

- A shortage of providers posed barriers to receiving treatment. The pandemic has made access to mental health care an acute problem nationally. Key informants confirmed that there are not enough mental health providers for youth, particularly adolescents, in the Baystate Wing region, resulting in long waitlists for professional clinical services. For example, there are only two child mental health providers at the Griswold Center, one of whom is currently on leave as of this writing. There are also few child psychiatrists and psychiatric hospital beds in the Baystate Wing region, leaving children sitting in adult psychiatric emergency rooms or with other adult psychiatric patients. This can be damaging to youth, especially younger children.
- Financial hardship is a challenge that many families face in the Baystate Wing region, where there are socioeconomic disparities. Access to adequate medical and mental health support is challenging to those without resources.
- Transportation is a barrier for youths who are seeking mental health services. The public transportation system in the Baystate Wing region is extremely limited. Transportation challenges, coupled with the limited number of mental health providers and other supports in this region, would cause many youths to have to travel outside the Baystate Wing region to receive care. Telehealth and other online options help reduce these challenges.
- Insurance is also an issue for many families. Lack of insurance, high copays, a limited number of covered appointments or services, and/or a lack of knowledge about one's own insurance coverage can prevent parents and caregivers from seeking or getting help for their child(ren).
- Mental health stigma and other types of stigma continue to be a challenge. Key informants reported that adolescents have been heard saying at school, "I'm bipolar today" or "I'm acting schizo today" in a joking way. One key informant said that this is because "they're really afraid of talking about it, being labeled as

having anxiety, of being seen as having to seek help [get therapy] because it's stigmatized or labeled." Key informants also shared how stigma may occur and impact students. For example, student culture often stigmatizes talking about poor mental health or needing therapy. As a result, students may tend to share their feelings only with close friends at school and keep silent around other students or adults. Though some primary caregivers are supportive, parental stigma around mental health and their children's identity issues inhibit youths from getting support. This is especially true when depending on telehealth, which may not provide a private space to be honest with the provider. One clinician shared that a student receiving telemental health care was questioning her gender, and her parents pulled out of therapy because they overheard her therapy session, were completely against it, and didn't want the clinician calling the student by her preferred pronoun. According to a parent and family outreach coordinator, lack of parental support is common in Palmer, where most of the population is rural, White, and with limited income. Many of these parents lack familiarity with what their children need or where to access services.

- Schools in the communities served by Baystate Wing tend to have trouble recognizing the necessity of proper mental health and do not provide enough mental health support to their students, according to key informants. Some schools are cutting back on their counseling staff or have their guidance counselors provide adjustment counseling, for which they are not trained. Some parents in Palmer who have requested help for their children have received pushback from school administrators. Key informants reported that schools were not equipped to organize remote learning in ways that supported students and families or to address their mental health needs. As schools returned to in-person learning, they struggled to support students through the transition back to the classroom.
- Social media has played positive and negative roles for youth before and during the pandemic. Social media platforms have (1) helped normalize mental health issues, (2) given youth the language and outlet to talk about them, (3) connected them with others facing similar challenges, and (4) helped them access mental health resources.<sup>51</sup> Key informants noted that adolescents and young adults tend to seek help from other youths primarily through social media, where they can be anonymous and maintain privacy. However, if students engage in social comparisons, social media can be harmful. As one youth coordinator who is also a parent of teenagers said, from the perspective of a teen, "If someone else is posting how great their life is, then my life should be as great as theirs." Social



media, particularly Instagram, has been associated with a rise in poor self-image, depression, and suicidal ideation for girls.<sup>52</sup>

### *Assets, Resources, and Solutions*

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Key informants working in mental health and youth development in the communities served by Baystate Wing emphasized the need for more trained mental health providers and trained pediatricians who can recognize mental health issues at an early age and make appropriate referrals. They also advocated for an increase in peer counseling, peer support groups, and mentoring opportunities led by knowledgeable and supportive adults. For instance, young adults could mentor high school students by sharing how they navigate adulthood and by helping students think about their goals, next steps, and needed skills. Resources highlighted by these key informants include:

**Health Care Programs.** Baystate Behavioral Health–Griswold Center provides outpatient mental health and addiction recovery services for all ages. Services include psychopharmacology, diagnostic services, therapy (individual, couples, family, and group), and the Operating Under the Influence Second Offender Program in partnership with the court. The Griswold Center has an affiliation with the Population-based Urban and Rural Community Health (PURCH) Program sponsored by the UMass Chan Medical School and Baystate. This physician training program focuses on population health, health care disparities, and health issues specific to urban and rural communities. Students have the opportunity to learn from faculty who are also local community members and from local underserved populations. Many of their clinical internships also take place in community health centers. Benefits of collaboration with PURCH include (1) training physicians and psychiatrists to work specifically with the communities in the Baystate Wing region and (2) increasing the number of physician and psychiatrist graduates who may stay in western Massachusetts to complete their residencies at Baystate Health. Baystate Health is partnering with Kindred Healthcare to build a behavioral health and psychiatric hospital in Holyoke, which will increase the number of mental health providers and beds in the region.

**Youth Programming and Prevention Supports.** Several key informants stressed the need for restoring and augmenting universal strategies for prevention that have eroded during the pandemic. Youth centers and community centers help students connect with each other and adults and provide many opportunities for emotional support and growth. Ongoing student activities in schools and communities are important, such as sports, scouts, theater, robot-making teams, and youth groups such as the Gender Sexuality



Alliance (GSA). Peer support groups at school provide students with a safe and supportive place to express themselves and help each other. Leadership opportunities in and outside school matter. For example, Palmer High School has a student-run school store that also doubles as a small-scale “survival center” for students. Opportunities such as these can help build students’ mental health, resilience, and empowerment.

**Community Organizations and Partnerships.** Faith communities can be a potential support to adolescents and young adults as well. Local industry-led programs, such as local agricultural programs or food policy councils, highlight the importance of fresh and healthy food, gardening, fresh air, exercise, and their impact on mood. The Quaboag Hills Substance Use Alliance (QHSUA) and other community groups address substance use and mental health through research, programming, and education (eg, school curricula). The QHSUA has also worked with PURCH in its research efforts. Increased collaboration among the QHSUA, PURCH, community service providers, and schools in the Baystate Wing region would benefit providers and recipients of mental health services in this region.

**Support for Transgender and Gender-Diverse Youth.** TransHealth Northampton provides an array of health and mental health services to adults and youth, including through telehealth. The organization serves a wide geographic area and currently has at least a dozen patients from communities served by Baystate Wing.

**State Initiative.** In November 2021, the Massachusetts Senate passed the *Mental Health ABC Act 2.0: Addressing Barriers to Care*, which is comprehensive legislation to reform how mental health care is delivered in Massachusetts.<sup>53</sup> The legislation will aid in the development of a tele-behavioral health pilot program for high-school-age youth and engage in studying access to culturally competent care.

## 6b. Deeper Dive: Financial Health and Well-being

Financial well-being is defined as a state of being where a person can meet all of their financial obligations, feel secure about their financial future, and be able to make decisions that allow them to enjoy life.<sup>54</sup> Though similar to financial well-being, financial health is the dynamic relationship between a person’s economic resources as they impact a person’s physical, mental, and social well-being.<sup>55</sup> Knowing that financial security and health are linked makes financial health and well-being a prioritized health need for Baystate Wing.

A nuanced component of financial health and well-being, however, is the context of an individual's life and the environments where people live and work.<sup>56</sup> Communities served by Baystate Wing differ in terms of population density and infrastructure. Access to and availability of employment opportunities offering a living wage, homeownership, and access to the internet varies across the region. Average income and wealth also vary tremendously across the region and even within the same municipality. These inequities are partly due to historical factors, such as policy choices that discriminated against those living in rural poverty, residents of color and others, private disinvestment, and present-day forces, including the COVID-19 pandemic. This section includes information on savings, financial literacy, homeownership, workforce development, and unemployment. Unfortunately, limited local data are available; we use national, statewide, and regional data when local data are not an option.

Of the priority populations for Baystate Wing, older adults are a population that experiences financial insecurity. Though service-area-specific data are limited, nationally one in three adults age 65+ are financially insecure,<sup>57</sup> and in Massachusetts 9.1% of adults age 65+ are financially insecure.<sup>58</sup> Financial insecurity of older adults is an important health issue, especially as housing and health care costs rise. A lack of sufficient finances may lead to a lack of nutrition and challenges accessing transportation and other basic needs.

### *Savings*

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Saving money is a first step to financial security because it provides a safety net for the uncertainties of life. The most recent Survey of Consumer Finances found that 36% of White families have enough savings to cover six months of expenses compared with 14% of Black families and 10% of Latino/a/e families. Black families have about \$2,000 in liquid savings, money they have immediate access to, whereas White families have around four times that amount.<sup>59</sup> An additional aspect of savings is retirement savings, and in 2019 around half of households headed by individuals age 55+ had no retirement savings.<sup>60</sup> A study conducted by Northwestern Mutual found that people who set goals, especially regarding saving money, feel happier about their lives. In addition, the Consumer Federation of America found that people with limited income who created saving goals and had spending plans were more likely to have money saved for emergencies.<sup>61</sup>

### *Financial Literacy*

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Financial literacy is defined as having the skills and knowledge to manage personal finances so that a person can fulfill their goals.<sup>62</sup> It includes understanding financial choices, making informed judgments, and taking effective actions, such as planning for the future, spending wisely, saving for retirement, paying for a child's education, and managing challenges associated with life events such as a job loss. For example, individuals need to understand how to budget, comprehend personal income taxes, and understand the concept of budgeting to make wise decisions with money.<sup>63</sup>

With funding from Baystate Health's Better Together grants program, the Quaboag Valley Community Development Corporation (QV CDC) recently started The Financial Fitness Club program that will take place over a three-year period. The program works with residents with limited income in the communities served by Baystate Wing. The Financial Fitness Club is a financial literacy program helping people open savings accounts and make routine deposits to reach a financial goal. The program is new, but the QV CDC is reporting success for the participants that are enrolled.

### *Homeownership*

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For many, the primary way to build wealth is through homeownership. Homeownership can be a path to wealth and has the potential to be more stable than renting.<sup>64</sup> For households considered middle-income, home equity is the largest financial asset and represents 50% to 70% of net wealth.<sup>65</sup> In the communities served by Baystate Wing, the homeownership rate (78%) is higher than the state's rate (68%), and the median monthly mortgage is \$1,385, whereas the state's median monthly mortgage is \$1,838. In addition, the median monthly rent in the region is \$922, and the state's median monthly rent is \$1,331.<sup>66,67</sup>

### *Employment and Income*

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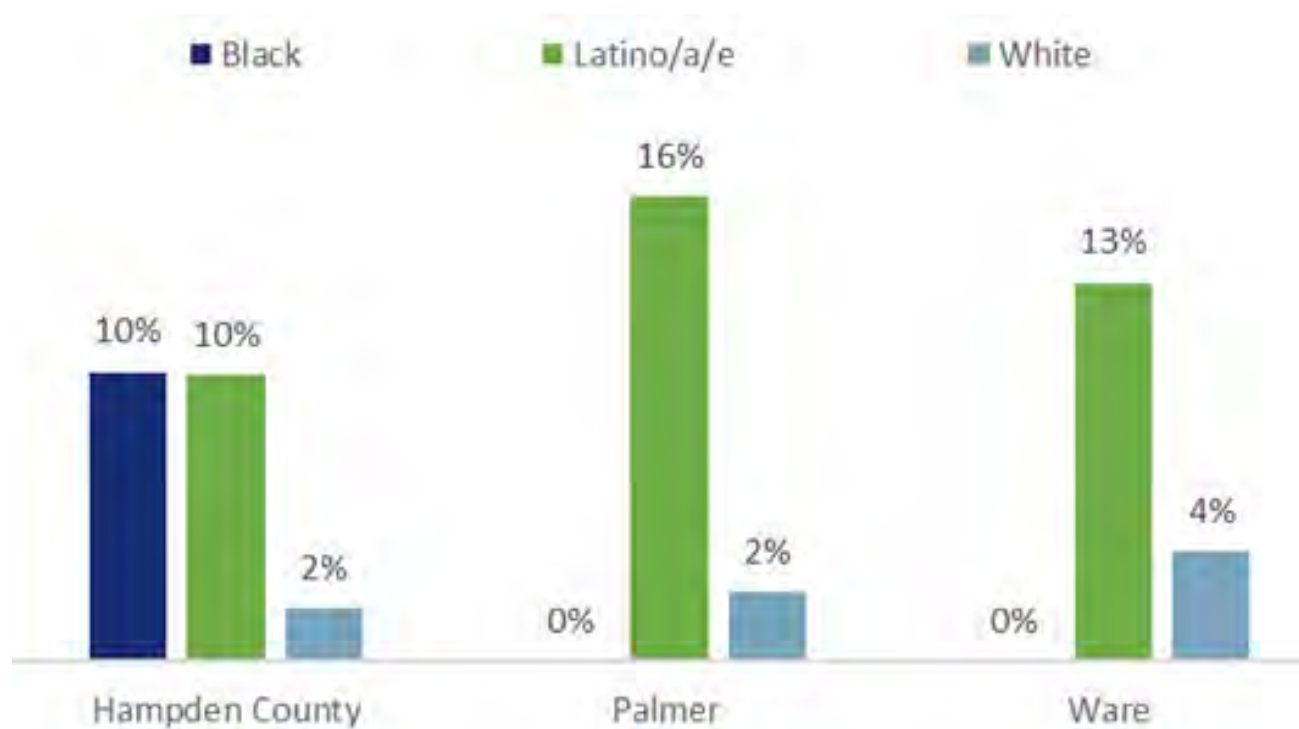
In communities served by Baystate Wing, many residents struggle with a lack of resources to meet basic needs. The connections between poor health and poverty, low levels of income, and access to fewer resources are well established. People with limited income are more likely to be negatively impacted by chronic stress associated with challenges in securing basic necessities that support health, such as housing, food, and access to physical activity.

- The unemployment rate in the communities served by Baystate Wing is 5% for those 16 and older.<sup>68</sup> Refer to Figure 10 for unemployment rates by race/ethnicity

in Palmer and Ware, which shows worse rates for Latino/a/e residents relative to White residents.

- The median household income in the service area is \$96,067.69.

**FIGURE 10: Unemployment Rates by Race/Ethnicity in Hampden County, Palmer, and Ware, 2015–2019**



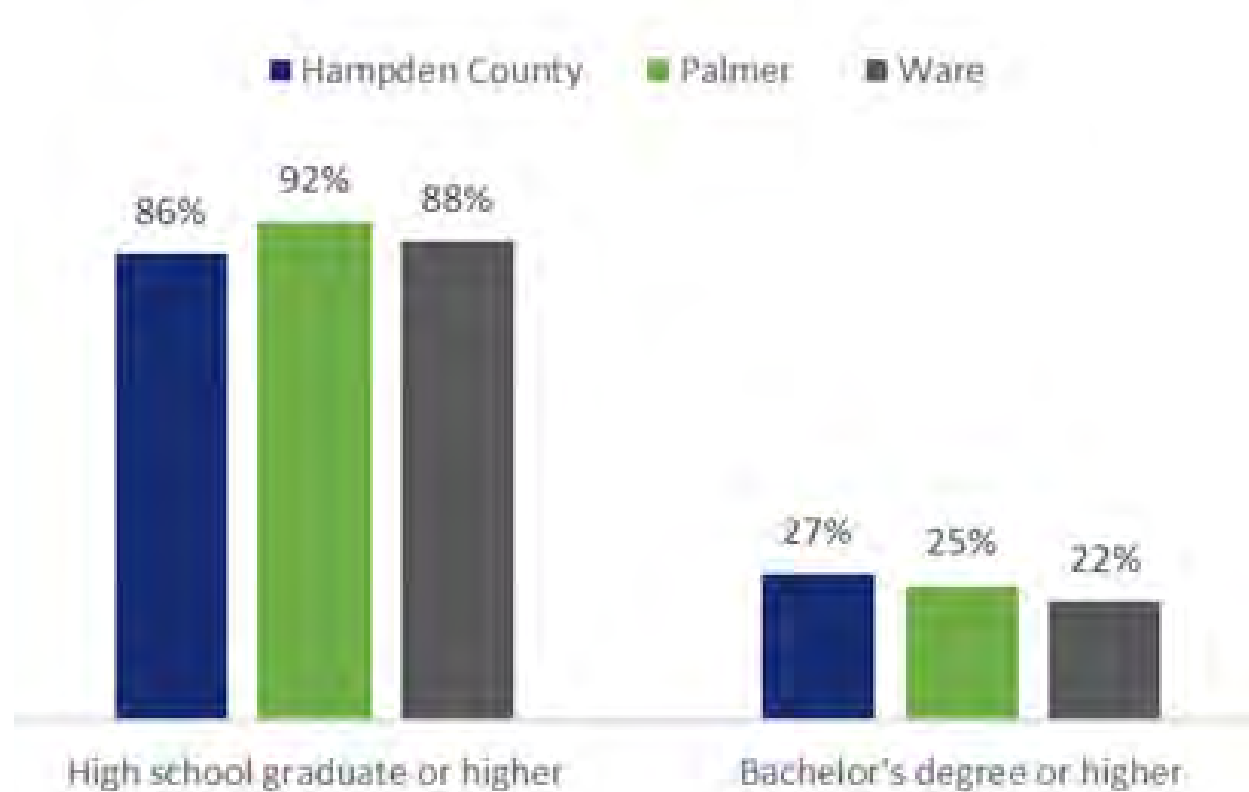
Source: ACS 2015–2019

### *Educational Attainment*

Educational attainment is a building block for health as it contributes to longevity, sufficient resources to meet basic needs, health literacy, and access to physically safe jobs. Levels of education are strongly correlated with employment status, the ability to earn a livable wage, and many health outcomes.<sup>70</sup> Rural communities and small towns experience educational challenges. Declining populations of school-age children and high operating and transportation costs have forced many rural school districts to consider cost-cutting measures.<sup>71</sup> These may include scaling back education enrichment, closing schools, or merging with other districts. Inequitable funding for public schools and residential segregation also perpetuates educational disparities today. Despite these

potential impacts, 91% of the students in the communities served by Baystate Wing graduated from high school, including 92% in Palmer and 88% in Ware.<sup>72</sup> On the other hand, Palmer and Ware have smaller percentages of residents with a bachelor's degree or higher compared with Hampden County (see Figure 11).

**FIGURE 11: Educational Attainment by Geography, 2015–2019**



*Source: ACS 2015–2019*

### *Digital Equity*

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During the pandemic, many aspects of people's lives transitioned to being online. Schools implemented online learning, some employers switched to remote work, and many community services required the internet for access. Digital technology and access to affordable and reliable broadband is a vital part of our society. Technology and the internet show up in every part of our daily lives: connecting with family and friends, employment, finding housing, connecting with services and health providers, education, and much more. However, as technology grows, so does the digital equity divide (the

disparity in access to digital technologies—limited access to devices, unaffordable or unreliable broadband, limited technology knowledge).

A 2021 report from the Alliance for Digital Equity<sup>73</sup> examined the digital divide that exists in three western Massachusetts counties: Hampden, Franklin, and Hampshire. The report found an ongoing digital divide for residents in western Massachusetts and brought to light three barriers that exacerbate the digital divide: (1) lack of internet connectivity, (2) lack of equipment, and (3) lack of digital literacy.

Digital inequities mirror other inequities, such as those related to structural poverty, race, educational attainment, and age, and they have widened because of the pandemic. Digital equity is achieved when all people have equal access to digital equipment, access to the internet, and have digital literacy. Digital equity is vital for participation in all facets of society—socialization, employment, housing, education, and essential services.

#### **Lack of Internet Connectivity**

- Lack of internet connectivity is the top barrier to digital equity for those living in rural areas, children, and youth, and those with limited income.
- Cost of the internet can prevent residents, especially those impacted by structural poverty, from accessing the internet. This is a growing concern with rising costs of housing, food, and transportation.

#### **Lack of Technology**

- Over 1 in 5 homes in Palmer (22%) and Ware (23%) do not have a computer.
- Lack of access to digital equipment is the primary barrier to digital equity for people who are unhoused or experiencing homelessness, people with physical disabilities, Black residents, Indigenous residents, and people of color.
- Cost of the equipment is the main cause for a lack of technology.

#### **Lack of Digital Literacy**

- A lack of digital literacy is the primary barrier to digital equity for older adults, people with mental, intellectual, and developmental disabilities, and people who are English language learners.

In 2022, focus group participants spoke about the impact of the digital world on older adults in western Massachusetts. Participants shared that older adults have trouble accessing services and social interaction, especially during COVID-19, because it requires older adults to be digitally literate.

*“Cost seems to be the number one reason for all ages to be prevented from having both the equipment and access to the internet to use that equipment.”*

**- 2022 Basic Needs Focus Group Participant from Monson, Massachusetts**

Because the internet is ingrained in our daily lives, the digital divide can increase isolation from others, create financial strain because employment or access to benefits requires reliable internet connectivity, and lead to people delaying care or leaving health issues unresolved.<sup>74</sup> During the pandemic, many services and educational opportunities required digital technology. A 2020 Pew Research Center study<sup>75</sup> found disparities for youths participating in the education system:

- 43% of lower-income parents said their children will have to do schoolwork on their cellphones.
- 40% of parents said their child would have to use public Wi-Fi to finish schoolwork because there is not a reliable internet connection at home.
- 1 in 3 parents (36%) said their children will not be able to complete schoolwork because they do not have access to a computer at home.

### ***Resources and Assets***

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- The QVDC recently started The Financial Fitness Club program that will take place over a three-year period. The Financial Fitness Club is a financial literacy program helping people open savings accounts and make routine deposits to reach a financial goal.
- Monson Savings Bank has multiple programs to help individuals with financial wellness. These programs include, but are not limited to, information on using credit cards, financing college, and financial literacy, and first-time home-buying workshops.
  - More information can be found here: [www.monsonsavings.bank/plan-learn/financial-wellness](http://www.monsonsavings.bank/plan-learn/financial-wellness)

## **6c. Deeper Dive: Violence and Trauma**

Violence and trauma show up in society in a variety of ways, either through interpersonal violence or collective violence.<sup>76</sup> Interpersonal and collective violence affect health directly, via death and injury, and indirectly through the trauma that affects mental health



and healthy relationships.<sup>77</sup> Interpersonal violence includes sexual and intimate partner violence, childhood physical and sexual abuse and neglect, emotional abuse, and elder abuse and neglect. Collective violence and trauma, such as police brutality and gun violence, affect the health of communities.

For 2022, Baystate Wing prioritized intimate partner violence (IPV) or domestic violence (DV) and youth dating violence. Analysis of any type of violence requires us to consider inequities and the intersections of inequities across race, gender, and other categories. As noted in the Guiding Principles section, some groups have asserted power over others for generations, including over their bodies and through violent control. This manifests today in violence toward women, children, people of color, people with limited income, those who identify as LGBTQIA+, and people living with a disability.<sup>78</sup> These victims of violence, especially if they live in a rural community, frequently face barriers to accessing resources, including lack of health care providers, limited or no insurance, lack of transportation, unstable housing, and being in an unsafe location.<sup>79</sup> Many of these barriers are rooted in the same systems that have led to higher rates of violence and impact how survivors of violence can receive care.

### *Intimate Partner Violence (IPV)*

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The National Coalition Against Domestic Violence defines domestic violence (also known as intimate partner violence) as the willful intimidation, physical assault, battery, sexual assault, and/or other abusive behavior as part of a systematic pattern of power and control perpetrated by one intimate partner against another.<sup>80</sup>

Intimate partner violence is a major public health issue across the U.S.<sup>81</sup> One in four women experience physical abuse, sexual abuse, or stalking in their lifetime.<sup>82</sup> In addition, evidence shows that Black, Indigenous, and other communities of color experience higher rates of sexual and intimate partner violence regardless of gender.<sup>83</sup> One limitation of any data on IPV is that many studies ignore the motivation for violence, so violence out of self-defense and violence meant to dominate and control are evaluated together. Data also shows that:

- 69% of women experience any form of IPV before age 24.<sup>84</sup>
- 44% of lesbian women, 61% of bisexual women, 26% of gay men, and 37% of bisexual men experience physical IPV, sexual IPV, or stalking over the course of their lifetime.<sup>85</sup>

- 57% of transgender and nonbinary individuals say they feel unsafe reporting IPV to the police, and 58% have experienced violence at the hands of law enforcement.<sup>86</sup>

There has been a focus on understanding risk and protective factors for perpetrating IPV.<sup>87</sup> There is not nearly as much research that seeks to understand the nuanced experiences of IPV survivors, especially at the intersection of identities (eg, race and sexual orientation).<sup>88</sup> Also, most research focuses on female victims and male perpetrators of IPV. Further research and data about victims and perpetrators in different populations are needed to understand better and prevent IPV. In addition, IPV is a crime that often goes unreported, with the Department of Justice estimating that in 2018 only 47% of cases of IPV were reported to the police.<sup>89</sup>

Underreporting happens for cultural, personal, and safety reasons, but in communities that have been and still are oppressed, underreporting is often due to distrust in the criminal justice system.<sup>90</sup> Survivors of IPV are at risk for adverse health outcomes such as chronic diseases, substance use, PTSD, traumatic brain injuries, and poor relationships with others (family, friends, coworkers).<sup>91</sup> Unfortunately, IPV was exacerbated during the pandemic.<sup>92</sup>

### *IPV in Massachusetts and the Region*

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IPV is a serious public health issue for the communities served by Baystate Wing, leaving lasting impacts on survivors and their families. In Massachusetts, 1.6 million people,<sup>93</sup> including 34% of women and 32% of men, report experiencing physical IPV, sexual IPV, and/or stalking in their lifetime. IPV is a regional crisis as well and has been worsened by the pandemic. CCIS data show that the four counties in western Massachusetts—Berkshire, Franklin, Hampden, and Hampshire—reported 1.5 to 3 times more IPV than other counties in Massachusetts.

Nationally, rates of IPV between rural and suburban/urban areas are comparable, but a review of 63 studies suggests that IPV victims in rural areas have worse health outcomes due to limited resources or lack of transportation. This research also suggests that IPV perpetration is more chronic and severe in rural areas.<sup>94</sup> A key informant interview conducted with a survivor of IPV suggests that these findings are consistent with the communities served by Baystate Wing. This key informant reports limited transportation options in the area and a lack of providers and services related to physical and mental health.

Police and court statistics also indicate that IPV in communities served by Baystate Wing needs to be addressed.

- District Court data from the communities served by Baystate Wing as of the fiscal year to date (FYTD) (August 5, 2022) compared with the same time span for 2020, are as follows:
  - East Brookfield District Court reports a 13% increase in harassment and restraining order filings (361 FYTD in 2020 vs. 411 FYTD in 2022).
  - Eastern Hampshire District Court reports a 26% increase in harassment and restraining order filings (349 FYTD in 2020 vs. 438 FYTD in 2022).
  - Palmer District Court reports a 9% increase in harassment and restraining order filings (427 FYTD in 2020 vs. 469 FYTD in 2022).<sup>95</sup>

There was an initial decrease in filings during the pandemic, but it does not necessarily indicate a decrease in IPV occurrence and is likely due to the pandemic impacting people's ability to file restraining and harassment orders safely.<sup>96</sup>

### *Youth Dating Violence*

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Youth dating violence, also referred to as teen dating violence, is a form of IPV that occurs between adolescents in romantic or consensual relationships. In the U.S., it is estimated that 1.5 million high school students are abused by partners every year.<sup>97</sup> This violence includes psychological and sexual abuse, harassment, or stalking of anyone age 12–18.<sup>98</sup> Though youth dating violence primarily focuses on children under age 18, young adults in college face high rates of sexual violence and IPV. Female students and students that identify as LGBTQIA+ are at higher risk of physical and sexual dating violence than their peers. Youth dating violence has short- and long-term consequences for young people, including experiencing depression and anxiety, engaging in unhealthy behaviors such as substance use, bullying and other antisocial behaviors, and suicidal thoughts.<sup>99</sup> This is in addition to all other negative health outcomes IPV victims may experience. Prevalence data show:

- In the U.S., an estimated one in 11 female teens and one in 15 male high school students experience physical dating violence.<sup>100</sup>
- One in nine female high school students and one in 36 male students experienced sexual dating violence.<sup>101</sup>

- Women aged 18–24 who are in college are three times more likely to experience sexual violence than same-age women who are not in college. Similarly, men aged 18–24 who are in school are five times more likely than men the same age who are not in school to experience sexual violence.<sup>102</sup>
- More than one in five (21%) transgender, queer, and nonbinary college students have experienced sexual assault,<sup>103</sup> and according to the U.S. National Transgender Survey, 47% of respondents reported experiencing sexual assault during their lifetime.<sup>104</sup>

In addition to violence that may occur in person, the violence that occurs via technology is critical to consider. A report published by the Urban Institute found that 26% of youths in a relationship said they experienced some form of cyber dating abuse.<sup>105</sup> Intervening in and preventing youth dating violence can be achieved through many avenues. Students need to feel supported and empowered through programs that focus on attitude, skills, and knowledge about healthy relationships.<sup>106</sup>

### *Youth Dating Violence in Massachusetts and the Service Area*

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In Massachusetts, youth dating violence has been identified as an area of concern. The Health and Risk Behaviors of Massachusetts Youth Survey from 2019 (n=6,768) found that:

- 7% of high school students reported being a victim of physical dating violence in the past year.
- 6% of high school students reported being a victim of sexual dating violence in the past year.
- 10% of high school students reported that they have been forced to have sexual intercourse.<sup>107</sup>

In the communities served by Baystate Wing youth dating violence persists. The 2021 Quaboag Hills Region Prevention Needs Assessment Survey was administered in six school districts across the communities served by Baystate Wing, with a response rate of 58%. In this survey many questions were asked about dating abuse:

- 6% of 12th-graders reported a feeling of regret about a sexual situation involving alcohol.
- When asked to identify unhealthy aspects of relationships they had experienced:

- 9% of students reported feeling afraid of a partner.
- 7% of students reported having agreed to unwanted sexual activity.
- 7% of students reported being forced into sexual activity.<sup>108</sup>

Though the response rate of this survey is lower than previous years (67% in 2019), the responses show that many youth in the communities served by Baystate Wing experience dating violence, and work needs to be done to prevent this abuse.

