Community Health Needs Assessment 2022

PREPARED FOR

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PREPARED BY

Public Health Institute of Western Massachusetts
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1. Executive Summary

Background

Shriners Children’s (referred to as Shriners) is a health care system with locations in the U.S., Canada, and Mexico. Shriners is dedicated to improving the lives of children by providing pediatric specialty care, conducting innovative research, and offering outstanding educational programs for medical professionals. Shriners Children’s New England, located in Springfield, is in its 97th year delivering high-quality specialty care for children with orthopedic conditions, chest wall deformity, cleft lip and palate, urology, fractures, sports injuries, or need outpatient physical, occupational, or speech therapy services in a family-centered environment. For more information, please visit https://www.shrinerschildrens.org.

While Shriners treats children from throughout New England and eastern New York, Shriners is located in Springfield and has a primary service area that includes the 23 cities in Hampden County. Hampden County is home to 467,871 residents spanning a dense urban core that includes Springfield, the third-largest city in Massachusetts, to many smaller and rural towns with populations under 20,000. The primary service area hosts a wealth of community resources and collaborations; a vibrant arts and culture scene; anchor education, health, and corporate institutions; a strong philanthropic network; and other assets that contribute to the region’s status as a destination to live, work, and play.

Shriners is a member of the Coalition of Western MA Hospitals (“the Coalition”), a partnership formed in 2012 that has grown to nine non-profit hospitals, clinics, and insurers in the region to coordinate resources and activities for conducting their Community Health Needs Assessment (CHNA). The federal Patient Protection and Affordable Care Act (PPACA) requires tax-exempt hospitals and insurers to conduct a CHNA every three years. Based on the findings of the CHNA and as required by the law, each hospital develops a health improvement plan to address select prioritized needs. The CHNA data also inform County Health Improvement Plans (CHIPs) as well as many other community-based initiatives to achieve health equity. The Coalition worked with a consultant team led by the Public Health Institute of Western Massachusetts to conduct the CHNA. This assessment focused on Hampden County data and data for select communities as available: Chicopee, Holyoke, Palmer, Springfield, West Springfield, and Westfield.

Guiding Values and Assessment Methods

The Coalition and 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. In order to make meaningful progress to address these root causes of poor health, the Coalition and the RAC worked to further incorporate aspects of these values into the 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 healthcare 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 a review of existing assessment reports; survey of public health officials; preliminary analysis of COVID-19’s impact on the region; and analysis of quantitative data, with efforts where possible to disaggregate (e.g. by race, ethnicity, gender, age, LGBTQIA+, rural) to understand health disparities. The consultant team also assembled qualitative data from community “chats,” key informant interviews, and focus groups conducted throughout the service area and region. The interviews and focus groups were primarily about youth mental health.

During the process, the Coalition and 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, Shriners undertook its own prioritization process and chose three of the identified prioritized needs for a deeper dive and additional data gathering: Built Environment (Access to Healthy Food, Transportation, and Physical Activity); Availability of Specialty Care Providers and Telehealth; and Mental Health, Substance Use, and Bullying. Shriners chose to place greatest focus on inequities among youth (up to age 21), those who are Latino/a/e or Black, and those who are living with a disability.

Prioritized Health Needs

The Shriners primary service area of Hampden County, MA continues to experience many of the same prioritized health needs identified in Shriners’ 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 the service area are:

- **Social and economic factors or “determinants” that influence health:**
  - Built Environment (Access and Affordability of Housing, Food, Physical Activity, and Transportation (Shriners focus area)
  - Educational Attainment
  - Employment and Income
  - Violence and Trauma
  - Environmental Exposures and Climate Crisis

- **Barriers to healthcare access**
  - Availability of Specialty Care Providers and Telehealth (Shriners focus area)
  - Other Barriers

- **Health behaviors and outcomes**
  - Youth Mental Health (regional focus area)
  - Mental Health, Substance Use, and Bullying (Shriners focus area)
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- Chronic Diseases and other Health Outcomes

COVID-19
It has been three years since the last community health needs assessment, and for two of those years our nation and region have battled a once-in-a-century health pandemic. COVID-19 has taken a tremendous toll on this service area, and it continues to affect the current status of health in Western MA. The pandemic took the lives of at least 1,951 residents of Hampden County, and over 27,000 were infected. 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 County had lower vaccination rates than other Western MA counties. 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. Hampden County’s unemployment rate shot up to 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 youth with a disability, Black and Latino/a/e residents, people who are unhoused or homeless, LGBTQIA+ individuals, older adults, those with limited incomes 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, grantmakers, and nonprofit agencies rose to the challenge, adapting and pivoting to provide resources, services, care, and timely, accurate information to residents in the service area.

Mental Health, Substance Use, and Bullying
Before COVID-19 arrived on our shores, the service area saw a rise in opioid deaths. Deaths of despair (due to suicide, drug overdose, and alcohol-related disease) disproportionally affected Latino/a/e residents. Mental health-related hospitalization rates had stabilized, but remained particularly high in some Hampden County communities, including Holyoke and Springfield, and among Black residents. 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, especially youth with disabilities, are acute. For example, among Springfield eighth graders surveyed in 2021, youth with disabilities were twice as likely to show depressive symptoms compared to peers without a disability. Youth with disabilities were also twice as likely to be e-bullied, and nearly one in four seriously considered attempting suicide. Other youth experiencing inequities exacerbated by the pandemic included girls, Black and Latino/a/e youth,
LGBTQIA+, rural, and young adults 18-24. Positive signs are that youth are more comfortable talking about mental health challenges, are finding trusting people to talk with, and are expressing openness to receiving care through telemental health, which expanded exponentially during the pandemic. Social media has both negative and positive impacts, undermining mental health, especially for girls, while also normalizing mental health issues and offering peer support. Several factors continue to affect youth mental health and access to care, including individual and systemic racism; continued stigma among many parents and some youth; provider shortages; and lack of cohesive and culturally competent mental health services. Proven prevention strategies such as organized sports, afterschool programs, youth drop-in centers, and other extracurricular activities need to be revitalized and expanded post-pandemic and made more affordable and accessible.

**Availability of Specialty Care Providers and Telehealth**

Many of the barriers that Hampden County residents faced in accessing health care in 2016 and 2019 are still prioritized needs in 2022. Chicopee, Holyoke, and Springfield continue to be classified as 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, 35% of Hampden County respondents cited 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. Unhoused or homeless individuals also struggled to receive care, as they often rely on the emergency room for treatment, but hospital ERs were overwhelmed at times with COVID-19 patients, as well as people experiencing mental health crises.

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 residents with limited means, immigrants, rural communities, and older adults, face barriers to using the internet and other technology. People with disabilities face additional challenges using telehealth because of accessibility of user interfaces such as telemedicine platforms and care coordination for ancillary services.

**Built Environment (Access to Housing, Food, Physical Activity, and Transportation)**

Access to and affordability of basic needs such as housing, food, physical activity resources, and transportation are key building blocks of health, and they continue to be a prioritized need for many residents in both urban and rural communities in the Shriners service area. Inequities in wealth and income have meant that some groups experience greater impact. For example, the median incomes of Black and Latino/a/e residents have grown at a much slower rate than for White residents, affecting their capacity to meet the rising costs of basic needs. Overcrowded housing and the aging housing stock in the county’s urban centers affect health, yet residents often don’t have the option to move to healthier environments. Hampden County also continues to have food deserts (lack of nearby grocery
stores) in the three largest cities, 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. In 2021, home prices in Hampden County rose almost 14%. The UMass Donahue Institute projects a housing gap of over 13,000 units in Hampden County by 2025. The pandemic also affected access to food—food insecurity jumped 42% from 2019 to 2020. Beginning in March 2020, the Food Bank of Western MA played a key role, distributing on average 877,000 meals per month to 91,000 clients, peaking at 1.1 million meals in October 2020. People who do not have access to transportation have an even harder time meeting basic needs. Census data show that consistently 14% of Hampden County 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.

Prior CHNAs documented inequities in accessing affordable, safe physical activity resources for youth with disabilities. COVID-19 brought these inequities to the forefront when youth lost access to or received limited supportive resources when stay-at-home orders were enacted, and schools switched to online learning. Youth no longer had access to recess or after school activities, and in many places community parks and playgrounds were closed. As schools and communities re-open, youth with disabilities continue to face limited access to opportunities for physical activities.

**Other Prioritized Health Needs**

We continue to see inequities in social and economic factors that affect health. Since the 2019 CHNA, overall educational attainment in Hampden County remains relatively unchanged, and racial disparities persist, with lower attainment rates among Black and Latino/a/e residents. Median incomes of Black and Latino/a/e individuals also lag White peoples’ incomes. The pandemic affected violence and trauma in ways yet to be understood fully, but people at risk of intimate partner violence or child abuse were more vulnerable during the lockdown and with the shift to remote work and school. Being at home full time also had implications for residents in homes that have elevated lead levels and allergens that contribute to asthma—two conditions that are already at higher levels in the largest cities in the service area. 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, especially asthma; emergency department visits rose among Black asthma sufferers relative to other groups. Chronic Obstructive Pulmonary Disease (COPD), cardiovascular disease, and other chronic conditions that are also a risk factor for heart disease—diabetes and obesity—also show disparities, with much higher rates among Black residents. Another chronic condition, Alzheimer’s Disease appears to have been affected by COVID-19, with CDC reports that there were 16% more deaths from this and other forms of dementia in 2020 compared to the prior five-year average. The infant mortality rate for the county is 30% higher than the statewide average. Sexually transmitted diseases have been on the rise in the state and Hampden County over the last several years.
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Priority Populations
This CHNA identified many inequities in prioritized health needs among youth up to age 18 and youth with disabilities, which are Shriners’ priority populations for the service area. People with disabilities, especially those with cognitive disabilities, are less likely to be employed making it harder for them to afford basic needs and to access quality health care. They also experience fragmentation of care and lack of care that is culturally and linguistically appropriate. While telehealth has increased access to care for many, people with disabilities face barriers when using telemedicine interfaces due to a lack of accessibility features and support services.

The pandemic exacerbated existing inequities. The disparate rates of infection and death in Hampden County, and national trends, indicate that communities of color, those with disabilities, and those with limited means suffered higher rates of both infection and death. Based on national studies, the pandemic-induced upheaval in the economy and the shift to remote schooling disproportionately harmed women of color. Black communities also felt the pandemic’s impact on mental health more keenly than other communities, as it coincided with police violence and vigilantism against Black residents. Emergency Department admissions for mental health were highest among Black residents in the county. Deaths of despair (suicide, overdose, alcohol-related) in the service area were highest for Latino/a/e residents.

For those who are unhoused, access to basic needs and to consistent health care are particularly challenging. Unfortunately, the number of unhoused persons in Hampden County increased three-fold, from 886 people experiencing homelessness in 2010 to 2,443 in 2019, while overall population grew less than 1%. Black and Latino/a/e people are disproportionately represented among those who are unhoused, a group that were particularly vulnerable during the pandemic in several ways. They were at higher risk of exposure to the virus if they sought shelter. They had less access to ER services, which are often the only place they can turn for health care, because of stretched hospital capacity. They faced higher costs for basic needs due to inflation caused by the pandemic. For the many unhoused people who have mental health and substance use challenges, they were affected by the reduction in availability of providers. Unhoused children 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 whose health is vulnerable or who experience inequities include children, older adults, LGBTQIA+ youth, people with low incomes, 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+ youth and youth with disabilities experienced higher rates of depression and anxiety during COVID-19 than other groups. Youth with disabilities also reported higher rates of e-bullying compared to peers without disabilities.

In sum, for so many facets of health and health care, COVID-19 deepened inequities. Virtually every prioritized health need was affected by the pandemic.
2. Introduction

About Shriners Children’s

Founded in 1925, Shriners Children’s (referred to as Shriners) is a health care system with locations in the U.S., Canada, and Mexico. Shriners is dedicated to improving the lives of children by providing pediatric specialty care, conducting innovative research, and offering outstanding educational programs for medical professionals. Children up to age 18 with orthopedic conditions, burns, spinal cord injuries, and cleft lip and palate are eligible for care, regardless of the families’ ability to pay. Within these broad service lines many types of care are provided. For example, some locations offer reconstructive plastic surgery, treatment for craniofacial abnormalities, or care for sports injuries. Generally, care is provided until age 18, although, in some cases, it may be extended to age 21. All services are provided in a compassionate, family-centered environment. For more information, please visit https://www.shrinerschildrens.org.

The mission of Shriners is to:

- Provide the highest quality care to children with neuromusculoskeletal conditions, burn injuries and other special healthcare needs within a compassionate, family-centered, and collaborative care environment.
- Provide for the education of physicians and other healthcare professionals.
- Conduct research to discover new knowledge that improves the quality of care and quality of life of children and families.

This mission is carried out without regard to race, color, creed, sex or sect, disability, national origin, or ability of a patient or family to pay.

The vision of Shriners is to become the best at transforming children’s lives by providing exceptional health care through innovative research in a patient and family-centered environment.

Shriners Children’s New England, located in Springfield, is in its 97th year delivering high-quality specialty care for children with orthopedic conditions, chest wall deformity, cleft lip and palate, urology, fractures, sports injuries, or need outpatient physical, occupational, or speech therapy services in a family-centered environment.

About the Coalition of Western MA Hospitals

Shriners is a member of the Coalition of Western MA Hospitals (“the Coalition”) a partnership formed in 2012 among eight 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, and Health New England, a local health insurer whose service areas cover the four counties of Western Massachusetts. In 2022 the Coalition expanded to include the Berkshire Health Systems. The Coalition members share resources
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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.

About the Hospital Service Area

While Shriners New England sees patients from across New England and eastern New York, 89% of patients served in 2020-2021 were from Massachusetts and 68% resided in Hampden County. Therefore, for the purposes of this assessment, Shriners’ primary service area includes the 23 communities in Hampden County. Hampden County is home to 467,871 residents.1 Springfield is the largest city in the service area and third largest in Massachusetts. Three adjacent cities (Holyoke, Chicopee, and West Springfield) join Springfield to create a densely populated urban core that houses over half of the county population. East and west of this central core are smaller communities, a majority with populations under 20,000 (see map below, as well as Appendix 1, Table 1). The Pioneer Valley Transit Authority, the second largest public transit system in the state, serves 11 communities in the service area, and connects suburban areas to the core cities and services. Spanning the geographically diverse service area, one finds a wealth of community-based organizations, resources, and collaborations; a vibrant arts and culture scene; anchor education, health, and corporate institutions; a strong philanthropic network; and other assets that contribute to the region’s status as a destination to live, work, and play.

According to Census estimates, the service area has become slightly more diverse since the last CHNA. Hampden County experienced small increases in the proportion of all racial and ethnic groups except White residents, especially in the larger cities. The service area population is now 60% White, 23% Latino/a/e, 8% Black, 5% two or more races, and 3% Asian. (See Appendix 1, Table 2.) The proportion of
foreign-born residents in the service area is close to 9%, half the statewide proportion. In Springfield, one in ten residents is foreign born.

FIGURE 1
Communities in Shriners Service Area: 2019 Population Estimates

The median age of the county is 39 years and continues to closely mirror the state, while Springfield remains a relatively younger city with a median age of just over 33 years. The county has a higher proportion of residents with a disability (12%) than the state overall (8%), and Springfield’s proportion of residents with a disability (16%) is fully double that of the state. Youth under the age of 18 with a disability account for 7.8% of the population in Hampden County.²

Prior to COVID-19, many of the socioeconomic conditions in Hampden County had not changed much since the 2019 CHNA. As this report describes, income, housing, food security, and many other conditions worsened during the pandemic. COVID-19 caused immense suffering for many residents, who faced dire health outcomes and financial hardship. The county’s leading economic engines such as higher education, healthcare services, and manufacturing were severely affected, with impacts on their workforce and the region. This topic is examined more closely in the COVID-19 section and in other sections on prioritized health needs.
Summary of the Previous CHNA
The 2019 CHNA found that the Shriners’ service area continued to experience many of the same prioritized health needs identified in Shriners’ 2016 CHNA. Social and economic challenges experienced by residents in the service area contributed to the high rates of chronic conditions and other health conditions identified in the needs assessment. These social and economic factors also contributed to the health inequities observed among marginalized populations, including children, older adults, Latino/a/e residents, Black residents, LGBTQIA+ youth, people with limited incomes, women, people with mental health and substance use disorders, people involved in the criminal legal system, people experiencing homelessness, and people living with disabilities.

The service area population continues to experience barriers that make it difficult to access affordable, quality care, some of which are related to the social and economic conditions in the community, and others which relate to the health care system. Mental health and substance use disorders were consistently identified as top health conditions affecting the community, as well as the inadequacy of the current systems of care to meet individuals’ needs. Also prioritized were chronic health outcomes, such as cardiovascular disease, asthma, cancer, and diabetes among others. Youth with disabilities lacked choices for accessible and affordable places to exercise. Youth bullying, especially for those with disabilities, was also a concern in the 2016 CHNA.
3. Setting Context

Guiding Principles for 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 Regional Advisory Council (RAC) for the 2022 CHNA share guiding principles rooted in an analysis of what prevents health equity, captured visually in the accompanying tree diagram. 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, in order to disadvantage and disempower other groups. This emphasis on dominant narratives and structural racism has been incorporated by the Massachusetts Department of Public Health (MDPH) into its health equity work, for example in its presentation of data from the COVID-19 Community Impact Survey.

FIGURE 2

Health Tree Model: Understanding Root Causes of Health Behaviors and Outcomes

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, Asian and Pacific Islander origin, other immigrants, women, people without wealth, people with disabilities, LGBTQIA+ 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, including in healthcare systems, and individual actions. As a result of these systemic hierarchies, race, ethnicity, age, gender, wealth and income, disability status, etc. determine one’s access to quality health care, a living wage, safe, affordable housing, freedom from violence, a good education, and healthy foods and physical activity.

“Racism stays through the life of a person.”
Age Friendly Coalition Member, Community Chat, Hampden County

In order 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 2) 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 3
Community Engagement Standards for Community Health Planning Guideline

In doing so, the Coalition and RAC recognize that the above tree image does not represent the full story of our community, nor 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 both the inequities and assets of our region, and our aspirations for its future.

Every three years the Coalition, 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 (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 the full picture of the vibrant, culturally diverse, and actively engaged communities that come together across sectors to make change in each service area 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
As in previous CHNA reports, this CHNA uses a health equity focus to identify needs. Research shows that less than a third of our health is influenced by our genetics or biology. The Guiding Principles and Health Tree (Figure 2) show that our health is largely determined by social and economic factors that are influenced by practices and policies such as 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 Shriners service area, 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: the impact of COVID-19 and the youth mental health crisis.
- Shriners’ three focus areas for deeper dive:
  - availability of specialty providers and telehealth;
  - built environment (access of housing, food, places to play, and transportation); and
  - mental health, substance use, and bullying.
• Shriners’ priority populations for greater focus: youth (up to age 21), those who are Latino/a/e or Black, and individuals living with a disability.

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 back to the 2019 report\(^5\) 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 Shriners can partner with you in promoting health and wellness in our service area. We welcome opportunities for discussion and feedback about the CHNA. Here’s how you can participate:

- For questions or comments on the CHNA, please contact:
  Director of Planning and Business Development – Boston and New England Shriners Children’s New England
  516 Carew St.
  Springfield, MA 01104
  Ph: 413-735-1269


- Join county initiatives such as the Hampden County Health Improvement Plan (CHIP). For more information, go to: [http://www.pvpc.org/HCHIP](http://www.pvpc.org/HCHIP). The CHIP has five focus areas or domains with active committees:
  - Domain 1: Health Equity and Health Disparities (access to opportunity in housing, employment, and education)
  - Domain 2: Behavioral Health (mental health, substance use/abuse, and treatment)
  - Domain 3: Primary Care, Wellness, and Preventative Care (CVD, diabetes, asthma, STIs)
  - Domain 4: Healthy Eating and Active Living (food access and the built environment)
  - Domain 5: Public Safety, Violence, and Injury Prevention (domestic violence, gun violence, childhood trauma)
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 healthcare access, and health behaviors and outcomes. This CHNA focused on Hampden County-level data and data for select communities as available: Chicopee, Holyoke, Palmer, Springfield, West Springfield, and Westfield. 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 County.

- **Quantitative data collection and analysis:** (winter 2021-22)
  - Analysis of COVID-19 Community Impact Survey data from Massachusetts Department of Public Health (MDPH).
  - Analysis of social, economic, and health data from Trinity CARES data hub, MA Department of Public Health, the U.S Census Bureau, the County Health Ranking Reports, Broadstreet, 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 2021-2022)

Prioritization Process
The 2022 CHNA used the 2016 and 2019 CHNA priorities as a baseline, 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 disproportionally 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. Also, Shriners chose a priority in each of three facets of health needs: availability of specialty providers and telehealth (Barriers to Care); built environment (access of housing, food, places to play, and transportation) (Social Determinants of Health); and mental health, substance use, and bullying (Health Outcomes). The consultant team identified priority populations by disaggregating available data to reveal disparities, which led Shriners to prioritize youth up to age 18, and youth living with a disability.
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 generally a problem when reporting data for larger cities such as Springfield, Holyoke, and Chicopee, 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. Statistics for people of color in Hampden County do not begin to reveal the level of detail we would like to know, preventing a better understanding of people who identify with different races and ethnicities. It is also important to consider intersectionality—the overlapping identities of residents. What impact does being young, Black, and gay in Hampden County 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.

Language Used to Describe Demographic Groups
The Coalition and 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+, Transgender. The glossary in Appendix 2 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. The Impact of COVID-19 in our Community

Overview
It has been three years since the last community health needs assessment, and for two of those years our nation and region have battled a once-in-a-century health pandemic. COVID-19 has taken a tremendous toll on this service area, and it continues to affect the current status of health in Western MA. We lost 76 veterans at the Holyoke Soldiers Home and hundreds of other older adults throughout the service area in congregate care settings. We lost 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. While 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 very clearly exacerbated existing health inequities. People of color, people with low wages, people with disabilities, 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. Because systemic racism and structural poverty reduce access to quality jobs and housing and increase the prevalence of chronic disease, people of color and people with limited incomes were more likely to be essential workers and experience other risk factors, such as having higher rates of comorbidities.

Some communities of color experienced disproportionately higher rates of illness, hospitalization, and deaths from COVID-19 across the U.S. For example, since the start of the pandemic, the 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. As the pandemic progressed and vaccination became available, inequitable access to vaccines and vaccine hesitancy continued to drive COVID-19 health inequities.

COVID-19 in our Region and Service Area
Since the pandemic began, COVID-19 has been ranked among the top three leading causes of death in the US for most months. Though we do not have up-to-date overall death data for the Western MA counties, comparisons to 2017 data (the most recent available) indicate that COVID-19 is likely among the leading causes of death locally as well. Though touching all of us throughout the region, the impacts across our four Western MA counties have varied, with communities that have historically experienced inequities bearing greater impact.

- In Western MA, as of 1/28/22, we have lost 2,809 lives to COVID-19 (see Table 1).
- For the year 2020, the greatest absolute and relative number of lives lost was experienced in Hampden County, with 1,055 people losing their lives to COVID-19. Hampden County’s death rate was over 70% greater than each of the other three Western MA Counties and 20% greater than that of the state as a whole.
Hampden County COVID-19 deaths in 2020 were comparable to the other top causes of death in the MDPH 2017 Death Report (top listed causes: heart disease=1,019, cancer=908).  

**TABLE 1**

**Confirmed COVID-19 Cases and Deaths as of 1/28/2022**

<table>
<thead>
<tr>
<th>County</th>
<th>Total Cases</th>
<th>Total Cases per 100,000</th>
<th>Total Deaths</th>
<th>Total Deaths per 100,000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Berkshire</td>
<td>20,827</td>
<td>16,315</td>
<td>370</td>
<td>290</td>
</tr>
<tr>
<td>Franklin</td>
<td>9,531</td>
<td>13,260</td>
<td>150</td>
<td>209</td>
</tr>
<tr>
<td>Hampden</td>
<td>127,046</td>
<td>26,769</td>
<td>1914</td>
<td>403</td>
</tr>
<tr>
<td>Hampshire</td>
<td>24,396</td>
<td>14,859</td>
<td>375</td>
<td>228</td>
</tr>
<tr>
<td><strong>Regional Totals</strong></td>
<td><strong>181,700</strong></td>
<td><strong>2,809</strong></td>
<td><strong>21,909</strong></td>
<td><strong>314</strong></td>
</tr>
</tbody>
</table>


Many more people have tested positive for COVID-19 and experienced illness. The number of confirmed cases in the four counties of Western MA as of 1/29/2022 was 181,800 (Table 1). Hampden County residents have been particularly hard hit by COVID-19 with the greatest cumulative cases per 100,000 population through 1/29/2022 among Western MA counties.

Data disaggregated by race/ethnicity are not available at a county level in MA. State data have limitations because a large percent of cases are classified as “unknown” or “other.” However, the disparate rates of infection and death in Hampden County, and national trends, indicate that communities of color and those with limited means suffered higher rates of both infection and death. In addition, we know that older adults have been at high risk for severe illness and death from COVID-19.