### *Impact of COVID-19 on Intimate Partner Violence*

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COVID-19 had repercussions for residents dealing with any kind of violence. During the pandemic, being able to leave one's home and spend time outdoors was a welcome opportunity for some families but a risk for those in communities with high levels of violence. Also, the pandemic affected those at risk of IPV, elder abuse, and child abuse, by forcing at risk residents to stay indoors with potentially dangerous household members. Based on a review of 12 U.S. studies, domestic violence increased by 8% during pandemic-related lockdowns.<sup>109</sup> CCIS data show that adult residents in rural areas of Massachusetts were more likely than residents in urban areas to have experienced IPV in the first six to eight months of the pandemic. For these CCIS findings, it is important to note that conditions during the pandemic may have exacerbated the experience of people experiencing IPV, impacted their ability to participate in the survey, and/or respondents may have been afraid to respond honestly. Therefore, this estimate may be an underrepresentation of people's experience in the region. CCIS data found:

- 10% of respondents requested resources for dating violence and/or domestic violence (n=144).
- 10% requested services for people who have been abusive toward their partners, who want help to stop, or services for people who have done unwanted sexual things to others and who want help to stop.

An advocate for survivors of IPV in the communities served by Baystate Wing reported housing, mental health, and transportation as being the biggest challenges for survivors of IPV and sexual assault throughout the pandemic. As reported by the advocate:

- Housing for survivors during the pandemic was scarce because shelters were full, and rent was unaffordable. If an abuser was the head of the household and a restraining order required them to leave the house, sometimes they forced the

survivor to pay rent, which was extremely difficult. Many people's stimulus checks went to paying late bills, not their rent.

- Mental health of individuals was also greatly impacted. Waitlists for counseling services increased in length. When the Department of Children and Family Services told people they or their children needed counseling, many people were unable to get an appointment. In addition, people may not have insurance that covers the services they need or money to pay out of pocket.
- Reliable and accessible transportation is crucial for survivors. People need to get to medical and dental appointments, work, and Department of Transitional Assistance meetings. During the height of the pandemic, the only public transportation available was the Quaboag Connector, a community shuttle service, but the number of passengers allowed on buses and the number of buses running were greatly reduced. A survivor of IPV also reported that public transit is triggering for many individuals due to the close proximity with strangers because abuse breaks down people's ability to trust others.

A survivor of IPV commented on the challenges of the judicial system during the pandemic. Many cases were dropped, and the already slow legal system was delayed even more due to the pandemic. Court proceedings and communications had to occur either over Zoom or email, which are less secure than in-person communications and hearings, and not everyone has equal access to digital tools.

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“All of the families I work with are so stressed and sick of COVID, and we as service providers are also close to burnout ourselves, so it is a really difficult place for us and our program participants to be. We try to stay positive, but there is often a lot of hopelessness to deal with.”

*-- Social service provider from Quaboag Hills Community Coalition*

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### *Resources for Violence and Trauma*

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- **National Crisis Hotlines:**
  - SafeLink—a 24/7 intimate partner violence crisis hotline, (877) 785-2020
  - National Domestic Violence 24/7 crisis hotline, (800) 799-7233
  - National Sexual Assault 24/7 crisis hotline, (800) 656-4673
- **Alianza** (formerly Womanshelter/Compañera) helps, supports, and empowers those whose lives are affected by battering and abuse. Alianza offers a 24/7 crisis hotline, (413) 536-1628. [www.alianzadv.org](http://www.alianzadv.org)
- **413Cares** is an online database of community resources. Residents who need help finding resources for violence and trauma can go to the 413Cares website [www.413cares.com](http://www.413cares.com) and search for “domestic violence” or “trauma” and their ZIP code.
- **Ware River Valley Domestic Violence Task Force (WRVDVT)**— currently serves Ware, Warren, and Hardwick. The mission of the task force is to prevent, and respond to, domestic violence in these towns.
  - This task force is funded by a grant awarded to the towns of Ware and Warren by the U.S. Department of Housing and Urban Development through the Massachusetts Department of Housing and Community Development’s Community Development Block Grant (CDBG) program.
  - For more information visit: [www.waredvtaskforce.org](http://www.waredvtaskforce.org).
- **Palmer Domestic Violence Task Force (PDVTF)**— promotes education and awareness in the community while empowering, educating, and providing resources to those who have been affected by domestic violence and/or IPV in Palmer or those who have found safety in Palmer.
  - This task force is funded by a grant awarded to the Town of Palmer by the U.S. Department of Housing and Urban Development through the Massachusetts Department of Housing and Community Development CDBG program.
  - For more information, visit [www.townofpalmer.com/domesticviolence](http://www.townofpalmer.com/domesticviolence).
- **10 to 10 Helpline** is a new anonymous, confidential helpline run by the Pioneer Valley Planning Commission, Behavioral Health Network, Growing a New Heart, and the MDPH. The hotline operates from 10 a.m. to 10 p.m. 365 days a year. The hotline is designed for those who may want to or do abuse their partner to call and seek help. In addition, friends, family, community leaders, and anyone else who is concerned about someone perpetrating abuse can call in a referral.



- The number of the 10 to 10 Helpline is (877) 899-3411
- For more information, visit [www.10to10helpline.org](http://www.10to10helpline.org)

## 6d. Deeper Dive: Lack of Resources to Meet Basic Needs

Lack of access and resources to meet basic needs continues to be a prioritized need for communities served by Baystate Wing. Access to and affordability of basic needs such as housing, food, and transportation are key building blocks of health. Taken together, they may account for the majority of one's expenses. People with limited resources often must make trade-offs in meeting these basic needs that may lead to avoidable health risks that become unavoidable because of inequities in our economic system.

Communities served by Baystate Wing differ in terms of population density and infrastructure. Access to and availability of basic needs varies across the region. Average income and wealth also vary tremendously across the region, and even within the same municipality, affecting residents' ability to access and afford housing, food, and transportation. These inequities are partly due to historical factors such as structural poverty, policy choices that discriminated against rural communities, residents of color, and others; private disinvestment; and present-day forces, including the COVID-19 pandemic.

The impacts of the pandemic on basic needs are discussed throughout this section. Overall, the pandemic spurred major supply shortages across the economy, contributing to the first major rise in inflation in decades, all at a time when many people's jobs became precarious, contributing to economic strains and uncertainties. For example, unemployment rates in April 2020 jumped to 18% in Hampden County, 13% in Hampshire County, and 16% in Worcester County (see Figure 7).<sup>110</sup> Many of the community leaders that participated in focus groups and Community Chats for this CHNA mentioned concerns about access to and affordability of basic needs. A local community-supported agriculture (CSA) representative noted the inflation of food prices due to COVID-19 and the challenges of the economic fluctuation in our region for food growers, suppliers, and their patrons.

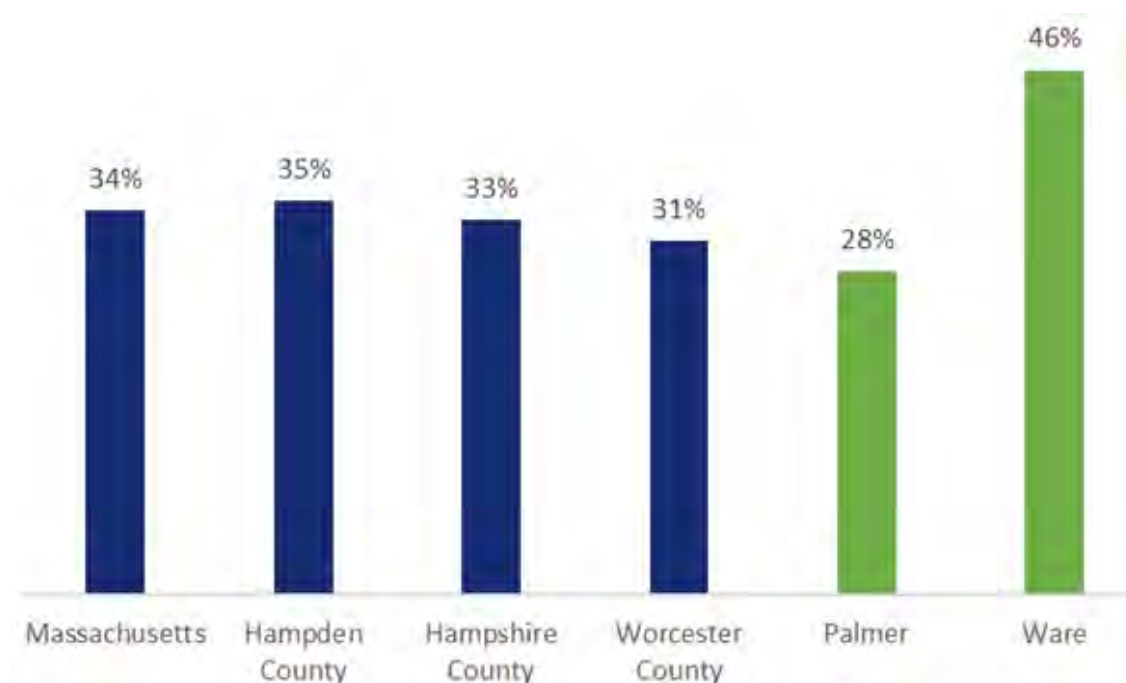
### *Housing and Homelessness*

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Many of the housing challenges that existed when the last CHNA was written persist today. About one in three households in Hampden (35%), Hampshire (33%), and Worcester (31%) counties qualify as housing-cost burdened, meaning they spend more than 30% of their income on housing.<sup>111</sup> Almost half of residents in Ware (46%) experience a housing

cost burden, far exceeding the regional rates (Figure 12). A white paper on rural housing issues in the state identified rural housing cost and access issues.<sup>112</sup> These may have been exacerbated by rising home prices in the region spurred by the pandemic. People of color are a small part of the population in the region, but it is still important to examine and understand the structural inequities they may have experienced. A Greater Springfield Regional Housing Analysis<sup>113</sup> published by the UMass Donahue Institute in 2021 found that housing cost burden was greater for people of color in the Pioneer Valley compared with White people. This is likely due in part to much lower increases in median income among Black and Latino/a/e residents compared with White people (increase in median income from 2013 to 2018: White 20%, Black 7%, Latino/a/e 10%). Also, a greater proportion of people of color rent than own.

**FIGURE 12: Housing Cost-Burdened: Monthly Housing Costs as a Percentage of Household Income in the Past 12 Months (30% or More) in Hampden, Hampshire, and Worcester Counties and Select Communities Served by Baystate Wing**



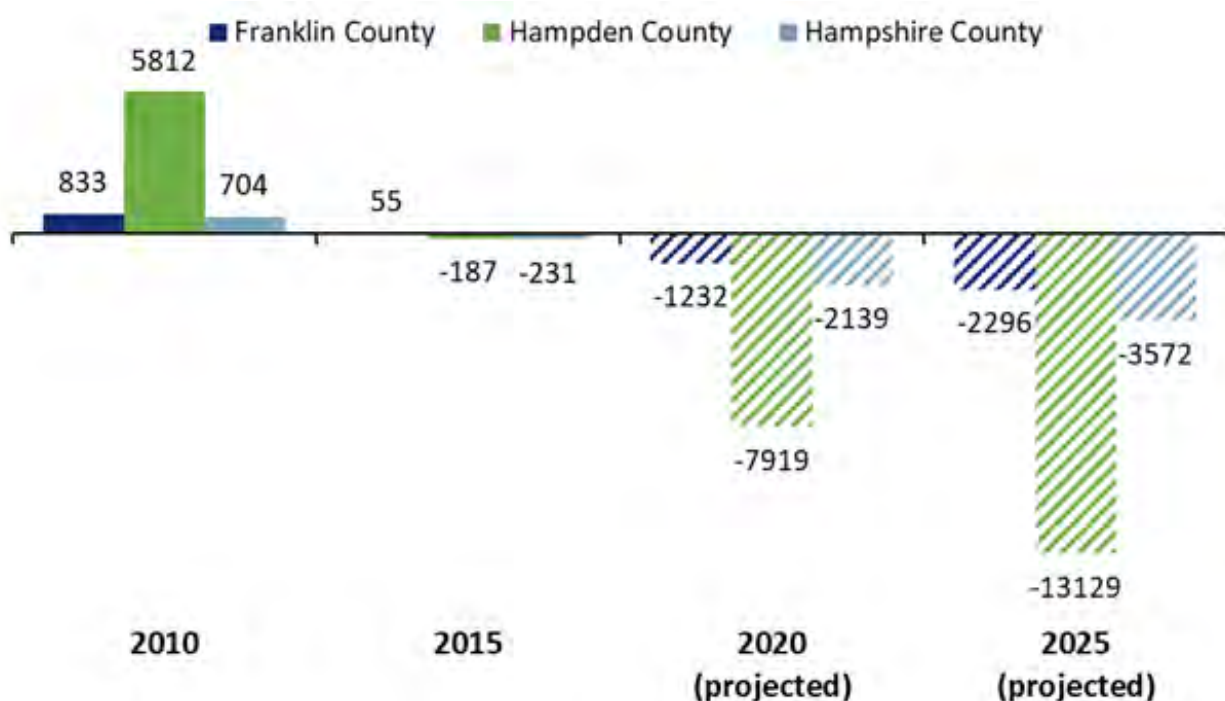
*Source: 2020 ACS five-year estimate*

The COVID-19 pandemic has contributed to housing challenges. Most directly, the pandemic has correlated with a general increase in housing prices that has moved homeownership—a common vehicle for wealth generation—out of reach for many. Supply

was constrained by reluctance to sell during the pandemic and higher home construction costs, and demand grew as the option to work remotely allowed people to live farther from their employer. The UMass Donahue Institute projects a housing gap of over 13,000 units in Hampden County by 2025 and over 3,500 units in Hampshire County (see Figure 13).<sup>114</sup> In addition, the pandemic led to a sharp rise in unemployment and has destabilized many people's finances, affecting their ability to make rent and mortgage payments (see Figure 7).

Approximately 41% of communities served by Baystate Wing CCIS respondents and 43% of rural respondents were worried about paying one or more of their upcoming expenses when the survey was administered early in the pandemic. This worry was more common among respondents of color, those with a disability, and LGBTQIA+ respondents. One in four respondents in the service area worried specifically about paying their housing-related and/or utility expenses, as did 27% of rural service area respondents.

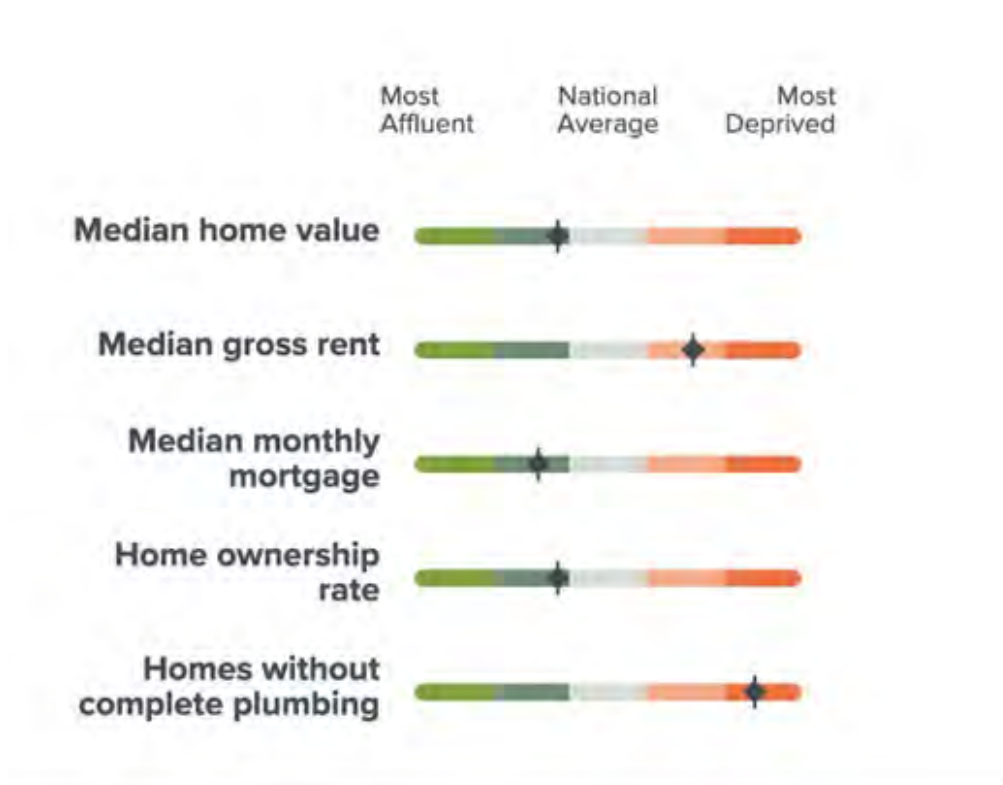
**FIGURE 13: Projected Housing Unit Gap in the Pioneer Valley**



**Source:** Graph created with data from UMass Donahue Institute Housing's Greater Springfield Housing Analysis, based on ACS one-year housing unit estimates (2010–2018) and five-year population estimates (2014–2018). Shaded areas are projections

Median gross rents in the service area are higher than the national average (Figure 14). Unaffordable housing correlates with a greater-than-average prevalence of homelessness—a situation that has worsened over the past decade.<sup>115</sup> Data on people who are unhoused are not available for the communities served by Baystate Wing. Between 2010 and 2019, homelessness increased threefold in Hampden County, according to the same Donahue Institute report—from 843 persons counted in 2010 to 2,443 in 2019. Of those, the majority (2,070) were people in households with adults and children.<sup>116</sup> In the Donahue Institute report, Hampshire County homelessness estimates are aggregated with Berkshire and Franklin counties. Results show an upward trend in homelessness. However, the rate of homelessness is substantially lower than Hampden County. The majority of shelters for western Massachusetts are in Springfield, which the report noted may impact the Hampden County numbers. The U.S. Department of Education reports that 4.2% of public-school students in Hampden County experience homelessness—a rate 50% higher than that of the state and nearly four times greater than that of neighboring Hampshire County.<sup>117</sup>

**FIGURE 14: Characteristics of Housing Stock in the Communities Served by Baystate Wing**



**Source:** Indicators comprising The Area Deprivation Index for Census Block Groups (BroadStreet 2021)

In addition, as noted in earlier CHNAs, the housing stock in communities served by Baystate Wing is older. An estimated 38% of housing in Hampden County and 32% in Hampshire County was built before 1949.<sup>118</sup> Older housing, combined with limited resources for maintenance, can lead to problems (eg, mold, pest/rodent exposure, exposure to lead paint, asbestos, and lead pipes) that affect asthma, other respiratory illnesses, and child development.<sup>119</sup> Several communities are also among high-risk communities for childhood lead poisoning. The rural cluster of Quaboag Valley had an elevated prevalence of childhood lead poisoning (5 to 8 per 1,000 children with confirmed blood lead levels  $\geq 10$   $\mu\text{g/dL}$ ) compared with Massachusetts (2.9 per 1,000 children).<sup>120</sup>

### *Food Access and Security*

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Access to healthy, nutritious food continues to be a prioritized need in the communities served by Baystate Wing and across the region. Eating nutritious food promotes overall health and helps manage many chronic health conditions. However, not all individuals and communities have equal access to healthy food. Food insecurity or being without reliable access to sufficient affordable and nutritious food, continues to impact many communities served by Baystate Wing residents (Figure 15). Approximately 9% of adults and 13% of children in the communities served by Baystate Wing are food insecure. Parts of Palmer and Ware have 10%–16% of residents with food insecurity.

Poverty, food insecurity, and access to food are interconnected. People living in poverty struggle to afford and access healthy foods and are more likely to live in limited-income areas and experience food insecurity. About 13% of residents in communities served by Baystate Wing have limited income (below 185% of the federal poverty level).<sup>121</sup> Many children (age 0–17) are disproportionately impacted by poverty:

- 19% have limited income (below 185% of the federal poverty level),
- 8% live in poverty (below 100% of the poverty level), and
- 4% live in deep poverty (below 50% of the poverty level).

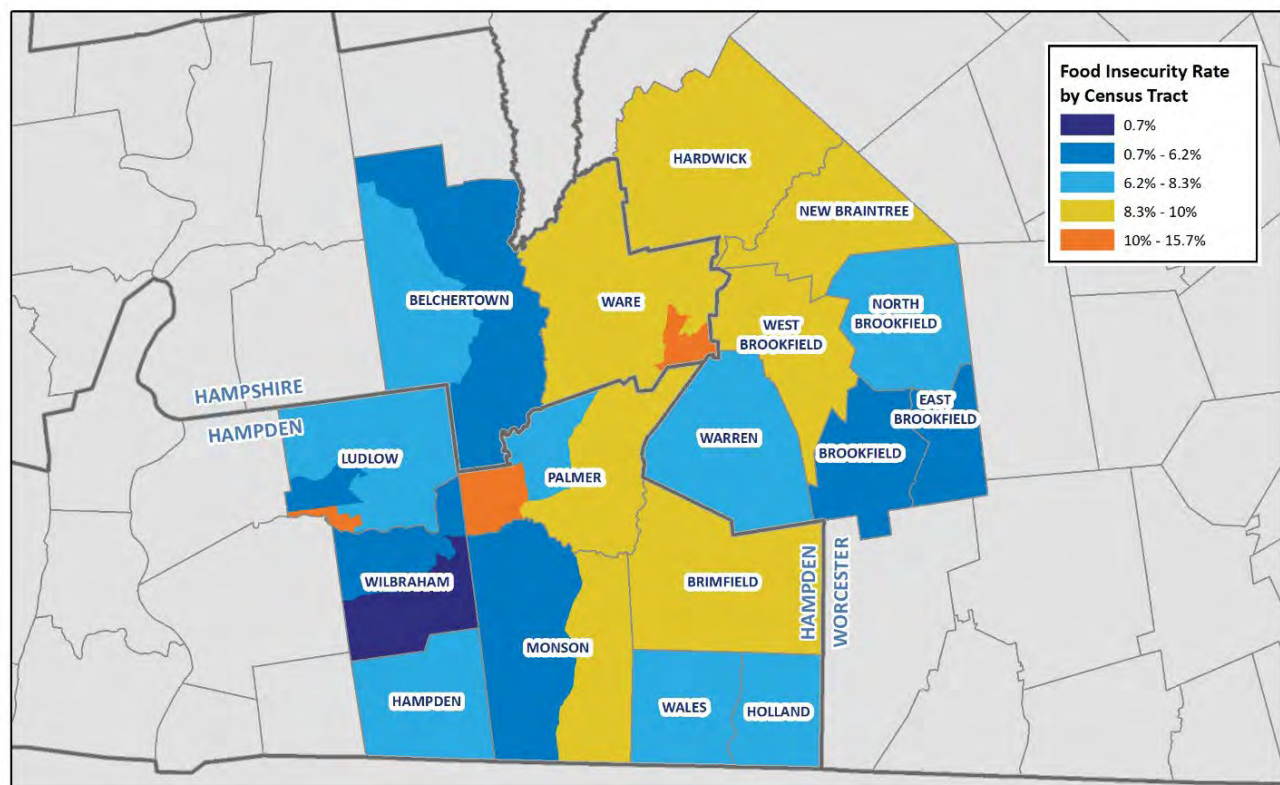
Poverty disproportionately impacts communities of color in the communities served by Baystate Wing. Ten percent of Black residents and 12% of Asian residents live in poverty compared with a 7% rate across the region and among White residents.<sup>122</sup>

Communities served by Baystate Wing also has several food deserts,<sup>123</sup> or 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. In rural areas, residents may have to choose between less nutritious and expensive foods found in gas stations and convenience stores or take a long drive to town to buy fresh fruits and vegetables at a grocery store. Some rural households are food insecure because they cannot rely on consistent access to affordable and nutritious food.<sup>124</sup> Food insecurity is strongly associated with chronic disease and poor health, both of which disproportionately affect rural populations and have a lasting impact on quality of life.<sup>125</sup>

**FIGURE 15: Food Insecurity in Baystate Wing Hospital Service Area by Census Tract (2021)**



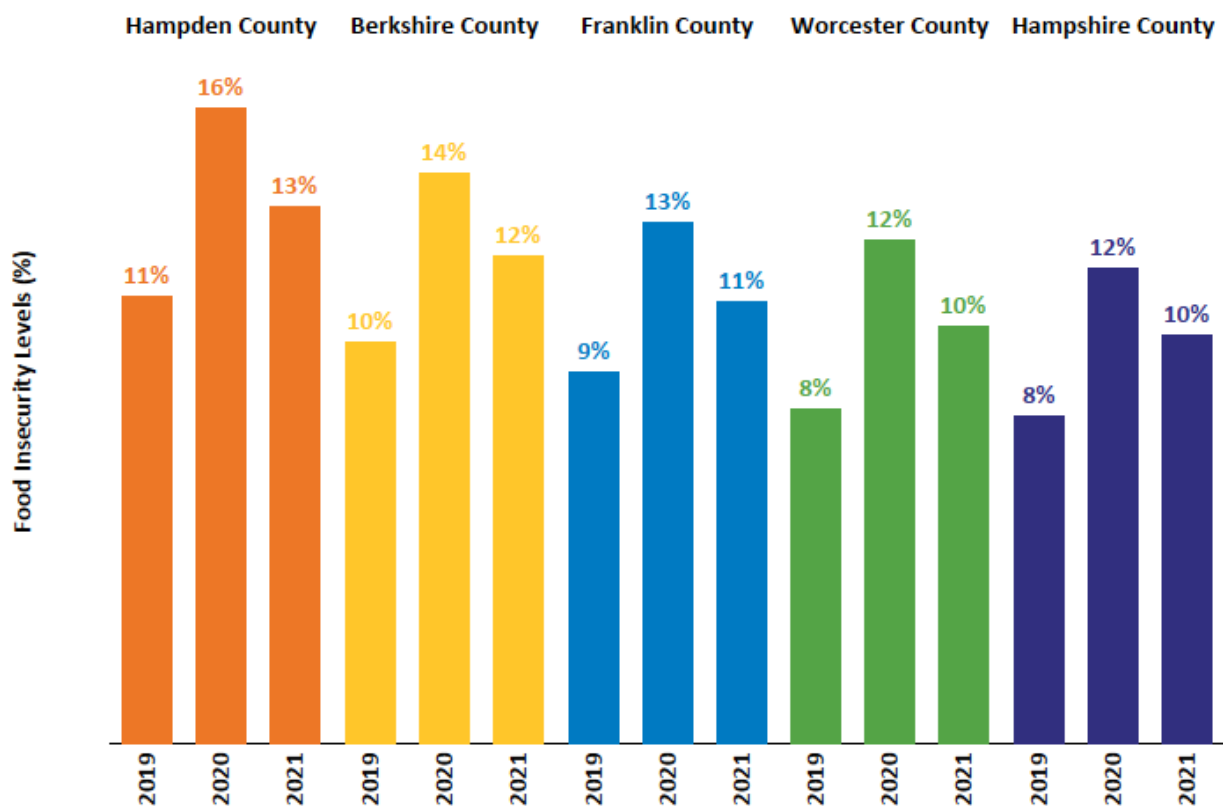
**Source:** Gundersen, C, Strayer, M, Dewey, A, Hake, M, and Engelhard, E (2021). *Map the Meal Gap 2021: An Analysis of County and Congressional District Food Insecurity and County Food Cost in the U.S. in 2019*. Feeding America.

<https://map.feedingamerica.org/>

State data on consumption of fruits and vegetables and obesity rates show that rural areas of the communities served by Baystate Wing have had healthier outcomes than the service area as a whole. Unfortunately, the data for rural clusters (2011–2015) are not as current as other data sources for this report.

- People living in rural clusters in the communities served by Baystate Wing (Central Pioneer Valley, East Quabbin, and the Quaboag Valley) consumed fruits and vegetables at a rate similar to or greater than the state's general population.
- Prevalence of obesity was higher in Hampden County (30%) than Hampshire County (23%) and the state (24%).
- Prevalence of obesity in Palmer and Ware is 28%, close to the rate for Hampden County and higher than the state rate.<sup>126</sup>
- However, the rural clusters within Hampden County did not exhibit a similar elevated prevalence of obesity.<sup>127</sup>

**FIGURE 16: Food Insecurity by County, 2019–2021**



**Source:** Gundersen, C, Strayer, M, Dewey, A, Hake, M, and Engelhard, E (2021); *Map the Meal Gap 2021: An Analysis of County and Congressional District Food Insecurity and County Food Cost in the U.S. in 2019*; Feeding America. [www.map.feedingamerica.org](http://www.map.feedingamerica.org)

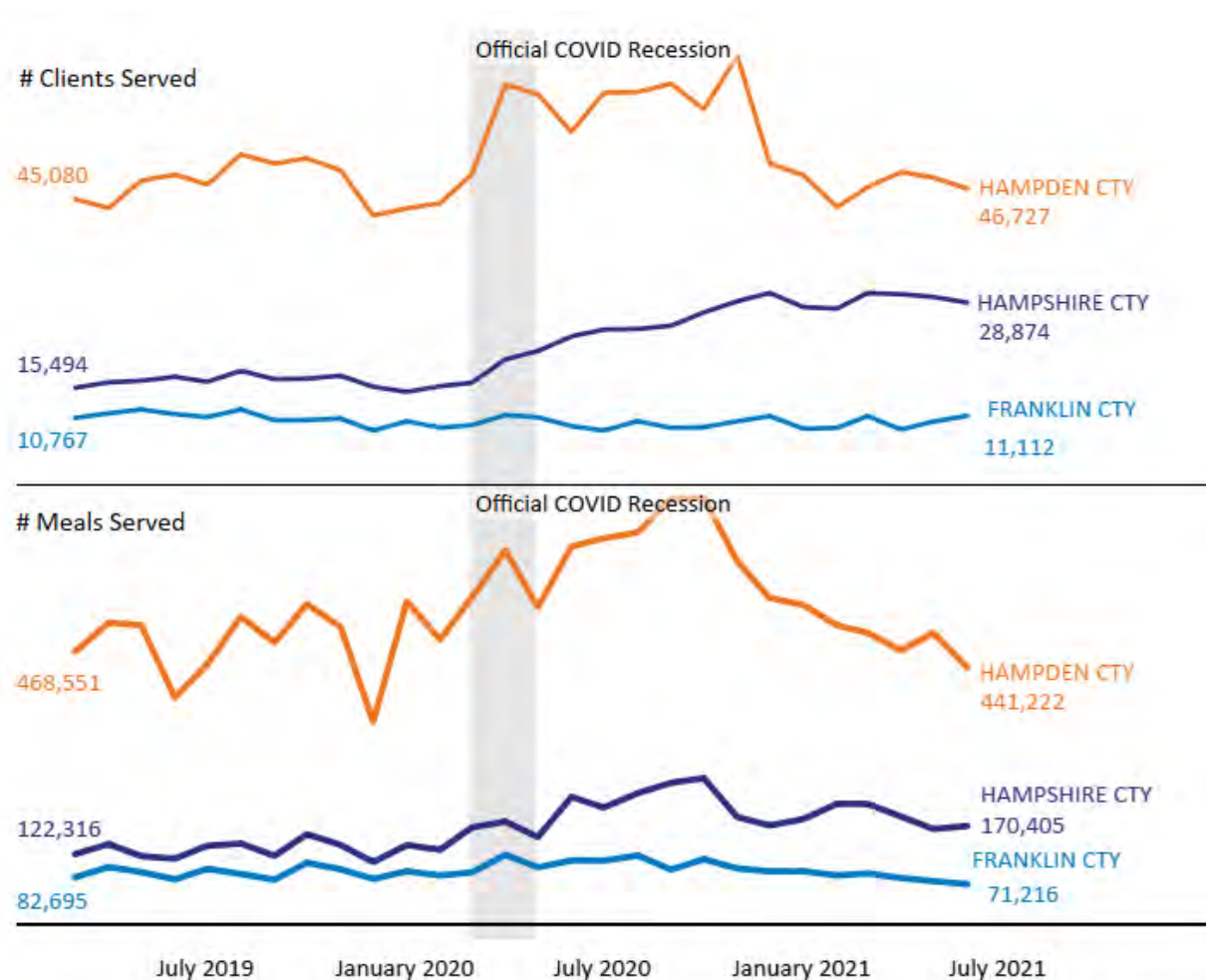
Food insecurity rates had declined slightly since the last CHNA, but during the COVID-19 pandemic, the problem got worse (see Figure 16). Food insecurity grew in 2020, reflecting the financial hardships faced by families throughout central and western Massachusetts. Between 2019 and 2020, Feeding America, a national non-profit organization, estimates that food insecurity (defined as “lacking access to sufficient food because of limited financial resources”) increased by 40% in Franklin County, by 42% in Hampden and Berkshire counties, by 45% in Hampshire County, and by 50% in Worcester County.

Almost four in ten residents in the communities served by Baystate Wing have limited access to grocery stores. Populations with low food access in the service area include:

- 38% of youths (age 0–17)
- 43% of older adults (age 65+)
- 37% of limited-income residents
- 36% of Black residents
- 35% of Latino/a/e residents
- 43% of Asian residents
- 31% of Indigenous residents
- 39% of residents identify as more than one race or ethnicity.<sup>128</sup>

The disparate impacts of COVID-19 on food access can be found in the CCIS data. In fall 2020, one in four residents from the communities served by Baystate Wing worried about getting food for themselves and their family. This rate was similar for rural respondents. Almost twice as many respondents of color reported worrying about getting food compared with White respondents (55% and 22% respectively). This concern was also higher among respondents with a disability (47%).

The Food Bank of Western Massachusetts (FBWM) played a key role distributing food during the COVID-19 pandemic, with significant increases in both the number of people served and the number of meals served. Across the three counties of the Pioneer Valley, tens of thousands of families have relied on food from food banks to meet their food needs during the COVID-19 pandemic. The Food Bank of Western Massachusetts distributes meals in several cities and towns in the Pioneer Valley. Since March 2020, each month they have provided on average 877,000 meals to 91,000 clients, peaking at 1.1 million meals provided in October 2020 (Figure 17).

**FIGURE 17: Food Bank of Western Massachusetts, Clients and Meals Served, 2019–2021**

*Source: Food Bank of Western Massachusetts*

## Transportation

Transportation is important for many facets of life, including going to work, going to the doctor, getting groceries, and engaging in social activities. People who do not have access to transportation have a hard time meeting these basic needs. Since the 2013 CHNA, transportation has continued to be identified as one of the largest barriers to medical care. Unfortunately, access to transportation cannot be taken for granted, especially for residents with limited income in the communities served by Baystate Wing

where transit options are few, and some rural residents have to travel many miles to access basic needs.

In 2019, 5% of area residents did not have access to a vehicle.<sup>129</sup> In a 2021 survey of public health officials in the region, transportation was ranked as the second-highest pressing issue (42%), just behind limited availability of providers (43%).

Looking at the combined cost of housing and transportation helps provide a fuller understanding of the financial burden for residents. As reported in the 2019 CHNA, for a typical household income, people in Palmer spend 55% of their income on housing and transportation costs combined. However, those with a lower household income in Palmer spend 66% of their income on housing plus transportation. In Ware, limited-income residents spend 59% of their income on combined housing and transportation costs.<sup>130</sup>

As identified in the previous CHNA, unequal access to appropriate transportation options exacerbates racial and ethnic health disparities. Residents with limited income and communities of color have less access to transportation options compared with majority White and higher income communities.<sup>131</sup> Public transportation plays a significant role in filling transportation needs for many of these households, but it is limited in the communities served by Baystate Wing.

The COVID-19 pandemic has undoubtedly exacerbated problems of access to and affordability of transportation. According to a report by the Bureau of Labor Statistics, the price of used cars increased by 40.5% in the 12 months between January 2021 and January 2022. Fuel costs have increased by 46.5% over the same interval.<sup>132</sup> Mean that reliable transportation has become less affordable for many.

### ***Resources to Increase Access to Housing, Food, and Transportation***

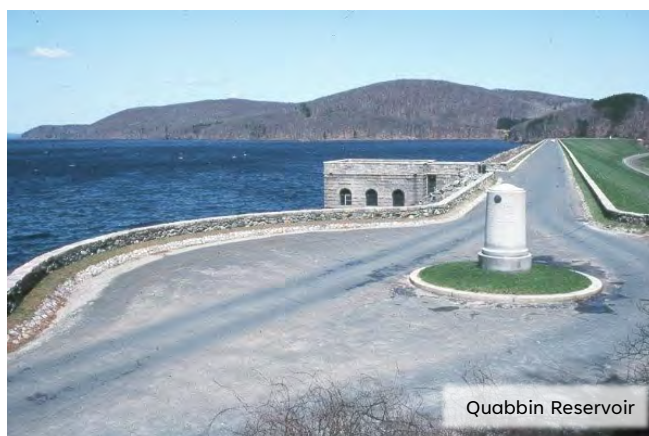
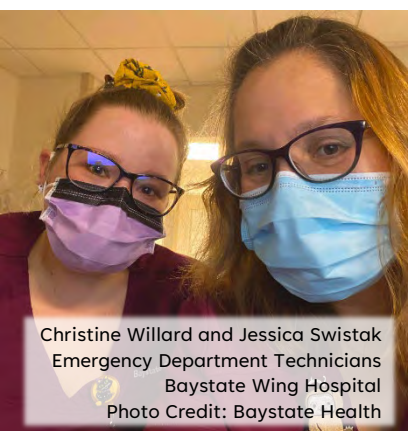
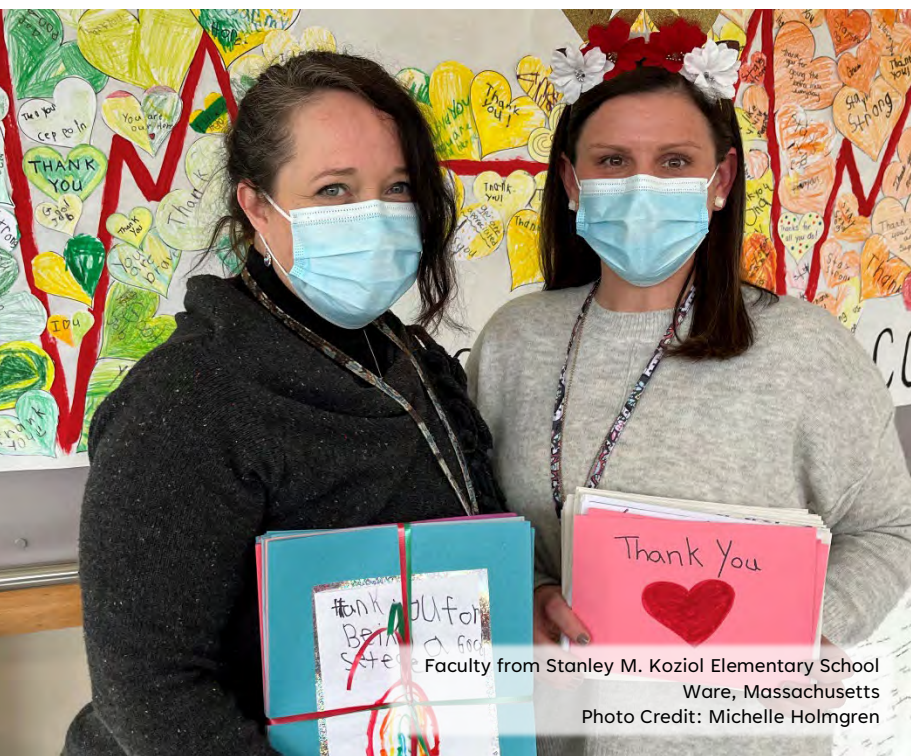
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In addition to the Food Bank and its network of food pantries, expansion of the Supplemental Nutrition Assistance Program (SNAP) and Healthy Incentives Program (HIP), which enables access to CSA shares and farmers markets, have also provided more options for affordable healthy foods while helping farmers increase their sustainability.

- Many CSAs and farmers markets have already or are attempting to expand into the fall and winter months. Food advocates mentioned the Department of Transitional Assistance finder for HIP as user-friendly and helpful to find what else is available for community members and what is in walking distance.

- **Quaboag Connector** [www.rideconnector.org/quaboag-connector](http://www.rideconnector.org/quaboag-connector)
- Three online databases to look for resources related to basic needs are:
  - **413 Cares**—The Food Bank of Western Massachusetts is a featured partner. <https://www.413cares.org>
  - **Look4Help** - [www.look4help.org](http://www.look4help.org)
  - **Find Help** – A free service to search and connect to support. Financial assistance, food pantries, medical care, and a multitude of other free or reduced-cost help can be found: [www.findhelp.org](http://www.findhelp.org)







## 6e. Other Prioritized Health Needs

### *Social and Economic Determinants that Impact Health*

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Social and economic factors that affect health include access to healthy foods, places to exercise, safe and affordable housing, transportation, and healthy social environments. Most of these topics have been addressed in other sections of the report in greater detail.

#### **Climate Crisis**

The climate change crisis is already having impacts, including rising temperatures, increased precipitation and flooding, and extreme weather events, which will negatively affect the health of many service area residents, including those with asthma, COPD, stroke, hypertension, diabetes, obesity, and depression. Limited-income populations, communities of color, older adults, people with disabilities, and immigrants have also been identified as populations that experience negative impacts of natural disasters and climate change.<sup>133</sup>

Increased heat perhaps represents the greatest threat to public health brought on by climate change. Between 1991 and 2005, Ludlow, Palmer, and Ware each averaged 3.48 days over 90 degrees per year. By 2030, the MDPH projects Ludlow, Palmer, and Ware will each have 12.87 days over 90 degrees each year, a sharp increase. Within 20 years, which estimate rises to 17.75 days per year for each city.<sup>134</sup> As days with extreme heat become more commonplace, hospitalizations due to heat stroke may increase. Residents with limited income may not be able to afford air conditioning and will struggle as temperatures rise. The state also anticipates a rise in illness and death due to cardiovascular disease and renal failure due to increased heat.

Air quality will also suffer. Longer, more extreme, and more frequent periods of extreme heat will beget increases in pollen production, ozone, and particulate matter. These conditions will exacerbate the region's already notable incidence of asthma (see the Health Outcomes section below) and other respiratory conditions.

Along with increased heat, increased precipitation will contribute to declining public health through its effect on the natural environment. A hotter and wetter climate will make the region more hospitable to disease-bearing pests, such as ticks and mosquitos. Greater rainfall exposes residents to not only greater risk of property damage and loss of value due to floods but environmental hazards that accompany water damage, such as mold and contamination.

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## MAKING THE CASE TO DROP THE USE SOCIAL DETERMINANTS OF HEALTH (SDOH)

Acting to address social influences on physiological, psychological, and behavioral health requires a complete understanding of complex health-related social influences (socioeconomic environment and well-known psychosocial risk factors) on health. The commercialized term “social determinants of health” oversimplifies complex and intersecting environmental, economic, and social influences, thus it is relatively meaningless. Let’s stick with “social influences of health” and then explain with specific detail what we mean.

*-Frank Robinson, Ph.D., Vice President, Public Health, Baystate Health*

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### ***Barriers to Accessing Quality Health Care***

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The following prioritized barriers to accessing health care were identified as needs in the 2016 and CHNA and continue to be needs today based on the data that follow:

- Insurance and Health Care Related Challenges
- Limited Availability of Providers
- Need for Increased Cultural Humility
- Need for Transportation
- Lack of Care Coordination
- Health Literacy and Language Barriers

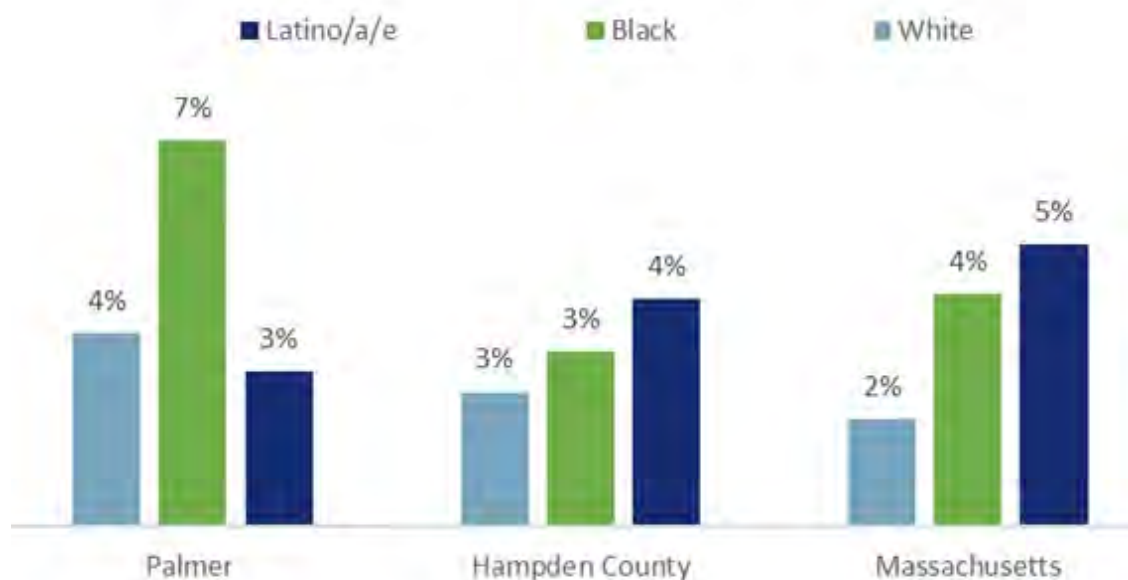
#### **Insurance**

Though most residents in Hampden (97%), Hampshire (98%), and Worcester (98%) counties are covered by health insurance,<sup>135</sup> determining what services health insurance will cover and navigating the medical care systems continue to be barriers to accessing quality health care.

- 35% of the insured population in Hampden County, and a smaller proportion in Hampshire (16%) and Worcester (24%) counties, are Medicaid beneficiaries compared with the statewide percentage of 23%.<sup>136</sup>
- The percentage of the population that is uninsured in Hampden County is 3.14%, which is 15% higher than the statewide average of 2.72%.<sup>137</sup>
- Figure 18 shows racial/ethnic inequities in insurance coverage in Palmer, especially for Black residents.

Despite high rates of residents covered by health insurance, the cost of health care copays, deductibles, tests, and medication is a barrier for many to having optimal health, including those who are above the eligibility threshold to receive Medicaid but still make limited income. Beyond the costs of portions of health care that insurance doesn't cover, additional costs include programs, equipment, physical activities, and alternative therapies such as acupuncture that are typically not covered by insurance but are suggested by medical providers to help patients. The high cost of home care for people with disabilities impacts the quality and quantity of those services. Older adults can fall into a gap where they are too young or have too much money to qualify for services they need yet cannot afford to privately pay for these services

**FIGURE 18: Percentage of Population Uninsured by Race and Hispanic or Latino/a/e Origin, 2015–2019**



**Source:** U.S. Census Bureau, ACS, 2015–2019

**Notes:** Data for Native Hawaiian and Pacific Islander populations is 0% for Hampden County and not available for Springfield. Data for White residents is among those reporting White Non-Hispanic.

### Limited Availability of Providers

Across the healthcare sector, this continues to be a prioritized need. Many communities in the service area continue to be medically underserved areas with health professional shortages. The pandemic created more workforce shortages in the healthcare sector, causing provider access challenges for the whole service area. In a regional survey of health officials, respondents regionally rated the limited availability of providers as the most pressing health issue facing their community. This is especially true for areas of high need, such as mental health. Residents with low incomes, rural residents, Black and Latino/a/e residents, LGBTQIA+ individuals, those with a disability, and others often face additional barriers that can further limit access to providers. These may include lack of income and wealth to purchase insurance or see providers who don't take insurance, unconscious bias among providers, and lack of access to care that is culturally and linguistically appropriate. Telehealth has mostly been a positive development in access to care, but some populations, such as rural communities, older adults, residents with limited means, and immigrants face barriers to using the internet and other technology. Among CCIS respondents living in rural areas, almost one in four were worried about their internet access (23%, n=184)

**TABLE 2: Population to Provider Ratios for Hampden, Hampshire, and Worcester Counties**

	Population to Primary Care Provider (2019)	Population to Dentists (2020)	Population to Mental Health Providers (2021)	Population to Other Primary Care Providers (2021)
Hampden County	1490:1	1090:1	100:1	560:1
Hampshire County	730:1	1310:1	100:1	880:1
Worcester County	1000:1	1290:1	180:1	600:1
Massachusetts	960:1	930:1	140:1	670:1

*Source: County Health Rankings, 2021*

Data provided by the County Health Rankings offer a glimpse of provider availability at a county level, though some data are from time periods prior to the pandemic. Based on the 2021 County Health Rankings:

- **Primary Care:** The ratio of primary care physicians available per population was similar to what was reported in the previous CHNA. Primary care physician ratios are reported using 2019 data and do not reflect potential impacts of labor shortages due to COVID-19 and the Great Resignation. The ratio of other types of primary care providers, such as nurse practitioners, is better than the state – 560:1 in Hampden County and 600:1 in Worcester County vs. 670:1 for Massachusetts, but they may still be insufficient to meet needs.
- **Dentists:** The ratio of dentists in Hampden County (1090:1), Hampshire County (1310:1), and Worcester County (1290:1) has slightly improved since the previous CHNA, although this is still worse than the state ratio of 930:1.
- **Mental Health:** The proportion of mental health providers in 2021 improved for Hampden County (100:1), Hampshire County (100:1), Worcester County (180:1), and the state (140:1) from the previous CHNA. However, Worcester County continues to be higher than the state and other counties in the region.

### Need for Cultural Humility

This remains a prioritized health need among health care and social service providers, as it was in the 2016 and 2019 CHNAs. Cultural humility refers to a commitment among health care and social service providers to self-reflection and evaluation in order to reduce the power imbalance between patients and providers, and to the development of care partnerships that are based on mutual respect and equality. Training in cultural humility is one strategy to deliver more culturally sensitive care. Results from 2019 CHNA interviews with public health leaders and focus groups identified cultural differences between the community and providers and implicit bias as a barrier to health. They called for:

- An assessment of where and when this happens.
- Increased training, experience, and sensitivity for health care providers to a variety of different cultures.
- Accountability for cultural humility and bias.

Focus group participants in 2019 noted that cultural humility is not limited to a racial or ethnic culture, but also includes care for stigmatized groups, such as ex-offenders, homeless individuals, people with mental health or substance use issues, the aging population, transgender, non-binary, and gender non-conforming, adults and children with disabilities. The need for providers competent in racial and cultural issues was also raised.



### **Transportation**

Transportation has been consistently identified as one of the top barriers to accessing medical care in previous CHNAs and continues to be a large barrier. Public health officials and other informants indicated that transportation to get to medical appointments is a particularly difficult issue for children and adults living with disabilities, older adults, and limited-income populations. Telehealth offers one potential avenue to overcome this barrier for some types of care.

### **Lack of Care Coordination**

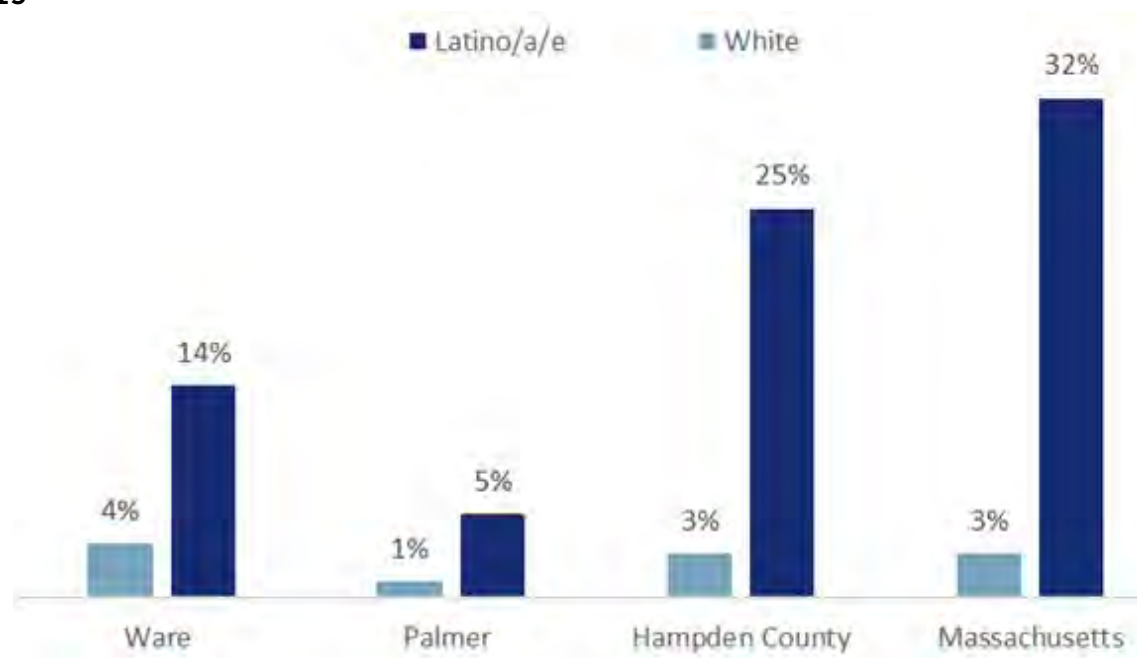
Lack of care coordination is still a prioritized community health need, as it was in the 2016 and 2019 CHNAs. Care coordination refers to the coordination of patient care, including the exchange of information between all parties involved in patient care.<sup>138</sup>

### **Health Literacy and Language Barriers**

Related to the need for culturally sensitive care is the need for care that is language appropriate as well. Language barriers can create multiple challenges for patients and health care providers, and it was previously identified as a need. Increasing availability of interpreters as well as translation of health materials are specific actions that health care institutions can take to help address this barrier. When populations are unable to speak English and they cannot find providers that speak their language or offer simultaneous translation services, this can create barriers to accessing health care, understanding their provider, and achieving health literacy. Health literacy is the capacity for an individual to find, “communicate, process, and understand basic health information and services to make appropriate health decisions.”<sup>139</sup>

- As shown in Figure 19, 14% of Ware populations that identify as Latino/a/e have limited English proficiency compared with 4% of populations that identify as White.<sup>140</sup>

**FIGURE 19: Population 5+ with Limited English Proficiency by Ethnicity Alone, 2015–2019**



*Source (data): U.S. Census Bureau, ACS, 2015–2019; Source (geography): Tract*

### The COVID-19 Pandemic

CCIS data help us better understand the impact of the pandemic on those seeking care in 2020. Barriers reported by respondents included long wait times, appointment cancellations, and potential COVID-19 exposure.

One in six respondents in the communities served by Baystate Wing that sought health care during the pandemic reported not receiving care due to barriers presented by COVID-19. The rate was more than one in three for respondents of color, about one in four for LGBTQIA+ respondents and respondents with a disability, and about one in eight among rural respondents.

More than half of service area respondents experienced delays in routine care, and one in six had delays in urgent care.

Among respondents with a disability, more than one in three worried about getting needed medical care and treatment for themselves or their families. This was similar for respondents that spoke a language other than English at home and respondents of color.

The proportions of respondents that experienced delays in needed health care were higher among subgroups that often experience other health care barriers such as accessibility, discrimination, and bias—LGBTQIA+ respondents, people with disabilities, parents overall, and parents of children with special health care needs.

## *Health Behaviors and Outcomes*

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### **Mental Health and Substance Use**

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. The World Health Organization (WHO) defines mental health 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>141</sup>

Any discussion of mental health in western Massachusetts must acknowledge the diversity of lived experience within the region and this service area. Mental health challenges emerge in varied contexts, from rural poverty and isolation to urban disinvestment and discrimination. In rural and urban communities, residents are resilient, yet the effects of poverty and discrimination have been passed from one generation to the next, and they continue to experience these harms today. Whether intentional or not, race and class discrimination in the delivery of care can further contribute to poor mental health as well as other adverse outcomes.<sup>142</sup> The impact of the COVID-19 pandemic on mental health was widespread while exacerbating disparities. Alarming data and community concern about mental health issues, especially among youth, prompted the Coalition and the RAC to devote a section of this report to the specific mental health needs of people ages 12–24 (see Section 6a).

Substance use disorders (SUDs) refer to the recurrent use of drugs or alcohol that results in health and social problems, disability, and inability to meet responsibilities at work, home, or school. Mental health challenges and substance use are often intertwined and described together as behavioral health. According to the National Institute on Drug Abuse, “Multiple national population surveys have found that about half of those who experience a mental illness during their lives will also experience a substance use disorder and vice versa.”<sup>143</sup> Risk factors for SUDs include genetics, age at first exposure, and a history of trauma.<sup>144</sup> Substance use must also be considered in the context of historical and present-day rural disinvestment, poverty, racism, and discrimination. Data show that other factors that contribute to SUDs, such as economic constraints, social networks,

opportunities for substance abuse treatment, and experiences within treatment, are affected by class, race, and ethnicity.<sup>145</sup>

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“We have lost so many mental health providers—making appointments for patients is a real challenge.”