- Though 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 8/12/20 through 3/1/22 (age-specific death data is only available as of 8/12/20) indicates that 74% of deaths occurred among those who were age 70 and older.
- Twenty-four percent of deaths have occurred among those residing in an elder care facility in MA.  


Another population at high risk of catching COVID-19 from being in congregate settings were incarcerated individuals, as well as the staff 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 the service area:

- Data collected by the Marshall Project through 6/22/21 estimated that in Massachusetts 2,574 incarcerated individuals (one in three) were infected, and 21 individuals died (one in 379). This was a higher proportion than the national median of one in 493.14
- According to the same database, 954 prison staff, or one in five, were infected, but no staff deaths were reported.

On the positive side, Massachusetts has one of the highest COVID-19 vaccination rates in the US, although vaccination rates vary across the Commonwealth.

- 76% of the state’s population have been fully vaccinated and 53% of those fully vaccinated have received a booster dose as of 2/24/22.
- At the county level, the lowest rates as of 2/24/22 were in Hampden (67%) and Hampshire (70%) counties (along with Bristol County in Eastern MA). 15
- By June 2021, 72% of incarcerated individuals in Massachusetts had been vaccinated, and 60% of prison staff.16 Data on boosters were not available.

Barriers to vaccine access and vaccine hesitancy were likely factors in Hampden County’s lower rates. Vaccination barriers 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. These lower vaccination rates have contributed to higher COVID-19 case rates, hospitalizations, and deaths, particularly when the Delta and Omicron variants were spreading. Hospital capacity in Western MA was also extremely limited during the Delta and Omicron phases as a result of high COVID-19 hospitalization rates and hospital staff shortages.

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 also 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. Some impacts are described below, and others are woven into later sections of this CHNA.

Business, the Economy and Labor Force
In 2020, each of the counties in the region saw substantial decreases in the size of their economies and small business revenues (See Appendix 6). As the pandemic recession took hold, unemployment rates spiked, and had not returned to pre-pandemic levels by the end of 2021 (Figure 5).

- The inflation-adjusted value of goods and services produced (i.e. the Gross Domestic Product or GDP) declined by $1.6 Billion (over 5%) in the Pioneer Valley in 2020.
- Hampden County’s GDP shrank by an estimated 5%. Variation between counties in decline of economic activity in part reflects the mix of industries making up the county economy.
- Small business revenues declined steeply in the initial weeks of the COVID-19 shutdowns, down 41% in Hampden County.\(^\text{20}\)
- Revenues remained depressed throughout 2020 and into 2021, when Hampden County’s small business revenues were 22% below pre-pandemic levels.
- In Hampden County, unemployment peaked at 18% in April 2020. Springfield and Holyoke unemployment rates topped 20%, higher than for any other cities in the region. Chicopee, West Springfield, Palmer, and Ludlow were also in the top ten regionally.\(^\text{21}\)

**FIGURE 5**

**County Unemployment Rates, January 2019-January 2022**

Although 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.\(^\text{2223}\)

These wrenching economic shifts and 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 (6) d 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 (6) a of this report looks at mental health and substance use in adults, and Section (6) b explores the youth mental health crisis.

Rural communities have had challenges during the pandemic that affected their access to employment, school, and health care, driven by limited access to the internet. CCIS data for three rural geographic clusters that overlap with Hampden County showed a disparity in concern about internet access, with 23% of rural respondents citing this concern, compared to 17% of urban respondents. See more on internet access and telehealth in Section (6) c of this report. Other sections also contain data on rural needs and challenges affected by the pandemic.

People with disabilities were also impacted by the pandemic and experienced changes in employment. CCIS data showed people with disabilities reported higher rates of job loss (11%) compared to people without a disability (7%). About one in four people with disabilities (25%) reported reduced hours at work or took leave, almost double the rate for those without disabilities (14%). Those with a cognitive disability were the most likely to report a reduction in hours or taking leave from work (35%).

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

People’s health outcomes are strongly impacted by the quality of local public health protections in each community. Yet 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, 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;
- 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 their staff, which resulted in significant disparities in COVID-19 contact tracing between towns using the state system and those with local public health nurses.
Assets and Resources
The response of Shriners Children’s during COVID-19 was to focus on continuing to deliver high quality pediatric specialty care within an environment that protected patients, families, and staff members. During the pandemic, new patient flows were created to provide for social distancing, masking, and handwashing as primary mechanisms to reduce the spread of illness. When vaccines became available, Shriners mandated that all staff members be fully vaccinated. While operative and outpatient volumes were severely reduced during portions of 2020, care delivery has rebounded to 90% of pre-pandemic volumes with additional infection prevention processes in place to safeguard against future risks.
6. Prioritized Health Needs

The Shriners primary service area of Hampden County, MA continues to experience many of the same prioritized health needs identified in Shriners’ 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 the service area are:

- Social and economic factors or “determinants” that influence health:
  - Built Environment: Access and Affordability of Housing, Food, Physical Activity, and Transportation (deeper dive)
  - Educational Attainment
  - Employment and Income
  - Violence and Trauma
  - Environmental Exposures and Climate Crisis

- Barriers to healthcare access:
  - Availability of Specialty Care Providers and Telehealth (deeper dive)
  - Other Barriers

- Health behaviors and outcomes:
  - Youth Mental Health (regional focus area)
  - Mental Health, Substance Use, and Bullying (deeper dive)
  - Chronic Conditions
  - Infant and Perinatal Health
  - Sexual Health
a. Deeper Dive: Mental Health and Substance Use

Overview
Though mental health is commonly thought of as the absence of mental illnesses, 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 [their] own abilities, can cope with the normal stresses of life, can work productively and is able to make a contribution to [their] community.”

FIGURE 6
Dig Deeper

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 both rural and urban communities, residents are resilient, 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.

As the above graphic so effectively conveys, the systems of care typically used in our society to treat mental health and substance use 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.

Substance use disorders (SUD) refer to the recurrent use of drugs or alcohol that result in health and social problems, disabilities, 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.”

Risk factors for SUD include genetics, age at first exposure, and a history of trauma. Substance use must also be considered in the context of historical and present day rural and urban disinvestment, poverty, racism, and discrimination. Data show that other factors that contribute to SUD, such as economic constraints, social networks, opportunities for substance abuse treatment, and experiences within treatment, are affected not only by class but also by race and ethnicity.

Also, predatory suppliers have heavily marketed both legal and illegal substances in Black neighborhoods and other communities of color for decades, including menthol tobacco products, malt liquor and distilled spirits, crack cocaine and more recently, synthetic opioids. The federal war on drugs and inequitable sentencing for crack vs. powdered cocaine contributed to the mass incarceration of people of color and stigmatized substance use addiction as a crime rather than a treatable health condition. Disparities between Black and White residents in arrests and sentencing for illegal drug use persist today, even though rates of drug use are similar.

The impact of the COVID-19 pandemic on mental health was widespread while also exacerbating disparities. In addition, police violence and vigilantism against people of color, threats to our democracy, and the rise of political hate speech and hate crimes, gun violence, and extreme weather brought on by the human-created climate catastrophe, further affected mental well-being in disparate ways. National weekly Census Bureau surveys taken after the pandemic began found the greatest leaps in anxiety and depression levels were among Black residents, especially after George Floyd’s murder by Derek Chauvin. The second most affected group was Asian Americans, whom politicians had been demonizing because the coronavirus started in China, resulting in a rise in hate crimes against this population.

Alarming data and community concern about mental health issues among youth in particular prompted the Coalition and RAC to devote a section of this report to the specific mental health needs of young people aged 12-24. It follows this section, which focuses primarily on adults.
Mental Health
As in the 2019 CHNA, mental health continues to be a prioritized health need, and has been exacerbated by COVID-19. Prior to the pandemic, the need was already acute.

“We have lost so many Mental Health providers – making appointments for patients is a real challenge.”
Medical administrator, Community Chat

- **Adult Mental Health**: Poor Mental Health is one measure of need. In Hampden County, one in seven adults (15%) reported their mental health was not good for 14 days or more within the prior 30 days. This exceeded the statewide rate of 13%. Further, one in five Hampden County adults (21%) suffer from depression.38

- **Emergency Department Visits**: Hampden County had the second highest rate of mental health hospital ED visits compared to other counties in the state (see Figure 7). At the municipal level, Holyoke had the second highest rate statewide, and the highest ED visit rate in the county in 2019 (6,023 per 100,000), followed by Springfield (4791 per 100,000). Longmeadow had the lowest rate in the county, at 1125 per 100,000.39

- **Racial Disparities**: Emergency Department visits for mental health in Hampden County were highest for Black residents (3851 per 100,000), and lowest for Asian residents (712 per 100,000). (See Figure 39 in Appendix 6.) The state did not provide data for those who identify as Latino/a/e ethnicity.

- **Homelessness**: Federal agencies have documented the prevalence of mental illnesses among people who experience homelessness. The most recent available data for Massachusetts found that 15% of those in emergency shelters and 27% of those in transitional housing had a severe mental illness.40

**FIGURE 7**
Mental Health Emergency Department Visits by County
Age-adjusted rate per 100,000 residents, 2019

<table>
<thead>
<tr>
<th>County</th>
<th>Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Berkshire</td>
<td>3,428</td>
</tr>
<tr>
<td>Franklin</td>
<td>2,745</td>
</tr>
<tr>
<td>Hampden</td>
<td>3,418</td>
</tr>
<tr>
<td>Hampshire</td>
<td>2,124</td>
</tr>
</tbody>
</table>

Source: MDPH Hospitalization tables for chronic diseases, 2016-2019
Substance Use

Substance use continues to be a prioritized health need in a county where 18% of adults smoke tobacco, compared to 14% statewide, and the same proportion (18%) engage in binge drinking. An important indicator for both mental health and substance use is “Deaths of Despair,” which include deaths due to suicide, drug overdose, and alcohol-related disease (see Appendix 7). These Deaths of Despair were identified and described by economists Anne Case and Angus Deaton because of the marked increase in these causes of death over the past two decades and their impact on the US working class, especially White men.

- Between 2016-2020, deaths of despair in the service area were 65.3 per 100,000, 29% higher than the state rate (50.7 per 100,000).
- These causes of death affected men at three times the rate of women in Hampden County, and the gender gap was more pronounced than at the state level.
- Compared to the state, the service area gap was especially wide for Latino/a/e people, who had the highest rate of all groups, just exceeding the rate for White people at 70.7 per 100,000.
- Three in ten driving deaths in the service area involve alcohol.

Despite some signs of improvement in 2017, the opioid crisis has grown in the last several years across the region and especially in Hampden County.

- In 2020, Hampden County experienced the highest rate of Emergency Medical Service calls related to opioid overdoses of any county in the state.
- 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.
- A subset of communities in Hampden County has seen rises in people dying from opioid overdose since the last CHNA, especially Springfield, Chicopee, and Holyoke (See Figure 8).

On the positive side, Westfield saw a decline in opioid-related deaths, and Palmer and West Springfield held steady after an uptick in 2018.
COVID-19’s Impact on Mental Health and Substance Use

“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

The COVID-19 pandemic has acutely affected the mental health of residents as well as 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 issue in their community, and it was the top ranked issue overall. A subset of those respondents also cited a shortage of mental health and substance use services.

Data from the statewide COVID-19 Community Impact Survey (CCIS) conducted in 2020 show the negative impacts of the early lockdown phase on mental health as well as substance use:

- **Depressive Symptoms**: In Hampden county, more than one in three respondents (36%) reported 15 or more poor mental health days in the past 30 days. The rate was 37% for respondents that lived in a rural area. Respondents with disabilities and parents of children with special health care needs were disproportionately impacted, with one in two experiencing 15 or more poor mental health days in the past 30 days. The following subgroups also
experienced disparities: younger respondents (age 25 to 64), LGBTQIA+ respondents, lower income respondents, parents in general. (See Appendix 6.)

- **Signs of PTSD**: More than one in four respondents (27%) reported experiencing three or more PTSD-like reactions to the pandemic, which include nightmares, avoidant behaviors, guilt, etc.\(^{48}\) This was slightly higher (29%) for rural respondents.

- **Substance Use**: Among Hampden County respondents that used any substance in the past 30 days, 41% increased their substance use compared to before the onset of the pandemic. Rates of elevated use were greatest among 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 57% for rural respondents vs. 48% urban, with a similar disparity in alcohol use in the past 30 days (54% rural, 43% urban).

While 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.

In urban areas, residents called for providers that could offer culturally appropriate care. A Blue Cross Blue Shield of Massachusetts (BCBS) summary of focus groups in seven regions, including Springfield/Holyoke, found that structural and interpersonal racism affected access to and quality of mental health care.\(^{49}\) BCBS focus group participants expressed frustration at the lack of responsiveness of primary care providers to behavioral health needs, as well as dearth of Spanish-speaking providers, providers of color, or those with cultural humility. Focus group participants found that fragmentation of care and lack of person-centered care was especially problematic in mental health care, adding to stress for those who are already most marginalized and resulting in untreated conditions.

"We need culturally responsive people to work with brown and black people, people like us who understand our culture."

*Community Health Center advisor, Community Chat*
Resources and Assets

At the writing of this CHNA, the behavioral health systems of care have been changing and continue to be in transition. Public health officials and 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.

- **Culturally Appropriate Care Providers**: Several providers are building their capacity to provide more responsive care. For example, Behavioral Health Network has created a Social Justice Director position. The Springfield Youth Mental Health Coalition (YMHC) is working with Wellness for the People and other organizations that are focusing their practice on communities of color.

- **New Statewide Systems/Models of Care**: The state administration created a Roadmap for Behavioral Health Reform in 2021 that will offer a model to strengthen community-based care through newly designated Community Behavioral Health Centers (CBHCs) that will expand availability of outpatient evaluation and treatment.

- **Support for Veterans**: The federal Veterans Administration has been privatizing mental health services, and it announced in March 2022 that it may close some VA health facilities, including the one in Hampshire County, which would affect health care access for veterans throughout the region.

- **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 2020-2021, 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. 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. (See section 8 of this report for more on telehealth.)

- **Community Resources**: 413 Cares provides a searchable website with resources related specifically to mental health: [https://www.413cares.org/breakthestigma](https://www.413cares.org/breakthestigma)
b. Regional Focus Area: Youth Mental Health and Bullying

Overview

“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

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.

Other factors erode any sense of well-being. For some, structural poverty and rural isolation are factors. For youth of color and other marginalized young people, mental well-being has been affected by racism and discrimination in both communities and schools. Key informants speak to the anxiety, stress, and fatigue of youth having to “interface with systems” that are often unsupportive, disrespectful, combative, and traumatizing. One manifestation of systemic bias – school discipline – illuminates the harms of pervasive discrimination for the well-being of youth today. School discipline data reveal the systematic over-discipline and eventual criminalization of Black and Latino/a/e children and youth, especially males, from as early as pre-kindergarten. Black students are expelled three times more than White students. Youth with disabilities experience higher rates of discipline, confinement, and restraint than those with no identified disabilities, and even more so if they are also youth of color.53, 54 LGBTQIA+ youth are also overrepresented in school discipline rates and experiences of victimization at school.55

Gender and gender identity are also significant aspects of youth mental health. Over their lifetimes, girls and women suffer twice the rates of anxiety and depression that males do.56 All students, but especially girls, may feel the pressure to meet social expectations around school performance, beauty and appearance, and getting into college or a career. The rise in use of social media has proven to be a double-edged sword for adolescent and teen girls. Use of some social media platforms is correlated with
a rise in poor self-image, depression, and suicidal ideation for girls.⁵⁷ Yet social media also provides a source of connection for isolated teens, as well as a means to access mental health resources.⁵⁸

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.

**Bullying**

Bullying refers to behaviors in which a person intentionally and repeatedly causes another person discomfort or injury.⁵⁹ Bullying occurs in many forms including words, subtle actions, physical contact, and online (cyberbullying or electronic bullying). The Public Health Institute of Western MA worked with the Springfield Public Schools (SPS) and community partners to conduct Youth Health Surveys in 2021, showing continued bullying challenges in this part of the service area as the pandemic wore on.

- Students with disabilities were twice as likely (20%) to have been electronically bullied (“e-bullied”) outside of school hours than students without disabilities (11%).
- 8% of students with disabilities reported being e-bullied during school hours.⁶⁰

2019 Youth Health Survey data for SPS showed students with disabilities were more likely to miss school than those without disabilities, because they felt unsafe and experienced bullying.

- 7% of students with disabilities reported missing six or more days of school because they felt unsafe, compared to less than 2% of students without disabilities.
- 28% of students with disabilities missed school at least once due to not feeling safe, compared to 18% of other students.
- Students with disabilities (10%) were three times as likely to have been bullied 12 or more times at school or on their way to school than other students.
- 39% of students with disabilities reported having been bullied, compared to 23% of students without disabilities.
- Nearly one in four of students with disabilities (23%) said they were e-bullied in the last year, more than double that of students without disabilities (9%).⁶¹

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

Past CHNAs found that youth across the region struggled with mental health issues and were increasingly vulnerable to opioid use and overdose.⁶² 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 decided to make youth mental health a 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 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 youth aged 12-24.

The MDPH COVID-19 Community Impact Survey (CCIS) gave insight into the mental state of hundreds of young people in Western Massachusetts early in the pandemic. The CCIS provides important information that aligns with findings from other youth health surveys from the region. Yet readers should use caution when interpreting these findings, as they reflect perspectives of the 622 survey respondents and not necessarily those of all youth in the region.

- Almost half of youth 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). These high rates of depressive symptoms correspond with the high rates seen in youth surveys administered this past Spring across the region.
- In addition, inequities in mental health challenges that preceded the pandemic continued to manifest, especially among youth with a disability, LGBTQIA+, female, rural, and young adults 18-24 (Figure 9).
- Respondents with a disability (n=117) were twice as likely as youth with no disability to show depressive symptoms.
- LGBTQIA+ youth (n=221) were almost three times more likely than other youth to experience multiple post-traumatic stress disorder (PTSD)-like symptoms due to the pandemic. (See Appendix 6)
- When asked what types of mental health resources would be most helpful, youth expressed the greatest preference for: information on how to access a therapist, having an in-person meeting with a therapist, and having the opportunity to use an app for mental health support. (See Appendix 6)

The 2021 Springfield Youth Health Surveys showed continued mental health challenges in this part of the service area as the pandemic wore on. A majority of SPS students are youth of color (including 68% Latino/a/e and 19% Black\(^\text{63}\)). The survey data for eighth graders show that many of these youth struggled with mental health issues. See Figures 10 and 11.

- In 2021, more than four in ten eighth grade survey respondents felt sad or hopeless for two weeks or more.\(^\text{64}\)
- Reported feelings of sadness and anxiety were more than twice as high among female and LGBTQIA+ respondents, continuing disparities found in the 2019 CHNA and affirming data from the 2020 CCIS survey.
**FIGURE 9**

Western MA 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.

<table>
<thead>
<tr>
<th>Category</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>All respondents (n=622)</td>
<td>45%</td>
</tr>
<tr>
<td>Respondents w/o a disability...</td>
<td>38%</td>
</tr>
<tr>
<td>Respondents w/ any disability...</td>
<td>76%</td>
</tr>
<tr>
<td>Cis Heterosexual (n=404)</td>
<td>34%</td>
</tr>
<tr>
<td>LGBTQ+ (n=218)</td>
<td>65%</td>
</tr>
<tr>
<td>Female (n=375)</td>
<td>49%</td>
</tr>
<tr>
<td>Male (n=197)</td>
<td>29%</td>
</tr>
<tr>
<td>Less than 18 (n=388)</td>
<td>41%</td>
</tr>
<tr>
<td>18 to 24 (n=234)</td>
<td>52%</td>
</tr>
</tbody>
</table>

Source: MDPH COVID-19 Community Impact Survey, 2020

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

SPS eighth grade students with disabilities also experienced continued mental health challenges throughout the pandemic. The Youth Health Survey data show many youth with disabilities struggled with mental health issues, including suicide and self-harm.

- Reported feelings of sadness or hopelessness almost daily were higher for students with disabilities (56%) than students without disabilities (38%).
- Nearly one in four students with disabilities seriously considered attempting suicide, which is double that of students without disabilities.
- Reported attempts of suicide were higher among students with disabilities. Nearly 12% of students with disabilities reported one suicide attempt within the last year compared to 3% of students without disabilities.
- Reported behaviors of self-harm were two to three times higher in students with disabilities. Almost 9% of students with disabilities reported purposely hurting themselves six or more times within the last year compared to 4% of students without disabilities.
FIGURE 10
Springfield Eighth Grade Students Who Reported Feeling Sad or Hopeless, 2021
Percent of eighth grade students feeling so sad or hopeless every day for two weeks or more in a row that they stopped doing usual activities

<table>
<thead>
<tr>
<th>Category</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>All respondents (n=819)</td>
<td>41%</td>
</tr>
<tr>
<td>Female (n=426)</td>
<td>52%</td>
</tr>
<tr>
<td>Male (n=364)</td>
<td>23%</td>
</tr>
<tr>
<td>LGBT (n=181)</td>
<td>66%</td>
</tr>
<tr>
<td>Cis-Heterosexual (n=569)</td>
<td>31%</td>
</tr>
</tbody>
</table>

Source: Springfield Youth Health Survey, 2021

FIGURE 11
Springfield Eighth Grade Students with Moderate to Severe Anxiety Symptoms, 2021

<table>
<thead>
<tr>
<th>Category</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>All respondents (n=663)</td>
<td>21%</td>
</tr>
<tr>
<td>Female (n=338)</td>
<td>28%</td>
</tr>
<tr>
<td>Male (n=297)</td>
<td>11%</td>
</tr>
<tr>
<td>LGBT (n=149)</td>
<td>37%</td>
</tr>
<tr>
<td>Cis-Heterosexual (n=451)</td>
<td>14%</td>
</tr>
</tbody>
</table>

Source: Springfield Youth Health Survey, 2021
As more youth felt depressed and anxious during the course of the pandemic, a number of factors affected their ability to receive support and care. Based on information collected through community chats, focus groups with youth and caring adults, and key informant interviews with youth mental health providers and youth development professionals, the following insights emerged:

1. **COVID-19 eliminated or weakened the universal prevention strategies and supports (schools, sports, social networks, extra-curriculars, camps, mentoring, etc.) that might typically help young people thrive emotionally.** Youth-serving providers noted that more time on social media, less social interaction, less engagement in activities that give joy, less physical activity, and the challenges of trying to have meaningful interactions with youth while remote, all had a detrimental effect on youth. Trying to re-enter the world has been challenging, and many youth are not ready emotionally to interact in face-to-face environments.

2. **Racism and other forms of discrimination undermine youth mental well-being.** From microaggressions, to teachers that don’t understand their lived experience, to structural poverty that limits access to healthy food, recreation, or positive youth development opportunities, youth of color bear the brunt of multi-generational and present-day racism. Echoing the school survey results, LGBTQIA+ youth expressed that they too are harmed by discrimination, including youth who are transgender or gender nonconforming and experience trauma when being misgendered by a parent, teacher, care provider, or peer. Stigmatization of people who are overweight/obese also came up as a form of discrimination in which some health care providers reinforce societal stigmas about weight.

3. **Fragmented care, shortages of providers and lack of culturally competent care all pose barriers to receiving treatment.** The pandemic has made access to care an acute problem nationally for all families seeking mental health care. There are simply not enough therapists, social workers, and psychiatrists to meet the needs. Local providers have cited low pay, high turnover rates, and burnout as major challenges to providing consistent, coordinated care. Type of insurance, available formal and informal referral networks, and other variables can further affect access to care. Locally, these issues are magnified for youth of color and those whose families have limited financial resources. Several sources discussed the shortage of culturally competent mental health providers, including fluent Spanish-speaking providers, as well as the barriers for people of color to become certified to be a mental health counselor. Some adults that work with LGBTQIA+ youth urged that mental health care for transgender and queer youth be foundational for all providers, rather than treated as specialty care.

4. **Mental health stigma continues to be a challenge, although there are signs it is becoming less so.** Some informants observed that youth today tend to be well versed in the language of
mental health and see it as normal to talk about, in part due to its prevalence as a topic on social media. That said, some youth still experience stigma or judgment in disclosing mental health challenges, especially with adult members of their family. Youth and adult focus groups described how generational, gender, and cultural norms can discourage conversations about mental health. Youth, providers, and caregivers observed that this stigma can be more prevalent among Black and Latino/a/e parents than among White parents. Some youth also have had negative experiences in sharing about mental health challenges with peers, resulting in ambivalence about turning to friends when in need.

“I’ve been trying to trust people, but now I kind of like have trust issues because people that I trusted before . . . they just do things . . . people are impulsive and make dumb decisions.”