*--Hospital physician, Community Chat in communities served by Baystate Wing*

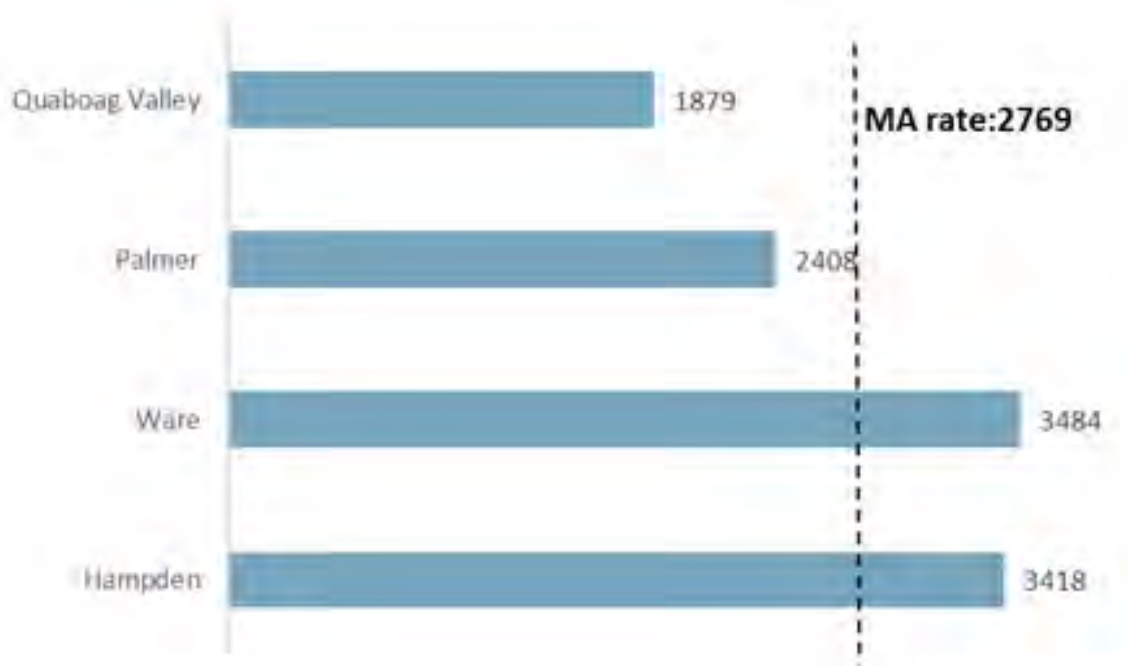
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**Mental health** continues to be a prioritized health need, as it was in 2019. Prior to the COVID-19 pandemic, the need was already acute. In 2019, Ware had a high emergency department (ED) visit rate compared with Hampden County overall (Figure 20). Ware had the highest ED visit rate among municipalities in the county, followed by Springfield.<sup>146</sup> Based on 2019 data:

- Nearly one in four (24%) adults in Palmer and Ware had depression compared with one in five adults in Hampden (21%), Hampshire (22%), and Worcester (20%) counties.
- An estimated 16% of adults in Palmer and 17% in Ware had 14 or more days of poor mental health.
- The prevalence of poor mental health for adults (14 or more days per year) was comparable in Hampden (15%), Hampshire (15%), and Worcester (13%) counties.<sup>147</sup>

**FIGURE 20: Mental Health Emergency Department Visits for Selected Communities**

Age-adjusted rate per 100,000 residents, 2019

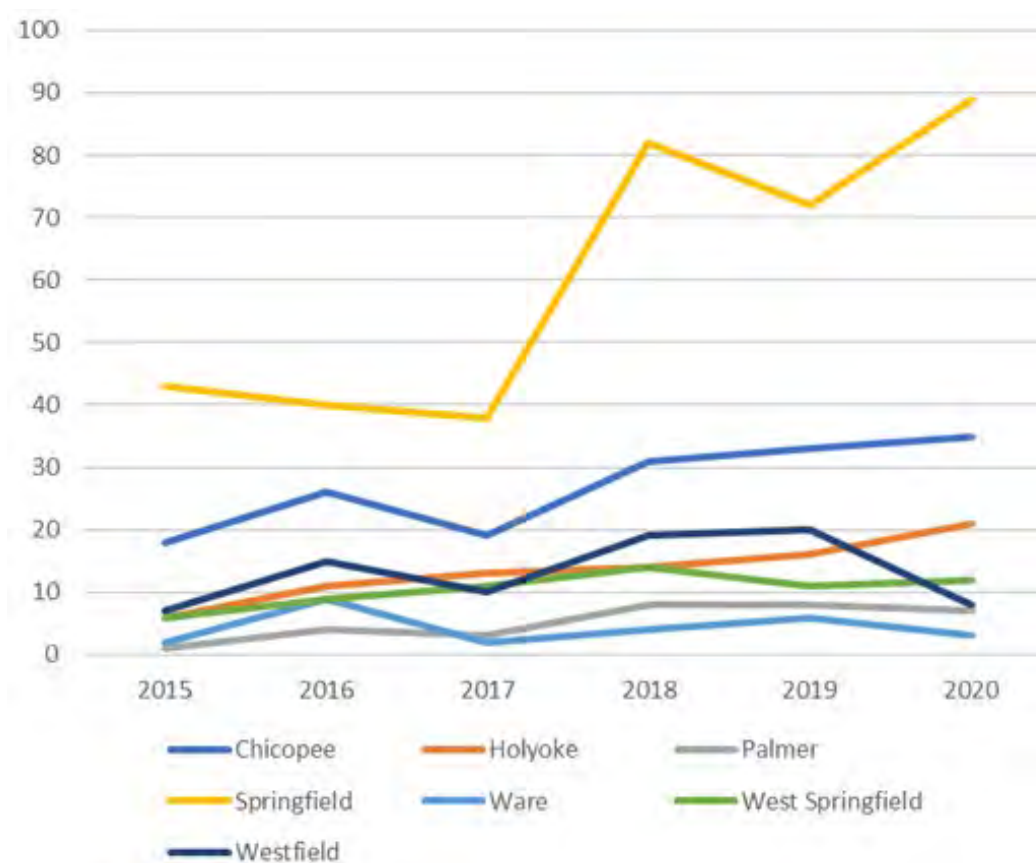


Source: MDPH hospitalization tables for chronic diseases, 2016–2019

**Substance use** continues to be a prioritized health need. Despite some signs of improvement in 2017, the opioid crisis has grown in the past several years across the region, especially in Hampden County.

- In 2020, Hampden County experienced the highest rate of emergency medical services calls related to opioid overdoses of any county in the state.<sup>148</sup>
- In the communities served by Baystate Wing in 2019, the age-adjusted rate for substance use–related hospital admissions were 562.4 per 100,000 and the age-adjusted rate for opioid-related hospital admissions was 283.4 per 100,000.<sup>149</sup>
- Tragically, the number of people who died from opioid overdose in Hampden County increased by 452% from 2010 to 2020, a higher percentage than in Hampshire and Franklin counties and the state overall.

However, the data are more positive in the communities served by Baystate Wing. Palmer’s number of opioid deaths had a slight decline, from eight to seven deaths, between 2019 and 2020. In Ware, the number of deaths halved, from six to three, in that time period (Figure 21).<sup>150</sup>

**FIGURE 21: Number of Opioid-related Deaths in Select Cities, 2015–2020**

**Source:** MDPH, Number of Opioid-related Overdose Deaths, All Intents by City/Town, 2015–2020

“Almost every aspect of health, mental health, and addiction that we look at seems to have been made much worse by COVID-19. It feels like all the systems we rely on are broken. I am worried it will be a long time before we recover from this.”

-- Member of a rural substance use coalition, Community Chat for Baystate Wing



The COVID-19 pandemic has acutely affected the mental health of residents and the availability of care in the region and service area. Among Hampden County public health officials surveyed in 2021 for this assessment, 41% listed mental health and substance use as the most pressing health issues in their community, as did 43% of Hampshire County respondents. A subset of those respondents also cited a shortage of mental health and substance use services. In a Community Chat with the Quaboag Hills Substance Use Alliance, members cited substance use, overdose deaths, and risk of nonfatal overdose as some of the most pressing prioritized health needs.

Data from the statewide CCIS conducted in 2020 show the negative impacts of the early lockdown phase on mental health as well as substance use. Respondents from the communities served by Baystate Wing reported the following:

- **Depressive Symptoms:**
  - More than one in three respondents (37%) reported 15 or more poor mental health days in the past 30 days in 2020.
  - The rate was 40% for respondents that lived in a rural area.
  - Respondents with disabilities and LGBTQIA+ respondents were disproportionately impacted, as were the following subgroups: younger respondents (age 25–34), respondents of color, limited income respondents, and parents in general (see Appendix 6).
- **Signs of PTSD:**
  - More than one in four respondents (28%) reported experiencing three or more PTSD-like reactions, which include nightmares, avoidant behaviors, and guilt, during the pandemic.<sup>151</sup>
  - This was slightly higher (30%) for rural respondents.
- **Substance Use:**
  - Among respondents that used any substance in the past 30 days, 41% increased their substance use compared with before the onset of the pandemic.
  - Rates of elevated use were greatest among parents, respondents aged 25–44, respondents with less than \$35,000 annual household income, LGBTQIA+ respondents, and Black and Latino/a/e respondents.

- The rate of reported substance use overall in the past 30 days was 66% for rural vs. 62% for urban respondents, with a similar disparity in alcohol use in the past 30 days (52% rural, 49% urban).

Though the CCIS data did not reveal a severe mental health strain for residents over 65, people at agencies that work with older adults and public health officials expressed concern about their isolation during the pandemic, which was often exacerbated by challenges in using technology to access care or be connected to loved ones. In addition to increasing mental health needs, COVID-19 strained the system's capacity to meet those needs. It made worse the inequities that already caused barriers to care. The more rural towns in the service area felt the effects of isolation and limited access to care during the pandemic.

### **Resources and Assets**

Public health officials and Community Chat participants listed local mental health resources as important assets in the county but stressed the need for more of them to meet the rising demand. The Quaboag Connector was cited during the Quaboag Hills Substance Use Alliance Community Chat as a boon for increasing transportation access, which may help with access to providers and treatment. Participants praised efforts to make a local recovery center, effective programs for domestic violence, and efforts to reduce the stigma associated with substance use and mental health disorders.

At the writing of this CHNA, the behavioral health systems of care have been changing and continue to be in transition. Baystate Health made the decision to consolidate behavioral health hospital services in a centralized new facility, which broke ground in March 2022. Once complete, it will replace and augment beds previously available at Baystate's four hospitals in the surrounding area.

The state administration created a Roadmap for Behavioral Health Reform<sup>152</sup> in 2021 that will offer a model to strengthen community-based care through newly designated Community Behavioral Health Centers that will expand availability of outpatient evaluation and treatment.

### **Telehealth**

The pandemic accelerated the use of "telemental health," whereby assessment and services are delivered by phone, video, or online chat. For example, during March 2020–March 2021, when Blue Cross reported a 9,500% increase in use of telehealth among its

Massachusetts patients, more than half of those visits (54%) were focused on mental health. Also, seven in ten outpatient mental health visits were virtual.<sup>153</sup> The value of telehealth was a recurring theme in Community Chats, with appreciation for its availability as well as concern that it needs to be made more accessible. Older adults and rural residents without internet access or computer literacy, non-English speakers, those with disabilities, and individuals who do not feel safe talking about mental health issues from their home may not be as well served. Federal and state changes are easing access to telemental health beyond the pandemic, including treatment of substance use disorders and services provided through opioid treatment programs.<sup>154</sup>

**413 Cares** provides a searchable website with resources related specifically to mental health: [www.413cares.org/breakthestigma](http://www.413cares.org/breakthestigma).

### *Chronic Health Conditions*

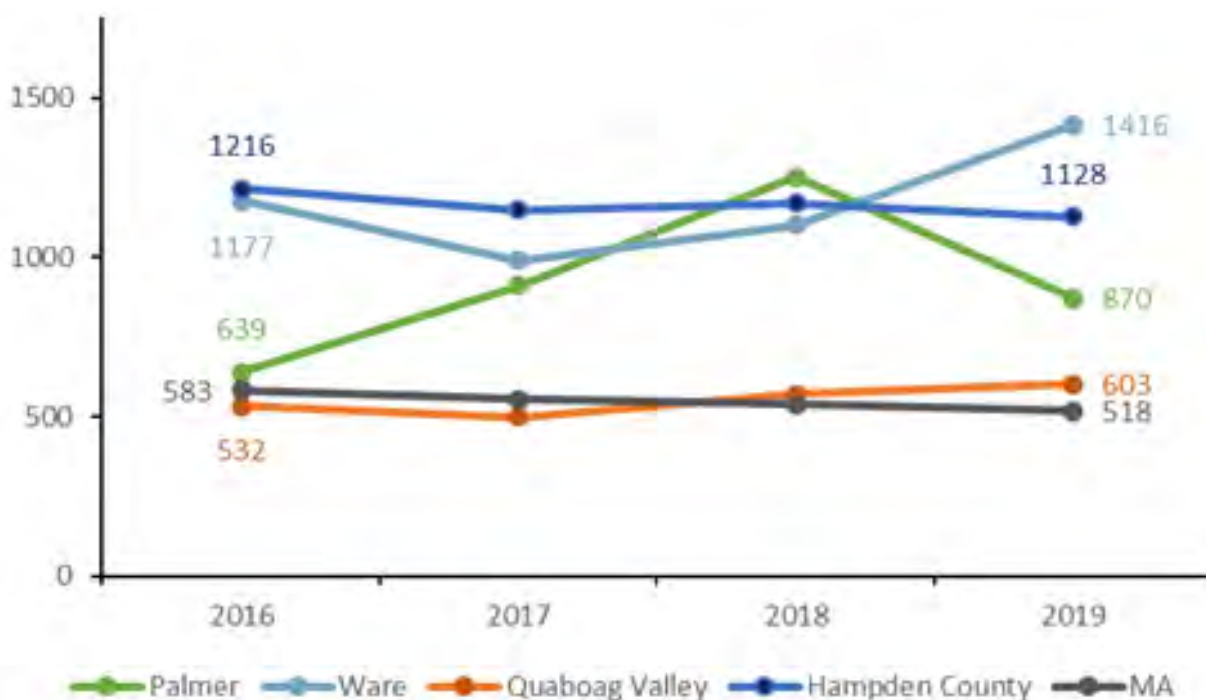
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A chronic health condition is one that persists over time and typically can be controlled but not cured. Chronic health conditions continue to remain an area of prioritized health need for the communities served by Baystate Wing. Residents continue to experience high rates of chronic health conditions and associated morbidity, particularly for obesity, diabetes, cardiovascular disease, cancer, and asthma.

As with other health needs described in this CHNA, for many chronic diseases there are inequities for those living in poverty and by race and ethnicity. Systemic racism and endemic poverty affect access to quality health care, stress levels, exposure to environmental toxins, access to healthy foods, and opportunities to exercise—all factors that influence chronic disease and how well it can be managed.

**Asthma:** About one in ten adults living in Hampden County (11%), Hampshire County (10%), and Worcester County (10%) has asthma. Similarly, one in ten adults (11%) living in Palmer and Ware has asthma.<sup>155</sup> Hampden County residents continue to be impacted by acute asthma, with emergency room visit rates more than two times that of the state in 2019 (1,128 vs. 518 per 100,000, respectively). Also, hospitalization rates in Hampden County were over 70% greater than the state (145 vs. 84 per 100,000, respectively). From 2018 to 2019, Ware saw a rise in ED visits, whereas Palmer experienced a decline (Figure 22).<sup>156</sup>

**FIGURE 22: Asthma Emergency Department Visit Rates by Geography, 2016–2019**  
Age-adjusted rate per 100,000



*Source: MDPH Emergency Department Visits, State Tables 2016–2019*

### Chronic Obstructive Pulmonary Disease (COPD)

COPD is the chronic obstruction of lung airflow that interferes with normal breathing and is not fully reversible. More familiar terms, such as chronic bronchitis and emphysema, are no longer used but are included within COPD.

- Between 2016 and 2019, the average age-adjusted COPD hospital admission rate in Hampden County was 216.7 compared with 180.8 in the Quaboag Valley rural cluster and 94.4 in the Hilltowns rural cluster.<sup>157</sup>
- For Medicare fee-for-service beneficiaries, the prevalence of COPD was 12% in Hampden County, 10% in Hampshire County, and 11% in Worcester County compared with 11% for the state.<sup>158</sup>
- The prevalence of COPD was 8% in Ware and 7% in Palmer.
- About 7% of adults living in Hampden County, 6% in Hampshire County, and 6% in Worcester County have COPD.<sup>159</sup>

## Obesity

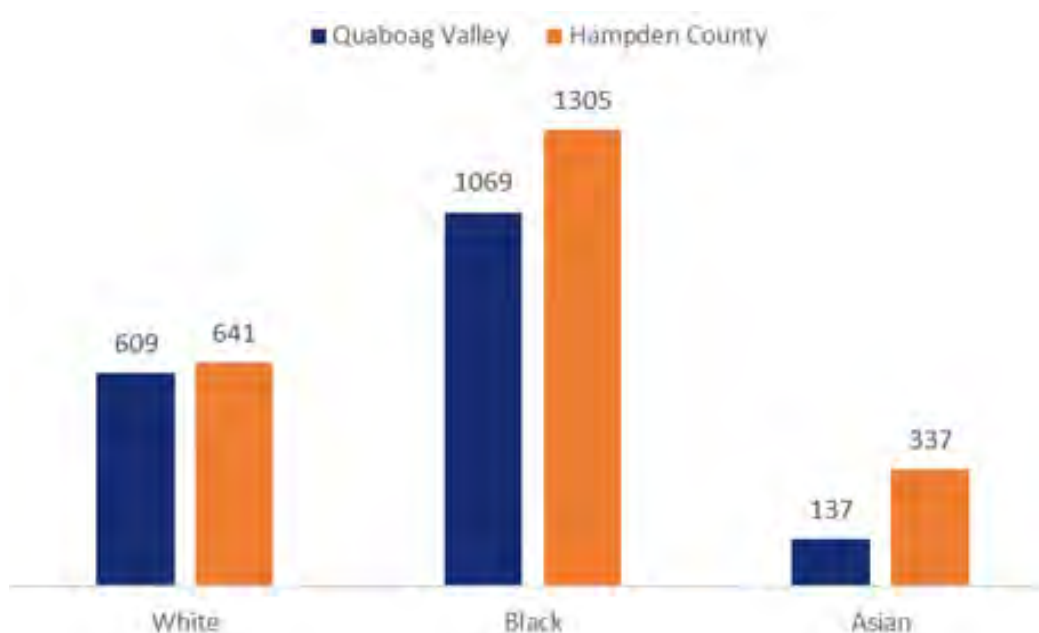
Obesity is a national epidemic and contributes to chronic illnesses such as cancer, heart disease, and diabetes. Obesity can impact overall feelings of wellness and mental health status. A healthy diet and physical activity play an important role in achieving and maintaining a healthy weight. The percentage of adults who have obesity has remained relatively the same since the last CHNA, at 27% in the communities served by Baystate Wing compared with 25% statewide.<sup>160,161</sup> About 28% of adults in Palmer and 27% in Ware are obese.<sup>162</sup> Almost one in three adults living in Worcester County (31%) and Hampden County (30%) are obese compared with one in four adults in Hampshire County.

## Cardiovascular Disease

Cardiovascular disease includes diseases that affect the heart and blood vessels, including coronary heart disease, angina (chest pain), hypertension, heart attack (myocardial infarction), and stroke. As of 2018, about one in five Medicare fee-for-service beneficiaries in Hampden County (21%) and Hampshire County (18%) and one in four (24%) in Worcester County has ischemic heart disease (24% statewide).<sup>163</sup>

- Between 2016 and 2019, the average age-adjusted cardiovascular disease hospital admissions rate for Quaboag Valley rural cluster was 1,070 per 100,000, and 806 for the Hilltowns rural cluster compared with the state average of 1,178.<sup>164</sup>
- Figure 23 highlights racial disparities in heart disease ED visits in Quaboag Valley.
- As shown in Figure 24, the age-adjusted stroke hospital admissions rate in 2019 for the Quaboag Valley rural cluster was 203 per 100,000 compared with the state average of 191 per 100,000.
- Almost one in three residents living in Ware (30%) and Palmer (31%) have high blood pressure.<sup>165</sup>
- As of 2018, over half of Medicare fee-for-service beneficiaries in Hampden County (56%), Worcester County (54%), and Hampshire County (50%) had high blood pressure (56% statewide).<sup>166</sup>

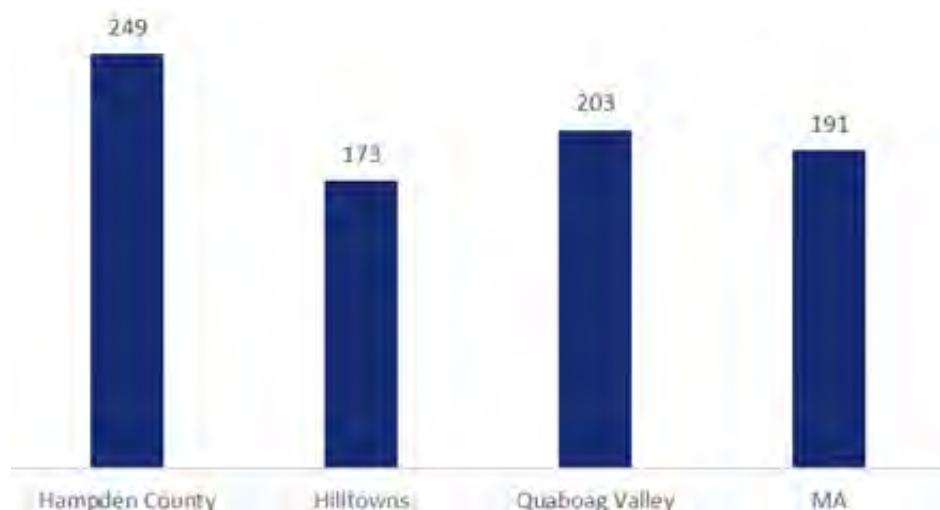
**FIGURE 23: Heart Disease Emergency Department Visits by Race, 2016–2019**  
Age-adjusted rate per 100,000



**Source:** MDPH, Hospital Admissions, State Tables, 2016–2019; age-adjusted rate per 100,000

**Note:** Data were not available for Latino/a/e patients

**FIGURE 24: Stroke Hospitalization Admission Rates by County, Rural Clusters, and Massachusetts, 2019**  
Age-adjusted rate per 100,000



**Source:** MDPH, Hospital Admissions, State Tables, 2016–2019; age-adjusted rate per 100,000



## Cancer

Cancer was the leading cause of death for Massachusetts residents in 2019, with the highest rates seen in White residents at 144 per 100,000 and the lowest seen in Asian residents at 91 per 100,000.<sup>167</sup> Advancing age is the most important risk factor for cancer. Between 2010 and 2019, the population age 65 and older experienced a 23% increase in cancer in Hampden County and an even larger increase—44% and 49%—in Hampshire and Franklin counties, respectively.<sup>168</sup>

In 2014, the age-adjusted cancer hospital admission rate was 329 and 332, respectively, for the Hilltowns and Quaboag Valley rural clusters, which were both higher than the Hampden County rate of 316 per 100,000.<sup>169</sup> The 2014–2018 colon and rectal cancer incidence rate was 37 per 100,000 in Hampden County, which was similar to the statewide average of 35 per 100,000.<sup>170</sup> Breast cancer incidence rates in the same time period in Hampden County were 131 per 100,000, which were also similar to the statewide average of 137.<sup>171</sup>

## Diabetes

An estimated 10% of residents in the communities served by Baystate Wing have diabetes (9% statewide).<sup>172,173</sup> The vast majority of diabetes is Type 2 diabetes, which is one of the leading causes of death and disability in the U.S. and a strong risk factor for cardiovascular disease. We see inequities in who is experiencing highest rates of serious illness and complications from diabetes, with greater hospitalization rates among Black patients compared with White patients.<sup>174</sup>

## *Other Health Outcomes*

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### Infant and Perinatal Health

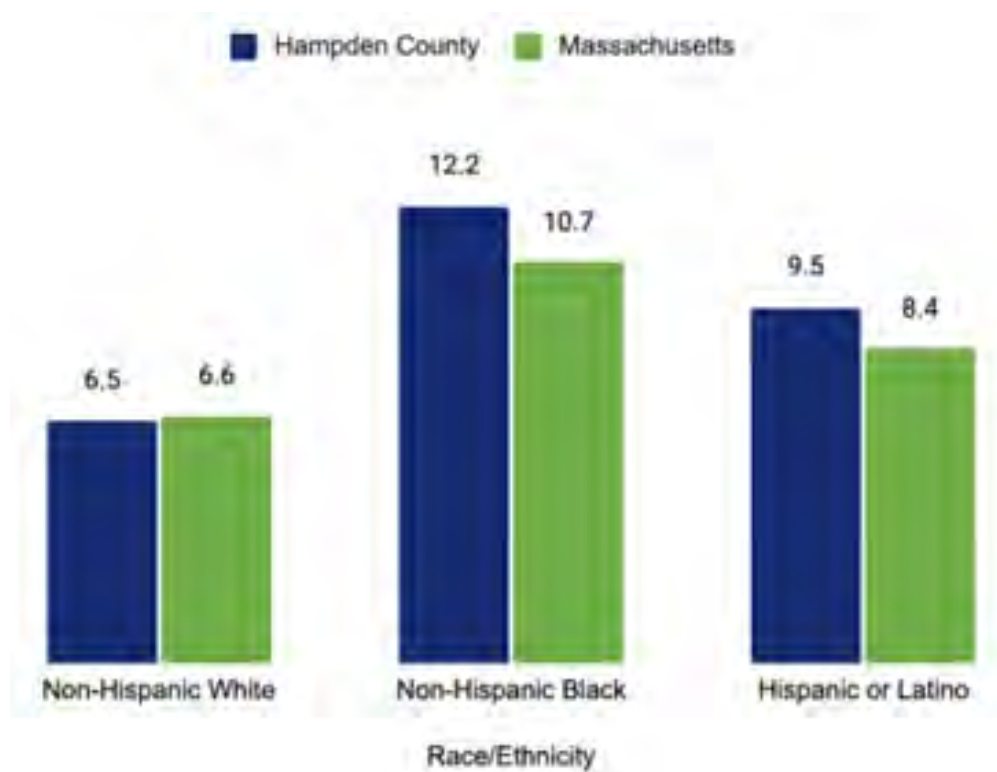
Infant and perinatal health risk factors continue to affect residents in the communities served by Baystate Wing, causing poor maternal and infant outcomes. Preterm birth (<37 weeks gestation) and low birth weight (about 5.5 pounds) are among the leading causes of infant mortality and morbidity in the U.S. and can lead to health complications throughout the lifespan.<sup>175</sup> Early entry to prenatal care and adequate prenatal care are crucial components of health care for pregnant women that directly reduce poor birth outcomes, including preterm birth, low birth weight, and infant mortality (infant death

before age 1).<sup>176</sup> Smoking during pregnancy is a risk factor that increases the risk for pregnancy complications and affects fetal development.<sup>177</sup>

- The percentage of low-birth-weight births in Hampden County is 8% compared with 7% in Hampshire County, Worcester County, and statewide. Black and Latino/a/e women experience inequities.<sup>178</sup> (see Figure 25)
- In the communities served by Baystate Wing, for every one baby who dies to a White mother, two babies die to a Black mother.<sup>179</sup>
- The 2013–2019 infant mortality rate in the region was five per 1,000 live births, which is 30% higher than the statewide average of four per 1,000 live births.<sup>180,181</sup>

One of the starkest health disparities in the U.S. today is related to maternal death and infant death. Black women are up to four times more likely than White women to die from a pregnancy-related cause.<sup>182</sup>

**FIGURE 25: Low Birth Weight, Percent by Race/Ethnicity, 2013–2019**

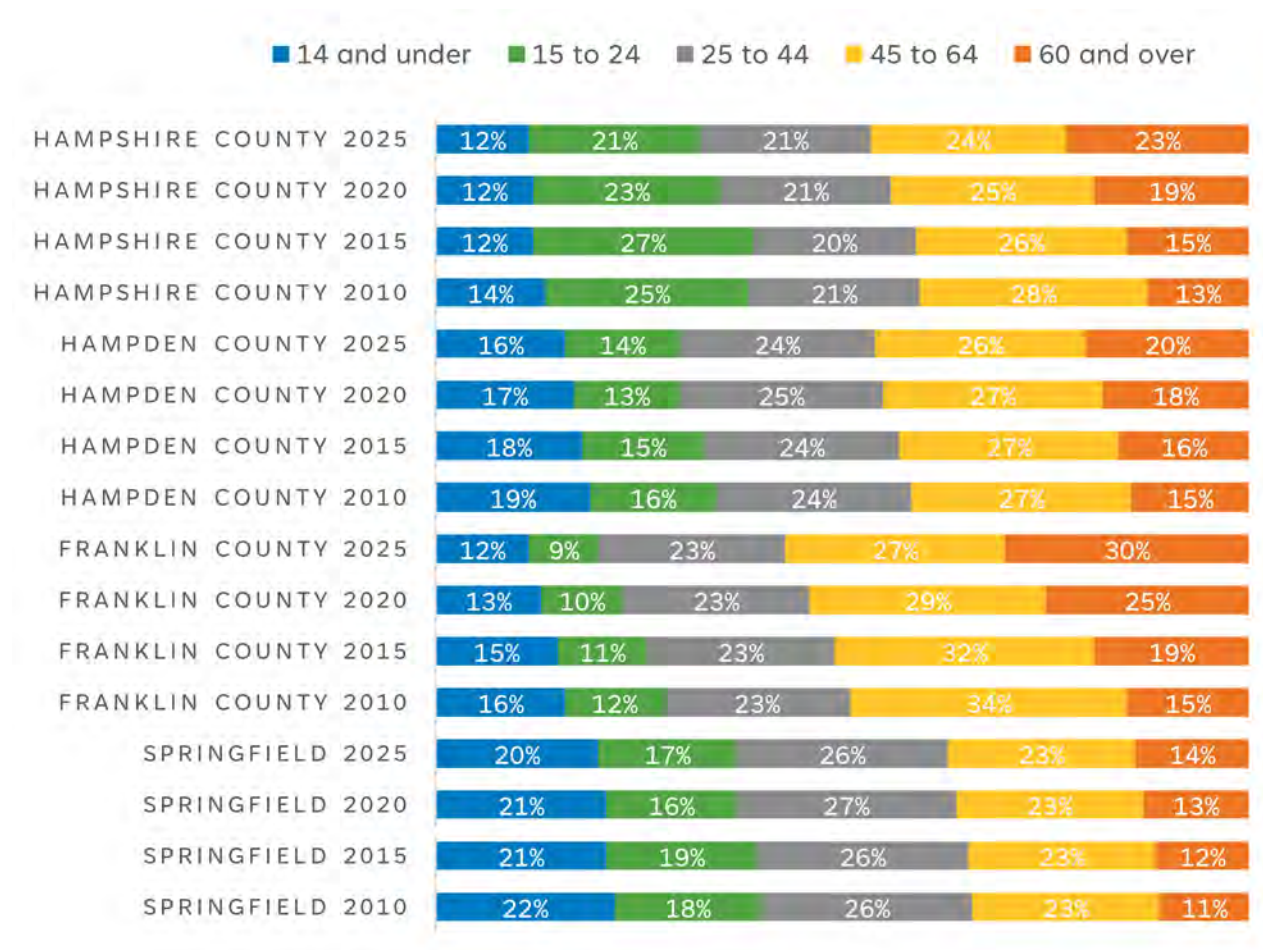


**Source (data):** University of Wisconsin Population Health Institute, County Health Rankings. 2014–2020  
**Source geography:** County

### Alzheimer's Disease and Dementia

Alzheimer's disease is the most common form of dementia and accounts for 60%–80% of dementia cases. More than 6 million Americans are living with Alzheimer's, and between 2000 and 2019, deaths from Alzheimer's increased by 145%.<sup>183</sup> COVID-19 has had an effect on Alzheimer's. Preliminary reports from the CDC indicate that there were approximately 16% more deaths in 2020 from Alzheimer's and other forms of dementia compared with the five-year average before 2020.<sup>184</sup> Of the total population in Hampden County, 17% is 65 and older. Between 2010 and 2019, this population has grown by 23% and is expected to continue to increase as the population ages (see Figure 26).<sup>185</sup>

- An estimated one in ten Medicare fee-for-service beneficiaries in Hampden County (11%), Hampshire County (10%), and Worcester County (10%) have Alzheimer's disease, which is comparable to the statewide rate (11%).<sup>186</sup>
- In the communities served by Baystate Wing in 2019, the age-adjusted rate for Alzheimer's related hospital admissions was 18.7 per 100,000.<sup>187</sup>
- People with dementia, including Alzheimer's, are found to be at elevated risk for infection and death from COVID-19, likely due to living in nursing homes, where the virus initially spread quickly in many parts of the country.<sup>188</sup>

**FIGURE 26: Projected Pioneer Valley Population by Age (detailed Age Cohorts)**

**Source:** UMDI Population Projections 2018, U.S. Census Bureau 2018 5-YR ACS Tables B25007 Tenure by Age, B01001 Sex by Age, B25001 Housing Units, B25004 Vacancy Status





# 7. Priority Populations



## 7. Priority Populations

The priority populations identified through the 2019 CHNA continue to be priority populations for the 2022 CHNA because of disparities in social determinants of health, access to care, and/or high rates of health conditions.