Youth focus group participant

5. **Social media has played both positive and negative roles for youth before and during the pandemic.** Social media platforms, especially TikTok, have helped normalize mental health issues and give youth the language and outlet to talk about them and connect with others facing similar challenges. However, mental health providers blame social media for reducing empathy, “othering” people, and contributing to cyberbullying. It is also addictive, and youth will choose it if not given other structured options. Social media, particularly Instagram, has been associated with increases in poor mental health among adolescent girls.

Despite these very real challenges, youth and adults from focus groups and key informant interviews point to the ability of many youth to find support systems of trusted peers or adults they can talk to, and for being resilient in the face of so many emotional challenges.

**Assets, Resources and Solutions**

Key informants and focus group participants emphasized the need for better preventive care for mental health to avert crises; culture and language-appropriate mental health care and pipelines for more diverse providers; more community-based and school-based referral systems and counseling; and building on family and youth resource centers. These informants recommended that youth need to be at the table and have power to influence decisions about their emotional well-being. For any of the following prevention and intervention resources, those supporting youth need to build and expand youth voice and decision-making opportunities.

**Healthcare institutions:** As noted in the previous section, the systems of care for mental health are in transition as hospitals and federal and state governments make major changes to address the acute mental health care needs of the region. During 2020, Shriners Children’s implemented universal
screening for all youth aged 12 and older for suicidal ideation. This program identifies at-risk youth and connects them with appropriate counseling services.

**Prevention supports:** Several key informants for this assessment stressed the need for restoring and augmenting universal strategies that have eroded during the pandemic. They advocated for structured activities such as organized sports, afterschool programs, youth drop-in centers, and other extracurricular activities. Community-based youth development organizations that cultivate young leadership are important prevention partners. These need to be affordable and accessible and allow youth to pursue their passions, develop skills and confidence, receive mentoring, and build trusting, healthy relationships.

**Schools:** Typically, when there isn’t a pandemic, young people spend much of their day in school. Key informants recommended that schools take a number of steps to support youth mental health: identify partners to support prevention and early intervention, train staff in culturally competent and respectful relationship-building, help identify mental health issues early on, and bring well-being supports into the schools and school-related programs.

**Community-based services and programs:** BCBS focus group participants pointed to the limited capacity to refer patients for mental health services through community health centers (CHCs), which are an appreciated and critical resource for communities of color in the region. Thus, the state’s Roadmap investments in behavioral community health centers may be a welcome model to build on the trust that residents already have in their local CHC.

**Telemental Health:** The rapid expansion of telehealth and “telemental health” has helped overcome barriers to access presented by the pandemic, and it may also offer longer term options for youth who may have transportation barriers or other challenges with receiving in-person care. Some providers have reported that youth feel comfortable using the technology and receiving care this way. Federal and state rules have been eased to enable ongoing use of telemedicine. (See more on this topic in Section 6c.)

**State initiatives:** 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. 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.

**Local initiatives:** Several recent efforts seek to address youth mental health as well as substance use.

- The four-county Young Adult Empowerment Collaborative of Western Massachusetts was formed in 2018 to address youth opioid use. This four-county, evidence-based collaboration works with systems serving emerging adults to prevent opioid misuse, address the needs of young adults currently addicted to opioids, and increase their health outcomes as they transition into adulthood.

- PHIWM worked with local leaders to create the Springfield Youth Mental Health Coalition in 2020 after the community identified it as a priority need prior to the pandemic. The YMHC has a
community advisory board and youth advisory board that guide its direction. The YMHC has identified several areas of focus, including a communications campaign to normalize mental health; identifying a youth Near Peer Mentoring framework; and providing culturally-informed community education and professional development trainings that address youth mental health risk/protective factors - violence prevention, social and racial justice, and well-being. In addition, the YMHC is monitoring policy for a potential universal behavioral health screening, in both schools and community behavioral health centers, to ensure the coalition is poised to assist.

- **Estoy Aquí** was cited as a successful culturally informed model that highlights the sociocultural factors surrounding suicide in the Latino/a/e and the Black community via training, dialogue, and outreach.
- The Hampden County Health Improvement Plan (CHIP) Violence and Injury Prevention Community Team held a mentoring summit and campaign around the importance of mentoring for Hampden County youth.
- The Hampden CHIP Mental Health and Substance Use Disorder Community Team 2 have been working to make Naloxboxes (kits that contain doses of Nalaxone to reverse opioid overdose effects) more accessible and provide trainings on how to use them. In some areas of Hampden County, they are teaching high school students how to administer Narcan (brand name of Nalaxone) for friends and family members.
c. Deeper Dive: Availability of Specialty Care Providers and Telehealth

Overview

Lack of access and availability of health care providers continues to be a prioritized need for the Shriners service area. A number of factors affect a resident’s ability to receive high quality, affordable health care when they need it. These include insurance coverage; availability of health care professionals who may or may not take that insurance; the degree to which providers communicate with each other to coordinate care; mobility needs; and access to transportation. Many of the barriers that Hampden County residents faced in accessing health care in 2016 and 2019 are still prioritized needs in 2022. The limited availability of health care providers was already problematic, but it became acute during the COVID-19 pandemic.

Unfortunately, residents with limited incomes, rural residents, Black and Latino/a/e residents, LGBTQIA+ residents, those with disabilities, and others often face additional barriers that can further limit their access to providers. These may include lack of money 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. Many of these barriers are rooted in health care policies and practices in the US. For example, the inability of the federal government to negotiate pharmaceutical prices with companies has made prescriptions in the US more expensive than in most other countries, putting patients without adequate income or good insurance coverage at a disadvantage.

Key Findings on Availability of Specialty Care Providers

Springfield, Holyoke, and Chicopee, and to a lesser extent, the rural northwestern part of the county, continue to experience provider shortages and are designated as Health Professional Shortage Areas (HPSAs).66 (See Figure 12)

In addition, key informants reported that systemic issues continue to create challenges in accessing certain types of providers.

- **Health insurance** is one major hurdle, with its complexity, cost, and disparities in coverage. For example, many psychiatrists do not accept health insurance--and this may vary whether private, Medicare, or Medicaid, in part because of low reimbursement rates, making access prohibitive for residents who need services.
- **Culturally and linguistically competent providers** are in short supply. BCBS focus group members described patients who feel unheard, dismissed, misunderstood, and ultimately powerless in their interactions with healthcare providers. They believe both frontline health workers as well as administrators and those in power should better reflect the communities being served.
• **Disconnected care systems are hard to navigate.** People experiencing homelessness face unique challenges accessing providers or having a consistent “medical home.” This causes many unhoused or homeless patients to seek care in hospital emergency departments,\(^6^8\) because they have no alternatives. In a Community Chat in Springfield, one participant noted that people cannot attain their health goals if they are experiencing homelessness or housing insecure. This person praised the role of community health workers (CHWs) as an important asset to the community, and they asked for greater collaboration across agencies to foster healthier populations.

**FIGURE 12**

Health Professional Shortage Areas in Hampden County for Primary Care, 2020

![Map of Hampden County showing health professional shortage areas for primary care in 2020.](https://data.hrsa.gov/maps/map-tool/)

**Source:** US Health Resources & Services Administration ([https://data.hrsa.gov/maps/map-tool/](https://data.hrsa.gov/maps/map-tool/)).

**Note:** A higher HPSA score indicates greater shortage of providers.

**Impact of COVID-19 on Availability and Access to Providers**

In a regional survey of health officials, 35% of Hampden County respondents cited the limited availability of providers as the most pressing health issue facing their community. Many other sources consulted for this report expressed concern about the shortage of providers. Several facets of the COVID-19 pandemic affected access to providers. Once the country went into lockdown to reduce transmission, most health care providers temporarily ended all non-emergency care. Many tried to pivot to telehealth, which is described in more detail below, but still had limited capacity as providers scrambled to deal with the fallout of the pandemic on their own lives.

The pandemic also resulted in a phenomenon dubbed the Great Resignation, in which millions of Americans left their jobs and were not easily replaced, resulting in massive labor shortages in some
fields. Their top reasons for leaving were not necessarily pay, but toxic work environments, job insecurity, high levels of innovation, failure to recognize performance, and poor response to the pandemic. The Great Resignation placed a strain on frontline health workers in particular and has caused staffing shortages throughout the medical system.

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 that sought healthcare during the pandemic reported not receiving care due to barriers presented by COVID-19. The rate was similar among rural respondents.
- More than half of respondents experienced delays in routine care and one in five had delays in urgent care.
- Among respondents that spoke a language other than English at home, almost 30% worried about getting needed medical care and treatment for themselves or their families.
- Youth with disabilities reported not getting the care they needed because their appointment was cancelled or delayed.

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

**Advances in Telehealth**

Since the last CHNA, telehealth – the provision of care by phone, online chat, or video – has emerged as a critical way for patients to access providers. Massachusetts was already experiencing rapid growth in the use of telehealth services before COVID-19, but primarily for female patients in their twenties and thirties seeking psychotherapy. The onset of the pandemic in early 2020 led the Massachusetts legislature to pass legislation (Chapter 260 of the Acts of 2020) to create a framework allowing for telemedicine to be delivered and reimbursed for most public and private plans on par with in-person visits. This led many providers to quickly pivot to offer telehealth services across the board as a safer alternative to in-person care. In May 2020, Shriners implemented a telehealth service platform to deliver safe care to patients when appropriate.

These changes led Massachusetts to become a major adopter of telehealth, quickly surpassing other states.

- Based on Medicare claims data, the Commonwealth was one of the top three states where telemedicine was used more than 60% of the time between March 2020 - February 2021.
- During the same time frame, Blue Cross Blue Shield of Massachusetts reported a 9500% increase in use of telehealth from the prior year for all types of visits. As noted in a previous section, 54% of those visits were focused on mental health.
● Between May 2020 and May 2021, Federally Qualified Health Centers (FQHCs) in the state conducted more than a million telemedicine visits, according to their telehealth consortium.  

It is difficult to find local telehealth data broken out demographically. The statewide FQHCs reported that close to half of telehealth patients were people of color: 52% were White, 31% were Latino/a/e, 21% were Black, 6% identified as more than one race, 5% were Asian/Pacific Islander, and 1% were Native American.

Barriers persist that may exacerbate disparities in who receives care. Telehealth depends on access to digital technology. Geographic location and cost of internet service are two potential factors affecting ability to use such technology. In a national telehealth study that reviewed claims data and conducted surveys of patients and clinicians, concerns about technology access for patients was the second greatest challenge raised by health providers. More than 70% saw this as a potential barrier to care beyond the pandemic, and more than 60% also raised specific concerns about lack of digital literacy and lack of patient access to broadband internet. These concerns were highest among rural providers. Among CCIS respondents living in rural areas, almost one in four were worried about their internet access.

Cultural and linguistic barriers can also pose access issues for telehealth. The BCBS focus group participants said that having to access health information in written form or through online portals, which may be hard to navigate or access, creates inequities. In the CCIS survey, 24% of respondents who spoke a language other than English worried about their internet access. Respondents of color and those with disabilities also were more likely to be worried about internet access compared to Hampden County respondents overall.

People with disabilities face additional challenges when accessing telehealth. Many telemedicine platforms lack features to enhance communication for users with hearing, vision, cognitive, or intellectual disabilities. Examples include screen readers, screen contrast, and captions. Performing certain movements or using devices for tele-physical assessments could also create barriers or frustration for people with mobility disabilities because of the dexterity needed. While telehealth may have reduced the burden of travel for people with disabilities, it may require more planning for ancillary services (i.e. labs) when services were previously coordinated with medical appointments in one trip.

Yet telehealth also helps remove barriers. In the same national study cited above, survey data from patients (which over-represented female responses) showed high ratings for their telehealth experiences. Three-quarters said that telehealth removed transportation as a barrier, 65% appreciated not having to take time off from work, and 67% said telehealth reduced their costs compared to an in-person visit.

Telehealth could be a good alternative to in-person services for people with disabilities. Coordinating accessible transportation, navigating public spaces, and inaccessible spaces or equipment are just a few obstacles people with disabilities encounter during in-person health care services. Telehealth presents
an opportunity for people with disabilities to receive care in a less stressful or overwhelming environment and to have less transportation and care coordination burden. As telehealth becomes more integrated into delivery of care, it is important to ensure people with disabilities are accounted for in the design and delivery of tele-medical services, otherwise inequities and health care gaps may widen for people with disabilities.

Youth providers discussing mental health noted that many young people are adept at using online platforms to access care and find it easier than going in-person. The FQHC Telehealth Consortium leaders see positive signs in their data that telemedicine is helping reduce health inequities faced by Medicaid patients, especially patients of color. That said, they still see the need to address the digital divide in communities served by FQHCs.

Federal and state policy changes have enabled telehealth to continue beyond the pandemic. A 2021 federal law enables Medicare and Medicaid to pay for mental health visits provided by Rural Health Clinics and Federally Qualified Health Centers via interactive video-based telehealth, including audio-only telephone calls. In Massachusetts, though all of the services that can be appropriately provided through telemedicine will be required to be covered, some of the telehealth reimbursement parity requirements made during COVID-19 are currently set to expire. Behavioral health services are required to be reimbursed on par with in-person services permanently. However, primary care and chronic disease management telemedicine reimbursement parity is set to expire at the end of 2022.

Resources to Increase Access and Availability of Providers

- Hospitals typically have an online resource and/or office that assists patients with finding the right provider and accessing insurance if needed. Shriners has a web search feature (https://www.shrinerschildrens.org/en/our-care-providers?listPage=1) to help clients find a doctor, as well as a phone number to receive guidance.
- Shriners Assist Charity Care Program provides financial assistance to children under 18 years of age who require specialty medical care for whom additional costs pose an undue financial burden.
- Shriners provides pediatric specialty care services to children that are not available at other hospitals in western Massachusetts.
- Another tool available in Hampden County is 413Cares, an online database with community resources of all different types. Residents who need help finding a health care provider can go to the 413Cares website (https://413cares.findhelp.com/), and search for “health care” and their zip code.
- There are also many healthcare referral agencies, which are listed in the appendix, as well as agencies that serve individuals who are unhoused or homeless, and can help them access health care.

Innovative recent efforts to triage care for Springfield residents without stable housing offer a model to improve access to health providers while reducing the strain on ERs, which have been periodically overwhelmed with COVID-19 cases.
d. Deeper Dive: Built Environment
(Affordability and access of housing, food, physical activity, and transportation)

Lack of access and resources to meet basic needs continues to be a prioritized need for the Shriners service area. Access to and affordability of basic needs such as housing, food, physical activity resources, 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 have to 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 in Hampden County differ in terms of population density and infrastructure. Access to and availability of basic needs varies from rural communities to the urban core. Average income and wealth also vary tremendously across the service area, and even within the same municipality, affecting residents’ ability to access and afford housing, food, physical activity resources, and transportation. These inequities are partly due to historical factors such as policy choices that discriminated against residents of color, those living in rural poverty and others; private disinvestment and more; 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. This occurred at a time when many people’s jobs became precarious, contributing to economic strains and uncertainties. For example, in Hampden County, unemployment rates jumped to 18% in April 2020.82 Many of the community leaders that participated in focus groups and chats for this CHNA mentioned concerns about access to and affordability of basic needs. BCBS focus group participants described how these unmet needs perpetuate the cycle of poor health outcomes for communities of color and immigrants.83 A local CSA (community supported agriculture) 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 & Homelessness

Many of the housing challenges that existed when the last CHNA was written persist today. Thirty-five percent of households in the County qualify as housing-cost burdened, meaning they spend more than 30% of their income on housing.84 A Greater Springfield Regional Housing Analysis85 published by the UMass Donahue Institute in 2021 found that housing cost burden was greater for people of color in the Pioneer Valley compared to White people. This is likely due in part to much lower increases in median income among Black and Latino/a/e residents compared to White residents (increase in median income from 2013-2018: White 20%, Black 7%, Latino/a/e 10%). Also, a greater proportion of people of color
rent than own. This report also found that foreclosures continue to occur in far greater numbers in Hampden County than in other western Massachusetts counties.

Unaffordable housing correlates with a greater-than-average prevalence of homelessness – a situation that has worsened over the past decade. Between 2010 and 2019, homelessness increased three-fold 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 children.86 The U.S. Department of Education reports that 4.2% of public school students in Hampden County are experiencing homelessness – a rate 50% higher than that of the state and nearly four times greater than that of neighboring Hampshire County.87

People of color are overrepresented in Hampden County’s unhoused population, according to a point-in-time estimate conducted by local organizations on January 30, 2019.88 Black people constitute 19% of the unhoused population and 7.7% of the County. Fifty-three percent of people who are without homes in Hampden County identify as Hispanic, versus 26% of the County. White people are proportionately represented among those experiencing homelessness (57% compared to 60% of the Hampden County population). The vast majority of those without homes in Hampden County are sheltered in Springfield. Of the minority who are unsheltered (1.6%), a plurality resides in nearby Holyoke.

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. In 2021, home prices in Hampden County rose almost 14%.89 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 (see Figure 12).90 In addition, the pandemic led to a sharp rise in unemployment (see Figure 5) and has destabilized many people’s finances, affecting their ability to make rent and mortgage payments.

Half of Hampden County CCIS respondents, and 42% of rural ones, 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 disabilities, those that speak a language other than English at home, parents of children with special healthcare needs, and LGBTQIA+ respondents. Almost 40% of respondents worried specifically about paying their housing related and/or utility expenses, as did 33% of rural respondents.
Overcrowding in housing, which can carry health risks, is often a response to a shortage of affordable units. COVID-19 response reporting from the Massachusetts state government shows a correlation between crowded housing units and COVID-19 case rates in Springfield and Holyoke (See Figure 14). The figure shows that within the Pioneer Valley, Springfield, and Holyoke, represented by red dots, had almost the highest levels of overcrowding as well as the most positive COVID-19 tests per 100,000.

**FIGURE 13**

Projected Housing Unit Gap by County, 2010-2025

<table>
<thead>
<tr>
<th>Year</th>
<th>Franklin County</th>
<th>Hampden County</th>
<th>Hampshire County</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010</td>
<td>833</td>
<td>5,812</td>
<td>704</td>
</tr>
<tr>
<td>2015</td>
<td>-187</td>
<td>-1232</td>
<td>-2,139</td>
</tr>
<tr>
<td>2020 (projected)</td>
<td>-231</td>
<td>-2,296</td>
<td>-7,919</td>
</tr>
<tr>
<td>2025 (projected)</td>
<td>-13,129</td>
<td>-3,572</td>
<td></td>
</tr>
</tbody>
</table>

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.

In addition, as noted in previous CHNAs, the housing stock in Hampden County is older. Older housing combined with limited resources for maintenance can lead to problems (e.g. mold, pest/rodent exposure, exposure to lead paint, asbestos, and lead pipes) that affect asthma, other respiratory illnesses, and child development. An estimated 38% of housing in Hampden County was built before 1949. Several communities are also among high-risk communities for childhood lead poisoning, including Holyoke, Springfield, and Westfield, with Holyoke and Springfield having the highest risk in the state. In addition, the rural cluster of Quaboag Valley had elevated prevalence of childhood lead poisoning.

**Food Access and Security**

Access to healthy, nutritious food continues to be a prioritized need in Hampden County 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 Hampden County residents (Figure 15).

**FIGURE 14**

**Overcrowded Housing Units and Positive COVID-19 Tests**

![Image of scatter plot showing overcrowded housing units and positive COVID-19 tests](image)


Hampden County also has several food deserts,96 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. People with lower incomes and people of color are more likely to live in food deserts because historical planning decisions created highways that split cities and separated White areas from Black areas.97 Food costs may be higher for certain types of foods in these neighborhoods.98 Additionally, marketing of fast food, junk food, sugary drinks, tobacco, and alcohol more often targets communities of color.99 Although the rate of fast food establishments per capita has fallen between 2013-2019, significant portions of the Mercy service area, particularly in the urbanized sections of Springfield, Holyoke, and Chicopee, and parts of West Springfield and Westfield, are still considered food deserts by the USDA.100
FIGURE 15
Food Insecurity in Western Massachusetts by Census Tract (2019)


State data on consumption of fruits and vegetables and obesity rates show that rural areas of the county have had healthier outcomes than the county as a whole. Though data for rural clusters are not as current as other data sources for this report, this method of characterizing data for rural areas recently implemented by MDPH helps us to better understand the needs of rural areas.

- Previous data (2011-2015) from the state show that Hampden County residents consumed fruits and vegetables at a lower rate than the state average, (16% vs. 19% daily consumption), and Hampden County had the second lowest rate of all counties.
- However, people living in rural clusters within Hampden County (North Quabbin, Central Pioneer Valley, and the Hilltowns) consumed fruits and vegetables at rates similar to the state average.
- Previous data (2011-2014) from the state show that while the prevalence of obesity was higher in Hampden County (28.8%) than the state (23.6%), the rural clusters within Hampden County did not exhibit a similar elevated prevalence of obesity.101
Food insecurity rates had declined slightly since the last CHNA, but during the COVID-19 pandemic, the problem got worse. 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. In 2020, one in seven Hampden County residents were classified as food insecure. By 2021, that figure had fallen, but was still higher than the pre-pandemic level (see Figure 16).

The disparate impacts of COVID-19 on food access can be found in the CCIS data. In Fall 2020, one in three Hampden County respondents were 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 to White respondents (46%, 25% respectively). This concern was also higher among respondents who speak languages other than English at home (47%) and respondents with disabilities (43%).
The Food Bank of Western Massachusetts 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 1.1M meals provided in October 2020 (see Figure 17).

**FIGURE 17**

**Food Bank of Western Massachusetts, Clients and Meals Served, 2019-2021**

![Graph showing clients and meals served from 2019 to 2021](image)

Source: Food Bank of Western Massachusetts

**Physical Activity**

Physical activity is an important component of maintaining good health. For youth, physical activity has many benefits, including improved physical health, mental wellness, social skills, and slower progression of some diseases. On average, youth with disabilities have lower levels of fitness, muscular endurance, and higher rates of obesity relative to their peers. The 2019 Springfield Youth Health Survey reported
28% of youth with disabilities were obese and 23% were overweight. A CDC study of 432,302 youth aged 2-19 years found that youth gained weight more rapidly during the pandemic. The rate of body mass index (BMI) increase doubled compared to a period preceding the pandemic. The biggest increases were among those who already had overweight or obesity, and younger school-aged children. The data were not disaggregated by disability status, yet they should raise concern about how local youth with disabilities may have been affected by the pandemic.

Children with disabilities tend to be less physically active, in part because of the need for inclusive places and equipment (i.e. ramps, wheelchair sports, sensory equipment). Decline in physical activity was exacerbated by COVID-19 because youth no longer had recess, after school activities were cancelled, community playgrounds closed, and youth spent more time in front of screens for virtual learning. Youth continue to face declines in physical activity as schools re-open due to repurposing of gymnasiums and limited opportunities to participate in physical activities.

Data from the 2019 and 2021 Youth Health Surveys administered to SPS students showed more screen time and decreased physical activity.

- 2019 survey data showed 59% of students with disabilities said they can easily access physical activity resources.
- Almost two in three youth with disabilities engaged in physical activity less than five days a week according to 2019 survey data.
- 2021 survey data showed approximately one in two students with disabilities spent five or more hours in front of screens for activities other than school.
- Having a safe place to enjoy physical activity or play is important. More than one in five youth with disabilities reported their neighborhood was not safe from crime according to survey data from 2021.

“[A need is] Exercise programs that are adapted for people with disabilities - builds self-confidence, self-worth, makes them less vulnerable to bullying. Currently there is a lack of quality fitness programs for people with disabilities - a lot of the organized activities for them are around food.”

2019 CHNA Key Informant Interviewee, Founder and Director of a fitness program that serves children with disabilities

In a 2019 focus group with parents of children with disabilities, reported in the 2019 CHNA, parents noted how Shriners BFit program, which provides socialization and physical activity opportunities for children with disabilities, has been essential for their children’s social and physical success. Parents felt that eligibility should be expanded so more can qualify. Other suggestions from parents of children with disabilities and professionals include making exercise and durable equipment more available and affordable; installing a pool; obtaining access to other pools for children with disabilities; making
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.

As identified in the previous CHNA, unequal access to appropriate transportation options exacerbates racial and ethnic health disparities. Communities of color and those with lower incomes have less access to transportation options compared to majority White and higher income communities. As of the last CHNA, 14% of Hampden County residents did not have access to a vehicle. Based on the most recent census data, this figure had not changed substantially. Public transportation plays a significant role in filling transportation needs for many of these households. The Pioneer Valley Transit Authority (PVTA), the region’s public transportation administrator, reports that 62% of their ridership is people of color. Accordingly, this means people of color are more likely to be affected by underfunding of public transportation, as well as changes to service schedules and fare rates.

In a national survey of people with disabilities, people with disabilities were more likely than those without disabilities to rely on public transportation or carpooling and less likely to drive their own car. Nearly two in three respondents said they had trouble accessing public transportation which included buses, rails, subways, rideshares (Uber, Lyft), and disability transport. Not having reliable, affordable, and accessible transportation options can hinder ability of people with disabilities to participate in their community and access healthcare or support services. People with vision, psychiatric, and chronic health condition disabilities were more likely to report trouble accessing transportation.

The COVID-19 pandemic has undoubtedly exacerbated problems of access to 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. Thus, reliable transportation has become less affordable for many. Data on regional transportation use during COVID-19 show variations in different areas. In 2020, PVTA ridership declined to 14% of 2019
ridership in the UMass area; 32% of 2019 ridership in the Northampton area; 55% of 2019 ridership in the Springfield area.\textsuperscript{111}

This highlights the degree to which Springfield residents continued to depend on public transportation. Many of them may have been frontline workers who had to travel to work even during the pandemic. The lower rates in Amherst and Northampton likely reflect the departure or lockdown of thousands of college students as well.

**Resources to Increase Access to Housing, Food, Physical Activity, and Transportation**

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 simultaneously helping farmers increase their sustainability.

- Shriners offers specialty programs to promote physical activity including, but not limited to:
  - *BFit Power-based Exercise Program*: This is an individually-mentored exercise program for children with physical disabilities focusing on fast movements to build strength, power, and coordination. BFit integrates socialization with area college students as personal coaches, expert supervision by Shriners’ staff, music for motivation and energy, and a wide variety of group and individual exercises. At the writing of this report, this event remained paused due to COVID-19.
  - *BFit Summer Cycling Program*: This is an individually-mentored cycling program to introduce children with physical disabilities to the sport of cycling focusing on safety, skill development, and fitness. The BFit cycling program integrates socialization with area college students as personal coaches, expert supervision by Shriners’ staff, music for motivation and energy, and a wide variety of group and individual exercises. This event was also paused due to COVID-19.

- Youth On The Move, Inc. is a private shuttle service for youth in western Massachusetts. Their vehicles are equipped to serve youth with disabilities.

- Springfield’s Go Fresh Mobile Market brings food to housing developments that would otherwise not be able to access fresh produce because they are in a food desert.

- 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 (DTA) finder for HIP as user friendly and helpful to find what else is available for community members and what is in walking distance.

- Two online databases to look for resources related to basic needs are:
  - 413 Cares – The Food Bank of Western MA is a featured partner. [https://www.413cares.org/](https://www.413cares.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: [https://www.findhelp.org/](https://www.findhelp.org/)
e. Other Prioritized Health Needs

1. Social and Economic Determinants that Impact Health

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 jobs that do not endanger one’s physical safety. Levels of education are strongly correlated with employment status, the ability to earn a livable wage, and many health outcomes. Communities of color have long faced systemic barriers to education. Historically, Jim Crow laws racially segregated school systems, and schools for Black children were neglected and under-resourced which has documented impacts on health inequities. Inequitable funding for public schools and residential segregation perpetuate educational disparities today. Similar to the 2019 CHNA, Racial inequities continue to persist among Black and Latino/a/e residents; the rate of White residents with a high school diploma or greater is 24 percentage points higher than rate for Latino/a/e residents (Figure 18).

FIGURE 18
Educational Attainment by Race/Ethnicity in Hampden County, 2015-2019

Source: U.S. Census, ACS 2019 5-Year Estimates
Notes: Data for White residents is among those reporting White Non-Hispanic, and data for Black residents is among those reporting Black Non-Hispanic.
Rural communities and small towns also 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.¹¹⁴ These may include scaling back education enrichment, closing schools, or merging with other districts.

Figure 19 shows educational attainment rates for students with disabilities. Among Hampden County residents with a bachelor’s degree or higher, there is a concerning attainment gap between people without disabilities and those with disabilities (61% vs. 50%). Students with disabilities were disproportionately impacted by COVID-19 nationally, which deepened educational challenges.¹¹⁵ Moving to virtual learning, especially in the early stages of the pandemic, separated students from resources used in their Individualized Education Programs (IEPs). The amount and quality of specialized services were reduced during the pandemic, and for some, abruptly ended.

- Students may have faced barriers with accessing and engaging in curriculums as schools adapted online learning platforms to ensure accessibility.

**FIGURE 19**

**Educational Attainment by Disability in Hampden County, 2015-2019**

<table>
<thead>
<tr>
<th>High School Graduate or Higher</th>
<th>Bachelor’s Degree or Higher</th>
</tr>
</thead>
<tbody>
<tr>
<td>People without a disability (n= 1960)</td>
<td>People with a disability(n=285)</td>
</tr>
<tr>
<td>People with a disability(n=285)</td>
<td>Cognitive disability(n=128)</td>
</tr>
<tr>
<td>Cognitive disability(n=128)</td>
<td>Mobility disability(n=120)</td>
</tr>
<tr>
<td>Mobility disability(n=120)</td>
<td>Self-care/independent-living disability (n=50)</td>
</tr>
<tr>
<td>Self-care/independent-living disability (n=50)</td>
<td>Other mental and physical disabilities(n=230)</td>
</tr>
</tbody>
</table>

- 97% 96% 95% 94% 78% 61% 50% 49% 51% 46% 36%

Source: U.S. Census, ACS 2019 5-Year Estimates
Higher rates of absenteeism, incomplete coursework, or course failures were reported among students with disabilities.

Students with certain cognitive disabilities (i.e. Attention deficit hyperactivity disorder (ADHD), autism) may have thrived more than those with other disabilities because of their ability to learn at home at their own pace.

Overall, students with disabilities regressed academically during the pandemic, and it may be years before we fully understand the long-term impact of COVID-19 on educational attainment.

**Employment and Income**

In Shriners’ service area of Hampden County, many residents struggle with a lack of money to meet basic needs. Parts of Hampden County have high rates of poverty and low levels of income. The connections between poor health and poverty, low levels of income, and access to fewer resources are well established. People with lower incomes 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.

- As of December 2021, the unemployment rate in Hampden County was 5%, compared to less than 4% in Massachusetts overall.¹¹⁶
- The unemployment rate for White populations in Hampden County is 4%, compared to almost 10% for Latino/a/e and Black populations.¹¹⁷
- The unemployment rate for those with disabilities is 23%. People with a cognitive disability account for 58% of those with a disability that are unemployed.¹¹⁸ Figures 21-24 provide further data on the employment status of people with disabilities.
- The median household income for Latino/a/e populations is $40,000 less than the income for White populations in Hampden County. (See Table 2 in Appendix 1)

**FIGURE 20**

**Unemployment Rates by Race/Ethnicity in Hampden County and Springfield, 2015-2019**

<table>
<thead>
<tr>
<th>Race/Ethnicity</th>
<th>Hampden County</th>
<th>Springfield</th>
</tr>
</thead>
<tbody>
<tr>
<td>Black or African American</td>
<td>10%</td>
<td>10%</td>
</tr>
<tr>
<td>Latino/a/e</td>
<td>4%</td>
<td>11%</td>
</tr>
<tr>
<td>White</td>
<td>11%</td>
<td>5%</td>
</tr>
</tbody>
</table>

*Source: U.S. Census, ACS 2019 5-Year Estimates*
Another important consideration when looking at income data is the concept of a living wage – what it actually costs to sustain oneself and one’s household. Based on the Massachusetts Institute of Technology (MIT) Living Wage Calculator, a single parent with one child in Hampden County would need to earn $31.30 an hour, or $65,096 a year, in order to meet living expenses. Median income for Black and Latino/a/e households is far below this level. For comparison, the minimum wage is $14.25 per hour, and poverty-level wage is $8.29 per hour.

FIGURE 21
Disability Type by Employment Status of Populations in the Labor Force in Hampden County, 2019

Source: U.S. Census, ACS 2019 5-Year Estimates
FIGURE 22
Unemployment Status by Disability Status of Populations in the Labor Force in Hampden County, 2019

Source: U.S. Census, ACS 2019 5-Year Estimates

FIGURE 23
Disability Status of Populations Not in the Labor Force in Hampden County, 2019

Source: U.S. Census, ACS 2019 5-Year Estimates
Violence and Trauma
Interpersonal and collective violence affects health directly, via death and injury, as well indirectly through the trauma that affects mental health and healthy relationships. Interpersonal violence includes sexual and intimate partner violence, childhood physical and sexual abuse and neglect, and elder abuse and neglect. Collective violence and trauma, such as crime, police brutality, and gun violence, affect the health of communities. Having a safe community free of violence and danger affects whether residents feel safe deciding where and when they will go outside of their homes.

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 intimate partner violence, elder abuse, and child abuse, by forcing vulnerable residents to stay indoors with potentially dangerous household members. Based on a review of 12 U.S. studies, domestic violence increased by 8.1% after pandemic related lockdowns. In Hampden County, the annual rate between 2014-2016 for violent crimes, which includes homicide, rape, robbery, and aggravated assault, was more than 55% higher than the statewide rate, at 585.30 compared to 374.40 per 100,000.

Springfield students who responded to the 2021 Springfield Youth Health survey reported their experience with safety and violence:
- One in five Springfield students (one in four for Latino/a/e students and one in four for students with disabilities) do not consider their neighborhood safe from crime.
- One in four students (25%) have witnessed someone being physically harmed in their neighborhood, for example with a gun, knife, or in a physical fight.
- 13% of students with disabilities (37 total) witnessed violence in their family.
- One in five students with disabilities (20% or 73) were e-bullied outside of school hours and 8% were e-bullied during school hours.
- 83% of students experienced verbal harm from a parent or caregiver (shout, yell, scream, swear).123

Environmental Exposures and Climate Crisis
Air pollution is associated with asthma, cardiovascular disease, and other illnesses, which all impact the health of Hampden County residents. Springfield in particular experiences poor ambient air quality due to development, zoning, and land use decisions. These decisions resulted in multiple mobile and point sources of pollution, including a large inter-state highway, several state highways, railroad lines running through the city and directly through its neighborhoods. Additionally, many cities in Hampden County are in a valley into which air pollution travels from other sources and settles. Exposure to near roadway air pollution has a particularly detrimental impact on health with the highway and heavily trafficked roadways running through or adjacent to neighborhoods.

Asthma is discussed in more detail below under Chronic Conditions, and it remains a major prioritized health need in the service area. Exposure to lead is a well-known health risk, connected to outcomes as varied as decreased academic achievement, lower IQ, and reduced growth in children and decreased kidney function, increased blood pressure, and hypertension in adults.124 With families spending more time indoors due to the ongoing pandemic, they may be at an increased risk for lead exposure.

- Springfield, Chicopee, Holyoke, and Westfield were listed as 2020 high-risk communities for lead exposure by the Massachusetts Department of Public Health.125
- From 2016-2020, Springfield had an incidence rate of 4.5 per 1,000 children (9 to 47 months) who had blood levels that were considered lead poisoning ($\geq 10$ $\mu g/dL), which was 88% higher than the statewide incidence rate of 2.4 per 1,000.126

Other environmental hazards in homes include asbestos, carbon monoxide, fire, mold and mildew, pests such as roaches and rodents, radon, and tobacco smoke.127 Residents with limited incomes and limited access to quality, affordable housing may be at greater risk of exposure to these potentially harmful housing conditions.

In addition, many parts of Hampden County are designated environmental justice communities. Almost all of Springfield, portions of Holyoke, Chicopee, West Springfield, and Westfield and some block groups in Agawam and Ludlow include environmental justice populations. Environmental justice communities are those identified as having vulnerable populations that often experience disproportionate exposure to environmental hazards. They are at greater risk of exposure because it has been easier for polluting
industries to site their installations in communities of color. The state of Massachusetts’ Executive Office of Energy and Environmental Affairs established an Environmental Justice policy that aims to reduce potential added environmental burdens on Environmental Justice Communities in Massachusetts, specifically focusing on neighborhoods that have a large percentage of low-income, people of color, or non-English speaking populations.

FIGURE 25
Massachusetts Environmental Justice Populations, 2020

The climate change crisis is already having impacts including rising temperatures, increased precipitation and flooding, and extreme weather events that will negatively affect the health of a large number of service area residents, including those with asthma, COPD, stroke, hypertension, diabetes, obesity, and depression. Low-income populations, communities of color, older adults, people with disabilities, and immigrants have also been identified as vulnerable to negative impacts of natural disasters and climate change.128

People with disabilities may have more difficulties during evacuations or climate emergencies due to limited mobility or impaired senses.129 Due to underlying conditions, those with disabilities may also be more susceptible to infectious diseases that occur from climate change or emergencies.
Increased heat perhaps represents the greatest threat to public health brought on by climate change. Between 1991 and 2005, Springfield averaged 6.35 days over 90 degrees per year. By 2030, the Massachusetts Department of Public Health projects Springfield will have 18.13 over 90-degree days each year, a sharp increase. Within 20 years, that estimate rises to 29.18 days per year. As days with extreme heat become more commonplace, hospitalizations due to heat stroke may increase. Lower income residents will be most vulnerable as they may not be able to afford air conditioning. The state also anticipates a rise in illness and death due to cardiovascular disease and renal failure because of 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 “Health Outcomes” section below) as well as other respiratory conditions.

Along with increased heat, increased precipitation will contribute to declining public health through its effect on the natural environment. Between 1995 and 2001, Springfield experienced an average of 5.76 days annually of rainfall exceeding one inch. By 2050, that amount is projected to increase to 6.95 days on average.

Though not as dramatic as the expected increase in temperature, increased precipitation is a foreboding prospect for the region. 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.
2. Barriers to Accessing Quality Health Care

A number of barriers to health care are referenced throughout this report, and they continue to be prioritized health needs. See Section (6) on the limited availability of providers, which has become an acute crisis in the mental health field, and further exacerbated by the pandemic. Other barriers discussed below include health insurance and need for financial assistance, need for transportation, need for culturally sensitive care, health literacy and language barriers, and lack of care coordination.

**Barriers to Accessing Care**

- **Insurance**: While 96.5% of Hampden County residents are covered by health insurance,\textsuperscript{132} the ability to navigate both what health insurance will cover as well as the medical care systems continue to be barriers to accessing quality health care.
  
  - 36.16% of the insured population in Hampden County are Medicaid beneficiaries, as compared to the statewide percentage of 23.45%.\textsuperscript{133}
  
  - 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%.\textsuperscript{134}
  
  - As seen in the chart below, in all populations except for Non-Hispanic White populations, there is a greater percentage of uninsured populations in Springfield as compared to Hampden County.

- **Financial assistance** was also identified as a need. The 2019 CHNA reported that, despite high rates of residents covered by health insurance, the cost of health care co-pays, 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 low incomes. 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 and 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 they cannot afford to privately pay for these services.

- **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 low-income populations. Telehealth offers one potential avenue to overcome this barrier for some types of care. People in focus groups from the previous CHNA said transportation prevented them from getting to medical appointments, places to exercise for children with disabilities, and accessing community resources. Focus group participants suggested expanding existing PVTA bus service; increasing eligibility for vans that are Americans with Disabilities Act (ADA) compliant; transportation vouchers (Uber, taxis, bus passes); mobile health vans to do lab draws and fill prescriptions; pharmacies delivery programs; and wellness checks from EMS.
“A lot of our patients financially aren’t doing that great, so transportation is a big issue. We would love to have a shuttle or better taxi service, make sure the taxi voucher program through our Patient Fund is still running. A lot of patients struggle to get to appointments, so transportation is a big support service need.”

2019 Key Informant Interviewee, Oncology Program Coordinator, Hampden County

FIGURE 26
Uninsured Population by Race/Ethnicity in Hampden County and Springfield, 2015-2019

![Uninsured Population by Race/Ethnicity](chart)

Source: Source: U.S. Census, ACS 2019 5-Year Estimates
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. Al/AN is abbreviated for American Indian/Alaskan Native

Care Barriers

**Lack of Care Coordination:** Lack of care coordination is a prioritized community health need, as it was in the 2016 and 2019 CHNA. Care coordination refers to the coordination of patient care, including the exchange of information between all parties involved in patient care. BCBS focus group participants spoke about the fragmented health care system, lack of person-centered care, and disconnects between the systems, all of which contributes to inequities among people of color and immigrants. In the 2019 and 2016 CHNAs, informants called for “one-stop shopping,” “consolidation of services that already exist,” and reduction of the duplication of services. Informants emphasized that lack of care coordination creates challenges such as lack of follow-up and coordination among agencies when exiting programs or jail; poor continuity of care for transgender individuals; and integration of specialty care with primary care.

“Lack of care coordination is a life or death situation. It is so difficult for patients to be seen as whole people and not just their individual ailments; people have to be strong advocates for themselves when they are the most vulnerable.”

2019 CHNA Regional Advisory Committee member
Culturally Sensitive Care: The need for culturally sensitive care is a prioritized health need, as it was in the 2016 and 2019 CHNAs, with increased training in cultural humility needed as a means 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; and accountability for cultural insensitivity and bias. Focus group participants noted that cultural sensitivity is not limited to a racial or ethnic culture, but also includes care for stigmatized groups, such as ex-offenders, people experiencing homelessness, people with mental health or substance use issues, the aging population, transgender, non-binary, and gender non-conforming, and adults and children with disabilities. The need for providers competent in racial and cultural issues was also raised.

"[The ability of healthcare providers to] understand people with disabilities as people and not as diagnoses is not great. For example, if a person is a paraplegic, providers start out talking about what they can’t do, rather than what they can do and connecting them to communities of people with disabilities to help them navigate their new lives. There needs to be more done on part of providers in helping people understand living with a disability can be okay, not terrible."
2019 Key Informant Interviewee, Systems Advocate, Stavros Center for Independent Living

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 both patients and health care providers and 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 help to 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 healthcare, 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.”

- The refugee and immigrant populations in Hampden County makes for an increasingly diverse linguistic population and in Hampden County, 9.1% of the population 5 years of age and older have limited English proficiency, compared to 9.23% in Massachusetts.
- As shown in the chart below, 25% of Latino/a/e populations have limited English proficiency as compared to 4% of populations that identify as Non-Latino/a/e in Hampden County.
FIGURE 27
Population 5+ with Limited English Proficiency by Ethnicity in Hampden County and Massachusetts, 2015-2019

3. Health Outcomes

Chronic health conditions
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 Hampden County residents. 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, there are racial and ethnic disparities for many chronic diseases. 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: Hampden County residents continue to be impacted by asthma with emergency department (ED) visit rates more than two times that of the state in 2019 (1,128 vs 518 per 100,000, respectively and hospitalization rates over 70% greater (145 vs 84 per 100,000 respectively).\textsuperscript{139} Within Hampden County, there were large differences in ED visit rates for asthma between races. In 2019, the most recent year in the data set, Black residents of Hampden County visited the emergency department for asthma at a rate double that of White residents. Asthma related ED visits rose for Black residents since the last CHNA, whereas they declined or held steady for other racial groups. The state did not provide 2019 data on Latino/a/e visit rates, but in the last CHNA, rates for ED visits by Latino/a/e residents were double visits among Black residents (2617 per 100,000 vs. 1310). The disparities were even more extreme for pediatric ED visits.\textsuperscript{140}

COPD: Chronic Obstructive Pulmonary Disease (COPD) is 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. In 2015, the age adjusted COPD hospital admission rate in Hampden County was 33.9 compared to 41.6 in the Quaboag Valley rural cluster and 3.9 in the Hilltowns rural cluster.\textsuperscript{141}

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, which can be compounded by weight discrimination and body shaming. A healthy diet and physical activity play an important role in achieving and maintaining good health. Yet many systemic factors contribute to obesity, including availability and access to healthy foods and safe places to be physically active. The percentage of adults who have obesity has remained relatively the same since the last CHNA, at 31% in Hampden County compared to 25% statewide.\textsuperscript{142} The 2019 Springfield Youth Health Survey reported 28% of youth with disabilities were obese and 23% were overweight. A 2021 CDC study found that youth gained weight more rapidly during the pandemic compared to a period preceding the pandemic. The biggest increases were among those who already had overweight or obesity, and younger school-aged children.\textsuperscript{143}
Cardiovascular disease: Cardiovascular disease (CVD) 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 2014, the most recent year of data available for rural cluster, the age-adjusted cardiovascular disease hospital admissions rate for Quaboag Valley rural cluster was 1,410, and 1,157 for the Hilltowns rural cluster, compared to the state average of 1,563. The age-adjusted stroke hospital admissions rate in 2014 in the Hilltowns rural cluster was 119.7 per 100,000, which is approximately 113% higher than the state average of 255.1 per 100,000. More recent data for Hampden County show:

- As of 2018, about one in five (21.2%) of Medicare fee-for-service beneficiaries in Hampden County has ischemic heart disease (23.7% statewide).
- As of 2018, over half (55.7%) of Medicare fee-for-service beneficiaries in Hampden County had high blood pressure, (55.9% statewide).
- As shown in Figure 29, the age-adjusted heart disease emergency department rates in Hampden County between 2016 and 2019 for Black populations is more than double that of White populations (641 vs 1,305 per 100,000) (rates for Latino/a/e populations were not provided).
FIGURE 29
Medicare Populations with Heart Disease in Hampden County, Massachusetts, and the United States, 2011-2018
Age-adjusted rate per 100,000 residents

Data Source: Centers for Medicare and Medicaid Services, CMS Geographic Variation Public Use File. 2018. Source geography: County

FIGURE 30
Heart Disease Emergency Department Visits by Race in Hampden County, 2016-2019
Age-adjusted rate per 100,000 residents

Source: MDPH, Hospital Admissions, State Tables, 2016-2019. Age-adjusted per 100,000.
**FIGURE 31**

**Stroke Hospitalization Admission Rates By County, Rural Clusters, and MA, 2014**

Age-adjusted rate per 100,000 residents

![Graph showing stroke hospitalization admission rates by county and rural clusters.]

**Source:** MDPH, 2014. Rural Cluster Data.

**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. Advancing age is the most important risk factor for cancer, and between 2010-2019, the population ages 65 and older experienced a 22.9% increase in Hampden County and an even larger increase of 44% and 49% increase in Hampshire and Franklin County, respectively.

In terms of hospital admissions, in 2014 the age-adjusted cancer hospital admission rate was 329 and 332 for the Hilltowns and Quaboag Valley rural clusters and 316 per 100,000 for Hampden County. The colon and rectum cancer incidence rate between 2014-2018 was 37 per 100,000 in Hampden County, which was similar to the statewide average of 35 per 100,000. Breast cancer incidence rates between this same time period in Hampden County were 131 per 100,000 which were also similar to the statewide average of 137.

**Diabetes:** An estimated 10% of Hampden County residents have diabetes (9% statewide). 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 the highest rates of serious illness and complications from diabetes, with greater hospitalization rates among Black patients compared to White patients.

**Infant and Perinatal Health:** Infant and perinatal health risk factors continue to affect Hampden County residents, 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.\textsuperscript{155} 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).\textsuperscript{156} Smoking during pregnancy is a risk factor that increases the risk for pregnancy complications and affects fetal development.\textsuperscript{157}

- The percentage of low birth weight births in Hampden County is 8.3\% compared to 7.5\% statewide with Black and Latino/a/e women experiencing inequities.\textsuperscript{158}
- The infant mortality rate in Hampden County between 2013-2019 was 5.2 per 1,000 live births, which is 30\% higher than the statewide average of 4.0.\textsuperscript{159}

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.\textsuperscript{160}

**Pediatric Disability:** According to the Census, almost 11\% of children in Shriners’ service area of Hampden County have disabilities. The percent of youth under 18 by disability is as follows:

- 9\% have an ambulatory disability.
- 8\% a cognitive disability.
- 1\% a self-care disability.
- 1\% a hearing difficulty.
- 1\% a vision disability.

The disability type impacting the most children under age 18 among those reported by the ACS was ambulatory disability (9\%). Shriners’ patients extend beyond the service area of this CHNA because of the specialized care offered for those with disabilities. Living with disabilities affects a range of quality of life concerns that are exacerbated by social, systemic, and community factors. The 2019 CHNA found that individuals with a disability were disproportionately impacted with higher rates of poverty and lower rates of education.
Sexual health: While great strides have been made to reduce teen birth rates in Hampden County, high rates of unsafe sexual behavior remain a need in Hampden County. From 2017-2019, Hampden and Suffolk County had roughly two times the rate of confirmed gonorrhea cases as compared to other counties in the state. The rate of the population with HIV/AIDS in Hampden County is 492 per 100,000, which is more than 30% higher than the statewide rate of 349.

FIGURE 33
Low Birth Weight, Percent by Race/Ethnicity, 2013-2019
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%. COVID-19 has also had an effect on Alzheimer’s, as preliminary reports from the CDC indicate that there were approximately 16% more deaths in 2020 from Alzheimer’s and other forms of dementia as compared to the five-year average before 2020. Of the total population in Hampden County, 17% is 65 years and older. Between 2010-2019, this population has grown by 23% and is expected to continue to increase as the population ages.