Available data indicate that children and youth, young adults under age 25, older adults, Latin/a/es, and Blacks experience disproportionately high rates of some health conditions when compared to that of the general population. Children experienced high rates of asthma and obesity. Older adults had higher rates of hypertension and asthma. Latino/a/es and Blacks experienced higher rates of hospitalizations due to asthma, stroke, cardiovascular disease, diabetes, and also experienced poor birth outcomes and lower rates of prenatal care.

With regard to mental health and substance use disorders, data indicate increased risk for youth for depression, substance use, and suicide. In particular, girls have higher rates of some types of substance use and LGBTQIA+ youth have particularly high rates of depression and suicide. Older adults are at risk for substance use disorder. Others at risk include women, who have higher rates of mental health hospitalization, people reentering society after incarceration who are at high risk for overdose, and people with dual diagnoses. People experiencing homelessness have high rates of severe mental illness and substance use disorder.

When considering those with disproportionate access to the social determinants of health, the Latino/a/es and Black population experience a host of inequities, including poverty, unemployment, income, educational attainment, interpersonal and institutional racism, affordable and safe housing, and access to transportation and to healthy food. Youth were identified as at risk with regard to childhood poverty, and older adults experience needs in affordable housing, income, and social isolation.

People with lower incomes experience poverty, unemployment, income concerns, lack of access to affordable and safe housing as well as poor housing conditions, and lack of access to transportation and healthy food. People with disabilities tend to have higher rates of poverty and lower levels of education, and in Hampden County, people living with a disability have more than double the rate of poverty as those with no disability. Women earn less than men and have high rates of experiencing interpersonal violence and trauma. People who have been involved in the criminal legal system have barriers to

housing and employment, and experience stigma and trauma. People with mental health and substance use disorders experience homelessness at higher rates and stigma.

### *Geographic Areas of Concern*

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In the communities served by Baystate Wing many of the smaller, rural communities do not have sufficient numbers of cases of chronic diseases and other conditions to be available for analysis. MDPH does not publish cases or rates of certain health conditions or illnesses when there are a small number in a given town. This varies based on dataset and health conditions. For example, for birth data, the number must be 5 or more; for other data, cases must number more than 11. In the communities served by Baystate Wing the towns of Ware and Palmer had consistently higher rates for the majority of health conditions identified as prioritized health needs. These communities also disproportionately experience numerous social and economic challenges which contribute to the health inequities, such as lower household incomes and lower educational attainment levels. While the region served by Baystate Wing is overwhelmingly White, these two communities include the largest proportions of residents of color, so health inequities experienced by these communities contribute to the many racial and ethnic disparities observed in the region.

# 8. Actions Taken by Baystate Wing

## 8. Actions Taken by Baystate Wing

The CHNA conducted in 2019 identified significant categories of health needs within the communities served by Baystate Wing. Those needs were then prioritized based on the magnitude and severity of impact of the identified need, the populations impacted, and the rates of those needs compared to referent (generally the state) statistics.

Additionally, Baystate Wing's resources and overall alignment with the health system's mission, goals, and strategic priorities were taken into consideration. It was determined that the hospital could effectively focus limited resources on select prioritized health needs. The full Strategic Implementation Plan (SIP) for 2020-2022 can be found here: <https://www.baystatehealth.org/about-us/community-programs/community-benefits/community-health-needs-assessment>. For the purposes of the SIP, four focus areas and goals were prioritized, including social environment, mental health and substance use, basic needs, and domestic violence.

In 2020, the year immediately following the completion of the 2019 CHNA and development of the 2022-2025 SIP, our world was turned upside down by the COVID-19 pandemic. Baystate Wing's CBAC pivoted to virtual meetings and continued to meet monthly and oversee the awarding of grant funding to select partners through two Better Together Grant Program request for proposal processes (in 2021 and 2022) to further address health needs identified in the 2019 CHNA. The section below provided additional details about the various initiatives undertaken and investments made by Baystate Wing to address the priorities identified in the previous CHNA.

### *Social Environment*

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- **Alzheimer's Association of Massachusetts/New Hampshire (AA MA/NH) (Better Together Grantee):** Received a three-year, \$50,000 grant bring an innovative and evidence-based approach to managing Dementia and Alzheimer's Called Dementia Care Coordination (DCC) to the communities served by Baystate Wing. The process involves interfacing directly with patients and families to provide information, support, and resources to manage challenges. DCC also works to increase the healthcare capacity for Dementia/Alzheimer's care through a direct referral program, provider education, and adoption of age-friendly guidelines. The program also provides telemonitoring for clinical staff utilizing Project ECHO (Extension for Community

Healthcare Outcomes). This is an ongoing program, but a success includes distributing a survey to providers to determine how to enhance the program during rollout.

- **Greater Springfield Senior Services Inc (GSSSI) (Better Together Grantee):** Received a three-year, \$51,000 grant to support its Medically Tailored Meals (MTM). MTM provides clients with home-delivered meals for clients with cardiac, renal, and diabetic diagnoses. The program aims to help elderly residents of Palmer (and hopefully the surrounding area if the program is successful) access healthy food, improve health education knowledge, reduce social isolation, and provide warm handoffs to other organizations as needed. All participants have an appointment with a dietitian to discuss health education. Program implementation was delayed due to COVID-19 impacts on community outreach and referrals.
- **Quaboag Hills Community Coalition (QHCC) (Better Together Grantee):** Received a three-year, \$50,000 grant to fund its Seeds of Hope Initiative. This program supports 50 young people in the Quaboag Hills region who are not headed to college to create rewarding lives through employment. QHCC provides an individual approach to address any gaps in participants' social environment while simultaneously working to lower barriers preventing successful engagement. These barriers include a lack of transportation, identification, and childcare, among other things. QHCC works with program participants to determine their aptitude and relevant skills for potential future employment. Seeds of Hope provides a Planned Approach to Community Health (PATCH) services through Behavioral Health Network (BHN). Program implementation was delayed due to COVID-19 impacts on community outreach and staffing.
- **Quaboag Valley Community Development Corporation (QV CDC) (Better Together Grantee):** Received a three-year, \$45,000 grant to support its Financial Fitness Club (FFC) initiative. FFC aims to help those with low incomes plan and save to achieve asset-building goals designed to bring participants financial stability. Participants set realistic goals and are encouraged to deposit money into their local community bank regularly. Participants also attended monthly group meetings on a litany of topics related to financial health. After completion of the program, successful participants will be awarded a one-to-one match for the money they saved. Since its inception in 2021, successes include outreach, launching the program, receiving applications, and enrolling eight participants.
- **The Literacy Project (TLP) (Better Together Grantee):** Received a three-year, \$43,664 grant to support its Building Healthy Lifestyles Together initiative. This program is

designed to enhance the adult basic education classes held at the Literacy Project Ware Classroom by offering opportunities for healthy eating and exercise as a group. A student advisory board will be created, allowing participants to drive program activities, and ensuring there is interest. In 2021, despite the skepticism of potential participants, program designers saw increasing participation as activities were tailored toward the group's interest.

### *Mental Health and Substance Use*

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- Quaboag Hills Community Coalition Substance Use Alliance (QHCC SUA):** Baystate Wing continues to support and active engage with QHCC SUA, Hampshire Heroin Opiate Prevention and Education (HOPE) Coalition, the Hampden County Addiction Task Force, Strategic Planning Initiative for Families and Youth (SPIFFY) Coalition, and the Worcester County Drug Addiction Task Force. QHCC SUA has acquired additional grants from SAMSA. It is a multi-year prevention SUD outreach grant for teens and young adults aged 19–26. The second group was identified as a priority population in the previous CHNA. While this is an ongoing effort, QHCC SUA designed a survey for the target groups and their parents, for teens who live at home. Additionally, in a project funded by The National Association of City and County Health Officials (NACCHO) and the CDC, QHCC SUA has implemented harm reduction techniques in the community, including expanded training and distribution of Naloxone and an Anti-Stigma Campaign. The funding allows for Naloxone to be stocked in community areas, available for use if needed. Finally, QHCC SUA received a second five-year grant from the CDC to work to reduce teen nicotine use.
- Opioid Legislative Earmark:** In 2021, Baystate Wing received a \$50,000 state earmark grant from the Massachusetts Department of Health (MDPH) to combat OUD in the region. Internally, just under half of the grant went to increase awareness, train providers in harm reduction techniques, and work to eliminate the stigma around the issue. Specifically, this grant was used to launch the Words Matter campaign, a social media campaign, and a pledge to stop using stigmatizing language related to those with SUD. There are currently 900 employees signed onto the pledge. Harm-reduction kits were distributed in the ED. The remaining money was awarded through two grants to community partner organizations fighting OUD in the region, including the Western Massachusetts Training Program for the Ware Regional Recovery Center and the Wilbraham Police Department for Drug Addiction and Recovery Team (DART) program



training. This funding was made possible through the support of State Representative Todd Smola.

- **Baystate Behavioral Health Hospital (opening 2023):** Baystate Health and Kindred Behavioral Health are partnering to build and operationalize a new state-of-the-art behavioral health hospital to meet the communities increased need for specialized behavioral health services and to address the dire shortage of beds in the region. The 150-bed freestanding facility, to be called Baystate Behavioral Health Hospital, will be in Holyoke, Massachusetts, and will feature 120 semi-private rooms and thirty private rooms for the Commonwealth of Massachusetts Department of Mental Health. The new hospital will increase patient access to Baystate Health's specialty inpatient behavioral healthcare for adults, including geriatric patients, as well as adolescents and children, by more than 50%. The 23,230-square-foot, four-story facility is designed specifically for behavioral health services to foster a better healing environment for patients and will feature a wide range of programs to meet patients' varying treatment needs. The hospital will feature large activity and therapy rooms, a gym for therapy services, multiple courtyards, and outdoor recreation spaces where patients can interact with each other and their family members. The \$72 million project is estimated to take 16 months to complete with an expected opening in August 2023.

### *Basic Needs*

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- **Alliance for Digital Equity:** Looking beyond physical resources, conquering the “digital divide” is another area of inequity identified by the previous CHNA. In the summer of 2020, there was broad community engagement on the “digital divide” led by Baystate Health's Vice President for Public Health, Frank Robinson. Discussions were centered on solving problems preventing digital equity, which occurs when everyone has access to the internet. In the fall of 2020, the Alliance for Digital Equity was formed, comprising 30 people representing various community elements and organizations working to actualize solutions that began in the discussion series. This is an ongoing project, and more information about their current activities can be found at [www.alliancefordigitalequity.com](http://www.alliancefordigitalequity.com).
- **Ware Mobile Food Pantry (WMFP):** a collaboration between the Food Bank of Western Massachusetts, Baystate Wing, and QHCC SUA. The WMFP provides healthy food to community members that may not otherwise be able to get it. Baystate Wing CBAC members and hospital staff serve as volunteers. The WMFP provides food to more

than 200 families living in the community and from the Highland Village Apartments. This was moved to Granville Park during the Pandemic to continue service in a safe, socially distanced manner. The Quaboag Hill Substance Use Alliance provides access to Narcan Training and Narcan at every Mobile Food Pantry. In addition to the WMFP, Baystate Wing helped to bring the Food Bank of Western Massachusetts Brown Bag Food for Elders Program (BBEP) to Ware. BBEP provides eligible older adults with supplemental bags of food. The program includes all types of food, including canned goods, pasta, and produce (when available). The program has been going strong for seven years. In 2020, the program provided supplemental food for 135 households. During the pandemic, the number of staff was reduced to five, and the program continued to operate at capacity.

- **Quaboag Valley Community Development Corporation (QVCDC):** awarded a total of \$40,000 to support the Quaboag Connector, a program administered by the Town of Ware and QVCDC to provide community members with transportation to and from work, workforce training, and adult education programs. The program has expanded to offer increased services to a nine-town area. Community members now use the program to access medical appointments, cultural activities, and grocery shopping. To continue to support the community's needs, the connector will expand to include Saturday service, an electronic schedule, and a fixed route shuttle along Route 9. In 2020, the connector provided 6,295 total rides to community members. The service continued through the pandemic and provided an average of 900 rides a month.
- **Baystate Wing Employee School Supply and Holiday Toy Drives:** Traditionally, hospital employees annually donate school supplies to benefit local elementary schools. Due to the pandemic, the drive was canceled in 2020. Instead, the hospital leveraged its purchasing power to donate \$5,000 worth of school supplies to beneficiary schools. The following year, the school supply drive was held as it traditionally was, with BWH team members donating school supplies to an area school. In 2021 Baystate Wing team members donated 1,058 items to Palmer, Ware, and Quaboag Regional Schools. In addition to the school supply drive, Baystate Wing employees donate toys for an Annual Holiday Drive. Unfortunately, during the pandemic and statewide shutdown, it had to be canceled in 2020. In 2021, staff designed a plan for the toy drive that allowed it to happen despite the ongoing pandemic. Team members mailed or delivered newly bought donations to be distributed. The donated toys were distributed to 90 children in Ware, Palmer,

Belchertown, Brookfield, Brimfield, and Warren by the Behavioral Health Network (BHN).

- Hampden County Healthy Improvement Plan (HCHIP):** Baystate Health continued to fund backbone support of the HCHIP, which has five focus areas: health equity; behavioral health; primary care, wellness, and prevention; healthy eating, and active living. HCHIP was awarded the Massachusetts Community Health and Healthy Aging Fund Grant which has helped the network to successfully implement many programs with community partners that benefit the community. Tapestry Health engaged in Narcan training and outreach. Tapestry health developed and generated interest in four “naloxoboxes in Hampden County as a part of these efforts. This effort was supplemented by harm reduction training and outreach designed to reach 100 people. Additionally, HCHIP successfully advocated for the “Family First’ bill, an effort led by MOAR, another HCHIP member. This bill expanded telehealth access to SUD and mental health services. This effort was supplemented by successfully implementing a “Breaking the Stigma’ campaign via local radio and 413 cares to raise awareness about SUD and resources to treat it. HCHIP also helps to facilitate youth mentoring in the community. In November of 2021, it held a Youth Mentoring Summit that connected participants with more than 50 potential mentors. This effort was augmented by the creation of mentoring resources posted on 413Cares and in-person programs.

In 2021, HCHIP used \$10,000 of funding from Baystate to distribute as mini grants to community organizations, including Estoy Aquí, LLC, Suicide Prevention and Social Justice Education, Let’s Move Holyoke, Farmers Market Coach, University of Massachusetts Amherst, and STRIVE Youth Participatory Action Research. While many of these are ongoing programs, there are several successes in the distribution of these grants. Estoy Aquí provides bilingual suicide prevention training to community members who work with youth. Program participants included barbers, hairdressers, doulas, etc. More than 45 community members have been trained so far. This program is also featured in a documentary called Mosaic. Let's Move Hampden County 5120 group hired a bilingual farmers market coach who provides dual services through orienting people with the Holyoke farmer's market and providing information about the Healthy Initiatives Program, which provides free fresh produce to SNAP/EBT participants. The group has leveraged this to get funding to keep the farmer’s market open during the winter. The group also secured a grant from Feeding America to implement this area in other communities. Beyond the mini-grants, HCHIP. The mini

grant awarded to STRIVE provided funding for the Youth Participatory Action Research Project. In its first year, 14 participants were able to share their perspectives of the world through various mediums, including some of the pictures in this report.

Given the fantastic work HCHIP does in the community, in 2020 local organizations in the Baystate Wing region applied to the Massachusetts Community Health and Healthy Aging Fund to get funding to start a Quaboag Hills Community Health Improvement Plan (QHCHIP). This is an ongoing process that COVID impacted, but there have been several successes. QHCHIP received funding and a staff member was hired to help facilitate the development of the program. A partnership was established with the Pioneer Valley Planning Commission (PVPC), which also has a strong partnership with HCHIP.

### *Domestic Violence*

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- **Ware and Palmer Domestic Violence Task Forces:** continued to provide services through the pandemic. Baystate Wing supports the groups by providing a meeting space, training, and communications to local providers. The task forces worked to determine how best to address the needs of survivors of domestic and sexual violence in the area, identify gaps in care, and discuss best practices and pending state mandates. A joint vision was to facilitate help for survivors of domestic and sexual violence. Both groups implemented plans working toward the following goals:
  - Continue to communicate and plan for ongoing meetings to strengthen the partnership between the two task forces.
  - Create a joint plan to identify opportunities for funding, training, and collaborative efforts.
  - Work together to create a plan to evaluate services, training, and collaborative effort.
  - Support the BEHR staff through the creation of a BEHR domestic violence task force.

Baystate Wing's Domestic and Sexual Violence Screening and Response Team worked to develop a set of screening questions and practices. These protocols are still used and promoted by Baystate Wing's ED staff.

Baystate Wing also fights domestic violence by providing office space to the BHN Domestic Violence Advocate, who is a certified counselor in the area of domestic and

sexual violence. The Advocate provides counsel and empowerment to survivors using emotional support, safety planning, case management, and advocacy in care systems. In 2021, the advocate was referred 47 cases.

### *Other Needs that Align to CHNA*

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- Baystate Wing Hospital Financial Counseling:** Available to community members who have concerns about the cost of their health care. Financial services provided include assistance with health insurance applications, navigating the health system, ensuring all healthcare needs are met, and determining eligibility for financial aid. Counselors are a link between clients and community resources, assisting people in finding a primary care physician, providing information about behavioral health services, and assisting with insurance issues at pharmacies. All counselors are Certified Application Counselors, a state-run program that trains participants to help the community apply for state and federal healthcare assistance. This program requires all counselors to be recertified yearly and take annual training. In 2020 and 2021, counselors at BWH completed 291 and 212 applications, respectively.
- Population-based Urban and Rural Community Health Program (PURCH):** A medical school curriculum track at the University of Massachusetts Chan Medical School. PURCH aims to train medical students using a population health lens and is informed by a community-based experience. In 2021, there were 15 PURCH graduates, with nine remaining in Massachusetts. The demographic breakdown based on how students identified is 11 White, 1 Black, 1 Chinese, and 1 graduate who chose not to self-identify. In 2022 there were 27 graduates, with 18 staying in MA and two continuing at Baystate. The demographic breakdown is 21 white students, two identified as Asian, two identified as Chinese, one identified as Indian, and one identified as other. In 2021, the PURCH Give Back program was developed in response to students recognizing there is often a shortage of resources at community-based organizations. The program partners with Baystate Health's Office of Government and Community Relations (OGCR), which allows students to provide financial support to community-based organizations and initiatives through earmarked Baystate Health community benefit funding. PURCH students work with community-based organizations and may identify a need, whether it is emerging, current, or urgent. Once a need has been identified, students can write and submit a proposal for funding that addresses the organizational or programmatic need and how it would address a social determinant of health. The first Give Back Program Grant recipient was an initiative

called “Rainbow Kitchen.” The program aimed to provide a new LGBTQIA+ residential living facility with healthy cooking classes in partnership with Tapestry Health.

- **Emergency Medical Services (EMS) Training and Continuing Education:** a program that offers additional training for participants at no charge. Between 10 and 25 participants attended each session. These educational opportunities were supplemented by two larger conferences attended by 70 people each. The final type of conference held for EMS improvement is Morbidity and Mortality (M&Ms) Conferences. 10-15 participants attended smaller meetings for internal staff held at area fire departments. Baystate Wing M&Ms were held virtually and were attended by between 50 and 130 people. Additionally, Baystate Wing’s Board of Trustees invested \$70,000 in the Ware Fire Department EMS training program. The funding for this program has dual benefits. First, it increases the department's capacity to provide pre-hospital care for those who needed. It also will increase workforce opportunities for young people in the area.
- **Quaboag Regional Certified Nursing Assistant Training:** a program of the Quaboag Regional School District funded by Baystate Wing to increase opportunities for students in the area. The school used the grant money to purchase equipment, supplies, and textbooks as fees and tuition for a CNA program. There were 15 students enrolled in the program, and the goal is to continue to enroll 15 students in the program each year. Another program that BWH supported was a grant for Ware Public School’s 3D Filament Project. The money was used to purchase the printer and filaments required to run it. Access to the 3D printer will allow the 33% of students with no immediate plans for the future the skills to get a job at local manufacturers.

### *Learn More*

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To learn more about actions taken by Baystate Wing since the 2019 CHNA please view the hospital’s annual community benefit reports as filed with the Massachusetts Attorney General’s Office.

- [www.mass.gov/non-profit-hospital-and-hmo-community-benefits](http://www.mass.gov/non-profit-hospital-and-hmo-community-benefits)
- <https://www.baystatehealth.org/about-us/community-programs/community-benefits/community-health-needs-assessment>





Baystate Wing Hospital  
Convenient Care Van



Jennifer Breault, RN  
Nurse Manager  
Baystate Wing Hospital



The Literacy Project Graduation Ceremony (May 2022)  
Grenville Park, Ware, Massachusetts  
Photographer: Amanda Bish



Surgical Technologist Team  
Baystate Wing Hospital  
Photo Credit: Baystate Health



PURCH Medical Students and Staff with the  
Baystate Wellness on Wheels (WOW) Bus  
Ware, Massachusetts  
Photo Credit: Baystate Health

# 9. Resources



## 9. Resources



# 413CARES

**Connecting YOU with Resources in the 413**  
*Many Resources Are FREE*



**Resources Available**

- Food and Nutrition
- Housing
- Behavioral Health & Recovery
- Early Education
- Healthcare
- And More!

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Serving Franklin and Hampshire Counties and the North Quabbin Region



Popular Categories

- Housing
- Food
- Transportation
- Money
- Mental Health
- Addiction & Recovery
- ...and more



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ADVANCING CARE. ENHANCING LIVES.

## Community Resources

*The following list of community resources is not comprehensive. To learn more about local community resources please visit [www.413Cares.org](http://www.413Cares.org) and [www.look4help.org](http://www.look4help.org).*

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### Behavioral Health Network (BHN) Addiction & Recovery Services

Comprehensive addiction services, including detox, post-detox residential series, long-term residential, day treatment programs, and outpatient services.

[www.bhninc.org/services-and-programs/addiction-recovery](http://www.bhninc.org/services-and-programs/addiction-recovery)

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### Behavioral Health Network (BHN) Outpatient Services

Provides services to chronically mentally ill adults, seriously emotionally disturbed children, adolescents, and families; substance use disorder treatment; domestic violence services; traumatic brain injury services; childcare and summer camps.

[www.bhninc.org](http://www.bhninc.org)

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### Belchertown Family Center

Committed to providing the community with early childhood enrichment in a safe environment that allows children to develop socially, emotionally, intellectually, and physically through learning activities and play.

[www.belchertown.org/residents/family\\_center](http://www.belchertown.org/residents/family_center)

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### Breathing Space Yoga

Dedicated to bringing low-cost, accessible, body-positive yoga, mindfulness, and mindful eating to all using simple forms and plain language.

[breathingspaceholyokey.com](http://breathingspaceholyokey.com)

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### Brookfield Institute

The mission of The Brookfield Institute is to build resilience in veterans and military families through targeted programs and resources in order to aggressively combat the causes and impacts of veteran suicide.

[www.brookfieldinstitute.org](http://www.brookfieldinstitute.org)

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### Center for Human Development (CHD)

As one of the largest social service organizations in western Massachusetts, CHD delivers a broad array of critical services with proven effectiveness, integrity, and compassion.

[www.chd.org](http://www.chd.org)

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### **Clean Slate Addiction Treatment Center (Suboxone Treatment)**

Drug treatment center in Ware that treats patients with dignity, compassion, and respect, offers rehabilitation for drug addictions such as opioids and alcohol, and accepts Medicare, Medicaid, and commercial insurance.

[www.cleanslatecenters.com/ware-ma](http://www.cleanslatecenters.com/ware-ma)

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### **Community Action Pioneer Valley (CAPV)**

Federally designated Community Action Agency serving low-income individuals and families.

[www.communityaction.us](http://www.communityaction.us)

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### **Eagle Hill School**

Educates students identified with learning (dis)abilities by providing an intimate and encouraging community that honors the individual, values learning diversity, and cultivates international mindedness.

[www.eaglehill.school](http://www.eaglehill.school)

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### **Education to Employment: Quaboag Region Workforce Training and Community College Center (E2E)**

A collaboration between Holyoke Community College and Quaboag Valley Community Development Corporation; the center offers non-credit classes in hospitality and culinary arts; the expectation is that course offerings will expand to include manufacturing and health careers; credit and non-credit HCC courses; EMS training; workforce development; training and resume writing.

[www.qvcdc.org/education-to-employment](http://www.qvcdc.org/education-to-employment)

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### **Food Bank of Western Massachusetts Brown Bag Food for Elders Program**

Food Bank of Western Massachusetts provides a free bag of healthy groceries to eligible older adults once a month at local older adult centers and community organizations.

[www.foodbankwma.org/get-help/brown-bag-food-for-elders](http://www.foodbankwma.org/get-help/brown-bag-food-for-elders)

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### **Food Bank of Western Massachusetts Mobile Food Pantry and SNAP Outreach and Enrollment**

Delivers a truckful of free, fresh, and nonperishable groceries from a warehouse directly to a community site for immediate distribution to residents; the program reaches underserved populations throughout western Massachusetts that don't have access to healthy foods, including families, older adults, and children.

Assists households in western Massachusetts apply for the program; screens individuals for eligibility and assists them throughout the SNAP application process, including gathering necessary documentation to receive benefits.

[www.foodbankwma.org/get-help/mobile-food-bank](http://www.foodbankwma.org/get-help/mobile-food-bank)  
[www.foodbankwma.org/get-help/snap-outreach-enrollment](http://www.foodbankwma.org/get-help/snap-outreach-enrollment)

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### **Hampshire & Hampden Drug Addiction Recovery Teams (DART)**

The DART officer program is a collaborative effort with Hampshire County HOPE; members are patrol officers who volunteer to be part of this program in addition to their regular patrol duties; DART officers review log activities and identify people who have engaged in high-risk behavior as a result of narcotics addiction, work to meet with the person and offer resources, and may even transport a person to a local treatment facility.

[www.hampshirehope.org/dart/about](http://www.hampshirehope.org/dart/about)

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### **Hardwick Youth Center and Commission**

Open to all residents of Hardwick, Gilbertville, Old Furnace, and Wheelwright.

<https://www.townofhardwick.com/YouthCommission.html>

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### **Healthy Hampshire**

Community-based coalitions to improve health equity in Ware and Palmer through improved access to healthy eating and active living.

[www.northamptonma.gov/1482/Healthy-Hampshire](http://www.northamptonma.gov/1482/Healthy-Hampshire)

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### **Mass In Motion-Palmer**

The Pioneer Valley Planning Commission is the Mass in Motion coordinator for Palmer and West Springfield; works with interdisciplinary wellness leadership teams in both communities to promote healthy behavior, increase access to healthy food, and move the communities toward a health-in-all-policies approach through modifications to the regulatory and built environment.

[www.pvpc.org/projects/mass-motion](http://www.pvpc.org/projects/mass-motion)



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### Palmer Council on Aging/Senior Center

Identifies the total needs of the older adult population to (1) promote and encourage new and existing activities, (2) provide services and education to enhance the quality of life for elders, and (3) to assist elders to age with dignity and independence.

[www.townofpalmer.com/coa](http://www.townofpalmer.com/coa)

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### Palmer Domestic Violence Task Force

Mission is to eradicate domestic violence in Palmer.

[www.townofpalmer.com/domesticviolence](http://www.townofpalmer.com/domesticviolence)

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### Palmer Family Center

A primary care provider striving to (1) provide families with the best possible preventive care, (2) encourage healthy lifestyle choices, (3) identify and treat common medical conditions, and (4) refer to and coordinate care from specialists, when needed.

[palmerclinic.com](http://palmerclinic.com)

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### Pioneer Valley Asthma Coalition

Community partnership that works to improve the quality of life for individuals, families, and communities affected by asthma.

[www.pvasthmacoalition.org](http://www.pvasthmacoalition.org)

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### Pioneer Valley Planning Commission: Hardwick Community Development Program

The Hardwick Community Development program funds housing rehabilitation, an older adult weekend meals program, an environmental hazards study, The Literacy Project, the PATCH Program, and the Domestic Violence Task Force Program.

[www.pvpc.org/Hardwick](http://www.pvpc.org/Hardwick)

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### Pioneer Valley Transit Authority (PVTA)

Public transportation for the Pioneer Valley.