- An estimated 11% of Medicare Fee For-Service Beneficiaries in Hampden County have Alzheimer’s disease, which is comparable to the statewide rate.
- People with dementia, including Alzheimer’s, were at elevated risk for infection and death from COVID-19, likely due to increased risk from living in nursing homes, which were at increased risk of outbreaks as a congregate care setting.
7. Potential Resources to Address Significant Health Needs

<table>
<thead>
<tr>
<th>Organization</th>
<th>Description of Services Provided</th>
<th>Website</th>
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<tbody>
<tr>
<td>Shriners Children’s</td>
<td>Description of Services Provided</td>
<td>Website</td>
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<tr>
<td>Assist Charity Care Program</td>
<td>Shriners Hospitals for Children provides financial assistance to children under 18 years of age who require inpatient or outpatient specialty medical care for whom additional costs would pose an undue financial burden on their family financial situation.</td>
<td><a href="https://www.shrinerschildrens.org/en/patient-information/billing-insurance-and-financial-assistance/financial-assistance">https://www.shrinerschildrens.org/en/patient-information/billing-insurance-and-financial-assistance/financial-assistance</a></td>
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<tr>
<td>Bfit Program – The Power to Move</td>
<td>This is an individually-mentored exercise program for children with physical disabilities focusing on fast movements to build strength, power, and coordination. BFit integrates socialization with area college students as personal coaches, expert supervision by staff from Shriners Hospitals for Children, music for motivation and energy, and a wide variety of group and individual exercises.</td>
<td><a href="https://www.shrinerschildrens.org/en/locations/new-england/patients-and-families/patient-programs">https://www.shrinerschildrens.org/en/locations/new-england/patients-and-families/patient-programs</a></td>
</tr>
<tr>
<td>Bfit Summer Cycling Program</td>
<td>This is an individually-mentored cycling program to introduce children with physical disabilities to the sport of cycling focusing on safety, skill development, and fitness. The BFit cycling program integrates socialization with area college students as personal coaches, expert supervision by staff from Shriners Hospitals for Children, music for motivation and energy, and a wide variety of group and individual exercises.</td>
<td><a href="https://www.shrinerschildrens.org/en/locations/new-england/patients-and-families/patient-programs">https://www.shrinerschildrens.org/en/locations/new-england/patients-and-families/patient-programs</a></td>
</tr>
<tr>
<td>Consumer Health Literacy</td>
<td>The Consumer Health Library was established by Shriners Hospitals for Children to offer free library resources and services to patients and their families.</td>
<td><a href="https://www.shrinerschildrens.org/en">https://www.shrinerschildrens.org/en</a></td>
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<tr>
<td>African Diaspora Mental Health Association</td>
<td>Minority-owned outpatient mental health clinic providing culturally-specific behavioral health and educational services in Massachusetts.</td>
<td><a href="https://admha.org/">https://admha.org/</a></td>
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<td>Organization</td>
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<td>After Incarceration Support Services</td>
<td>The AISS assists formerly incarcerated people in all aspects of their lives as they transition from incarceration into the community. Many of them face a range of issues, such as addiction, mental health problems, lack of identifying documents, employment obstacles, financial concerns, limited education, poor housing situations (or lack of housing), etc. They also cope with a lack of familial support, poor self-esteem, fear of failure, and a constant temptation to return to the criminal lifestyle. AISS is the bridge which carries the positive momentum that has begun during incarceration forward and that assists individuals in the Re-Entry Process.</td>
<td><a href="http://hcrdma.org/aiiss-3/">http://hcrdma.org/aiiss-3/</a></td>
</tr>
<tr>
<td>Alzheimer's Association (Massachusetts and New Hampshire)</td>
<td>The Alzheimer's Association is the leading voluntary health organization in Alzheimer's care, support, and research. Our mission is to eliminate Alzheimer's disease through the advancement of research; to provide and enhance care and support for all affected; and to reduce the risk of dementia through the promotion of brain health</td>
<td><a href="https://www.alz.org/manh">https://www.alz.org/manh</a></td>
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<tr>
<td>American Heart Association</td>
<td>American Heart Association is the nation's largest voluntary organization dedicated to fighting heart disease and stroke.</td>
<td><a href="https://www.heart.org/en">https://www.heart.org/en</a></td>
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<tr>
<td>Arise for Social Justice</td>
<td>A member-led community organization dedicated to defending and advancing the rights of poor people. Whose mission is to educate, organize, and unite low-income people to know what their rights are, stand up for those rights, and achieve those rights.</td>
<td><a href="https://www.arisespringfield.org/">https://www.arisespringfield.org/</a></td>
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<tr>
<td>Behavioral Health Network Addiction Services Outpatient Services Carlson Recovery Center</td>
<td>A regional provider of comprehensive behavioral health services for adults, children, and families with life challenges due to mental illness, substance abuse, or intellectual and developmental disabilities. The center treats dually-diagnosed clients with both mental health and substance use disorders through the Enhanced Acute Treatment Program. Services are available 24 hours per day.</td>
<td><a href="http://bhninc.org/">http://bhninc.org/</a></td>
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<tr>
<td>Big Brothers Big Sisters of Hampden County</td>
<td>Provide children facing adversity with strong and enduring, professionally supported one-to-one relationships that change their lives for the better, forever.</td>
<td><a href="http://www.bigbrothers-sisters.org/">http://www.bigbrothers-sisters.org/</a></td>
</tr>
<tr>
<td>Black Men of Greater Springfield</td>
<td>Providing positive experiences and activities for black youth. We are dedicated to exposing our students to highly successful African-American role models that emphasize their ability to achieve and become contributing members of our community, society and the world.</td>
<td><a href="https://bmgspringfield.com/">https://bmgspringfield.com/</a></td>
</tr>
<tr>
<td>Springfield Boys and Girls Club</td>
<td>Provides, in a safe environment, programs that inspire, educate, guide, enable, and support all young people to realize their full potential as productive, responsible, respectful citizens and leaders</td>
<td><a href="http://www.sbrc.org/">http://www.sbrc.org/</a></td>
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<td><strong>Brianna Fund for Children with Physical Disabilities</strong></td>
<td>Founded to assist children with physical disabilities by eliminating barriers of access to community resources. With the goal that children with physical disabilities will enhance their capacity for living a full and productive life, the Brianna Fund has to date provided grants to over 46 families in the Greater Springfield community.</td>
<td><a href="https://www.briannafund.org/">https://www.briannafund.org/</a></td>
</tr>
<tr>
<td><strong>Caring Health Center</strong></td>
<td>CHC’s team of community health workers, health navigators, and interpreters ensures that patients receive comprehensive care that addresses their cultural, economic, and language needs, while its behavioral health specialists deliver services to address a wide range of emotional and other issues.</td>
<td><a href="http://caringhealth.org/index.html">http://caringhealth.org/index.html</a></td>
</tr>
<tr>
<td><strong>Center for Human Development</strong></td>
<td>One of the largest social service organizations in western Massachusetts, delivering a broad array of critical services with proven effectiveness, integrity, and compassion.</td>
<td><a href="https://chd.org">https://chd.org</a></td>
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<tr>
<td><strong>CleanSlate Addiction Treatment Center (Suboxone Treatment)</strong></td>
<td>Patient-focused treatment for opioid, alcohol and other drug addictions; appointment-based outpatient treatment.</td>
<td><a href="http://cleanslatecenters.com/">http://cleanslatecenters.com/</a></td>
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<tr>
<td><strong>Clinical and Support Options</strong></td>
<td>A “one-stop” model of comprehensive, holistic services to individuals and families with multiple and complex issues</td>
<td><a href="https://www.csoinc.org/">https://www.csoinc.org/</a></td>
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<tr>
<td><strong>Springfield Community Based Doula</strong></td>
<td>Dedicated to improving birth outcomes in vulnerable populations of Springfield by reducing racial inequities in infant and maternal health. Train community-based labor companions, or doulas, to empower women and families before, during, and after birth.</td>
<td><a href="http://www.springfieldcommunitybaseddoulas.org/">http://www.springfieldcommunitybaseddoulas.org/</a></td>
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<tr>
<td><strong>Community Legal Aid</strong></td>
<td>Provides free civil legal services to low-income and elderly residents. Regardless of how much money you have, we assure fairness for all in the justice system, protecting homes, livelihoods, health, and families.</td>
<td><a href="https://communitylegal.org/">https://communitylegal.org/</a></td>
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<tr>
<td><strong>Community Services Institute</strong></td>
<td>A family-owned clinic focused exclusively on outpatient, trauma-informed psychotherapy, psychiatry, and psychological assessment.</td>
<td><a href="http://communityserv.com/">http://communityserv.com/</a></td>
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<tr>
<td><strong>Community Survival Center</strong></td>
<td>A non-profit agency that helps families struggling to provide the basics: food, clothing, and household items.</td>
<td><a href="http://communitysurvivalcenter.org/">http://communitysurvivalcenter.org/</a></td>
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<tr>
<td><strong>Alianza (formerly Compañeras)</strong></td>
<td>Dedicated to assisting, supporting, and empowering those whose lives are affected by battering and abuse.</td>
<td><a href="https://www.womanshelter.org/">https://www.womanshelter.org/</a></td>
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<td>Council on Aging</td>
<td>Focused on improving and enhancing quality of life for elder residents by striving to ensure that all elder residents are afforded the opportunity to live a lifestyle based on independence, and to mature with dignity and security.</td>
<td><a href="https://www.springfield-ma.gov/hhs/council-on-aging">https://www.springfield-ma.gov/hhs/council-on-aging</a></td>
</tr>
<tr>
<td>Counter Criminal Continuum Policing (C3)</td>
<td>The Springfield Police Department and Massachusetts State Police C3 teams facilitate unity of effort and criminal intelligence gathering by, with, and through interagency, community, and private enterprise cooperation in order to detect, disrupt, degrade and dismantle criminal activity.</td>
<td><a href="https://www.springfield-ma.gov/police/">https://www.springfield-ma.gov/police/</a></td>
</tr>
<tr>
<td>Dress for Success</td>
<td>Provide each client with professional attire to secure employment and furnish her with a confidence that she carries forever and the knowledge that she can actively define her life, the direction she takes and what success means to her.</td>
<td><a href="https://westernmass.dressforsuccess.org/">https://westernmass.dressforsuccess.org/</a></td>
</tr>
<tr>
<td>Dunbar Community Center</td>
<td>Provides martial arts, fitness sessions, dance classes, after school care, summer camp, senior health initiatives, and mentoring opportunities.</td>
<td><a href="http://www.springfieldy.org/family-centers/dunbar-y-family-community-center/">http://www.springfieldy.org/family-centers/dunbar-y-family-community-center/</a></td>
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<tr>
<td>First Pioneer Valley Dream Center Isaiah’s Closet</td>
<td>A multicultural, bilingual (English-Spanish), faith-based, and volunteer driven non-profit organization that loves and serves others; the homeless, disenfranchised, the struggling families, and individuals from all walks of life</td>
<td><a href="http://firstpvdreamcenter.org/our-story">http://firstpvdreamcenter.org/our-story</a></td>
</tr>
<tr>
<td>Foodbank of Western Mass Brown Bag Food for Elders Program</td>
<td>Distributes food to member agencies in Berkshire, Franklin, Hampden, and Hampshire counties. These independent pantries, meal sites, and shelters are on the front lines of emergency food assistance in the region, playing a crucial role helping individuals, families, seniors, and children. Provides a free bag of healthy groceries to eligible seniors once a month at local senior centers and community organizations.</td>
<td><a href="https://www.foodbankwma.org/">https://www.foodbankwma.org/</a></td>
</tr>
<tr>
<td>The Gándara Center Addiction Services Outpatient Mental Health Services Youth Outreach Programs</td>
<td>The Gándara Center promotes the well-being of Hispanics, African-Americans, and other culturally diverse populations through innovative, culturally competent behavioral health, prevention, and educational services.</td>
<td><a href="https://gandaracenter.org">https://gandaracenter.org</a></td>
</tr>
<tr>
<td>Gardening the Community</td>
<td>A food justice organization engaged in youth development, urban agriculture, and sustainable living to build healthy and equitable communities.</td>
<td><a href="http://www.gardeningthecommunity.org/">http://www.gardeningthecommunity.org/</a></td>
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<tr>
<td>Girls Inc. of the Valley</td>
<td>Inspires all girls to be strong, smart, and bold by providing them the opportunity to develop and achieve their full potential.</td>
<td><a href="https://www.girlsincvalley.org/">https://www.girlsincvalley.org/</a></td>
</tr>
<tr>
<td>Girls on the Run</td>
<td>A nonprofit organization dedicated to creating a world where every girl knows and activates her limitless potential and is free to boldly pursue her dreams.</td>
<td><a href="https://www.girlsontherunwesternma.org/">https://www.girlsontherunwesternma.org/</a></td>
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<td>Greater Springfield Senior Services Inc. Aging Services Access Point</td>
<td>A private nonprofit organization dedicated to maintaining a quality of life for older adults, caregivers, and persons with disabilities. This mission is achieved through the provision of programs and services which foster independence, dignity, safety, and peace of mind.</td>
<td><a href="https://www.gsssi.org/index.html">https://www.gsssi.org/index.html</a></td>
</tr>
<tr>
<td>Habitat for Humanity</td>
<td>Seeking to put God’s love into action, Habitat for Humanity brings people together to build homes, communities, and hope.</td>
<td><a href="https://www.habitatspringfield.org/">https://www.habitatspringfield.org/</a></td>
</tr>
<tr>
<td>Hampden County Addiction Task Force</td>
<td>A collaboration of community resources, law enforcement (local and state), health care institutions, service providers, schools and community coalitions individuals and families whose goal is to focus on a county wide approach to address drug addiction, overdose, and prevention</td>
<td><a href="https://hampdenda.com/community-safety-and-outreach-unit/hampden-county-addiction-taskforce/">https://hampdenda.com/community-safety-and-outreach-unit/hampden-county-addiction-taskforce/</a></td>
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<tr>
<td>Head Start</td>
<td>Committed to providing low-income children and their families with a Beacon of Hope and source of support for a brighter future. Head Start strives to do so by providing high-quality comprehensive child development services to enrolled children and empowering families to achieve stability in their home environment.</td>
<td><a href="https://hcsheadstart.org/">https://hcsheadstart.org/</a></td>
</tr>
<tr>
<td>Home Grown Springfield</td>
<td>Free peer-to-peer support groups, relapse prevention and tobacco cessation support groups, social events, job readiness activities, advocacy, and recovery coaching.</td>
<td><a href="https://www.homegrownspringfield.org/">https://www.homegrownspringfield.org/</a></td>
</tr>
<tr>
<td>Hope for Holyoke Recovery Support Center</td>
<td>Free peer-to-peer support groups, relapse prevention and tobacco cessation support groups, social events, job readiness activities, advocacy, and recovery coaching. Participants must be 18 years of age or older.</td>
<td><a href="https://www.gandaracenter.org/hopeforholyoke">https://www.gandaracenter.org/hopeforholyoke</a></td>
</tr>
<tr>
<td>International Language Institute</td>
<td>Promotes intercultural understanding by providing high quality language instruction and teacher training.</td>
<td><a href="https://ili.edu/">https://ili.edu/</a></td>
</tr>
<tr>
<td>Jewish Family Services Refugee Resettlement</td>
<td>Provides behavioral health programs and new American programs, as well as supports for older adults. Multicultural, multilingual staff provides comprehensive services which includes case management, family reunification, employment, English as a Second Language, school and health support, and counseling.</td>
<td><a href="http://www.jfswm.org">www.jfswm.org</a></td>
</tr>
<tr>
<td>Link to Libraries</td>
<td>Link to Libraries collects and distributes new books to elementary school libraries and nonprofit organizations and to enhance the language and literacy skills of children of all cultural backgrounds.</td>
<td><a href="https://www.linktolibraries.org/">https://www.linktolibraries.org/</a></td>
</tr>
<tr>
<td>Live Well Springfield</td>
<td>A coalition that brings together over 30 organizations working together to build and sustain a culture of health in Springfield that includes the broadest definition of health, including healthy eating, active living, the built environment, economic opportunity, housing, and education.</td>
<td><a href="http://www.livewellspringfield.org">http://www.livewellspringfield.org</a></td>
</tr>
<tr>
<td>Organization</td>
<td>Description</td>
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<tr>
<td>Massachusetts Trans Political Coalition (MTPC)</td>
<td>Dedicated to ending oppression and discrimination on the basis of gender identity and gender expression. Rooted in social justice, MTPC educates the public, advocates with state, local, and federal government, engages in activism, and encourages empowerment of community members through collective action.</td>
<td><a href="https://www.masstpc.org/">https://www.masstpc.org/</a></td>
</tr>
<tr>
<td>Martin Luther King Jr. Family Services</td>
<td>A multi-cultural and multi-service agency dedicated to being “Keepers of the Dream”, we nurture and empower the aspirations of individuals, families, and youth to achieve new realities of peace, social and economic justice, self-determination, self-actualization, and self-sufficiency.</td>
<td><a href="https://www.mlkjrfamilyservices.org/">https://www.mlkjrfamilyservices.org/</a></td>
</tr>
<tr>
<td>Mass 211</td>
<td>An easy to remember telephone number that connects callers to information about critical health and human services available in their community. It serves as a resource for finding government benefits and services, nonprofit organizations, support groups, volunteer opportunities, donation programs, and other local resources.</td>
<td><a href="https://mass211.org/">https://mass211.org/</a></td>
</tr>
<tr>
<td>MassHire</td>
<td>Local people interacting with local job seekers and businesses to assist people in building their skill sets to meet the needs of businesses.</td>
<td><a href="https://masshirespringfield.org/about/">https://masshirespringfield.org/about/</a></td>
</tr>
<tr>
<td>Maternal Child Health Commission</td>
<td>The Maternal Child Health Commission (MCHC) promotes a community that nurtures all families to have healthy pregnancies and healthy children.</td>
<td><a href="https://www.springfield-ma.gov/hhs/nursing-programs">https://www.springfield-ma.gov/hhs/nursing-programs</a></td>
</tr>
<tr>
<td>Men of Color Health Awareness (MoCHA)</td>
<td>A program aimed to address the poorer health and higher levels of stress that men of color in Springfield experience compared to other groups. Our goals are to empower men of color to play an active role in health care through health education and wellness classes</td>
<td><a href="http://mochaspringfield.org/">http://mochaspringfield.org/</a></td>
</tr>
<tr>
<td>Mental Health Association</td>
<td>Offers programs such as mental health services, developmental disabilities services, homeless services, internship programs, recovery from addiction services, and an emotional health and wellness center.</td>
<td><a href="https://www.mhainc.org/">https://www.mhainc.org/</a></td>
</tr>
<tr>
<td>Mental Health First Aid</td>
<td>An 8-hour course that teaches you how to identify, understand, and respond to signs of mental illnesses and substance use disorders.</td>
<td><a href="https://www.mentalhealthfirstaid.org/">https://www.mentalhealthfirstaid.org/</a></td>
</tr>
<tr>
<td>MetroCare of Springfield</td>
<td>An organization founded on the principle of providing residents of western Massachusetts with reliable and accessible caregiving. The goal is to provide culturally aware services to a diverse community of individuals with the objective to keep individuals happy and healthy in their homes.</td>
<td><a href="http://metrocareofspringfield.com/en_US/">http://metrocareofspringfield.com/en_US/</a></td>
</tr>
<tr>
<td>Women of Color Health Equity Collective (formerly known as MotherWoman)</td>
<td>Promotes the resilience and empowerment of mothers and their communities by building community-capacity and advocating for just policies through evidence-based research and grassroots organizing.</td>
<td><a href="https://wochec.org/">https://wochec.org/</a></td>
</tr>
<tr>
<td>Organization</td>
<td>Description</td>
<td>Website</td>
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</tr>
<tr>
<td>National Association of Mental Illness (NAMI)</td>
<td>The nation’s largest grassroots mental health organization dedicated to building better lives for the millions of Americans affected by mental illness.</td>
<td><a href="https://www.nami.org/Find-Your-Local-NAMI/Affiliate/Program-Details-(1)?state=MA&amp;local=0011Q000022GArKQAW">https://www.nami.org/Find-Your-Local-NAMI/Affiliate/Program-Details-(1)?state=MA&amp;local=0011Q000022GArKQAW</a></td>
</tr>
<tr>
<td>New England Farm Workers’ Council</td>
<td>A multi-faceted human services agency dedicated to improving the quality of life for low-income people throughout the northeast. In addition to migrant and seasonal farm workers and their families, the agency serves inner-city and low-income groups.</td>
<td><a href="http://www.partnersforcommunity.org/default/index.cfm/about-pfc/affiliates-programs/nefwc/">http://www.partnersforcommunity.org/default/index.cfm/about-pfc/affiliates-programs/nefwc/</a></td>
</tr>
<tr>
<td>New England Justice for Our Neighbors: Trinity United Methodist Church</td>
<td>As a neighborhood church, Trinity is committed to helping all people who want to become active, vital members of the community. Trinity Church works toward justice for all and offers services such as free legal advice.</td>
<td><a href="http://www.newenglandjfon.org/">http://www.newenglandjfon.org/</a></td>
</tr>
<tr>
<td>New North Citizens Council</td>
<td>Serves at risk- youth through services including groups, workshops, structured recreation projects, video development, and outreach efforts. NNCC addresses two of the needs of the client population: After School leadership/Education program and Outreach/Mentoring Street Worker.</td>
<td><a href="https://www.newnorthcc.org/">https://www.newnorthcc.org/</a></td>
</tr>
<tr>
<td>Open Doors Social Services</td>
<td>A program that provides case management, housing search assistance, medical, mental health, and substance abuse referrals for homeless people living in area shelters, on the streets, or temporarily doubled up with friends or relatives.</td>
<td><a href="http://www.openpantry.org/open-door-social-services.php">http://www.openpantry.org/open-door-social-services.php</a></td>
</tr>
<tr>
<td>OutNow</td>
<td>A support group for LGBTQIA+ youth from the greater Springfield Area.</td>
<td><a href="http://outnowyouth.org/">http://outnowyouth.org/</a></td>
</tr>
<tr>
<td>Parent Villages</td>
<td>Parent Villages builds bridges between parents, youth, advocates, community leaders, and educators to close the opportunity gap and improve education for students.</td>
<td><a href="https://www.facebook.com/parentvillages/">https://www.facebook.com/parentvillages/</a></td>
</tr>
<tr>
<td>Pioneer Valley Asthma Coalition</td>
<td>A coalition of health professionals and institutions, community groups and residents, public health organizations, municipal and state agencies, academic institutions, schools, day care, housing and environmental groups committed to improving asthma and environmental conditions that affect health in western Massachusetts</td>
<td><a href="http://www.pvasthmacoalition.org">www.pvasthmacoalition.org</a></td>
</tr>
<tr>
<td>Pioneer Valley Transit Authority (PVTA)</td>
<td>A federal, state, and locally funded transit system. It is the largest regional transit authority in Massachusetts with 186 buses, 132 vans, and 24 participating member communities</td>
<td><a href="http://www.pvta.com/">http://www.pvta.com/</a></td>
</tr>
<tr>
<td>Planned Parenthood</td>
<td>Provides sexual health and reproductive services including abortion services, birth control, emergency contraception, general healthcare, HIV/STI testing, pregnancy testing, LGBT services, and more.</td>
<td><a href="https://www.plannedparenthood.org/health-center/massachusetts/springfield/01107/western-massachusetts-health-center-2662-90610">https://www.plannedparenthood.org/health-center/massachusetts/springfield/01107/western-massachusetts-health-center-2662-90610</a></td>
</tr>
<tr>
<td>Organization</td>
<td>Description</td>
<td>Website</td>
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</tr>
<tr>
<td>Project Baby</td>
<td>A community organization addressing disparities in infant mortality rates in the city of Springfield, Massachusetts and in Hampden County.</td>
<td><a href="http://projectbabyspringfield.org/">http://projectbabyspringfield.org/</a></td>
</tr>
<tr>
<td>Project Coach</td>
<td>Works to bridge the economic, educational, and social divisions facing Springfield youth by empowering and training inner-city teens to coach, teach, and mentor elementary school students in their neighborhoods.</td>
<td><a href="https://www.projectcoach.smith.edu/">https://www.projectcoach.smith.edu/</a></td>
</tr>
<tr>
<td>Rebekah’s Closet</td>
<td>Outreaches to young families in the area seeking support providing for their infants and toddlers. Families can receive diapers, wipes, clothing, toys, books, and furniture as they become available.</td>
<td><a href="https://www.uccholyoke.org/programs-events/rebekahs-closet/">https://www.uccholyoke.org/programs-events/rebekahs-closet/</a></td>
</tr>
<tr>
<td>Revitalize Community Development Corporation (CDC)</td>
<td>The mission is to revitalize homes, neighborhoods, and lives through preservation, education, and community involvement.</td>
<td><a href="https://www.revitalizecdc.com/">https://www.revitalizecdc.com/</a></td>
</tr>
<tr>
<td>ROCA</td>
<td>The mission is to disrupt the cycle of incarceration and poverty by helping young people transform their lives.</td>
<td><a href="https://rocainc.org/">https://rocainc.org/</a></td>
</tr>
<tr>
<td>Ronald McDonald House</td>
<td>When children are sick and being treated at Springfield area medical facilities, the Ronald McDonald House of Springfield, Massachusetts is a welcome “home away from home” for children and their families. A dedicated group of volunteers assist a full-time house manager to sustain the House. Families have the privacy of their own bedroom and bath and communal support of dining and recreation facilities.</td>
<td><a href="https://rmhc-ctma.org/what-we-do/rmh-springfield/">https://rmhc-ctma.org/what-we-do/rmh-springfield/</a></td>
</tr>
<tr>
<td>Salvation Army</td>
<td>Offers a range of programs and services encompassing everything from after-school programs, social clubs, and parenting classes through drug and alcohol rehabilitation and disaster response. We regularly partner with churches, charities, and other organizations to reach and assist as many people as possible.</td>
<td><a href="https://springfield.salvationarmy.org/">https://springfield.salvationarmy.org/</a></td>
</tr>
<tr>
<td>Scan 360</td>
<td>The Scan 360 Family Center assists families who have a family member with a developmental disability to navigate the service system.</td>
<td><a href="https://www.facebook.com/scan360familycenter/">https://www.facebook.com/scan360familycenter/</a></td>
</tr>
<tr>
<td>Springfield 311</td>
<td>Gives the public responsive and easy access to all of Springfield’s government services. Allows departments to focus and improve their process and provide the residents of Springfield with a well-managed and proficient government.</td>
<td><a href="http://faq.springfieldma.intelligovsoftware.com/1home.aspx">http://faq.springfieldma.intelligovsoftware.com/1home.aspx</a></td>
</tr>
<tr>
<td>Springfield Coalition for Opioid Overdose</td>
<td>Trains, educates, advocates, and provides support and resources to all who are affected by opiate abuse and overdoses.</td>
<td><a href="http://www.springfield-ma.gov/hhs/index.php?id=scoop-about">http://www.springfield-ma.gov/hhs/index.php?id=scoop-about</a></td>
</tr>
<tr>
<td>Prevention (SCOOP)</td>
<td>Protects the public health and environment of the City of Springfield through education, inspections, sampling and monitoring, and enforcing federal, state, and local codes as they pertain to public health issues.</td>
<td><a href="https://www.springfield-ma.gov/hhs/">https://www.springfield-ma.gov/hhs/</a></td>
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<tr>
<td>Springfield Department of Health and Human Services</td>
<td>Serves as a diverse group of stakeholders that provides a comprehensive examination and ongoing assessment of Springfield’s food system as well as ongoing recommendations for policy and built-environment solutions to improve access to fresh, affordable, and culturally appropriate food for those who live and work in the City of Springfield.</td>
<td><a href="https://www.springfieldfoodpolicycouncil.org/">https://www.springfieldfoodpolicycouncil.org/</a></td>
</tr>
<tr>
<td>Springfield Healthy Home Collaborative</td>
<td>City-wide collaboration to address health issues faced by residents due to poor housing conditions, including asthma.</td>
<td><a href="http://springfieldhealthyhomes.org/asthma-triggers/">http://springfieldhealthyhomes.org/asthma-triggers/</a></td>
</tr>
<tr>
<td>Springfield Rescue Mission</td>
<td>Meets the physical and spiritual needs of the hungry, homeless, addicted, and poor by introducing them to Christ and helping them apply the Word of God to every area of their lives.</td>
<td><a href="https://springfieldrescuemission.org/">https://springfieldrescuemission.org/</a></td>
</tr>
<tr>
<td>Square One</td>
<td>The vision of Square One is to affect meaningful change that results in better lives and more promising futures for children, families, and our communities. It achieves this vision by raising funds, advocating on behalf of children and families, delivering research-based solutions, and developing needed services that promote education, health, safety, holistic development, and self-reliance.</td>
<td><a href="https://www.startatsquareone.org/">https://www.startatsquareone.org/</a></td>
</tr>
<tr>
<td>Stavros</td>
<td>Helps people with disabilities and deafness to develop the tools and skills they need to take charge of their own lives.</td>
<td><a href="https://www.stavros.org/">https://www.stavros.org/</a></td>
</tr>
<tr>
<td>Stonewall Center</td>
<td>Provides support, resources, programming, and advocacy for lesbian, gay, bisexual, trans, queer, intersex, asexual (LGBTQIA) and allied students, staff, and faculty at UMass Amherst and for the larger Pioneer Valley</td>
<td><a href="https://www.umass.edu/stonewall/">https://www.umass.edu/stonewall/</a></td>
</tr>
<tr>
<td>Stop Access Drug-Free Communities Springfield</td>
<td>City-wide coalition, coordinated by the Gandara Center, works to prevent and reduce underage drinking and marijuana use in the Mason Square, South End, and Forest Park neighborhoods of Springfield</td>
<td><a href="https://www.gandaracenter.org/stop-access-coalition">https://www.gandaracenter.org/stop-access-coalition</a></td>
</tr>
<tr>
<td>Suit-Up Springfield</td>
<td>Guides the young men of Springfield on professional attire and becoming professionally minded</td>
<td><a href="http://suitupspringfield.com/">http://suitupspringfield.com/</a></td>
</tr>
<tr>
<td>Sunshine Village</td>
<td>Built on the belief that adults with disabilities can lead rich, meaningful lives, Sunshine Village is a thriving, vibrant community where adults and their families come to connect, learn, contribute—and shine.</td>
<td><a href="https://www.sunshine.us/">https://www.sunshine.us/</a></td>
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</tbody>
</table>
| **Tapestry Health Needle Exchange Program** | Provides sexual and reproductive health services, LGBT health services, HIV health and prevention, family nutrition services, syringe access and disposal, overdose prevention, and community trainings. Needle exchange programs in Holyoke and Northampton, sterile needles to injection drug users, trainings on Naloxone, education, and counseling. | https://www.tapestryhealth.org
https://www.tapestryhealth.org/harm-reduction/ |
<p>| <strong>The Children’s Study Home</strong> | Serves children, adolescents, and families with special needs throughout the Pioneer Valley and Cape Cod areas. Children served are often struggling to cope with behavioral, psychiatric, and cognitive issues related to the experiences they have survived. | <a href="https://studyhome.org/">https://studyhome.org/</a> |
| <strong>The Gray House</strong> | Helps its neighbors facing hardships to meet their immediate and transitional needs by providing food, clothing, and educational services in a safe, positive environment in the North End of Springfield. | <a href="http://grayhouse.org/">http://grayhouse.org/</a> |
| <strong>The Parent and Community Engagement Center (PACE)</strong> | The “go to place” for Springfield families. The PACE Center recognizes the important role parents and community partners have in the education of our children and the Center offers a centralized place for services for parents and other caring adults. | <a href="http://spss18.sharpschool.com/departments/pace">http://spss18.sharpschool.com/departments/pace</a> |
| <strong>United Way of Pioneer Valley</strong> | For almost 100 years United Way of Pioneer Valley has served as our community’s fundraiser. But UWPV doesn’t just raise money; today’s United Way is a focused, results driven system that works year-round to change community conditions and create lasting solutions. Through strong partnerships with volunteers, local businesses, government, and nonprofit organizations, United Way accomplishes what no one can do alone. | <a href="https://www.uwpv.org/">https://www.uwpv.org/</a> |
| <strong>UniTy of Pioneer Valley Transgender Support Group</strong> | A peer led psychosocial support group for transgender individuals, their allies, and all GLBTs. | <a href="https://www.facebook.com/groups/UniTySpringfield/about/">https://www.facebook.com/groups/UniTySpringfield/about/</a> |
| <strong>Urban League of Springfield</strong> | Serves the African American Community in Greater Springfield by advocating for and providing model services that enhance the academic and social development of young people and families, promoting economic self-sufficiency, and fostering racial inclusion and social justice. | <a href="http://ulspringfield.org/">http://ulspringfield.org/</a> |
| <strong>Valley Bike</strong> | A collaboration and partnership with Bewegen Technologies and Corps Logistics to bring bike share to the region in the communities of Amherst, Holyoke, Northampton, South Hadley, and Springfield. | <a href="https://www.valleybike.org/">https://www.valleybike.org/</a> |
| <strong>Valley Eye Radio</strong> | Broadcasts local news and information to reading impaired listeners throughout the Pioneer Valley. | <a href="http://valleyeyeradio.org/">http://valleyeyeradio.org/</a> |</p>
<table>
<thead>
<tr>
<th>Resources</th>
<th>Description</th>
<th>Website</th>
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<tbody>
<tr>
<td>Veteran Services</td>
<td>The City of Springfield Department of Veterans’ Services’ primary duty is to provide information, counsel, and assistance to veterans and their dependents as may be necessary to enable them to procure the benefits to which they are or may be entitled relative to employment vocational, or other educational opportunities, hospitalization, medical care, pensions, and other veteran benefits.</td>
<td><a href="https://www.springfield-ma.gov/hhs/veterans">https://www.springfield-ma.gov/hhs/veterans</a></td>
</tr>
<tr>
<td>Way Finders</td>
<td>Confronts homelessness head on in communities throughout western Massachusetts. Develops targeted services that help people lift themselves up and out of homelessness with a focus on Housing, Real Estate, Employment Support, and Community Services.</td>
<td><a href="https://www.wayfindersma.org/welcome-way-finders">https://www.wayfindersma.org/welcome-way-finders</a></td>
</tr>
<tr>
<td>WestMass Elder Care</td>
<td>A private, non-profit agency that aims “to preserve the dignity, independence, and quality of life of elders and persons with disabilities desiring to remain within their own community.” We offer a variety of services for elders, their families and caregivers, and persons with disabilities.</td>
<td><a href="https://www.wmeldercare.org/">https://www.wmeldercare.org/</a></td>
</tr>
<tr>
<td>YMCA of Greater Springfield</td>
<td>Recreation and physical health classes for youth through adults, including nutrition and diet. Includes the MIGHTY pediatric obesity prevention program.</td>
<td><a href="http://www.springfieldy.org/">http://www.springfieldy.org/</a></td>
</tr>
<tr>
<td>Youth On The Move</td>
<td>Reliable, safe, and affordable shuttle service for youth in western Massachusetts. Vehicles are equipped to serve youth with disabilities.</td>
<td><a href="https://www.youthonthemoveinc.com/">https://www.youthonthemoveinc.com/</a></td>
</tr>
</tbody>
</table>
8. Evaluation of Impact of Actions Taken to Address Significant Health Needs Identified in 2019 CHNA

The CHNA conducted in 2019 identified significant health needs within the Shriners Children’s community. Those needs were 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. The following actions were taken:

- In response to the identified need for **improved access to specialized pediatric healthcare**, Springfield Shriners Hospital provided pediatric specialty care without regard for the patient or family ability to pay in the following areas:
  - Pediatric Orthopaedics
  - Inpatient Rehabilitation
  - Pediatric Sports health and medicine
  - Pediatric Urology
  - Physical Medicine and Rehabilitation

- Shriners Hospitals for Children provided **financial assistance** to children under 18 years of age who required inpatient or outpatient specialty medical care for whom additional costs would pose an undue financial burden on their family financial situation.

- In response to the identified needs for **increased physical activity**, Springfield Shriners Hospital delivered physical activity programs targeting children with special health care needs and their families. For approximately 35 of 52 weeks each year, free programs were available to work with area university students to develop self-esteem, self-confidence, and develop strength, fitness, and power through organized individual and group activity. The program also trained area university students to adapt the physical and social environment to empower people with disabilities to be more physically active. Due to the COVID pandemic, this program has been paused until community transmission rates permit its return.

9. 2022 CHNA Action Plan

Shriners Hospitals for Children – Springfield submitted a letter of intent to transition from a hospital to an outpatient clinic in May, 2022 with an expected transition date in fall 2022. Shriners Hospital for Children—Springfield remains committed to our mission of providing the highest quality care for children with neuromusculoskeletal conditions and other special healthcare needs within a compassionate, family-centered and collaborative environment, to provide for the education of physicians and other healthcare professionals, and to conduct research to discover new knowledge that improves quality of care and quality of life of children and families regardless of the ability of a patient or family to pay.
Appendix 1. Service Area Demographics

### TABLE 3
Communities in Shriners Service Area

<table>
<thead>
<tr>
<th>Hampden County</th>
<th>2019 Population Estimates</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agawam</td>
<td>28,696</td>
</tr>
<tr>
<td>Blandford</td>
<td>1,105</td>
</tr>
<tr>
<td>Brimfield</td>
<td>3,658</td>
</tr>
<tr>
<td>Chester</td>
<td>1,470</td>
</tr>
<tr>
<td>Chicopee</td>
<td>55,421</td>
</tr>
<tr>
<td>East Longmeadow</td>
<td>16,242</td>
</tr>
<tr>
<td>Granville</td>
<td>1,691</td>
</tr>
<tr>
<td>Hampden</td>
<td>5,178</td>
</tr>
<tr>
<td>Holland</td>
<td>2,630</td>
</tr>
<tr>
<td>Holyoke</td>
<td>40,241</td>
</tr>
<tr>
<td>Longmeadow</td>
<td>15,791</td>
</tr>
<tr>
<td>Ludlow</td>
<td>21,291</td>
</tr>
<tr>
<td>Monson</td>
<td>8,779</td>
</tr>
<tr>
<td>Montgomery</td>
<td>798</td>
</tr>
<tr>
<td>Palmer</td>
<td>12,237</td>
</tr>
<tr>
<td>Russel</td>
<td>1,470</td>
</tr>
<tr>
<td>Southwick</td>
<td>9,720</td>
</tr>
<tr>
<td>Springfield</td>
<td>154,139</td>
</tr>
<tr>
<td>Tolland</td>
<td>530</td>
</tr>
<tr>
<td>Wales</td>
<td>2,088</td>
</tr>
<tr>
<td>Westfield</td>
<td>41,449</td>
</tr>
<tr>
<td>West Springfield</td>
<td>28,609</td>
</tr>
<tr>
<td>Wilbraham</td>
<td>14,638</td>
</tr>
</tbody>
</table>
### Total Service Area

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

**Total Service Area** 467,871

<table>
<thead>
<tr>
<th>TABLE 4</th>
<th>Sociodemographic Characteristics of Shriners Service Area</th>
</tr>
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<tr>
<td>2020 Census Demographic Information</td>
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</tr>
<tr>
<td><strong>Age</strong></td>
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<tr>
<td>Median age (years)</td>
<td>40</td>
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<tr>
<td>Persons under 18 years, percent</td>
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<tr>
<td>Persons 18-64, percent</td>
<td>63%</td>
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<tr>
<td>Persons 65 years and over, percent</td>
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</tr>
<tr>
<td><strong>Race and ethnicity</strong></td>
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</tr>
<tr>
<td>Latino or Hispanic</td>
<td>13%</td>
</tr>
<tr>
<td>Non-Latino or Hispanic</td>
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<tr>
<td>White</td>
<td>68%</td>
</tr>
<tr>
<td>Black or African American</td>
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<tr>
<td>American Indian and Alaska Native</td>
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<tr>
<td>Asian</td>
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<td>Native Hawaiian and other Pacific Islander</td>
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<td>Some other race</td>
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<td>Two or more races</td>
<td>5%</td>
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<tr>
<td><strong>Language spoken at home (population over 5)</strong></td>
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<tr>
<td>Language other than English spoken at home</td>
<td>24%</td>
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<tr>
<td><strong>Educational attainment</strong></td>
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1 U.S. Census Bureau, 2019 Population Estimates
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<tr>
<td>Less than high school graduate</td>
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<td>High school graduate (includes equivalency)</td>
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<td>31%</td>
<td>33%</td>
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<tr>
<td>Some college or associate degree</td>
<td>23%</td>
<td>28%</td>
<td>33%</td>
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<tr>
<td>Bachelor's degree or higher</td>
<td>44%</td>
<td>27%</td>
<td>19%</td>
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</table>

**Income**

| Median household income (in 2019 dollars) | $81,215 | $55,429 | $39,432 |

*Source: U.S. Census, ACS 2015-2019 and 2020 Census Redistricting Data*
Appendix 2. Glossary

**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 MA 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 nonprofit 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 in order for nonprofit hospitals/insurers to maintain their nonprofit 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**

- **Quantitative data** – information about quantities; information that can be measured and written down with numbers (e.g., 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 (e.g., 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 (e.g., 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 (e.g., rates of disease compiled by the MA 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 Massachusetts Department of Public Health. 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.

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.

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 — We use this term to refer to 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 (e.g. 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.

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+ — This term is inclusive of lesbian, gay, bisexual, transgender, queer or questioning, intersex, asexual, agender, non-binary, gender-nonconforming and all other people who identify within this community.

People who experience homelessness or are unhoused – we use these terms to refer to 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, e.g., differences in eye color have not been treated as socially significant but differences in skin color have.

Asian — We use this term to refer to people who identify as being of Asian or South Asian descent, as well as Pacific Islanders.

Black – we use the term “Black” 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 – we use the term “Latino/a/e” in this report in reference to the many cultures who identify as Latin or Spanish-speaking. Latine is a gender-neutral term, a non-binary alternative to Latino/Latina. 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 – We use this term to refer collectively to individuals and groups that do not identify as White or Indigenous. It should not be used to lump all non-white people together, as this erases or dismisses the experience of each racial/ethnic group.

White — We use the term “White” to refer 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.

Systemic 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.
### Appendix 3. Quantitative Data and Sources

#### TABLE 5
Quantitative Data Included in CHNA and Data Sources

<table>
<thead>
<tr>
<th>Quantitative Data Cited</th>
<th>Data Source</th>
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<tbody>
<tr>
<td>Proportion of Residents with a Disability by Location</td>
<td>U.S. Census, ACS 2015-2019 and 2020 Census Redistricting Data</td>
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<tr>
<td>Life Expectancy by Census Tract</td>
<td>National Center for Health Statistics. Life Expectancy at Birth for U.S. States and Census Tracts, 2010-2015</td>
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<td>Correlates of Life Expectancy</td>
<td>OECD. 2017. Chapter 2. What has driven life expectancy gains in recent decades? A cross-country analysis of OECD member states</td>
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<td>Racial Correlates of COVID-19 Risk Factors</td>
<td>Racism, Not Race, Drives Inequity Across the COVID-19 Continuum Rohan Khazanchi, BA; Charlesnika T. Evans, PhD, MPH; Jasmine R. Marcelin, MD, 2020, JAMA Network Open</td>
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<tr>
<td>Confirmed COVID-19 Cases and Deaths as of 1/28/2022</td>
<td>Massachusetts Department of Public Health COVID-19 Dashboard</td>
</tr>
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<td>Appendix</td>
<td>Reference</td>
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<td><a href="https://github.com/themarshallproject/COVID_prison_data/blob/master/data/covid_prison_rates.csv">https://github.com/themarshallproject/COVID_prison_data/blob/master/data/covid_prison_rates.csv</a></td>
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<td>Massachusetts COVID-19 Deaths by Age</td>
<td>MDPH COVID-19 Dashboard, COVID-19 Raw Data - March 28, 2022,</td>
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<td>Vaccination Status of Incarcerated Populations and Staff in Massachusetts</td>
<td><a href="https://www.prisonpolicy.org/blog/2021/12/16/covid_data/">https://www.prisonpolicy.org/blog/2021/12/16/covid_data/</a></td>
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<td>Vaccination Status by County</td>
<td>MDPH, Weekly COVID-19 Vaccination Report</td>
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<td>Real GDP Change 2020 in the Pioneer Valley</td>
<td>US Bureau of Economic Analysis,</td>
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<td><a href="https://www.bea.gov/data/gdp/gdp-county-metro-and-other-areas">https://www.bea.gov/data/gdp/gdp-county-metro-and-other-areas</a>&quot;.</td>
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<td>Early COVID-19 Small Business Revenue Changes</td>
<td>Womply data, from Opportunity Insights,</td>
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<td><a href="http://tracktherecovery.org">http://tracktherecovery.org</a></td>
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<td>Unemployment by Location</td>
<td>US Bureau of Labor Statistics, Local Area Unemployment Statistics. For a</td>
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<td>table displaying a map and table with unemployment rates by town, see this PVPC dashboard:</td>
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<td><a href="https://public.tableau.com/app/profile/pvpc/viz/CHNAUnemploymentData_Jan20toDec21/24MonthU-Rates?publish=yes">https://public.tableau.com/app/profile/pvpc/viz/CHNAUnemploymentData_Jan20toDec21/24MonthU-Rates?publish=yes</a></td>
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<tr>
<td>Hospital Admissions Rates by Location and Race</td>
<td>MDPH Hospitalization tables for chronic diseases, 2016-2019</td>
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<td>Mental Health Admissions by County in Massachusetts</td>
<td>MDPH Hospitalization tables for chronic diseases, 2016-2019</td>
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<td>Substance Use by County</td>
<td>CDC Places. Same rates as 2019 CHNA, based on County Health Rankings data.</td>
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<td>Health Service Gap by Race/Ethnicity</td>
<td>Mercy Vital Signs Cares Report, from Centers for Disease Control and Prevention, National Vital Statistics System. Accessed via CDC WONDER. 2016-2020. Disaggregated data were only available for White, Black, and Latino/a/e residents</td>
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<td>Proportion of Driving Deaths Involving Alcohol</td>
<td>County Health Rankings, 2020.</td>
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<td>Emergency Medical Service Calls Related to Opioid Overdose by County</td>
<td>Pioneer Valley Planning Commission. Young Adult Empowerment Collaborative Hampden County Opioid Profile, September 2021</td>
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<td>Opioid Overdose Deaths by City</td>
<td>MDPH, Number of Opioid-Related Overdose Deaths, All Intents by City/Town, 2015-2020</td>
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<td>Telehealth Usage in Massachusetts Blue Cross Patients</td>
<td>Blue Cross Blue Shield of Massachusetts. Blue Cross Blue Shield Of Massachusetts Releases New Data On Mental Health &amp; Substance Use Disorder Claims During COVID-19 Pandemic.; 2021</td>
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<td>Disparities in School Discipline by Race and Ability Status</td>
<td>ACLU. School To Prison Pipeline Infographic.</td>
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<td>Western MA youth who reported feeling sad or hopeless, 2020</td>
<td>MDPH COVID-19 Community Impact Survey, 2020</td>
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<td>Springfield Eighth Grader Mental Health Statistics</td>
<td>PHIWM CHLP report, using PHIWM data from 2019 Youth Health Survey.</td>
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<td>Health Professional Shortage Areas in Hampden County for Primary Care, 2020</td>
<td>US Health Resources &amp; Services Administration (<a href="https://data.hrsa.gov/maps/map-tool/">https://data.hrsa.gov/maps/map-tool/</a>).</td>
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<td>Homelessness and Emergency Department Usage</td>
<td><em>QuickStats:</em> Rate of Emergency Department (ED) Visits, by Homeless Status and Geographic Region — National Hospital Ambulatory Medical Care Survey, United States, 2015–2018. MMWR Morb Mortal Wkly Rep 2020;69:1931. DOI: <a href="http://dx.doi.org/10.15585/mmwr.mm6950a8">http://dx.doi.org/10.15585/mmwr.mm6950a8</a></td>
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<td>Increase in Telehealth Usage by Blue Cross Patients</td>
<td>Blue Cross Blue Shield of Massachusetts. <em>Blue Cross Blue Shield Of Massachusetts Releases New Data On Mental Health &amp; Substance Use Disorder Claims During COVID-19 Pandemic.</em>; 2022.</td>
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<td>Changes in Home Prices</td>
<td>“Housing And Health: An Overview Of The Literature,” Health Affairs Health Policy Brief, June 7, 2018. DOI: 10.1377/hpb20180313.396577</td>
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<tr>
<td>Food Insecurity in Western Massachusetts by Location</td>
<td>MDPH Rural Cluster DataTables</td>
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<td>Food Bank of Western Massachusetts, Clients and Meals Served, 2019-2021</td>
<td>PVPC, Food Bank of Western Massachusetts</td>
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<td>Pioneer Valley Transit Authority Ridership by Race and Over Time</td>
<td>Pioneer Valley Transportation Authority, as reported to PVPC</td>
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<td>Hampden County Living Wage Calculation</td>
<td>Massachusetts Institute of Technology Living Wage Calculator, <a href="https://livingwage.mit.edu/counties/25013">https://livingwage.mit.edu/counties/25013</a></td>
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<td>Proportion of Students Experiencing Harm</td>
<td>Public Health Institute of Western Massachusetts. 2021 Springfield Youth Health Survey.</td>
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<td>Climate Changes Over Time in Massachusetts</td>
<td>Massachusetts Environmental Public Health Tracking. Climate Change</td>
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<td>Insurance Rates and Types, Disaggregated by Race/Ethnicity</td>
<td>US Census Bureau, ACS 2015-2019</td>
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<td>Hampden County Emergency Department Visit Rates for Asthma</td>
<td>MDPH 2016-2019. Emergency Department Visit Rates, Hampden County and Massachusetts, Age-Adjusted per 100,000.</td>
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<td>Hampden County Emergency Department Visit Rates 2012-2015, Disaggregated by Race</td>
<td>MDPH, 2012-2015. Emergency Room Visit Rates by Race for Asthma, Hampden County, Age-adjusted per 100,000</td>
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<td>Hampden County COPD Hospital Admission Rate</td>
<td>MDPH, 2015. Rural Clusters Data. COPD Hospital Admission Rate. Age-adjusted per 100,000.</td>
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<td>Hampden County Proportion of Adults who Have Obesity and Diabetes</td>
<td>County Health Rankings, 2021.</td>
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<td>Proportion of Medicare Fee-For-Service Beneficiaries with High Blood Pressure, Ischemic Heart Disease, Alzheimer’s</td>
<td>Centers for Medicare and Medicaid Services, CMS - Geographic Variation Public Use File. 2018. Source geography: County</td>
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<td>Age-Adjusted Cardiovascular Disease Hospital Admission Rate</td>
<td>MDPH, 2014. Rural Clusters Data. Cardiovascular Disease Hospital Admissions Rates. Age-Adjusted per 100,000.</td>
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<td>Age-Adjusted Stroke Hospital Admission Rate</td>
<td>MDPH, 2014. Rural Clusters Data. Stroke Hospital Admissions Rate. Age-adjusted per 100,000.</td>
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<td>Age-Adjusted Cancer Hospital Admission Rate</td>
<td>MDPH, 2014. Cancer Hospital Admissions, Age-adjusted per 100,000.</td>
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<td>Hampden County Age-Adjusted Diabetes Hospitalization Rates</td>
<td>MDPH, 2016-2019. Diabetes Emergency Department Rates by Race, Hampden County. Age-adjusted per 100,000.</td>
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<tr>
<td>Correlations between Alzheimer’s and COVID-19 Infection and Death</td>
<td>Matias-Guiu, Jordi A.; *</td>
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<td>COVID-19 Incidence Rate in Western MA by County, Pre-Omicron Variant</td>
<td>Massachusetts Department of Public Health COVID-19 Dashboard</td>
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<td>Hampden County Proportion of Respondents with High Poor Mental Health Days</td>
<td>Behavioral Risk Factor Surveillance System (BRFSS), 2019.</td>
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</table>
Appendix 4. Community Members and Partners Engaged in the Process

About the Consultant Team

Lead Consultant
The 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.