[www.pvta.com](http://www.pvta.com)

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### Quabbin Reservoir

Quabbin Reservoir is one of the largest unfiltered water supplies in the U.S.

[www.mass.gov/locations/quabbin-reservoir](http://www.mass.gov/locations/quabbin-reservoir)

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### Quaboag Connector

Transportation system that services Belchertown, Brookfield, East Brookfield, Hardwick, Monson, Palmer, Ware, Warren, and West Brookfield; rides relating to work, job training programs, and other job-related destinations take priority.

[www.rideconnector.org](http://www.rideconnector.org)

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### Quaboag Hills Community Coalition

Made up of members and agencies who work for the people of the Quaboag Hills region in western Massachusetts; helps people access resources to solve basic problems related to food, shelter, transportation, childcare, health care, substance use treatment, support, and information

[www.quaboaghillscc.org](http://www.quaboaghillscc.org)

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### Quaboag Hills Community Coalition: Coalition Substance Abuse Alliance

Regional coalition that works to prevent and reduce substance use in the 15 towns of the Quaboag Hills; supports and advocates for expanded support and recovery services; train, educate, advocate, and provide support and resources on opiate abuse and overdoses.

[www.qhsua.org](http://www.qhsua.org)

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### Quaboag Valley Community Development Corporation (QV CDC)

A member-based non-profit organization committed to economic development and helping small businesses grow and prosper.

[www.qvcdc.org](http://www.qvcdc.org)

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### Scantic Valley YMCA and Tri-Community YMCA

Fitness sessions, swimming, dance classes, after-school care, summer camp, older adult health initiatives, and mentoring opportunities.

[www.springfielddy.org/family-centers/scantic-valley-y-family-center](http://www.springfielddy.org/family-centers/scantic-valley-y-family-center)

[www.tricommunityymca.org](http://www.tricommunityymca.org)

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### Serving the Health Insurance Needs of Everyone (SHINE)

Program provides free health insurance information and counseling to all Massachusetts residents with Medicare and their caregivers; people who have Medicare or who are about to become eligible for Medicare can meet with a counselor to learn about benefits and options available; a counselor will review programs that help people with limited income to pay health care costs.

[www.mass.gov/health-insurance-counseling](http://www.mass.gov/health-insurance-counseling)

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### **South Middlesex Opportunity Council**

Mission is to improve the quality of life of low-income and disadvantaged individuals and families by (1) advocating for their needs and rights, (2) providing services, (3) educating the community, (4) building a community of support, and (5) participating in coalitions with other advocates and searching for new resources and partnerships.

The Greater Worcester Housing Connection provides housing and supportive services to unhoused and formerly unhoused individuals toward the community goal of ending homelessness.

[www.smoc.org/services-alphabetical-listing.php](http://www.smoc.org/services-alphabetical-listing.php)  
<http://www.smoc.org/greater-worcester-housing-connection.php>

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### **Springfield Partners for Community Action**

Federally designated Community Action Agencies serving low-income individuals and families.

[www.springfieldpartnersinc.com](http://www.springfieldpartnersinc.com)

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### **Tapestry Health: Syringe Access Program**

Syringe access programs in Holyoke and Northampton, sterile needles to drug users who inject drugs, trainings on Naloxone, education, and counseling.

[www.nasen.org/sep/tapestry-health-syringe-access-program](http://www.nasen.org/sep/tapestry-health-syringe-access-program)

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### **Top Floor Learning**

Promotes and provides personalized tutoring services in basic literacy skills and sponsors a dynamic, comprehensive program of lifelong learning opportunities for adult.

[www.topfloorlearning.org](http://www.topfloorlearning.org)

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### **Valley Opportunity Council: Fuel Assistance**

Also known as the Low-Income Home Energy Assistance Program, helps eligible households challenged by the high cost of home heating fuel pay a portion of their winter heating bills.

[www.valleyopp.com/energy-assistance/fuel-assistance](http://www.valleyopp.com/energy-assistance/fuel-assistance)

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### **Ware Adult Education Center/ The Literacy Project**

Provides free adult education classes at three levels: basic literacy, pre-GED, and GED; provides access to post-secondary education and job training skills.

[www.literacyproject.org](http://www.literacyproject.org)

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### Ware Family Center

One-of-a-kind resource for families with children aged 0–5 in Ware and the surrounding towns that helps families find resources to make it through trying times such as bringing home a new baby, identifying high-quality childcare and preschools, managing unexpected financial hardships, and other problems that affect them at home.

[www.facebook.com/WareFamilyCenter](https://www.facebook.com/WareFamilyCenter)

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### Way Finders

Confronts homelessness head-on in communities throughout western Massachusetts, including Hampden and Hampshire counties; targeted services help people experiencing homelessness with housing, real estate, employment support, and community services.

[www.wayfindersma.org](http://www.wayfindersma.org)

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### Worcester County Food Bank

Collects and inspects perishable and nonperishable food and distributes it through a network of 131 Partner Agencies in all 60 cities and towns of Worcester County.

[www.foodbank.org](http://www.foodbank.org)

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### Worcester Regional Transit Authority

Regional transit system that services the City of Worcester and the surrounding towns.

[www.therta.com](http://www.therta.com)

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### Workshop 13

Non-profit cultural arts and learning center in Ware that offers classes and workshops in fine arts and crafting, photography, ceramic arts, and personal growth; hosts monthly open mic nights and concerts and offers a venue for events.

[qhma.com/list/member/workshop13-ware-6969](http://qhma.com/list/member/workshop13-ware-6969)

## Hospital Resources

*The following list of hospital resources is not comprehensive. To inquire about additional hospital resources please visit [www.baystatehealth.org](http://www.baystatehealth.org).*

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### Baystate Behavioral Health

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.

[www.baystatehealth.org/services/behavioral-health](http://www.baystatehealth.org/services/behavioral-health)

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### Baystate Family Advocacy Center (FAC)

Our 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.

[www.baystatehealth.org/services/pediatrics/family-support-services/family-advocacy-center](http://www.baystatehealth.org/services/pediatrics/family-support-services/family-advocacy-center)

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### Baystate Wellness on Wheels (WoW) Bus

Wellness on Wheels is a program of Baystate Health, supported by funding from TD Bank's Ready Commitment. The WOW Bus is operated by Baystate Medical Center. Wellness on Wheels—the WOW Bus—will [travel to neighborhoods in the Springfield area](#) providing low-cost or free screenings, health education, and counseling to people where they live and work. Our community-centered approach means our services and programs remain '[by the people, for the people](#)'.

[www.baystatehealth.org/wowbus](http://www.baystatehealth.org/wowbus)

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### Community Health Link (CHL)

A leading community-based provider of health care services in Central Massachusetts, including services for mental health, substance abuse, rehabilitation, and unhoused individuals and families.

[www.communityhealthlink.org/chl](http://www.communityhealthlink.org/chl)

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### **Comprehensive Adult Weight Management Program**

Proven methods for weight management tailored to individuals' unique health needs and lifestyle.

[www.baystatehealth.org/services/weight-management](http://www.baystatehealth.org/services/weight-management)

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### **Diabetes Education Center**

Complete range of services for evaluation, treatment, and management of diabetes and other endocrine disorders; education, information, classes, and support groups.

[www.baystatehealth.org/services/diabetes-endocrinology](http://www.baystatehealth.org/services/diabetes-endocrinology)

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### **Diabetes Self-Management Program**

Help adult patients and their families learn to manage their diabetes and live full and productive lives.

[www.baystatehealth.org/services/diabetes-endocrinology](http://www.baystatehealth.org/services/diabetes-endocrinology)

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### **Griswold Behavioral Health Center**

Individual, couple, family, and group therapy; psychiatric and psychological assessment for children, teens, adults, and elders; substance abuse/addiction recovery programs; medication management program; driving under the influence program.

[www.baystatewinghospital.org/services-conditions/behavioral-health/services-we-provide/griswold-behavioral-health-center](http://www.baystatewinghospital.org/services-conditions/behavioral-health/services-we-provide/griswold-behavioral-health-center)

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### **Heart and Vascular Care Services**

Comprehensive diagnostics and treatment options for coronary artery disease, heart rhythm disorders (arrhythmias), heart failure, cardiac surgeries for adults and children, and cardiology clinical trials.

[www.baystatehealth.org/services/heart-vascular](http://www.baystatehealth.org/services/heart-vascular)

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### **Patient Family Advisory Councils**

Baystate Health Patient and Family Advisory Council is made up of a diverse group of patients, family members, and community members who represent the “collective voice of our patients and families”

[www.baystatehealth.org/about-us/community-programs/health-initiatives/patient-family-advisory-council](http://www.baystatehealth.org/about-us/community-programs/health-initiatives/patient-family-advisory-council)



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### Physical Therapy Services

Information, resources, coaching and education, stretching, core strengthening, walking, and strength training to improve or restore physical function and fitness levels.

[www.baystatehealth.org/services/rehabilitation](http://www.baystatehealth.org/services/rehabilitation)

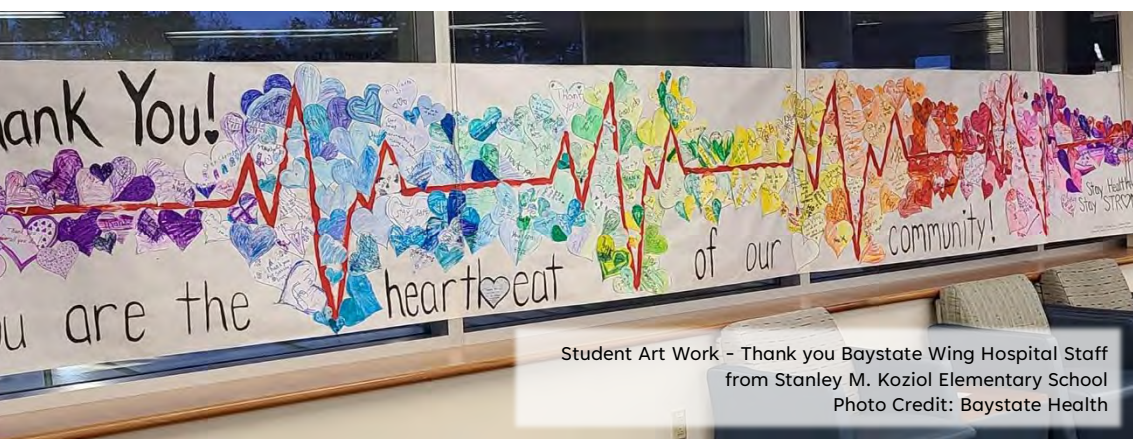
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### Population-based Urban and Rural Community Health (PURCH)

The PURCH track in the UMass Chan Medical School - Baystate is a unique educational experience where students can focus on health care issues common to urban and rural under-served populations—and come to understand the complex interwoven social and environmental factors that affect them.

[www.baystatehealth.org/education-research/education/umms-baystate-campus/purch](http://www.baystatehealth.org/education-research/education/umms-baystate-campus/purch)







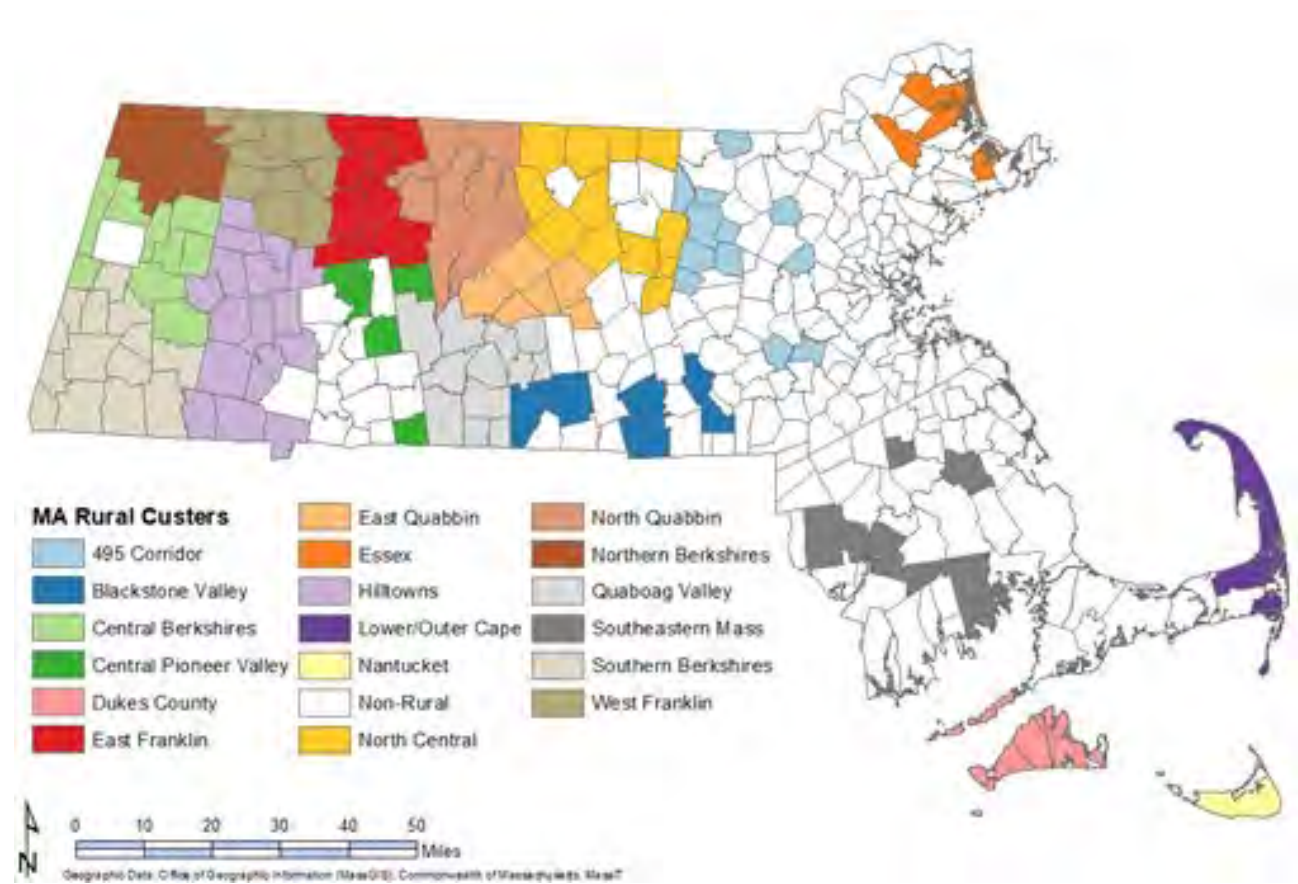
BAYSTATE WING HOSPITAL

# 10. Appendices

# 10. Appendices

## Appendix 1. Additional Demographics

**FIGURE 27: Massachusetts Rural Clusters Map**



**Source:** Office of Geographic Information (MassGIS), Commonwealth of Massachusetts, MassIT

**TABLE 3: Population Estimates, Communities Served by Baystate Wing**

Community Served by Baystate Wing	2019 Population Estimate
<b>Hampden County</b>	
Brimfield	3,658
Hampden	5,178
Holland	2,630
Ludlow	21,291
Monson	8,779
Palmer	12,237
Wales	2,088
Wilbraham	14,638
<b>Hampshire County</b>	
Belchertown	15,005
Ware	9,801
<b>Worcester County</b>	
East Brookfield	2,040
Brookfield	3,441
Hardwick	3,048
New Braintree	1,211
North Brookfield	4,774
Warren	5,213
West Brookfield	3,728
<b>Total Population in the Communities Served by Baystate Wing</b>	<b>118,760</b>

**Source:** U.S. Census, ACS 2019 5-Year Estimates Data Profiles, specifically table DP05, Demographic and Housing Estimates

**TABLE 4: Sociodemographic Characteristics of Communities Served by Baystate Wing<sup>189</sup>**

2020 ACS Demographic Information	Massachusetts	Hampden County	Communities Served by Baystate Wing <sup>190</sup>	Ware	Palmer
<b>Age</b>					
Median age (years)	40	39	44	35	46
Persons under 18 years	20%	21%	20%	26%	19%
Persons 18–64	63%	62%	62%	58%	62%
Persons 65 and older	17%	17%	18%	16%	19%
<b>Race and ethnicity</b>					
Latino/a/e or Hispanic	12%	26%	5%	10%	7%
Non-Latino/a/e or Hispanic					
White	71%	62%	91%	87%	85%
Black or African American	7%	8%	1%	2%	3%
American Indian and Alaska Native	0.1%	0.1%	0.0%	0.0%	0.0%
Asian	7%	2%	1%	0%	2%
Native Hawaiian and other Pacific Islander	0.0%	0.0%	0.0%	0.0%	0.0%
Some other race	0.8%	0.2%	3%	0.0%	0.0%
Two or more races	3%	3%	2%	1%	3%



2020 ACS Demographic Information	Massachusetts	Hampden County	Communities Served by Baystate Wing <sup>190</sup>	Ware	Palmer
<b>Language spoken at home (population over 5)</b>					
Language other than English spoken at home	24%	26%	9%	11%	9%
<b>Educational attainment (population over 25)</b>					
Less than high school graduate	9%	14%	6%	12%	11%
High school graduate (includes equivalency)	24%	30%	32%	42%	32%
Some college or associate degree	23%	28%	27%	28%	30%
Bachelor's degree or higher	45%	27%	32%	18%	26%
<b>Income</b>					
Median household income (in 2020 dollars)	\$84,385	\$57,623	\$96,067	\$42,905	\$68,694

**Source:** 2020 Population Estimates. US Census Bureau

## Appendix 2: Community Members and Partners Engaged in the 2022 CHNA Process

### *About the Consultant Team*

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#### Lead Consultant

**Public Health Institute of Western Massachusetts' (PHIWM)** mission is to build measurably healthier communities with equitable opportunities and resources for all through civic leadership, collaborative partnerships, and policy advocacy. Our core services are research, assessment, evaluation, and convening. Our range of expertise enables us to work in partnership with residents and regional stakeholders to identify opportunities and put into action interventions and policy changes to build on community assets while simultaneously increasing community capacity. [www.publichealthwm.org](http://www.publichealthwm.org)



**PUBLIC HEALTH INSTITUTE  
OF WESTERN MASSACHUSETTS**  
PARTNERS FOR HEALTH EQUITY

#### Consultants

Community Health Solutions (CHS), a department of the **Collaborative for Educational Services (CES)**, provides technical assistance to organizations including schools, coalitions, health agencies, human service, and government agencies. CHS offers expertise and guidance in addressing public health issues using evidence-based strategies and a commitment to primary prevention. CHS believes local and regional health challenges can be met through primary prevention, health promotion, policy and system changes, and social justice practices. CHS cultivates skills and brings resources to assist with assessment, data collection, evaluation, strategic planning, and training. [www.collaborative.org](http://www.collaborative.org)



*Collaborative for  
Educational Services*

**Franklin Regional Council of Governments (FRCOG)** is a voluntary membership organization of the 26 towns of Franklin County, Massachusetts. FRCOG serves the 725 square mile region with regional and local planning for land use, transportation, emergency response, economic development, and health improvement. FRCOG serves as the host for many public health projects including a community health improvement plan network, emergency preparedness and homeland security coalitions, two local substance use prevention coalitions, and a regional health district serving 15 towns. FRCOG also provides shared local municipal government services on a regional basis, including inspections, accounting, and purchasing. To ensure the future health and well-being of our region, FRCOG staff are also active in advocacy. [www.frcog.org](http://www.frcog.org)



**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. [www.pvpc.org](http://www.pvpc.org)



## Regional Advisory Council

**TABLE 5: Regional Advisory Council**

\*Coalition of Western Massachusetts Hospitals/Insurer member

Name (Last, First)	Title	Organization	Organization Serves Broad Interests of Community	Organization Serves Low Income, Minority, & Medically Underserved Populations	State, Local, Tribal, Regional, or Other Health Department Staff
<b>Anderson, Kathleen</b>	Director of Community Benefits	Holyoke Hospital	X	X	
<b>Audley, Jen</b>	Project Coordinator - Community Health Improvement Plan (CHIP)	Franklin Regional Council of Governments (FRCOG)	X	X	X
<b>Borgatti, Monica</b>	Chief Operating Officer	Women's Fund of Western Massachusetts	X	X	
<b>Bruno, Kathleen*, and Smith, Shelly</b>	Health Management Program Manager	Health New England	X	X	
<b>Cairn, Sue</b>	Director of Healthy Families and Communities	Collaborative for Educational Services	X	X	
<b>Cardillo, Beth</b>	Executive Director	Arm Brook Village	X	X	
<b>Comerford, Jo</b>	Senator	Massachusetts State Senate	X	X	
<b>Dewberry, Beatrice</b>	Community Building & Engagement Manager	Way Finders	X	X	

Name (Last, First)	Title	Organization	Organization Serves Broad Interests of Community	Organization Serves Low Income, Minority, & Medically Underserved Populations	State, Local, Tribal, Regional, or Other Health Department Staff
<b>Doster, Amanda</b>	Regional Projects Coordinator	Franklin Regional Council of Governments	X	X	
<b>Dukes, Cheryl L</b>	Director of Healthcare Outreach and Community Engagement	Baystate Franklin CBAC /UMass College of Nursing; BAYSTATE FRANKLIN CBAC	X	X	
<b>Evans, Brenda</b>	Community Liaison	University of Massachusetts, Amherst	X	X	
<b>Fallon, Sean</b>	Massachusetts Regional Director	Community Health and Well Being, Trinity Health of New England/Mercy Medical Center	X	X	
<b>Fludd, Walt</b>	Executive Director Samaritan Inn	Greater Westfield Committee	X	X	
<b>Frutkin, Jim</b>	Senior Vice President Business IFU	ServiceNet; Western Massachusetts Veterans Outreach	X	X	
<b>Gale, Roberta*</b>	Vice President, Community Health	Berkshire Health Systems	X	X	
<b>Garozzo, Sal</b>	Executive Director	United Cerebral Palsy Association of Western Massachusetts	X	X	
<b>Naunheim, Geoff</b>	Director of Community Investment	United Way of the Franklin & Hampshire Region	X	X	

Name (Last, First)	Title	Organization	Organization Serves Broad Interests of Community	Organization Serves Low Income, Minority, & Medically Underserved Populations	State, Local, Tribal, Regional, or Other Health Department Staff
<b>Golden, Annamarie*</b>	Director, Community Relations	Baystate Health	X	X	
<b>Rosario, Brittney*</b>	Community Benefits Specialist	Baystate Health	X	X	
<b>Gonzalez, Chrismery</b>	Coordinator Program Lead, Office of Problem Gambling Prevention	Office of Racial Equity, Springfield Department of Health, and Human Services City of Springfield, Department of Health, and Human Services	X	X	X
<b>Gorton, George*</b>	Director of Research, Planning & Business Development	Shriners Hospital for Children - Springfield	X	X	
<b>Gramarossa, Gail</b>	Program Director	Town of Ware, Drug Free Communities Project	X	X	
<b>Harness, Jeff*</b>	Director, Community Health, and Government Relations	Cooley Dickinson Health Care	X	X	
<b>Harris, Aumani</b>	Community Engagement Facilitator	The Healing Communities Study, Boston Medical Center			



Name (Last, First)	Title	Organization	Organization Serves Broad Interests of Community	Organization Serves Low Income, Minority, & Medically Underserved Populations	State, Local, Tribal, Regional, or Other Health Department Staff
<b>Bidwell, John</b>	Executive Director	United Way of the Franklin & Hampshire Region	X	X	
<b>Jones, Kimothy</b>	Project Manager SDoH (Public Health)	Baystate Health	X	X	
<b>Kent, Marian</b>	Strategic Grant Writer	Baystate Strategic Planning Team	X	X	
<b>King, Mary</b>	CFCE Coordinator/Family Center Director	Montague Catholic Social Ministries	X	X	
<b>Kinsman, Jennifer</b>	Director of Community Impact	United Way of Pioneer Valley	X	X	
<b>Lake, Eliza</b>	Chief Executive Director	Hilltown Community Health Center	X	X	
<b>Lamas, Kelly</b>	Project Coordinator	Baystate Springfield Educational Partnership	X	X	
<b>Lee, Jennifer</b>	Systems Advocate (former)	Stavros Center for Independent Living	X	X	
<b>Liu, Chung</b>	Senior Technical Manager	Massachusetts Municipal Wholesale Elec.	X		
<b>Lopez, Luz</b>	Executive Director	MetroCare of Springfield	X	X	
<b>Lytton, Kate</b>	Director of Research and Evaluation	Collaborative for Educational Services (CES)	X	X	

Name (Last, First)	Title	Organization	Organization Serves Broad Interests of Community	Organization Serves Low Income, Minority, & Medically Underserved Populations	State, Local, Tribal, Regional, or Other Health Department Staff
<b>Millman, Laurie</b>	Executive Director	Center for New Americans	X	X	
<b>Mulkerin, Angela</b>	Service Director and Paramedic	Hilltown Community Health Center	X	X	
<b>Owens, Christo</b>	Resident			X	
<b>Robinson, Frank*</b>	Vice President, Public Health	Baystate Health	X	X	
<b>Rodriguez, Rafael</b>	Holyoke Coalition Coordinator	Western Massachusetts Training Consortium	X	X	
<b>Rozie, Cherelle, Mary Stuart, and Sean Fallon</b>	Regional Manager of Community Benefit	Trinity Health Of New England	X	X	
<b>Rufino, Tiffany and Latonia Naylor</b>	Regional Director	Parent Villages	X	X	
<b>Scott, Lamont</b>	Mentor	Men of Color Health Alliance	X	X	
<b>Steed, Ebony</b>	Advisor	Young Women's Advisory Council of Western Massachusetts	X	X	
<b>Tetreault, Janna</b>	Assistant Director, Community Services Department	Community Action Pioneer Valley	X	X	

Name (Last, First)	Title	Organization	Organization Serves Broad Interests of Community	Organization Serves Low Income, Minority, & Medically Underserved Populations	State, Local, Tribal, Regional, or Other Health Department Staff
<b>Toto, Sheila</b>	Senior Program Officer	Community Foundation of Western Massachusetts	X	X	
<b>Vrabel, Jennifer*</b>	Executive Director of Communications, Planning, and Development	Berkshire Health Systems	X	X	
<b>Walker, Phoebe</b>	Director of Community Services	Franklin Regional Council of Governments	X	X	X

## Appendix 3. Glossary of Terms

**Ableism**—intentional or unintentional bias, oppression of, discrimination of, and social prejudice against people with disabilities and those perceived to have disabilities. Ableism creates barriers to equity in education, employment, health care, access to public and private spaces, etc. It is rooted in the belief that typical abilities are superior and people with disabilities need “fixing.”

**Built Environment**—man-made structures, features, and facilities viewed collectively as an environment in which people live, work, pray, and play. The built environment includes not only the structures but the planning process wherein decisions are made.

**Community**—can be defined in many ways, but for the purposes of the CHNA we are defining it as anyone that is not part of the Western Massachusetts Coalition of Hospitals/Insurer, which could be community organizations, community representatives, local businesses, public health departments, community health centers, and other community representatives.

**Community Benefits (hospitals)**—services, initiatives, and activities provided by Non-profit hospitals that address the cause and impact of health-related needs and work to improve health in the communities they serve.

**Community Health Needs Assessment (CHNA) and Implementation Plan**—an assessment of the needs in a defined community. A CHNA and a hospital implementation plan is required by the Internal Revenue Service for non-profit hospitals/insurers to maintain their non-profit status. The implementation plan uses the results of the CHNA to prioritize investments and services of the hospital or insurer’s community benefits strategy.

**Community Health Improvement Plan (CHIP)**—long-term, systematic county-wide plans to improve population health. Hospitals likely participate, but the CHIPs are not defined by hospital service areas and typically engage a broad network of stakeholders. CHIPs prioritize strategies to improve health and collaborate with organizations and individuals in counties to move strategies forward.

**Cultural Humility**—an approach to engagement across differences that acknowledges systems of oppression and embodies the following key practices: (1) a lifelong commitment to self-evaluation and self-critique, (2) a desire to fix power imbalances

where none ought to exist, and (3) aspiring to develop partnerships with people and groups who advocate for others on a systemic level.

### Data Collection

**Age-adjusted**—Age-adjusted rates are used in data analysis when comparing rates between geographic locations, because differing age distributions can affect the rates and result in misleading comparisons.

**Quantitative data**—information about quantities; information that can be measured and written down with numbers (eg, height, rates of physical activity, number of people incarcerated). You can apply arithmetic or statistical manipulation to the numbers.

**Qualitative data**—information about qualities; information that cannot usually be measured (eg, softness of your skin, perception of safety); examples include themed focus group and key informant interview data.

**Primary data**—collected by the researcher her/himself for a specific purpose (eg, surveys, focus groups, interviews that are completed for the CHNA).

**Secondary data**—data that has been collected by someone else for some other purpose but is being used by the researcher for another purpose (eg, rates of disease compiled by the Massachusetts Dept. of Public Health).

**Determination of Need (DoN) application**—proposals by hospitals for substantial capital expenditures, changes in services, changes in licensure, and transfer of ownership by hospitals must be reviewed and approved by the MDPH. The goal of the DoN process is to promote population health and increased public health value by guiding hospitals to focus on the social determinants of health with a proportion of funds allocated for the proposed changes.

**Digital Equity**—digital equity occurs when all individuals and communities have access to affordable and reliable broadband or Wi-Fi, access to affordable digital technology, and have the digital literacy needed for full participation in our society. Digital equity is necessary for community participation, employment, education, and access to services.

**Disability**—a physical, cognitive, developmental, or mental condition that interferes with, impairs, or limits a person's ability to do certain tasks or engage in daily interactions.

Disabilities can be visible, invisible, something a person is born with, something a person acquired, temporary, or permanent.

**Ethnicity**—shared cultural practices, perspectives, and distinctions that set apart one group of people from another; a shared cultural heritage.