Consultants
Community Health Solutions (CHS), a department of the Collaborative for Educational Services, provides technical assistance to organizations including schools, coalitions, health agencies, human service, and government agencies. 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-based strategies 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.

Franklin Regional Council of Governments (FRCOG) is a voluntary membership organization of the 26 towns of Franklin County, Massachusetts. The 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 12 towns. The 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.

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.

## Regional Advisory Council

### TABLE 6

<table>
<thead>
<tr>
<th>Name (Last, First)</th>
<th>Title</th>
<th>Organization</th>
<th>Organization Serves Broad Interests of Community</th>
<th>Organization Serves Low Income, Minority, &amp; Medically Underserved Populations</th>
<th>State, Local, Tribal, Regional, or Other Health Department Staff</th>
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<td>Anderson, Kathleen</td>
<td>Director of Community Benefits</td>
<td>Holyoke Hospital</td>
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<td>Audley, Jen</td>
<td>Project Coordinator - Community Health Improvement Plan (CHIP)</td>
<td>Franklin Regional Council of Governments (FRCOG)</td>
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<tr>
<td>Borgatti, Monica</td>
<td>Chief Operating Officer</td>
<td>The Women's Fund of Western Massachusetts</td>
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<td>Cairn, Sue</td>
<td>Director of Healthy Families and Communities</td>
<td>Collaborative for Educational Services</td>
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<tr>
<td>Cardillo, Beth</td>
<td>Executive Director</td>
<td>Armbrook Village</td>
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<tr>
<td>Comerford, Jo</td>
<td>Senator</td>
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<td>Dukes, Cheryl</td>
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<td>Baystate Franklin CBAC /UMass College of Nursing; BFMC CBAC</td>
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<td>University of Massachusetts, Amherst</td>
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<td>Name</td>
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<td>Office of Racial Equity, Springfield Department of Health and Human Services City of Springfield, Department of Health and Human Services</td>
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<td>Gorton, George*</td>
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<td>Shriners Hospital for Children - Springfield</td>
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<td>John Bidwell</td>
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<td>Jones, Kimothy</td>
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<td>King, Mary</td>
<td>CFCE Coordinator/Family Center Director</td>
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<td>Hilltown Community Health Center</td>
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<td>Collaborative for Educational Services (CES)</td>
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<td>Millman, Laurie</td>
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<td>Organization</td>
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<td>Rufino, Tiffany and then Latonia Naylor</td>
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<td>Scott, Lamont</td>
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<td>Steed, Ebony</td>
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<td>Young Women's Advisory Council of Western Massachusetts</td>
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<td>Tetreault, Janna</td>
<td>Assistant Director, Community Services Department</td>
<td>Community Action Pioneer Valley</td>
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<td>Toto, Sheila</td>
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<td>Franklin Regional Council of Governments</td>
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</table>

*Coalition of Western Massachusetts Hospitals/Insurer member
Appendix 5. 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 4.) This myriad 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 Hospitals/Insurer.

A. Community Input on the previous CHNA and CHIP

To solicit written input on Shriners’ prior CHNA and Implementation Strategy, both documents are available on our hospital system’s website: https://www.shrinerschildrens.org/en/community-health-needs

They are posted for easy access, and we include contact information for questions or comments. The links on our website also include our federal IRS 990 tax return and an overview of Community Benefit. We have verified and confirmed that we have not received any written comments since posting the last CHNA and Implementation Strategy.

B. Community Chats

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, healthcare 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 healthcare, 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.

<table>
<thead>
<tr>
<th>Table 7</th>
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<tr>
<td>Community Chats Held for 2022 CHNA</td>
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<table>
<thead>
<tr>
<th>Organization</th>
<th>Population</th>
<th>Location</th>
<th>Number of Participants</th>
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<tr>
<td>Hampden County</td>
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<tr>
<td>Age-Friendly Coalition</td>
<td>Coalition members</td>
<td>Springfield</td>
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<tr>
<td>Alzheimer's Support group/Armbrook Village</td>
<td>Caregiver Support Group</td>
<td>Westfield</td>
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<td>Appendix</td>
<td>Description</td>
<td>Group</td>
<td>Location</td>
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<tr>
<td>Baystate Community Faculty - UMass Medical School (UMMS)-Baystate</td>
<td>Baystate faculty</td>
<td>Springfield</td>
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<td>Baystate Mason Square Neighborhood Health Center</td>
<td>Community Advisory Board</td>
<td>Springfield</td>
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<td>Community Benefits Advisory Council Baystate Medical Center</td>
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<td>Springfield</td>
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<td>Community Benefits Advisory Council Baystate Noble</td>
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<td>Food Bank of Western Massachusetts</td>
<td>Professional Staff at Food Bank</td>
<td>Hatfield</td>
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<td>Springfield Healthy Homes / Pioneer Valley Asthma Coalition</td>
<td>Community Advocates</td>
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<td>Springfield Youth Health Survey</td>
<td>Planning Team</td>
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<td>Youth Mental Health Coalition</td>
<td>Representatives from Various Youth Serving Organizations</td>
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<td><strong>Hampshire County</strong></td>
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<td>Baystate Wing Hospital’s weekly Compass Huddle</td>
<td>Baystate Health Eastern Region’s Managers</td>
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<td>Community Benefits Advisory Council Baystate Wing</td>
<td>Community Leaders</td>
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<td>Quaboag Hills Community Coalition</td>
<td>Social Service Providers and Community Members from the Baystate Wing Service Area</td>
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<td>Quaboag Hills Substance Use Alliance</td>
<td>Service Providers, Schools, Law Enforcement, Community Members, Faith Leaders</td>
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<td><strong>Franklin County</strong></td>
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<td>Community Action Pioneer Valley (CAPV) Youth Staff</td>
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<td>Just Roots Farm and Community Supported Agriculture (CSA)</td>
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<td>Stone Soup Cafe</td>
<td>Older Adults</td>
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<td><strong>Western MA</strong></td>
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<td>Health New England</td>
<td>Behavioral Health, Care Management, and Quality departments</td>
<td>Western MA</td>
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FIGURE 34
Community Assets

Chats participants were asked what their community needed to live healthy, happy, and productive lives. Overwhelmingly, Chat participants said food assistance and SNAP benefits were extremely beneficial. Public schools allowed children to receive a free education. Recreational spaces were essential to mental health, fueling social cohesiveness. Access to healthcare, dental care, and mental health resources were also stated as assets. Trust and social cohesiveness between community members was seen as a major form of social capital. Free internet was noted to help connect people to each other, and aid education.

Many of the issues prioritized in the 2019 CHNA were still prevalent today. It was noted that structural racism impacted all the issues previously and currently prioritized. Participants were overwhelmingly concerned with the elderly community, as they have been socially isolated during the pandemic. It was noted that social isolation has tremendously impacted mental health issues within their communities. Parents raised concerns about receiving paid time off when their children were sent home from school as ‘close contacts’ to someone with COVID-19. One participant noted the need for emotional support, time off, and care for COVID-19 ‘long-haulers’. The pandemic also exacerbated all existing issues within communities. Food insecurity, lack of transportation, and lack of quality healthcare providers were all things the pandemic exacerbated. Youth mental health was chosen as the regional health priority. Participants were worried about the increased stress and anxiety children have faced both in general, and since the pandemic.

FIGURE 35
Community Needs
Emerging Issues

- Lack of Providers
- Lack of Resources to Meet Basic Needs
- Racism in Healthcare
- Food Insecurity
- Paid Time Off
- Lack of Transportation
- Social Isolation due to COVID-19
- Mental Health & COVID-19

Progress towards Bettering Health Concerns
Community members have seen progress on certain health issues. Firstly, in each chat analyzed, it was mentioned that progress is being made in regard to social justice. Participants have noticed the willingness of people to sit and have conversations relating to social justice and racism. A participant also noted that they had noticed more racial equity training being required in certain jobs. It also was noted that more attention was being brought to youth mental health. A participant also stated that they felt coalitions and groups within the western Massachusetts have stepped up and are solving pressing issues for their communities. While there is still work to be done, these small steps towards change are valuable and necessary for a better and healthier community.

C. Survey of Public Health Officials
The consultant team conducted an anonymous survey of public health officials and agents in the four counties of Western MA during fall 2021. A summary of Hampden County results, general western MA themes, and a table on the most pressing issues are provided below.

Summary of Hampden County Results
- 17 respondents; 9 were health directors or agents; 10 working in Public Health in region for 5+ years.
- Mostly white women (10 of those who identified); only one respondent identified as non-white (mixed race).
- Most did varied COVID-related work, including contact tracing, mask enforcement, communications, vax clinics, and more.
- In open-ended question, participants noted need for improved communication and information (9), although specifics vary:
  - Culturally and linguistically appropriate information is insufficient.
  - Access to broadband is a concern.
Also mentioned were mental health and substance abuse services (4) and access to fresh food (3).

- Three most urgent needs from checklist included:
  - mental health/substance abuse (7)
  - transportation in general (6), lack of transportation to medical services (5)
  - limited availability of providers (6)
  - health literacy (6)
  - resources/access to digital technology (5)
  - basic needs (5).

- Mental health and communication appear in both questions (open response and prompted) as major issues.

- Special populations in need of care
  - Elderly (7)
  - Russian (4)
    - A few specifically noted a tendency among Russian speaking population to distrust government, avoid vaccine, not believe government sources.
  - Black/Latino populations (2)
  - Low income (2)

- Assets
  - COAs (5)
  - First responders, municipal departments
  - Informal groups; neighbors helping neighbors; church groups
  - Local agencies and orgs, including Holyoke Community College, Holyoke Health Center, Behavioral Health Network.

- General feeling that there is very little contact or collaboration between hospitals and insurers and local public health systems. Hospitals should listen more to local groups, work with them better, be more transparent.

**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 seniors were two themes that appeared in all four counties.

- There is also general concern over low income families and people. This is a big umbrella that includes people experiencing 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 8
Community and Health Issues Identified as Most Urgent

<table>
<thead>
<tr>
<th>MOST PRESSING ISSUES (prompted)</th>
<th>REGION (n=69)</th>
<th>Berkshire (n=15)</th>
<th>Franklin (n=22)</th>
<th>Hampden (n=17)</th>
<th>Hampshire (n=14)</th>
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<tr>
<td>Community Level Factors:</td>
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<tr>
<td>Limited availability of providers</td>
<td>43%</td>
<td>33%</td>
<td>73%</td>
<td>35%</td>
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<tr>
<td>Transportation general</td>
<td>42%</td>
<td>47%</td>
<td>45%</td>
<td>35%</td>
<td>36%</td>
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<td>Safe and affordable housing</td>
<td>36%</td>
<td>60%</td>
<td>45%</td>
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<tr>
<td>Access to digital technology</td>
<td>26%</td>
<td>27%</td>
<td>27%</td>
<td>29%</td>
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<tr>
<td>Lack of resources to meet basic needs</td>
<td>25%</td>
<td>13%</td>
<td>18%</td>
<td>29%</td>
<td>43%</td>
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<tr>
<td>Health Conditions and Behaviors:</td>
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<tr>
<td>Mental health and substance use</td>
<td>36%</td>
<td>33%</td>
<td>27%</td>
<td>41%</td>
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<tr>
<td>Chronic conditions</td>
<td>22%</td>
<td>33%</td>
<td>23%</td>
<td>24%</td>
<td>7%</td>
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### TABLE 9
Most pressing issues (open response)

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

<table>
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<tr>
<th>REGIONAL SUMMARY (n=69)</th>
<th>Berkshire (n=15)</th>
<th>Franklin (n=22)</th>
<th>Hampden (n=17)</th>
<th>Hampshire (n=14)</th>
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<td>Communication and health information (including digital access issues, culturally appropriate), Transportation, Basic needs/food access, Access to mental health services.</td>
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<td>Health Information and Communication (including reliability, dissemination, and digital access).</td>
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<td>Communication and access to information (including culturally and linguistically appropriate, and digital access), Mental health services. Basic needs.</td>
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D. Focus Groups

Purpose: The primary purpose of the youth focus groups was to help inform a Youth Mental Health Coalition communications campaign, and secondarily to inform the CHNA. Key topics were: (1) ways youth in Springfield talk about their mental health, (2) who they look to for support and why, (3) what are viewed as barriers to reaching out for help, and (4) what type of media platform they might use or look at for positive messaging about mental health, support, and help-seeking. Separate focus groups of parents and caregivers were conducted to enhance what was learned from youth. While we were careful to look for patterns across what the youth (and adults) told us, we recognize that the groups we spoke to do not represent all youth or even all youth within our community. Acknowledging that they do not represent all opinions on the topic does not diminish the importance, value, and beauty of what was shared by the youth and their adult supporters.

MAIN THEMES:
1. It is normal to struggle with mental health and need some support. Youth and adults viewed young people having some mental health struggles such as depression, anxiety, or stress and a need for care from others as normal. This may reflect a generational shift in how having a mental health problem is perceived, specifically in communities of color.
2. However, talking about mental health with others is a challenge. Both youth and adults identified reasons why it is difficult to talk openly about this subject. While both groups provided perspectives that the others did not, there was a great deal of overlap in reasons given for why the conversation is challenging.
3. Despite cautiousness, some youth affirmed that there are people who they can talk to about their mental health. Some adults also have strategies for discussing mental health with their children. While discussing mental health issues as they arise may not be the norm, both youth and adults had examples of being able to successfully do so. This may be helpful guidance in bridging the communications gap that exists.
4. Youth had a variety of opinions as to where or how a mental health normalization campaign should be presented. Youth did not seem to favor one social medium over another though they did have some suggestions as to how to make the content appealing.

Some quotes:
(Y = Said by a youth; C = Said by an adult caregiver/parent/guardian)

[About it being normal] "Everybody’s messy." [Y]

[About not facing your problems alone] “[If a friend was struggling] I would tell them it’s okay. And that I understand. Like [I’d] give them my perspective- try to make them feel like they’re not alone. Cause if you have those feelings and then it’s like you’re alone on top of those feelings, it makes it worse. So, I give ‘em my perspective and that I’m here. Or, I would suggest they talk to [someone] about how they feel.” [Y]

[About it being difficult to talk about] “I am very comfortable talking to my friends about my mental health and what I’m going through. Parents and my family would be the last. I just don’t feel comfortable. Or, I don’t feel like good enough thinking that they would support rather than just critique what I’m going through. It’s not a critiquing type of moment. This is a listen and support type moment.” [Y]

Conversation between 3 caregivers:
[C 1] “But then you look at this generation, and they are a bunch of emotions. And hopefully we can help them navigate on how to control those emotions and, and not just be an emotional wreck.”
[C 2] “But how can we teach them that if a lot of us don’t quite know how to, right?”
[C 3] “Right. That’s it. But that is educating us as the parents and the caregivers. Like you can do things differently.”

[About reasons it’s difficult to communicate] “I’ve been trying to trust people, but now I kind of like have trust issues because people that I trusted before . . . they just do things . . . people are impulsive and make dumb decisions.” [Y]

“Sometimes you don’t know how you’re feeling but you know it’s not the greatest feeling to have. It’s kind of this stuck moment and then [someone responds with] “Well, then nothing’s really wrong.” But that’s not what it is.” [Y]

“Yes. It’s different. I think our generation wise like for us, we were, we didn’t have, we weren’t allowed feelings. Right? You were just told, “Do as I tell you. That’s it. Don’t ask questions. Don’t.” What do you what are you stressing about? What bills do you pay? What are you about to take care of?“ So, the mindset versus now in recognizing that our youth are humans, they have emotions, they have feelings.” [C]

[About communications campaign] [I like ads that] make me aware but also make you feel connected”. [Y]

“And then especially when they don’t sugarcoat things, just [be] straight up. Because some ads they’re treating us like babies.” [Y]

THEME 1: It is normal to struggle with mental health and need some support.
- One adult hypothesized that youth’s experiences with the pandemic and their simultaneous symbiotic and parasitic relationship with social media accelerated the change in attitude towards mental health.
- There is also concern that those suffering do not feel alone.
- One parent with nodding heads of agreement from the others in attendance, advised the need for similar supports for anyone raising children who might be struggling.
- Despite most expressing positive sentiments around the need for social support, one youth cautioned that it is important to recognize limitations in how much someone struggling can be supported by others.

THEME 2: Talking about mental health with others is a challenge.
- While the consensus was that it is normal to have problems and need to reach out to others, youth also conveyed that having real conversations about mental health issues with others was fraught with challenges, especially when trying to talk with adults.
- Key barriers to talking with adults that were identified were: (1) Concerns that adults do not take what youth express seriously (sometimes identified as a cultural factor), understand it, or are judgmental about it; (2) Adults make too many assumptions about what is wrong or how to fix it; (3) Adults are not well versed on “modern day” challenges; (4) Not wanting a parent or caregiver to worry, or; (5) Recognition that adults have limited time. While it is not known how many youths who participated in the focus groups live in group homes or foster families, those that did mention it viewed the relationship as particularly difficult for honest discussions of any issues, mental health or otherwise.
• Adults acknowledged and even identified some of these same struggles.
• While most youth spoke of struggling to talk with an adult about their problems, experiences confiding in a peer were more mixed.
• In other words, peers may or may not be viewed as capable of being supportive or validating in these types of conversations.
• In general, both youth and adults viewed issues of trust as a reason why it is difficult for youth (and adults) to communicate how they are feeling to others.
• Adults more frequently cited their culture, gender, or generation as barriers to communicating easily about this subject.
• Relatedly, another reason it can be hard to discuss mental health is difficulty identifying feelings.
• Youth who identify as male were perceived to have a more difficult time naming or discussing feelings.

**THEME 3:** Despite cautiousness, some youth affirmed that there are people who they can talk to about their mental health and some adults have strategies for discussing mental health with their children.
• As mentioned, some youth cited friends as the people they can go to about “everything and anything.” But some hesitancy was expressed in having these conversations with adults.
• Despite the awkwardness, some adults want to support these conversations and have strategies for discussing mental health with their children.
• One set of parents also expressed the value of formal or informal adult support groups, but with certain guidelines.
• In other words, a friend or group with a non-judgmental attitude, capacity to sympathize, and ability to talk through the stress or crisis of the moment might be some important ways adults can be helped in supporting their children.

**THEME 4:** Youth had a variety of opinions as to where or how a mental health normalization campaign should be presented.
• Youth mentioned YouTube, TikTok, Billboards, Instagram, and even Google “pop-up” ads as places they might look for this type of information.
• One youth suggested that the format of the ad mattered.
• Youth suggested that they gravitate towards information that connects to and respects their experiences.

**OTHER IMPORTANT PERSPECTIVES:**
• Social media may be contributing.
• The hurtful nature of misgendering.
• The stigma attached to seeking help.
• Parents and caregivers also may have mental health needs that are unaddressed.
• Strain on parents or caregivers with kids who do have a mental health diagnosis.

**LIMITATIONS:**
Although some adults shared stories about their sons, we were unable to conduct a focus group with youth who identify as male. A survey administered for the same project received more responses from youth who identify as male than female, so perhaps that mode of receiving information is more comfortable for them. One of the adult groups comes together to provide each other support around mental health care for their children. Everyone was friends in the other group and informally help to support the raising of each other’s children. Therefore, their responses may not reflect the experiences
of parents or caregivers who feel more isolated. COVID or even how a group now is accustomed to meeting meant that the facilitators used a hybrid approach rather than having all groups online or in-person. Although one of the online youth groups seemed as chatty as an in-person one, the different modes of information collection are not totally comparable and may have affected the youths’ willingness to share. While the same information was shared and questions asked each time, facilitators also adjusted their approach based on debriefing discussions after the first two focus groups.

**TABLE 10**

**Youth Mental Health Coalition Focus Group Details and Protocols**

<table>
<thead>
<tr>
<th>Dates</th>
<th>December 6, 13, &amp; 14; January 26; February 16</th>
</tr>
</thead>
<tbody>
<tr>
<td>Participants</td>
<td>18 Youth; 8 Adult supporters</td>
</tr>
<tr>
<td>Locations</td>
<td>Youth: (1) South End Community Center (in-person); (2) Beat the Odds @ Martin Luther King Jr. Family Services (via zoom); (3) Out Now (via zoom); Adults: (1) Family support group @ Gándara Mental Health Center (in-person); (2) South End Community Center (in-person)</td>
</tr>
<tr>
<td>Demographics represented</td>
<td>We did not ask them to self-identify during these focus groups. Groups were chosen to ensure that we heard primarily from youth in communities in Springfield that are identified as majority Black or majority Hispanic. Based on self-disclosure, we also had representation within and across groups of youth who identify as gender non-binary, transgender, gay, lesbian, or queer. A few youths and adults also spoke about their own mental illness and experiences in foster care or group home settings. The youth ranged in age from 13 to 20. The parent/caregiver group from Gándara Center was conducted in Spanish. The group that was underrepresented was youth who identify as male. A therapeutic mentor heavily recruited and promoted the event with his team and their mentees. Although 4 males agreed to come, none showed up.</td>
</tr>
<tr>
<td>Facilitators</td>
<td>Tiffany Rufino, Alisa Ainbinder</td>
</tr>
<tr>
<td>Mental Health support (for Youth)</td>
<td>Tamera Crenshaw, LMHC, LPC; Whitney Dodds, LMHC, LPC</td>
</tr>
</tbody>
</table>
| Question protocol (Youth) | 1 & 2: How would you communicate to this friend or really anyone you know that it’s okay to talk about mental health/how you feel?/ What’s the most important thing you think they should know if they’re struggling with a mental illness?  
3: But for all of us, it’s sometimes still hard to talk about our feelings and what we are scared about or don’t understand about our feelings, even with trusted adults - what are some ways to make it easier to have the conversation? With friends? With adults?  
4. [Unhelpful things] Can you think of anything that you heard someone say like that?  
5 & 6. What would be the best way to make sure that your peers would see the messages? How about your adult supporters? Where might they go? Would you want them to see the same campaign messaging as you do? Or do you think they need some different information? |

**E. Key Informant Interviews on Youth Mental Health**
The consultant team conducted Key Informant Interviews (KIs) 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 KIs.

**Table 11**

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

<table>
<thead>
<tr>
<th>Name (Last, First)</th>
<th>Title</th>
<th>Organization</th>
<th>Organization Serves Broad Interests of Community</th>
<th>Organization Serves Low-Income, Minority, &amp; Medically Underserved Populations</th>
<th>State, Local, Tribal, Regional, or Other Health Department Staff</th>
</tr>
</thead>
<tbody>
<tr>
<td>Edna Rodriguez</td>
<td>Director Behavioral Health</td>
<td>Trinity Health of NE</td>
<td>x</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>Madeline Johnson</td>
<td>Manager</td>
<td>Trinity Health of NE</td>
<td>x</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>Maria Zygmont</td>
<td>Clinical Manager, Brightside</td>
<td>Trinity Health of NE</td>
<td>x</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>Katherine Mague</td>
<td>Senior Vice President</td>
<td>Behavioral Health Network</td>
<td>x</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>Nicole Desnoyers</td>
<td>Peer to Peer Parent Outreach Specialist</td>
<td>Behavioral Health Network</td>
<td>x</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>Malika Jeffries</td>
<td>Coalition Coordinator</td>
<td>Gandara Center Stop Access Coalition</td>
<td>x</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>Ysabel Garcia</td>
<td>Founder</td>
<td>Estoy Aquí</td>
<td>x</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>Tiffany Ruffino</td>
<td>Youth Mental Health Coalition Manager</td>
<td>Public Health Inst of W Mass</td>
<td>x</td>
<td>x</td>
<td></td>
</tr>
</tbody>
</table>

**Greater Springfield Area**

**Other Sources**

- City of Springfield Social Work Awareness Month Panel on Youth Mental Health, March 2022
- 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 Committee panel on youth mental health, January 2022
Stop Access Coalition hosted webinar, *Mental Health: Beyond the Individual*, December 2021

**SHRINERS SERVICE AREA: PRELIMINARY SUMMARY OF FINDINGS FROM QUALITATIVE INQUIRY ON YOUTH MENTAL HEALTH**

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?*

1. To address this question, the findings presented below cover four essential sub-questions, as well as other topics that respondents identified. 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 that hospitals can build on in collaboration with others?
3. What effective models exist in Western Mass (e.g., 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 eight key informants working in mental health or youth development roles in the greater Springfield area. The interview protocols are available in Appendix XX. 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

- 4 are mental health providers or clinical program managers.
- 2 are coalition coordinators working on youth issues.
- 1 is a mental health family outreach worker.
- 1 is an educator/trainer on mental health and social justice.

Identity characteristics:

- All respondents identified as female.
- 2 are women of color.
- 2 are white women.
- 2 are women of Hispanic/Latino/Spanish origin.
- 2 are undisclosed; 1 who identifies as universal.
- Age range is: mid 20’s - mid 50’s.

Services areas covered:

- Most of the respondents’ work is with residents of Springfield or all of Hampden County.
- One person covers Hampden, Hampshire, and Franklin counties.

Staff at the Collaborative for Educational Services conducted interviews using Zoom video-conferencing. Most of the interviews were individual (one on one conversations); one interview included two
respondents who worked in the same agency; and one interview was co-facilitated by two interviewers. The findings included in this summary are based on interviews facilitated and analyzed by three white, professional, formally educated women and one bilingual (Spanish-English), professional, formally educated Latino/a/e woman. 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 (e.g., 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:

- City of Springfield Social Work Awareness Month Panel on Youth Mental Health, March 2022
- 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 Committee panel on youth mental health, January 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.

**Summary Across Youth Providers**

**What are some critical ways hospitals and health insurers can facilitate community, provider, family, and school collaboration to support young people’s mental health?**

1. **How do youth in diverse communities conceive of “mental health”? Who do they turn to? Who do they trust for guidance?**
   a. How do youth talk about mental health?
      - Some youth avoid specific language around depression, or suicidality. They might just say, “so and so is ‘Not feeling right’”, or “Miss, you should check in on ____”
      - Anxiety, stress, depression -- all common terms: “youth talk about these as normal”. They don’t understand when stress turns into anxiety or depression. Young people are not necessarily connecting these terms with other emotions or experiences behind these labels.
      - Intense exposure via social media and peer groups results in:
         - Comfort talking about depression and anxiety
         - Resonate with folks on TikTok, and learn from them about feelings related to stress and depression
         - Self-diagnosing: ADHD, neuro-divergence,
      - Respondents expressed a range of perceptions regarding stigma around mental health; while some said youth are so exposed to issues of anxiety, depression, self-harm and suicidality, they are comfortable talking about it. Others identified stigma as a huge obstacle for seeking support. At least one person noted that the stigma is often greater among adults/parents, so that young people cannot turn to their parents with issues.
   b. How are adults talking about youth mental health issues?
      - Anxiety, stress, and fatigue tied to “interface with systems”; e.g., DYS, DCF, typical day at school. “Seeing how challenging, constraining, oppressive these are for young people and families.”
Highly stressful, not supportive, often disrespectful, combative, traumatizing interactions. Young people are carrying a lot of stress from their day to day interactions.

- Extreme pressure to meet social expectations: performance in school, pursuing college or career, beauty
- Adolescent developmental challenges; going through so much change, identity development, having to figure out what’s next (e.g., college, work, etc.)
- LGBTQ youth facing particular challenges around identify, peer perceptions, family
- Well-being, supported development; not simply talking about poor mental health or diagnoses
- Lack of physical activity -- link to mental health
- For many parents/adults, stigma and fear get in the way of talking about mental health issues with the young people in their lives. Don’t want to think their children are screwed up AND scared to talk about suicide.
  - For families in Black and Brown communities, stigma is particularly significant
- Multi-generational impacts of racism, structural and policy barriers that have created low-income communities, and the many related challenges -- lack of access to healthy food, fitness, school resources,
- Micro-aggressions: young people feel the barbs, the attitudes. Once you give them the language, they can name what is happening.
- Impacts of COVID:
  - Exacerbated all the problems
  - More time on social media
    - perfectionism/comparison culture; never good enough
  - Less social interactions
  - Less engagement in the regular activities that give joy -- socializing, physical activities
  - Now young people are needing to re-enter the world, “take their masks off” -- literally and figuratively. They are not used to being in-person social environments
  - Harder to engage and connect with youth when they are remote -- for school, activities, etc.

b. Who do youth turn to?
- “TikTok” was the first response offered by one respondent; social media echoed by all
- Peers -- close friends AND frequently via social media
- Many turning inward; “They hold a lot of stuff and or trying to figure out their feelings or their thoughts by themselves, and sometimes find success with it and other times you know they don’t.”
  - don’t sense they can trust peers or others, particularly in the world of personal information/photos going viral;
- Trusted adults - coach, youth groups, etc.
- Religion, church, faith -- sometimes forced by parents
  - Can have negative consequences; message in Black and brown communities is sometimes “go pray about it”; young people can feel serious feelings are being dismissed
- Surprisingly little mention of parents as essential support; although parents are central in helping young people access mental health services
  - Parents don’t know how to support youth; “parents and caregivers also, I think the first thing that comes to mind is again confusion, just on how to be able to support youth.”
  - Parents challenged in setting limits (knowing how to set limits) on cell phone/social media use
  - Stigma gets in the way of young people talking to parents
d. Youth assets:
  - Resilience, which as one individual described: “A lot of them still have a purity and an honesty and the zest for the truth. And I think that is what maintains their resiliency. And they still have hope…. As long as they’re given authentic information and they’re actually able to have some form of expression and dialogue. … So that is what I look for to capitalize on.”
  - Peer support system

0. What are the current platforms for community support that hospitals can build on in collaboration with others?
   - Respondents mostly identified gaps in support systems:
     - URGENT NEED: Culture and language appropriate mental health services
       - Youth will only open up to people who they can connect with; people they think really understand them
       - Youth turned off from seeking help because of bad fit; “when you are paired with a therapist a lot of times it’s not a good fit. There aren’t very many therapists. ... who show cultural humility to Black and brown folks. So they wait for a long time to get into therapy and then, once they get someone that is this like totally not a match, so then they’re back to square one.”
       - Alternative licensing/training to remove barriers to entering the field; current training required to become LICSW and low starting salaries mean that this path is unrealistic particularly for lower income folks, people of color
     - URGENT NEED: Adequate supply of counseling supports;
       - Young people are waitlisted for months;
       - Only able to get services when they are in crisis, and even then many are stuck in hospital ERs until they can find an appropriate placement
     - Schools:
       - Do not have adequately trained teachers or counselors to identify and support students facing challenges.
       - School staff’s narrow focus on academic skills, catching up, achievement means that young people are spending hours a day with adults who don’t know them, see them, treat them as individuals. “you have teachers and educators who are coming from cities and towns that are outside of Springfield, that are sometimes very, very different from Springfield. So you have educators who have very different lives than the youth are living ..., and so they don’t know how to relate to them, they don’t know how to teach them, they don’t know how to encourage them or motivate them…. youth, are going to school again every day spending most of their days in school with these folks that don’t necessarily relate to them or know how to educate them.”
       - “Our educational systems do not relate to ... most of the population and the cultures that are in the school, and how that impacts their day to day experience.
     - Health insurance -- lack of portability, plans vary in their coverage; parents who get a job lose some of the benefits they had with Medicaid.

b. Opportunities to build on:
   - Community-based spaces for youth to convene with trusted, culturally competent and appropriate adult mentors to debrief with on their days, reflect, and destress. Supportive place and healthy activities to help youth unwind.
• Training for providers, schools, community organizations, and local colleges on equity and cultural competence in mental health (e.g., Estoy Aquí). Clinicians need to broaden their understanding of the young person’s context and cultural norms (e.g., young person talking to ancestors diagnosed as “hearing voices”, schizophrenic)

• Mentoring models -- formal and informal;
  o Culturally competent adult mentors to support families and young people. Adult mentors from the community;
    • Training all adults who interact with young people (e.g., crossing guards) to keep an eye out, encourage,
  o Peer to peer mentoring

• Expanded and appropriate school-based counseling and referral systems; school staff/counselors need to be trained to understand and support whole child, not simply about academic performance
• Systems of care meetings
• Youth Health Coalition
• Current Coalition coordinators, youth development staff -- cultural competence and highly committed to sustainable work with youth

0. **What effective models exist in W Mass (e.g., collaboration between Mental Health providers and schools or Primary Care) or what should be further developed?**
   a. Local community youth groups that offer safe spaces for young people to decompress, share experiences, support each other, “helps them see they are not alone” (e.g., Gandara’s Stop Access Coalition youth group)
   b. Estoy Aquí training for providers and educators on social justice issues in mental health; how bias, cultural norms and expectations, and racism affect young people
   c. Community centers as places that young people are comfortable coming for activities, sports; strong connections, trust between youth and staff;
   d. Family and youth resources centers (e.g., Gandara) : parent groups, youth groups, Impact Center

0. **How can youth be involved in building more effective support systems?**
   a. Youth groups with trusted culturally similar adults designing centers for youth well-being
   b. Creating alternative pathways for education and workforce development -- working with school counseling systems, workforce development agencies, and youth leadership groups to generate new pathways, broaden young people’s sense of possibilities, opportunities
   c. Need to break down current structures/systems that lead to poor health and bring youth in to build youth-positive systems
   d. Imagining with trusted adults strategies to reduce the harmful impacts of (excessive) social media reliance. Creating or testing programs.

A. COVID-19 Supplemental Data

FIGURE 36
COVID-19 Incidence Rate in Western MA by County, August 2020 – November 2021 (Pre-Omicron Variant)

Source: Massachusetts Department of Public Health COVID-19 Dashboard
FIGURE 37
Effects of COVID-19 on Pioneer Valley Gross Domestic Product (GDP), 2020

FIGURE 38
Small Business Revenues, January 2020 - January 2021

Mental Health Data

FIGURE 39
Mental Health Emergency Department Visits by Race in Hampden County, 2016-2019
Age-adjusted rate per 100,000 residents


FIGURE 40
Types of Adults that Springfield Eighth Grade Students Sought Help From, 2021
Percentage of respondents who sought help from adult

Source: Springfield Public Schools, Youth Health Survey of Eighth Graders, 2021
COVID-19 Community Impact Survey (CCIS) Data

In response to the ongoing COVID-19 pandemic, the Massachusetts Department of Public Health 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 the fall of 2020 and reached over 33,000 adults and 3,000 youth (under 25). There was an intentional effort to reach key populations such as people of color, LGBTQIA+ individuals, people with disabilities, older adults, etc.

Compared to past surveillance surveys, this survey reached:

- 10x as many Alaska Native/Native American respondents
- 10x as many LGBTQIA+ respondents
- 5x as many residents who speak languages other than English
- 5x as many Hispanic residents
- 5x as many Asian residents
- Over twice as many respondents in other populations including the deaf/hard of hearing and Black community

In Hampden County, there were 2,253 survey respondents. Respondents were predominantly female (79%), a third identified as a Non-White race or ethnicity, 12% identified as LGBTQIA+, 23% speak a language other than English at home, and 22% had an income below $35,000.

Throughout the report, we will highlight relevant findings for Hampden County and Western MA 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 COVID-19 Community Impact Survey. 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 Hampden County.

COVID-19’s Impact on Mental Health and Substance Use Health

The COVID-19 pandemic has acutely affected the mental health of residents as well as 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 issue in their community, and it was the top ranked issue overall. A subset of those respondents also cited a shortage of mental health and substance use services.

Data from the statewide COVID-19 Community Impact Survey (CCIS) conducted in 2020 show the negative impacts of the early lockdown phase on mental health as well as substance use.

**Depressive Symptoms:** In Hampden County, a greater proportion of respondents reported experiencing high rates of poor mental health days compared to previous surveillance data. More than one in three respondents reported 15 or more poor mental health days in the past 30 days (36%, n=1,879) which is
more than twice as high as estimates from 2019 (15%). The rate was 37% for respondents that lived in a rural area. Though not directly comparable to state-wide rates because of different methods used to calculate them, these are slightly elevated from the state response rate of 33%. Respondents with disabilities and parents of children with special health care needs are disproportionately impacted, with one in two experiencing 15 or more poor mental health days in the past 30 days. Disparities were also seen among the following subgroups: younger respondents (age 25 to 64), LGBTQIA+ respondents, lower income respondents, parents in general.

**Signs of PTSD:** The survey also captured information on mental health outcomes that are directly tied to the pandemic. Respondents were asked to report their experience with five post-traumatic stress disorder (PTSD)-like reactions to the COVID-19 pandemic which include nightmares, avoidant behaviors, guilt, etc. More than one in four respondents reported experiencing 3 or more PTSD-like reactions to the pandemic (27%, n=1,843). This was slightly higher (29%) for rural respondents. More than 1 in 3 youth with disabilities reported experiencing 3 or more PTSD-like reactions to the pandemic (40%, n=116).

**Barriers to Care:** Overall, the pandemic exacerbated existing poor mental health issues, and it also posed specific barriers to accessing care. Respondents reported delaying needed care during the pandemic due to canceled or delayed appointments, increased wait times, lack of safe transportation, inability to access telehealth, etc. Approximately, one in five respondents that experienced a delay in care reported delaying routine mental health care (22%, n=169) or urgent mental health care (22%, n=82). Also, 35% of respondents that experienced 15 or more poor mental health days in the past 30 days delayed routine mental health care (n=69) or urgent mental health care (n=50).

**Resource Needs:** 31% of respondents experiencing 15 or more poor mental health days in the past 30 days worried about getting mental or emotional support (n=680). This was true for 25% of rural respondents. Respondents requested the following resources to help with their mental health and well-being:

- Information on how to see a therapist
- Talking to a health professional on the phone
- Talking to a health professional over video chat
- Meeting in-person with a health professional (individual and/or group therapy)
- Using an application on a mobile phone or tablet for mental health support

**Substance Use:** The pandemic also resulted in increased substance use. Among Hampden County respondents that used any substance in the past 30 days, 41% increased their substance use compared to before the onset of the pandemic (n=1,097). Rates of elevated use were greatest among: respondents with less than $35,000 annual household income (55%, n=179); LGBTQIA+ respondents (55%, n=147); and Black (52%, n=52) and Hispanic/Latino/a/e respondents (48%, n=149).

Although respondents were able to select multiple substances when indicating increased substance use, respondents that used the following substances reported increased substance use overall:

- 60% of respondents who use marijuana (n=293)
- 54% of respondents who use prescription drugs* (n=127)
- 51% of respondents who use tobacco (n=222)
- 49% of respondents who use e-cigarette (n=47)
- 47% of respondents who use over the counter (OTC) drugs* (n=34)
- 39% of respondents who use alcohol (n=863)
* Please note that prescription and OTC drug use does not specify if it was inappropriate use.

The isolation of rural communities in the lockdown phase of the pandemic may have been harder for those with substance use issues. The rate of reported substance use overall in the past 30 days was 57% for rural respondents vs. 48% urban, with a similar disparity in alcohol use in the past 30 days (54% rural, 43% urban). Of those who reported having used a substance in the last 30 days, 42% of rural respondents increased their substance use compared to before the onset of the pandemic.

**Resource needs:** The top three resources requested by respondents who use substances were:
1. Meeting in-person with a therapist (individual and/or group therapy).
2. Access to NRT (patches, gum, lozenges) or quitting medication – which was most requested among rural respondents.
3. Talking to a quit coach or counselor via video (for example: WhatsApp, Skype, FaceTime) to help me with my tobacco and vaping.

**CCIS Data on Youth Mental Health**

**FIGURE 41**

Western MA Youth Experiencing 3 or more PTSD Like Reactions during COVID-19

<table>
<thead>
<tr>
<th>Category</th>
<th>All respondents (n=639)</th>
<th>White (n=250)</th>
<th>Youth of Color (n=376)</th>
<th>Less than 18 (n=393)</th>
<th>18 to 24 (n=246)</th>
<th>Female (n=386)</th>
<th>Male (n=203)</th>
<th>LGBTQ+ (n=221)</th>
<th>Cis-Heterosexual (n=418)</th>
<th>Respondents with any disability (n=116)</th>
<th>Respondents without a disability (n=523)</th>
<th>Rural (n=107)</th>
<th>Urban (n=532)</th>
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<td>All respondents</td>
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**Source:** MDPH COVID-19 Community Impact Survey, 2020
Impact of COVID-19 on Availability and Access to Providers
County Health Rankings Data on Provider Ratios

Data provided by the County Health Rankings offers a glimpse of provider availability at a county level, though most data is from time periods prior to the pandemic. Unfortunately, there is a delay in when data becomes available due to challenges in data collection and cleaning. We know that COVID-19 has had impacts on provider workforce and availability, but it is helpful to understand status prior to the pandemic. Based on the 2021 County Health Rankings:

- **Primary Care:** There were fewer primary care physicians available per population than reported in the last CHNA. Hampden County had 1,490 residents for each primary care physician (1,490:1) in 2018, compared to 970:1 statewide. The ratio of other types of primary care providers, such as nurse practitioners, is better than the state – 610:1 in the county vs. 730:1 for Massachusetts, but may still be insufficient to meet needs.
- **Dentists:** The ratio of dentists has slightly improved since the previous CHNA, with 1,110 residents per dentists in 2019, although this is still worse than the state ratio of 930:1.
- **Mental Health:** The proportion of mental health providers in 2020 was improved (100:1) from the previous CHNA and continues to be better than the state (150:1).

Despite slight improvements in some areas, the overall situation was challenging even before COVID-19. The map in Section (6)c shows that parts of the county continue to be underserved and/or face provider shortages, notably in Chicopee, Holyoke, Springfield, and West Springfield. These are areas with predominantly Black and Latino/a/x residents who experience numerous health inequities.

Impact of COVID-19 on Availability and Access to Providers

Several facets of the COVID-19 pandemic affected access to providers. Once the country went into lockdown to reduce transmission, most health care providers temporarily ended all non-emergency care. Many tried to pivot to telehealth, which is described in more detail below, but still had limited capacity as providers scrambled to deal with the fallout of the pandemic on their own lives.

The pandemic also resulted in a phenomenon dubbed the Great Resignation, in which millions of Americans left their jobs and were not easily replaced, resulting in massive labor shortages in some fields. Their top reasons for leaving were not necessarily pay, but toxic work environments, job insecurity, high levels of innovation, failure to recognize performance, and poor response to the pandemic.²

The Great Resignation placed a strain on frontline health workers in particular, and it has caused staffing shortages throughout the medical system. Many sources consulted for this report expressed concern about the shortage of providers. In a regional survey of health officials, 35% of Hampden County respondents cited the limited availability of providers as the most pressing health issue facing their community.

CCIS data help us better understand the impact of the pandemic on those seeking care in 2020.

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² These Are the Top 5 Reasons People Are Quitting During the Great Resignation, According to a Massive New Analysis (Hint: None of Them Is Pay), by Jessica Stillman, inc.com, https://www.inc.com/jessica-stillman/great-resignation-mit-revelio-research.html
Overall, about 75% of respondents needed health care since July 1, 2020 (n=2,049).

One in six respondents that sought healthcare during the pandemic reported not receiving care due to barriers presented by COVID-19 (17%, n=1,575). Among rural respondents it was similar (18%, n=146).

Respondents experienced delays in routine care (53%, n=269), urgent care (21%, n=269), or both (10%, n=269).

The types of barriers reported by respondents included long wait times, appointment cancellations, and potential COVID-19 exposure.

Among respondents that spoke a language other than English at home, almost 30% worried about getting needed medical care and treatment for themselves or their families (n=470).

Top Routine Care Visits Delayed:
- a. Primary Care
- b. Oral Dental Care
- c. OB/GYN care (not including prenatal or sexual and reproductive health)
- d. Chronic disease management
- e. Mental Health Care

Top Five Acute Conditions Delayed:
1. Pain (e.g. chest pain, stomach pain, headaches, back pain)
2. Chronic disease flare ups (e.g. diabetes, uncontrolled asthma, cardiovascular conditions, gastroenterology, lupus)
3. Severe mental health (e.g. stress, depression, nervousness, or anxiety)
4. Dental Pain
5. Severe cold or flu symptoms

The percentage of respondents that experienced these delays in needed health care were higher among subgroups that experience other healthcare barriers such as accessibility, discrimination and bias:
- LGBTQIA+ respondents (26%, n=249)
- People with disabilities (23%, n=269)
- Parents overall (19%, n=269)
- Parents of children with special health care needs (29%, n=55)

Our best source of local data on telehealth is the COVID-19 Community Impact Survey (CCIS).

- CCIS data for Hampden County showed that 44% of respondents that needed care received telehealth via phone or video.

- Accessing telehealth for care was higher among respondents with disabilities (55%, n=270) – telehealth may increase access to care if there are other accessibility issues with getting in-person care.

- However, telehealth did not meet the needs for all respondents that sought care during the pandemic. About 7% of respondents that experienced delayed care due to pandemic challenges reported telehealth related barriers to care such as lack of a private place to have a phone or video call or lack of a stable phone or internet connection (n=228).

Barriers persist that may exacerbate disparities in who receives care. Telehealth depends on access to digital technology. Geographic location and affordability of internet service are two potential factors affecting ability to use such technology. In the national review cited above, concerns about technology access for patients was the second greatest challenge raised in a survey of health providers. More than 70% saw this as a potential barrier to care beyond the pandemic, and more than 60% also raised specific concerns about lack of digital literacy and lack of patient access to broadband internet. These concerns...
were highest among rural providers. Among CCIS respondents living in rural areas, almost one in four were worried about their internet access (23%, n=184).

Impact of COVID-19 on Basic Needs

Data from the COVID-19 Community Impact Survey provide a snapshot of basic needs and related issues among some service area residents early in the pandemic.

- **Food access:** One in three respondents were worried about getting food for themselves and their family (31%, n=2,036). Almost twice as many respondents of color reported worrying about getting food compared to White respondents (46%, 25% respectively). Similarly, this concern was also higher among respondents who speak languages other than English at home (47%, n=470) and respondents with disabilities (43%).

- **Internet Access:** With the switch to remote work and learning, as well as the need for telehealth access, for many during the pandemic, access to the internet to meet basic needs was essential—for example, being able to order food online rather than shop in the supermarket. Almost one in five of respondents were worried about getting internet access (18%, n=2,036). This concern was higher among the following populations:
  - 23% of rural respondents (n=184)
  - 25% of respondents of color (n=360)
  - 28% of respondents with a disability (n=265); 31% of respondents with a cognitive disability (n=117)
  - 24% of respondents who speak a language other than English at home. This subgroup was also more likely to report being worried about accessing a computer or tablet (13%, n=470), or cellphone (n=17%, n=470) to meet their basic needs compared to folks who only speak English at home (5% and 6% respectively).

- **Expenses:** 50% of respondents were worried about paying one or more of their upcoming expenses (n=2,036). This was higher among respondents of color (63%), respondents with a disability (62%), respondents that speak a language other than English at home (63%), parents of children with special healthcare needs (66%), and LGBTQIA+ respondents (59%). Worrying about paying upcoming expenses was even higher among respondents with a cognitive disability (73%, n=117) and respondents with a self-care/independent living disability (80%, n=45).
  - **Housing:** Almost 40% of respondents worried about paying their housing related and/or utility expenses (n=2,036)
  - **Medical:** 13% of respondents worried about insurance (health, disability, or life) or medical related expenses (n=2,036)

- **Childcare** needs of parents during the pandemic posed a barrier to staying in the workforce at the same level or at all. Of respondents that experienced a job loss, a reduction in their work hours, or needed leave from work, 30% did so to take care of their children (n=337). These pandemic related job changes or losses may contribute to other respondent concerns with regards to their expenses and meeting the basic needs of their families. Respondents who speak a language other than English at home were more likely to be concerned about getting affordable and available childcare than respondents who only speak English at home (13% and 9% respectively)
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