**Food insecure**—lacking reliable access to sufficient quantity of affordable, nutritious food.

**Health**—a state of complete physical, mental, and social well-being and not merely the absence of disease or infirmity (WHO).

**Health equity**—when everyone has the opportunity to attain their full health potential, and no one is disadvantaged from achieving this potential because of their social position or other socially determined circumstance. The highest standards of health should be within reach of all, without distinction of race, religion, political belief, economic or social condition (WHO). Health equity is concerned with creating better opportunities for health and gives special attention to the needs of those at the greatest risk for poor health.

**Hospital Community/ies Served** - includes the cities and towns in the HSA, plus additional geographic areas, or considers target populations or other specialized functions. For each Baystate Health CHNA cycle the most recent HAS for the hospital is provided by the Strategy Department. The HSA is then reviewed by the hospital's Community Benefits Advisory Council (CBAC). Community stakeholders serving on the CBAC offer additional geographies, target populations, or specialized functions that should also be considered for the hospital community/ies served for the purpose of the CHNA. For the 2022 CHNA the hospital uses the term "community/ies served".

**Hospital Service Area or "HSA"** - the local health care markets for a hospital. HSA is determined through the collection of zip codes whose residents receive most of their hospitalizations from the hospitals in that area. Data is based on case mix data (including inpatient discharges, emergency department visits, and observation stays) provided through the Center for Health Information and Analysis (CHIA).

**Housing insecurity**—the lack of security about housing that is the result of high housing costs relative to income, poor housing quality, unstable neighborhoods, overcrowding, and/or homelessness. A common measure of housing insecurity is paying more than 30% of income toward rent or mortgage.

**Indigenous**—people who identify as Alaska Native, Native American, American Indian and/or a specific tribal affiliation.



**Inequities**—unfair, avoidable, or remediable differences in access, treatment, or outcomes among groups of people, whether those groups are defined socially, economically, demographically, geographically or by other dimensions (eg, sex, gender, ethnicity, disability, or sexual orientation).

**Intersectionality**—an approach advanced by women of color arguing that classifications such as gender, race, class, and others cannot be examined in isolation from one another; they interact and intersect in individuals' lives, in society, in social systems, and are mutually constitutive.

**Interpersonal violence**—interpersonal violence includes sexual and intimate partner violence, childhood physical and sexual abuse and neglect, and elder abuse and neglect.

**Intimate Partner Violence**—IPV or domestic violence refers to abuse or aggression occurring in a romantic, familial, or close relationship.

**Investment/Disinvestment**—investment refers to a set of strategies and instruments that target some communities for positive social outcomes and improvement to the built environment. Disinvestment describes the absence of investment in some communities over a long period of time.

**LGBTQIA+**—inclusive of lesbian, gay, bisexual, transgender, queer or questioning, intersex, asexual, agender, nonbinary, gender-nonconforming and all other people who identify within this community.

**Limited income**—having a relatively low or fixed income, not by choice, which may not be sufficient to meet all basic needs and to thrive.

**People who experience homelessness or are unhoused**—people who do not have permanent housing.

**Race**—a socially created construct, in which differences and similarities in biological traits among groups of people are deemed by society to be socially significant, meaning that people treat other people differently because of them, eg, differences in eye color have not been treated as socially significant but differences in skin color have.

**Asian**—people who identify as being of Asian or South Asian descent as well as Pacific Islanders.

**Black**—used instead of African American in this report in reference to the many cultures with darker skin, noting that not all people who identify as Black descend from Africa.

**Latino/a/e**—refers to the many cultures who identify as Latin or Spanish-speaking. Latino/a/e is a gender-neutral term, a nonbinary alternative to Latino/a. We chose to use Latino/a/e instead of Hispanic or Latino/a, noting that there is a current discussion on how people identify.

**People of Color or Communities of Color**—refers collectively to individuals and groups that do not identify as White or Indigenous.

**White**—refers to people who identify as White, Caucasian, or European American, and who also do not identify as Hispanic, Latino/a, or Latino/a/e.

**Social determinants of health**—the social, economic, and physical conditions in which people are born, grow, live, work, and age. These circumstances are shaped by the distribution of money, power, and resources at global, national, and local levels. (WHO)

**Social justice**—justice in terms of the distribution of wealth, opportunities, and privileges within a society.

**Structural poverty**—the concept of poverty as structural means that poverty is not primarily the fault of individuals or the result of their actions, but rather is an outcome of our economic system and how it is structured.

**Substance Use Disorder (SUD)**—refers 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.

**Systemic or Structural Racism**—the normalization and legitimization of policies and practices that exist throughout a whole society or organization, and that result in and support unfair advantage to some people and unfair or harmful treatment of others based on race.

**Transgender**—refers to anyone whose gender identity does not align with their assigned sex and gender at birth.

**Unconscious/Implicit Bias**—refers to the process of associating stereotypes or attitudes toward categories of people without conscious awareness.

## Appendix 4. Community Input Received

For this CHNA, the consultant team and other partners solicited extensive community input as described below. In addition, the Regional Advisory Council (RAC) provided input at monthly RAC meetings. (The members of the RAC are listed in Appendix 2.) This input informed the identification and prioritization of significant health needs. For example, a panel of youth mental health experts presented to the RAC at its monthly meeting, which resulted in the elevation of this prioritized need as a regional focus area for the Coalition of Western Massachusetts Hospitals/Insurer.

### *4a. Community Input on the previous CHNA*

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To solicit written input on our prior CHNA and Strategic Implementation Plan, both documents are available on our hospital system's website:

[www.baystatehealth.org/about-us/community-programs/community-benefits/community-health-needs-assessment](http://www.baystatehealth.org/about-us/community-programs/community-benefits/community-health-needs-assessment)

They are posted for easy access, and we include contact information for questions or comments. The links on our website also include an overview of Community Benefits as well as our annual filing with the Massachusetts Office of the Attorney General. We have verified and confirmed that we have not received any written comments since posting the last CHNA and Strategic Implementation Plan.

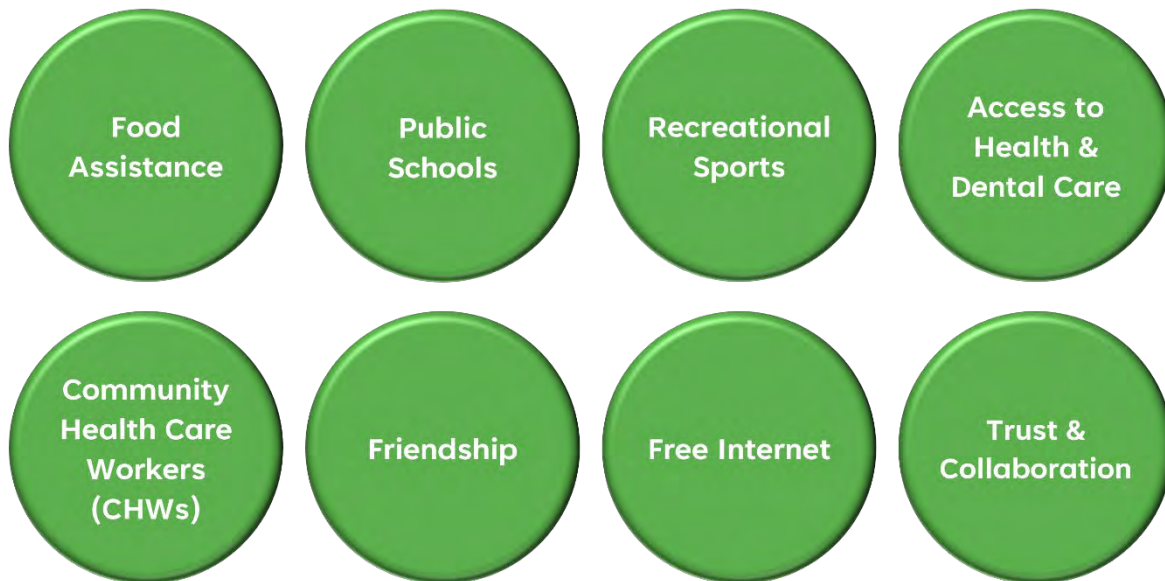
### *4b. Community Chats*

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Community Chats are an integral part of the CHNA. They are a safe space for community members to come together and discuss important health issues in their community. Community Chats range from 30 to 60 minutes and are welcome to any and all members of the community. Participants in these chats include faith-based community members, older community members, representatives from various youth-serving organizations, members of community-based coalitions, state representative, health care workers, and non-profit organization members. The goal of these Chats is for people to get a better understanding of the CHNA, why it is done, and to highlight and reflect on the communities' assets and emerging health concerns. The Chats were held over several months during Fall of 2021. During the Chats, a facilitator asked reflective questions on all aspects of community health. Such aspects included culture, social connectedness, access

to health care, education, and barriers to needs and care. Feedback received during the Chats was summarized and integrated into the findings of the CHNA to help inform prioritized health needs.

**FIGURE 28: What Helps You Live a Happy, Healthy & Productive Life?**



**FIGURE 29: Emerging Issues**



#### *4c. Community Chats Summary*

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**Community Assets:** Across the board, residents express that even for assets that their communities have, access is not the same for everyone.

**Access to Basic Needs:** Generally, as one resident shared, “a lot of people are struggling to get their basic needs met.” COVID-19 significantly impacted access to, and the quality of, services by disrupting the networks people built to support one another. This continues to be a pressing issue.

**Housing:** Across Western Massachusetts, residents repeatedly expressed concern about the affordability, quality, accessibility, and safety of housing. The Massachusetts eviction moratorium ending may cause housing instability to increase, especially as this resident feels that housing laws favor landlords. A community member from Springfield worries about affordable housing for individuals with dementia, noting that systemic racism plays a role in this. Residents in the Franklin County/North Quabbin area noted a need for increased shelter for people without stable housing from the fall through the spring as well as supportive housing for people in recovery and existing incarceration facilities. For individuals with stable housing, there is a need for readily available funds to repair homes, as it feels like existing support has too many strings attached. Aging housing units are concerning, especially as individuals’ express hesitation to get their homes inspected for fear of mandatory reporting of problems and ultimately landing in a shelter.

**Transportation:** Residents in the Springfield area note that public transportation is an asset for their community though, for others across Western Massachusetts, it is still an area for improvement. People in Hampshire County shared that the need is much more apparent in the summer months when students are not in school. Community members flagged rural areas with low population density as needing improved options, so people do not have to rely on owning or borrowing private cars. Older people are also in need of wider options for transportation. One resident from Amherst said that “buses don’t respect the hours...I wait a long time for a bus (sometimes 2 hours),” highlighting frustration with unreliable bus schedules. Another participant from Springfield said, “Chronic health conditions impact our ability to transport ourselves.”

**Food:** Regionally, food came up quite a bit in conversation, both as an asset and a need, especially as inflation makes food increasingly unaffordable for individuals and families in Western Massachusetts. There was a sense that the COVID-19 pandemic forced increased coordination and infrastructure, as in Springfield where mobile food banks increase access in areas that are otherwise food deserts. Individuals in the Franklin County/North

Quabbin area felt that there was affordable food in their communities. Residents across Springfield said that food pantries, soup kitchens, farm shares and SNAP are all helpful resources, especially when individuals are having a tough time financially. Community members from Springfield also expressed pride in the strong agricultural system saying, “We are the states’ breadbasket because we produce a lot of food.”

This said, food access is not seen as an asset across all communities uniformly. Concerns about food insecurity were raised, especially from Springfield residents. Healthy food is available, but not nearly enough; residents expressed a desire for more healthy options rather than fast food. In Amherst, people shared that healthy food is more expensive and that serves as a barrier.

**Health Care Delivery Issues:** Health care delivery shifted significantly due to the COVID-19 pandemic and communities felt the impacts. Residents expressed appreciation for the hospital systems in the area, particularly for the emergency care access in Hampden, Hampshire, and Worcester counties. People in Hampden and Franklin counties also saw increased telehealth access as an asset to their communities, especially for those with disabilities. On the flip side, chat participants across Western Massachusetts were concerned about significant technology divides due to access or technical skill. Further, it was noted that online appointments can be tougher for children who have no desire to sit in front of a screen or people without private spaces in which they could take their appointments.

Community members emphasized the need for more providers generally, while individuals from the Pioneer Valley highlighted the lack of diverse providers including Black and brown, trans-competent, size-inclusive, and language-diverse medical professionals. Franklin residents shared the need for providers who are responsive to non-citizens, people in Amherst see a need for more specialists, and chat participants from Hampden County are worried about providers leaving the workforce and the need for geriatric specialists. An additional need that arose from conversation included additional mental health providers, as there seems to be a shortage and concern about increased demand coming out of the pandemic.

Affordability appears to be a barrier to care, as residents share those copays are often unaffordable and low, or no copays would be significantly better. Members in the Pioneer Valley expressed a desire for more providers who take MassHealth; others said the process of transitioning insurance is uncoordinated and very challenging. People in Springfield are concerned about long waiting times and the lack of after-hours/weekend availability. Across the region, community members rely heavily on the services from



hospital systems and would like to see improved care coordination that provides wraparound services including vision care.

**Mental Health and Substance Use:** Chat participants in the region, anywhere from urban Springfield to rural Franklin County, expressed concern about the levels of social isolation, anxiety, increased stress, and mental health challenges—especially in youth populations. The COVID-19 pandemic presented an upheaval of “normal” life, exacerbating existing mental health concerns and creating new issues. Residents have seen progress in the recognition of connections between trauma and mental health concerns as well as increased general attention toward the mental health of communities. Western Massachusetts residents speak highly of the formal and informal support systems that exist including, but not limited to, barbershops and hair salons, faith groups, and Alcoholics Anonymous (AA) or Narcotics Anonymous (NA). Residents of the Pioneer Valley noticed increased support for SUDs and progress in addiction/recovery was seen by those in the area prior to the pandemic. Preventing SUDs, supporting individuals with SUDs, and further educating youth about addiction all remain concerns across Western Massachusetts.

**Violence and Trauma:** Quabog Hills residents brought about concerns about domestic violence dramatically increasing during the past few years, exacerbated by the pandemic. This mirrors concerning trends nationally. Individuals also noticed efforts to increase support for individuals affected by domestic violence.

**Access to Physical Activity:** Outdoor spaces, especially parks, bike paths, and other green spaces, are perceived to be significant assets to Western Massachusetts. Sidewalks also allow community members to safely travel and exercise outdoors, especially for individuals who are not in close proximity to fields and other spaces dedicated to exercise or recreation. Though recognized as an asset, other residents see room to improve recreational opportunities; one member commented on the need for child-friendly spaces, so they are not engaging in other activities such as riding their bikes unsafely.

**Issues Affecting Older Adults:** Residents in Western Massachusetts expressed concern for the older adults in their communities, especially since the COVID-19 pandemic exacerbated many existing issues. Social isolation is at a high, leaving people feeling alone and disconnected from communities and services that bring a sense of normalcy to their lives. One older chat participant mentioned that mental health issues worsened due to the adjustment to remote life and social distancing. Another individual spoke about homebound individuals feeling stuck. Contact tracers were speaking with people who needed resources but there was no good way to facilitate the disbursement of those

resources. The pandemic also heightened the need for medical and housing support and highlighted how impactful food insecurity is, especially in the older population. Though many are experiencing significant challenges, it was noted that the weekend meal service in Springfield has been a strong asset.

**Issues Affecting Black and Latino/a/e Communities:** In many Community Chats, members spoke about the impacts of the COVID-19 pandemic on Black and Latino/a/e communities. The public health crisis led to news headlines highlighting the health disparities and it forced people to pay attention. As one resident said, “COVID-19 put the biggest mirror on the fact that racism and systemic oppression still exists.” Across the region, residents noticed more conversations about disparities and the impact and manifestations of white supremacy, additional racial equity training, and an increased recognition of how important social determinants of health are in creating inequity. Chat participants have also seen progress via increased resources for BIPOC clinicians.

Pioneer Valley residents raised concern about punitive responses such as incarceration or the Department of Children and Family serving as barriers to fellow residents. The childcare burdens over the pandemic also placed a significant burden on mothers of color, according to residents. To quote one individual, “I feel that all issues are rooted at the intersection of racism that created these systems that uphold white supremacy characteristics creating those inequities.”

**TABLE 6: Community Chats Held for 2022 CHNA**

Organization	Population	Location	Number of Participants
<b>Franklin County</b>			
Community Action Pioneer Valley (CAPV) Youth Staff	CAPV Youth Staff	Greenfield	6
Just Roots Farm and Community Supported Agriculture (CSA)	Professional Staff	Greenfield	4
Franklin County/North Quabbin Community Health Improvement Planning	Community Members	Greenfield	20

Organization	Population	Location	Number of Participants
Stone Soup Cafe	Older Adults	Greenfield	N/A
<b>Hampden County</b>			
Age-Friendly Coalition	Coalition members	Springfield	8
Alzheimer's Support group/Arm Brook Village	Caregiver Support Group	Westfield	N/A
Baystate Community Faculty - UMass Medical School (UMMS)-Baystate	Baystate faculty	Springfield	8
Baystate Mason Square Neighborhood Health Center	Community Advisory Board	Springfield	7
Community Benefits Advisory Council Baystate Medical Center	Community Leaders	Springfield	15
Community Benefits Advisory Council Baystate Noble	Community Leaders	Westfield	11
Food Bank of Western Massachusetts	Professional Staff at Food Bank	Hatfield	N/A
Springfield Healthy Homes / Pioneer Valley Asthma Coalition	Community Advocates	Springfield	21
Springfield Youth Health Survey	Planning Team	Springfield	N/A

Organization	Population	Location	Number of Participants
Youth Mental Health Coalition	Representatives from Various Youth Serving Organizations	Springfield	N/A
Visionary Club of Greater Springfield	Serving blind and visually impaired residents	Chicopee	20
<b>Hampshire County</b>			
Baystate Wing Hospital's weekly Compass Huddle	Baystate Health Eastern Region's Managers	Palmer	25
Community Benefits Advisory Council Baystate Wing	Community Leaders	Ware	15
Quaboag Hills Community Coalition	Social Service Providers and Community Members from the Baystate Wing Service Area	Ware	14
Quaboag Hills Substance Use Alliance	Service Providers, Schools, Law Enforcement, Community Members, Faith Leaders	Ware	15
<b>Western Massachusetts</b>			
Health New England	Behavioral Health, Care Management, and Quality departments	Western Massachusetts	9
Health New England	Health New England Associates	Western Massachusetts	17
Regional Advisory Council (RAC)	Community Representatives, Organization Representatives, Coalition Members	Western Massachusetts	20

#### *4d. Survey of Public Health Officials*

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The consultant team conducted an anonymous survey of public health officials and agents in the four counties of Western Massachusetts during the Fall of 2021. General western Massachusetts themes, and a table on the most pressing issues are provided below.

##### **General Themes Among Four Counties**

- Enforcing mask mandates and communicating with public were largest roles for public health workers in Hampshire and Berkshire Counties. Hampden and Franklin Counties participants were more likely to take on more varied roles in COVID work (contact tracing, communications, mask enforcements, clinics, more).
- Transportation and support for older adults were two themes that appeared in all four counties.
- There was also general concern over low-income families and people. This is a big umbrella that includes homelessness, lack of affordable housing, limited access to healthy foods, etc.
- Communication is another theme- better communication between state and local officials; between local officials and the public; across cultures and languages; between hospitals and local public health workers; lack of high-speed internet is a problem across the board. Franklin County respondents noted the need for a centralized response across the county and more local access to news and information (as opposed to news from Boston/Springfield/Albany etc.).
- COAs and senior centers have been key players in improving public health. This was a resounding sentiment across all counties.
- Other key players include local nonprofits, churches, and social service groups. People stepping up, volunteering time and resources, and checking on neighbors were also crucial.
- Berkshire County has better communication and collaboration between local public health workers and hospitals, but still room for improvement. Respondents in other counties mostly said there was no collaboration.

**TABLE 7: Community and Health Issues Identified as Most Pressing**

MOST PRESSING ISSUES (prompted)	REGION (n=69)	Berkshire (n=15)	Franklin (n=22)	Hampden (n=17)	Hampshire (n=14)
<b>Community Level Factors:</b>					
Limited availability of providers	43%	33%	73%	35%	21%
Transportation general	42%	47%	45%	35%	36%
Safe and affordable housing	36%	60%	45%	24%	14%
Access to digital technology	26%	27%	27%	29%	14%
Lack of resources to meet basic needs	25%	13%	18%	29%	43%
<b>Health Conditions and Behaviors:</b>					
Mental health and substance use	36%	33%	27%	41%	43%
Chronic conditions	22%	33%	23%	24%	7%

**TABLE 8: Most pressing issues (open response)**

*\*Communication issues are largely about covid, vaccines, etc.*

REGIONAL SUMMARY (n=69)	Berkshire (n=15)	Franklin (n=22)	Hampden (n=17)	Hampshire (n=14)
Communication and health information (including digital access issues, culturally appropriate). Transportation. Basic needs/food access. Access to mental health services.	Health Information and Communication (including reliability, dissemination, and digital access).	Isolation, particularly among elderly. Transportation. Communication (including reliability, dissemination, and digital access).	Communication and access to information (Including culturally and linguistically appropriate, and digital access). Mental health services. Basic needs.	Transportation. Basic needs. Communication.



#### *4e. Focus Groups and Key Informant Interviews on Domestic and Intimate Partner Violence*

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**Focus Group Report:** Domestic Violence

**Primary Hospital/Insurer:** Baystate Wing Hospital

**Topic of Focus Group:** Domestic Violence

**Date of Focus Group:** May 25, 2022

**Facilitator:** Monica Moran

**Note Taker:** Monica Moran

Question	Synthesis of Responses
What do you think are considered basic needs for domestic violence survivors?	<ul style="list-style-type: none"> <li>• <b>Advocacy services</b></li> <li>• <b>Recovery services for long term healing</b> <ul style="list-style-type: none"> <li>○ healing is a long process, and just because a case is resolved, closed, or dropped, advocates have to move onto others and the support that existed immediately disappears</li> <li>○ Would be helpful to have outpatient day programs that are designed to help survivors heal, learn useful skills, be creative, and connect with others</li> </ul> </li> <li>• <b>Legal services</b></li> <li>• <b>Childcare</b></li> <li>• <b>Social connection</b> <ul style="list-style-type: none"> <li>○ Need programs that connect people because isolation makes the healing process harder</li> </ul> </li> </ul>
What are the top 3 basic needs?	<ul style="list-style-type: none"> <li>• <b>Opportunities for social connection</b></li> <li>• <b>Safe and affordable housing</b> <ul style="list-style-type: none"> <li>○ Housing is either full and the waitlists are long, or people are paying more money than they are able, so they are somewhere safe</li> </ul> </li> <li>• <b>Transportation</b> <ul style="list-style-type: none"> <li>○ The Quaboag Connector needs to be booked far in advance making it difficult to access basic needs if there is no availability.</li> <li>○ Transportation was especially limited during the beginning of the pandemic.</li> <li>○ Some survivors are unable to take public transit due to mental or physical health reasons</li> </ul> </li> </ul>

**Key Informant Interview Report: Domestic Violence****Primary Hospital/Insurer:** Baystate Wing Hospital**Date of Interview:** April 25, 2022**Interviewer:** Lisa Ranghelli**Participant:** Erin Ballard, Civilian Police Advocate, Behavioral Health Network Domestic Violence Services

Question	Synthesis of Responses
What are the top three issues for survivors	<ul style="list-style-type: none"> <li>• <b>Transportation</b> - decrease in service by the Quaboag Connector and advocates were no longer able to help with transportation needs</li> <li>• <b>Mental health services</b> - waitlists are incredibly long for services for abusers, survivors, and witnesses such as children in the household</li> <li>• <b>Safe and affordable housing</b> - people went into shelters to be housed. Difficult to pay rent especially once abuser is removed from the household</li> </ul>
What flaws in the system showed the most due to COVID?	<ul style="list-style-type: none"> <li>• <b>There is not enough money to support the systems that are in place to help survivors</b></li> <li>• <b>Waitlists grew significantly</b></li> <li>• <b>The digital divide for those who are not able to reliably access the internet it made telehealth, court hearings, and contact incredibly difficult</b></li> </ul>
What prevention activities occur?	<ul style="list-style-type: none"> <li>• <b>Prevention for abusers:</b> <ul style="list-style-type: none"> <li>○ Counseling that is both court mandated and self-referred, the number of participants is increasing</li> </ul> </li> <li>• <b>Prevention for victims:</b> <ul style="list-style-type: none"> <li>○ Creating safety plans</li> </ul> </li> </ul>
How were the police and courts affected by COVID?	<ul style="list-style-type: none"> <li>• <b>Courts holding virtual hearings helped some people - gave some survivors courage because speaking to their abuser or the court over the phone is easier than in person</b></li> <li>• <b>Courts were backlogged, cases were extended, a lot of cases were dropped unless survivors fought for their case to stay active, and judges would change frequently</b></li> </ul>

What was it like  
being an advocate  
during COVID?

- Incredibly difficult, staff were affected emotionally
- Isolation impacted a lot of the advocates

What care  
coordination issues  
exist?

- Abusers have been released without any warning to victims or advocates
- Clients ask legal advice, but advocates can't answer affirmatively because they aren't the court - would turn to court advocate
- Victim witness advocates are not calling when they should be
- Cases being delayed is making survivors feel unsupported by the judicial system

#### *4f. Key Informant Interviews on Youth Mental Health*

The consultant team conducted Key Informant Interviews (KIIs) on the prioritized need of Youth Mental Health during winter 2021-22 and also attended webinars, trainings, and events related to this topic. These data gathering opportunities are summarized in the table below, followed by a detailed summary of the KIIs.

**TABLE 9: Respondents Participating in Key Informant Interviews and Other Qualitative Data Sources**

Name (Last, First)	Title	Organization	Organization Serves Broad Interests of Community	Organization Serves Low- Income, Minority, and Medically Underserved Populations	State, Local, Tribal, Regional, or Other Health Department Staff
<b>Greater Springfield Area</b>					
Nicole Desnoyers	Peer to Peer Parent Outreach Specialist	Behavioral Health Network	X	X	

**Quaboag Hills Region**

Lauren Mansfield	Practice Manager	Griswold Center-Baystate Wing Hospital	x	x	
Taniesha Burton	Child/Adolescent Behavioral Health Clinician	Griswold Center-Baystate Wing Hospital	x	x	
Gail Gramarossa	Prevention Director	Quaboag Hills Substance Use Alliance, and Town of Ware	x	x	
Nekr Jenkins	Drug Free Communities Project Director	Quabbin Regional School District	x	x	
Ariana Williams	Substance Use Youth Engagement Coordinator	Town of Ware	x	x	

**Other Sources**

- University of Massachusetts, School of Public Health, Addressing the Mental Health Crisis among Young Adults, an Inter-professional Workshop, March 2022
- Stop Access Coalition hosted webinar, Suicide Prevention from a Racial Justice Lens, February 2022
- Community Health Needs Assessment, Regional Advisory Council panel on youth mental health, January 2022
- Stop Access Coalition hosted webinar, Mental Health: Beyond the Individual, December 2021
- Holyoke Medical Center, CHNA in-depth interviews, October 2021 - February 2022

### ***4g. Summary of Findings from Qualitative Inquiry on Youth Mental Health***

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#### **Introduction**

This report provides a summary of findings from the qualitative inquiry of adolescent and youth adult mental health supports and challenges. The study was conducted by the Collaborative for Educational Services in collaboration with the Public Health Institute of Western Massachusetts, the Coalition of Hospitals/Health Insurers, and the Regional Advisory Council supporting the Community Health Needs Assessment. This report summarizes findings for the Baystate Wing region, which includes the towns of the Quaboag Hills area (eg, Palmer, Ware, Monson, Warren, and North Brookfield).

The essential question driving this study is: *What are some critical ways hospitals and health insurers can facilitate community, provider, family, and school collaboration to support young people's mental health?*

To address this question, the findings presented below cover the following four essential sub-questions as well as other topics that respondents identified:

1. How do youth in diverse communities conceive of “mental health”? Who do they turn to? Who do they trust for guidance?
2. What are the current platforms for community support those hospitals can develop in collaboration with others?
3. What effective models exist in western Massachusetts (eg, collaboration between mental health providers and schools or primary care)?
4. How can youth be involved in building more effective support systems?

#### **Methods**

The thematic summary is based on semi-structured in-depth interviews conducted with five key informants working in mental health or youth development roles in the Quaboag Hills area as well as learnings developed from interviews with respondents in other hospital service areas. Interview questions and the ensuing conversations were informed and adjusted based on the areas of expertise of the respondents.

The roles and self-identified characteristics of the respondents are as follows:

**Professional roles:**

- Three mental health providers or clinical program managers
- Two coalition coordinators working on youth issues

**Identity characteristics:**

- Five respondents identified as female
- One African American individual, four White individuals
- Age range: mid-30s to mid-60s

**Service areas covered:**

- Quaboag Hills region, including Palmer, Monson, and nearby towns
- Quabbin region

Staff at the Collaborative for Educational Services conducted one-on-one interviews using Zoom videoconferencing. The findings included in this summary are based on interviews facilitated and analyzed by two white, professional, formally educated women. We provide this information to be transparent and to acknowledge that the identity characteristics of research staff may influence the flow and content of interviews as well as the analyst's interpretation of findings.

To promote respondent comfort and choice, in our initial outreach to key informants, we asked if there were certain characteristics they would like in an interviewer (eg, gender identity, race, ethnicity, or language abilities) and did our best to accommodate requests. Respondents were offered the option of using the video option or switching cameras off, were reminded that they can skip any question or opt out of the interview at any time and were invited to offer their own topics to discuss to better understand issues affecting young people's well-being.

In addition to the key informant interviews, members of the qualitative team participated in several regional webinars or panels on youth mental health issues. These included:

- University of Massachusetts School of Public Health, Addressing the Mental Health Crisis Among Young Adults, an Inter-professional Workshop, March 2022
- Community Health Needs Assessment, Regional Advisory Council panel on youth mental health, January 2022



- Stop Access Coalition–hosted webinar, Suicide Prevention from a Racial Justice Lens, February 2022
- Stop Access Coalition–hosted webinar, Mental Health: Beyond the Individual, December 2021

At each of these events, facilitators asked or presented information on topics aligned with this study’s essential questions and the specific questions in the interview protocols.

### **Constraints and Limitations of This Study**

Intrinsically, the findings presented in this report primarily reflect the perspectives of a small number of respondents in the greater Quaboag Hills area. Though these findings generally align with and build off of interviews from other areas in western Massachusetts, the Quaboag Hills region has some unique demographic and socioeconomic characteristics, and a smaller number of providers to consult as key informants. Therefore, these findings do not reflect the breadth of medical expertise or youth development opportunities that might be found in the Baystate Medical Center service area.

### **Findings**

#### **1. How are adults and youth thinking about “mental health”?**

“The surgeon general making mental health a national crisis is really accurate. Lots of kids are struggling, and don’t necessarily have the coping skills, and also don’t have the terms for how they’re feeling.”

### **High Levels of Anxiety, Depression, Grieving**

- Adolescents and young adults are currently struggling with depression, anxiety, fear, and many other emotions and concerns. In clinical settings, students talk about being depressed, sad, anxious, traumatized, and afraid of the future. “I see youth coming to treatment to address symptoms related to increased anxiety, both generalized and social, depression, and for grief and loss support for relatives that may have died during the pandemic, both from COVID and non-COVID diagnoses.”
- Youth tend to own their mental health, using phrases such as “my mental health,” “my well-being,” “my mood,” “my attitude,” “my anxiety,” “my depression.”

One positive note is that a recent survey by the Quaboag Hills Substance Use Alliance showed that depression rates have dropped substantially from 2021 to 2022. Being back with friends, classmates, and peers seems to have improved their depression and sadness.

### **Coping and Social Skills**

- Social isolation during the pandemic has led many students to feel social anxiety around leaving their houses and reintegrating into social environments (eg, school, activities) as social restrictions have been lifted.
- “There are a lot of kids with a lot of concerns, a lot of things going on in their lives that they don’t know how to deal with, and they’re responding poorly. I don’t know if that’s through their actions, their behaviors, how they interact with each other, or substance use, or through violent activities, through bullying and things like that.”

### **Developmental Delays/Missing Out on Milestones**

- Young people have missed several of the typical rights of passages and milestones (such as prom, graduation, starting or finishing college) due to the pandemic and missed opportunities to learn new skills (such as job seeking).
- Some young adults have reported being afraid to get their driver’s license. Others are concerned about the lack of work, education, and transportation opportunities.

“Being stuck in their own houses for two years did not really help them to develop those [coping] skills. So, there are a lot of kids who are developmentally delayed. And now they’re suddenly being shoved back into the social world to deal with your friends and be nice to each other, and some kids don’t know how to do that.”

“They are developmentally delayed because of COVID—there has to be acceptance and understanding for that. Youth and teachers’ expectations of what they should be able to do, what an HS student can and can’t do. Like telling a sophomore who isn’t really a sophomore that they should be taking their SATs because they’ll impact where they go to college.”

“Young adults who don’t stay in college have to figure out what to do with their lives, what their life is going to look at, and don’t have school guidance counselors to help them. If they want to go back to college, there’s no room because all the current

graduates took all of those college spots. They don't know how to fill out applications, apply for scholarships, and need a guidance counselor to help them. Their anxiety is through the roof, and they have access to all kinds of substances and other dangerous coping methods."

"Young adults, you see a lot more of their being sick of where they are, sick of what's going on more than they're excited for the next stage. [I see this] among my kids, other seniors, and recent graduates who are not so excited about their future, but just sick of where they are and ready for something completely different. And I think that's different from the past."

### **Stigma Around Mental Health Issues**

- Adolescents have been heard saying at school "I'm bipolar today" or "I'm acting schizo today" in a joking way because "they're really afraid of talking about it, being labeled as having anxiety, of being seen as having to seek help [get therapy] because it's stigmatized or labeled." Student culture often stigmatizes talking about poor mental health or needing therapy. Talking about one's feelings openly and honestly with other students or adults at school can be risky. As a result, students tend to share their feelings only with close friends at school and keep silent around other students or adults. Students who want to help their friends are also afraid of helping them because of this stigmatization.

### **Who or What Do Youth Turn To for Support?**

#### **Personal Relationships**

- Adolescents tend to turn to friends, teachers, other adults, and medical and mental health providers for help, either in-person, online, or through social media.
- Students will sometimes seek online help or resources for a friend who is struggling.
- Students also find support from relationships with sports teammates, coaches, activity leaders, and peers who are involved in sports and other organized activities.

"They're doing a really good job of trying to connect with their friends and peers, trying to find ways to be supportive of each other. They're willing to listen to their friends. They

want to be there for each other, {but} don't always have resources or knowledge to help other than listening.”

### **Social Media**

- Adolescents and young adults tend to seek help from other youths primarily through social media. “One of the ways they say they deal with difficult emotions is to go on social media and they just scroll through.”
- Popular social media adolescents use to express their feelings and seek support include YouTube, TikTok, Snapchat, and Instagram. Some students also use WOTPAD, a journaling and story-writing program.
- Often social media is helpful because it gives students opportunities to connect with other adolescents, find support, and find information and resources.
- In addition, students can be anonymous when accessing these supports, which can help them maintain privacy around their issues and concerns. Privacy is especially important when parents don't support their children's emotional struggles. Privacy issues are addressed in more detail in the Gaps and Barriers section below.
- If students engage in social comparisons, social media can be very harmful. “If someone else is posting how great their life is, then my life should be as great as theirs. If their life is absolute crap, then my life should be as crappy as theirs. If my life isn't as sucky as their life, I don't deserve the attention that they do.

### **Online Professional Mental Health Services and Resources**

- Many youths receive telehealth services from mental health professionals and medical providers. There are many benefits of clinical telehealth services to youth as opposed to in-person treatment, including accessibility, availability, a range of treatment options, and no need for transportation, which is challenging for adolescents in the Baystate Wing region and is discussed in more detail in the Gaps and Barriers section below).
- They also receive support through online anonymous 24/7 crisis support services and support groups with other youths and clinicians.
- Students also get support from online resources, such as mental health information, mindfulness and meditation videos and guidance, and other support options.

- Unfortunately, clinical telehealth services are typically more available to young adults because adolescents need their parents' permission and support to access these services and because there are fewer clinicians in the communities served by Baystate Wing that are trained to work with youth under age 18, among other reasons. There is also more advertising of these services among young adult populations than among adolescents.

**What are the youth assets that help young people maintain a sense of well-being or cope with mental health challenges?**

- Resilience was mentioned by most interviewees as very important.
- “Self-esteem and awareness that they and their opinions are valid and worthwhile. I see the desire to have a unified and inclusive voice as the catalyst for them to come together. They are also more likely to be empowered when the adults in their lives affirm their capacity to make good choices, remain curious, supportive, and approachable, which is usually from a true desire to listen to youth and their self-identified needs.”
- One clinician noted that students are proactive and assertive in advocating for awareness and respect for themselves and other students. “Claiming the language of what is of concern to them. Calling out what they see as problems and issues, like anxiety. Telling adults what pronouns they prefer, other identity information. Being willing to call out racism, homophobia, and hold teachers and community members accountable. They’re speaking up a lot—lots of self-advocacy and assertiveness.”
- As mentioned earlier, supportive relationships with friends and peers are a big asset to adolescents and young adults, providing critical acceptance and support for their mental health struggles.
- Close relationships with adults in and outside school also provide critical support to youth. These adults can be parents or extended family, schoolteachers, counselors, or other staff, coaches and activity leaders, medical and mental health professionals, faith leaders, and other adults in the community

2. What are the current platforms for community support that hospitals can build on in collaboration with others?

### **Youth Programming**

- Youth centers and community centers help students connect with each other and adults, and they provide many opportunities for emotional support and growth.
- Existing student activities in schools and communities, such as sports, scouts, theater, and robot-making teams, and youth groups such as the GSA.
- Peer support groups at school provide students with a safe and supportive place to express themselves and help each other.
- Leadership opportunities in and outside school. For example, Palmer High has a student-run school store that also doubles as a small-scale “survival center” for students. Opportunities such as these can help build students’ mental health, resilience, and empowerment

### **Community Organizations**

- Faith communities can be a potential support to adolescents and young adults as well.
- Local industry-led programs, such as local agricultural programs or food policy councils, highlight the importance of fresh and healthy food, gardening, fresh air, exercise, and their impact on mood.

### **Health Care Programs**

- The Griswold Center has an affiliation with the PURCH program sponsored by the UMass Chan School of Medicine and Baystate. This physician training program focuses on population health, health care disparities, and health issues specific to urban and rural communities. Students can learn from faculty who are also local community members and from local underserved populations. Many of their clinical internships also take place in community health centers. Benefits of collaboration with PURCH include (1) training physicians and psychiatrists to work specifically with the communities in the Baystate Wing region and (2) an increased number of physicians and psychiatrists in this region because graduates may stay in western Massachusetts to complete their residencies at Baystate Health.



- Baystate Health is partnering with Kindred Healthcare to build a behavioral health and psychiatric hospital in Holyoke, which will increase the number of mental health providers and beds in the Baystate Wing and nearby regions, which are sorely needed.

### **Community Partnerships**

- The QHSUA and other community groups address substance use and mental health through research, programming, and education (eg, school curricula). The QHSUA has also worked with PURCH in their research efforts. Increased collaboration among the QHSUA, PURCH, community service providers, and schools in the Baystate Wing region would benefit providers and recipients of mental health services in this region.

### **Gaps and Barriers**

- There are not enough mental health providers to meet the needs of youth, particularly adolescents, in the Baystate Wing region. As a result, there are very long waitlists for youth to receive professional clinical services in the region. For example, there are only two child mental health providers at the Griswold Center, one of whom is currently on leave as of this writing. There are also very few child psychiatrists and psychiatric hospital beds in the Baystate Wing region, leaving children sitting in adult psychiatric emergency rooms or with other adult psychiatric patients. This can be damaging to youth, especially younger children.
- Transportation is a large barrier for youth who are seeking mental health services. The public transportation system in the Baystate Wing region is extremely limited. For example, many youths receiving services live in the limited-income housing complex next to the hospital. Due to transportation challenges coupled with the limited number of mental health providers and other supports in this region, many youths would have to travel outside the Baystate Wing region to receive this support. Telehealth and other online options help reduce these challenges.
- Insurance is also an issue for many families. Lack of insurance, high copays, limited numbers of covered appointments or services, and/or a lack of knowledge about one's own insurance coverage can prevent parents and caregivers from seeking or getting help for their child(ren).
- Financial hardship is a challenge that many families in the Baystate Wing region face. There are significant socioeconomic disparities in this area, with most

families having either an abundance of financial and other resources or a lack of these resources. Access to adequate medical and mental health support is challenging to those without these resources.

- Another barrier is that adolescents' struggles are often not recognized or accepted by their parents, particularly when they do not have adequate privacy around their struggles and attempts to get support.
  - Though increased telehealth options can provide greater opportunities for youth to seek mental health support, the lack of privacy with telehealth services can jeopardize their efforts. For instance, a clinician shared that a student client who was questioning her gender was pulled out of therapy because her parents were completely against it and didn't want the clinician calling the student by her preferred pronoun. This situation arose because the client's parents heard her talking about her gender issues because she had no privacy, could not use headphones, and did not have a private place to go when she had therapy.
  - According to a parent and family outreach coordinator, lack of parental support is common in Palmer, where most of the population is rural, White, and with limited income. Many of these parents tend to lack the wealth and education to know what their children need as well as the knowledge of and access to services. In addition, there is often little privacy around adolescents' mental health struggles in smaller, more rural towns such as those in the Baystate Wing region. Families tend to know each other, ask about high school students' future plans, and get involved in each other's lives, which can limit students' privacy and safety, and add pressure around expectations.
- Schools in the region tend to have trouble recognizing the necessity of proper mental health and do not provide enough mental health support to their students. Some schools are cutting back on their counseling staff or have their guidance counselors provide adjustment counseling, for which they are not trained. Some parents in Palmer who have requested help for their children have received pushback from school administrators. Parents often "get run over by the school district." The school says: "You don't know what you're talking about. We don't need to do this."
  - Schools in the region have not done enough to support students and families with the challenges of remote learning and its effects on their mental health. There wasn't an organized approach to remote learning, and many parents struggled with it, particularly when they weren't expecting their children to struggle with it. Finding

support for their children, especially those with disabilities, has been extremely challenging.

- Schools have also struggled with supporting students as they returned to school in person. With their return, students have faced a number of challenges, such as relearning how to learn at school rather than remotely, fear of getting COVID-19 or someone in their family getting it, fear of leaving the house, social isolation, and social anxiety (eg, relearning how to socialize with peers, being accepted by peers for who they are).

### 3. Proposed strategies to support young people:

- Train more mental health providers in the region to work with adolescents and to provide environments in which young people feel safe and respected.
- Train pediatricians to know more about child and adolescent mental health, to recognize mental health issues at earlier ages, and to know where youth mental health services exist.
- Increase peer counseling, peer support groups, and mentoring opportunities led by knowledgeable and supportive adults. For instance, young adults could mentor high school students by sharing how they navigate adulthood and by helping students think about their goals, next steps, and skills needed.
- Adolescents and young adults could be trained in providing youth mental health first aid to help their friends and peers who are struggling.
- Local gyms could have youth-oriented programs as emotional outlets.
- Workplaces could also increase their efforts to understand and support their adolescent and young adult employees.

### 4. How can youths be involved in building more effective support systems?

#### **The Importance of Active Youth Engagement**

- In schools, efforts to promote mental health awareness, support, inclusivity, and acceptance will have a stronger impact when students can take an active role in these efforts. *“Youth are most likely to feel more agency in peer-oriented and collaborative environments or environments that have a trusted adult willing to provide them that open space. For example, a couple of my high school clients feel*

*empowered to have a say in how school is conducted, requesting breaks and other changes they feel would benefit their well-being during the day.”*

- Youths also feel more agency when they are allowed to have input into their medical and mental health care such as helping decide when to schedule their appointments and when they are provided adequate information about their care, including strategies, medications, and other treatments.

#### **Youth-Centered and Youth-advised Programming**

- One interviewee works with the local GSA, assisting them with trauma-informed work and in other capacities. The GSA could provide valuable youth input and support to schools, hospitals, and community health centers to create or enhance youth programs in the region that address mental health.

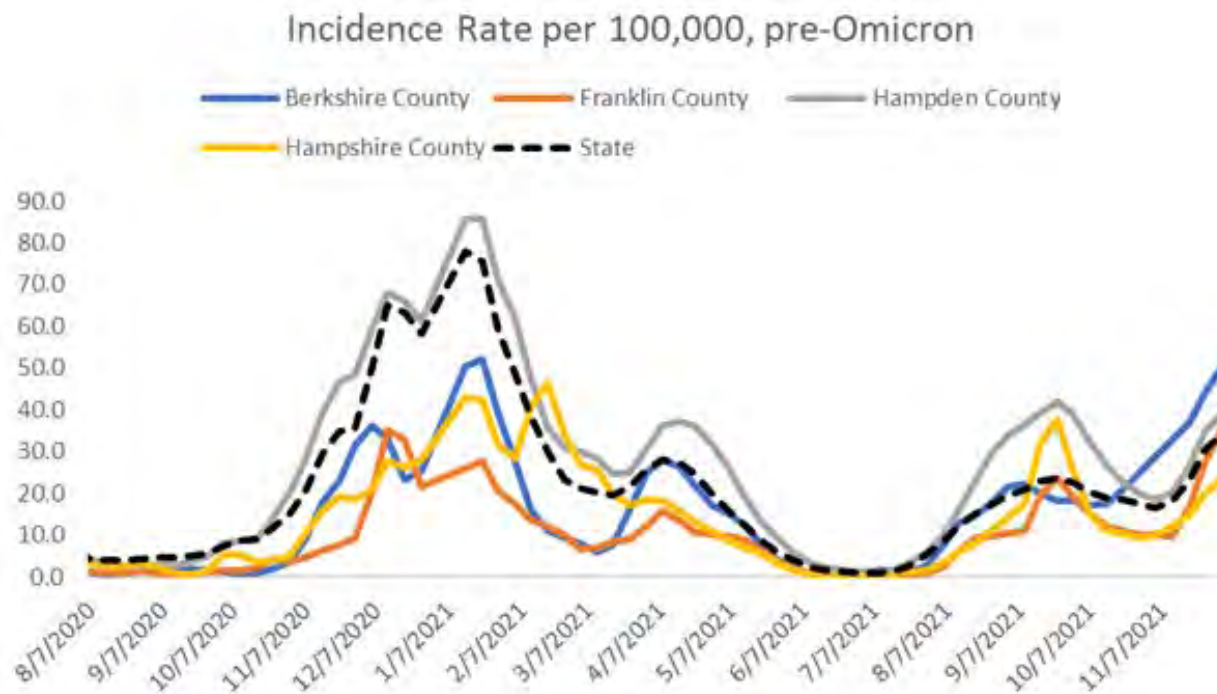
#### **Gaps in Our Findings (What Didn't We Hear About?)**

- In part due to the demographic makeup of the Quaboag Hills region and the professional providers who support youth, the mental health professionals and youth coordinators interviewed for this report have mostly worked with White students. Few discussed in any detail the experiences and concerns of Black, Latino/a/e, and Indigenous young people in the region.

## Appendix 5. Supplemental Data

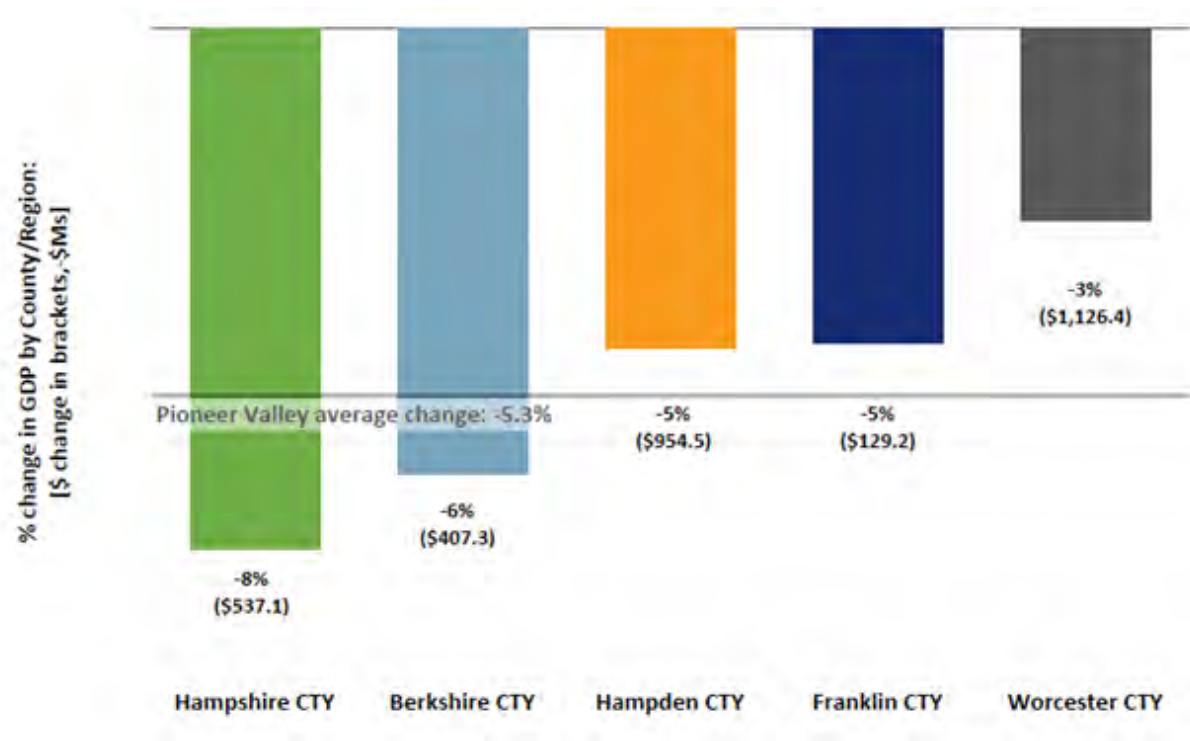
### 5a. COVID-19 Supplemental Data

**FIGURE 30: COVID-19 Incidence Rate in Western Massachusetts by County, Pre-Omicron Variant**



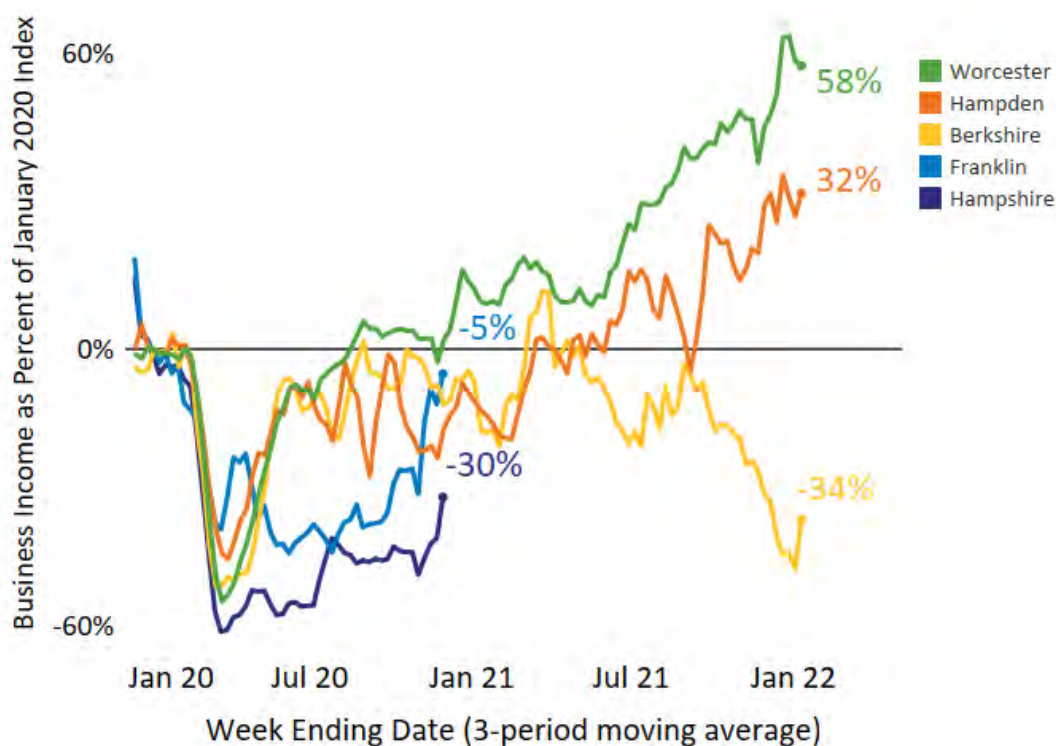
Source: MDPH COVID-19 Dashboard

**FIGURE 31: Effects of COVID-19 on Pioneer Valley Gross Domestic Product (GDP), 2020**



**Source:** U.S. Bureau of Economic Analysis, <https://www.bea.gov/data/gdp/gdp-county-metro-and-other-areas>.



**FIGURE 32: Small Business Revenues, January 2020–February 2022**

Source: Womply data, from Opportunity Insights, <https://www.tracktherecovery.org/>.

### ***5b. COVID-19 Community Impact Survey (CCIS) Data***

In response to the ongoing COVID-19 pandemic, the MDPH conducted the COVID-19 Community Impact Survey to better understand the needs of populations that have been disproportionately impacted by the pandemic, including its social and economic impacts. The survey was conducted in fall 2020 and reached over 33,000 adults and 3,000 youths (under 25). There was an intentional effort to reach key populations such as people of color, LGBTQIA+ individuals, people with disabilities, and older adults.

Compared with past surveillance surveys, this survey reached:

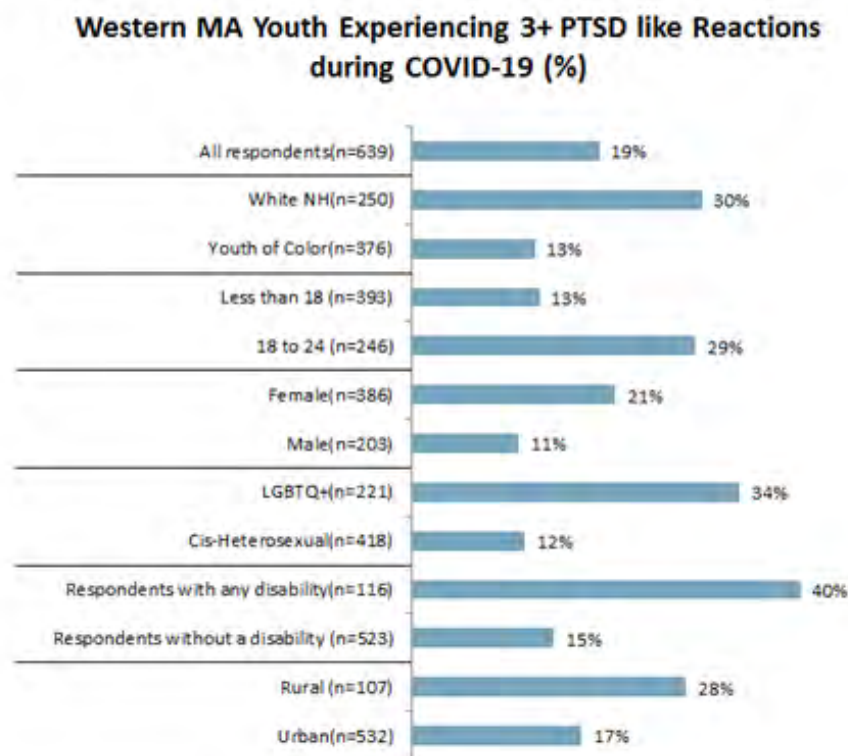
- 10 times as many Alaska Native/Native Americans
- 10 times as many LGBTQIA+ respondents
- 5 times as many residents who speak languages other than English
- 5 times as many Hispanic residents

- 5 times as many Asian residents
- Over twice as many respondents in other populations including the deaf/hard of hearing and Black community

Throughout the report, we highlight relevant findings for the communities served by Baystate Wing and western Massachusetts in general to better understand the impacts of the pandemic. All percentages reported are unweighted and statistical significance testing, a chi-square ( $X^2$ ) test of independence for comparisons was used where applicable. Caution should be used when interpreting the results of the CCIS. It is important to note that these findings are only representative of those who participated in the survey and may not be representative of the experiences of everyone in the service area or region.

### 5c. CCIS Data on Youth Mental Health

**FIGURE 33: Western Massachusetts Youth Experiencing Three or More PTSD-like Reactions During COVID-19**



**Source:** MDPH COVID-19 Community Impact Survey, 2020

### 5d. Hospital Patient Data Related to Chronic Conditions

**TABLE 10: Baystate Wing Admissions**

Diagnosis Upon Arrival	Year(s)	Count	Median Age	Black Median Age	Latine Median Age	Other Median Age	White Median Age	% Under 18	% 65 and over	% Female	% People of Color
Asthma	2019 - 2021	13,855	51	49	45	54	57	15%	27%	64%	57%
Congestive Heart Failure	2019 - 2021	22,832	74	64	66	74	77	N/A	72%	50%	32%
COPD	2019 - 2021	15,878	70	65	66	75	72	N/A	67%	52%	26%
Diabetes	2019 - 2021	31,583	67	63	61	67	70	1%	56%	49%	43%
Substance Use	2019	7,250	53	53	46	48	57	2%	25%	39%	40%
	2020	7,186	52	51	45	49	56	2%	23%	38%	42%
	2021	7,559	53	51	45	43	56	3%	23%	38%	43%
SUBSTANCE USE	2019 - 2021	21,995	53	52	45	45	56	3%	24%	38%	42%
Behavioral Health*	2019	2,804	42	37	36	35	47	11%	17%	43%	48%
	2020	2,240	43	36	36	36	49	10%	19%	44%	44%
	2021	2,762	41	38	35	29	47	14%	17%	44%	47%
BEHAVIORAL HEALTH*	2019 - 2021	7,806	42	37	36	32	48	12%	17%	43%	46%

\*Includes only visits where behavioral health is primary diagnosis

**Source:** Division of Healthcare Quality, Baystate Health

**TABLE 11: Visits to Baystate Wing Emergency Department**

Diagnosis Upon Arrival	Year(s)	Count	Median Age	Black Median Age	Latine Median Age	Other Median Age	White Median Age	% Under 18	% 65 and over	% Female	% People of Color
Asthma	2019 - 2021	15,564	25	26	20	25	35	39%	7%	59%	73%
Congestive Heart Failure	2019 - 2021	3,129	71	63	65	69	76	N/A	66%	54%	41%
COPD	2019 - 2021	3,915	65	63	61	60	67	N/A	50%	55%	35%
Diabetes	2019 - 2021	14,600	59	58	55	58	64	2%	38%	52%	58%
Substance Use	2019	5,276	40	43	37	33	42	4%	5%	33%	53%
	2020	4,933	40	44	36	34	42	3%	6%	31%	56%
	2021	4,243	39	43	36	35	41	5%	6%	32%	57%
SUBSTANCE USE	2019 - 2021	14,452	40	43	37	35	42	4%	6%	32%	55%
Behavioral Health*	2019	5,603	34	36	31	29	39	18%	9%	41%	55%
	2020	4,442	36	38	32	30	41	14%	8%	39%	57%
	2021	4,948	35	37	32	31	39	16%	9%	40%	58%
BEHAVIORAL HEALTH*	2019 - 2021	14,993	35	37	32	29	39	16%	9%	40%	56%

\*Includes only visits where behavioral health is primary diagnosis

**Source:** Division of Healthcare Quality, Baystate Health

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