2019 Community Health Needs Assessment

Adopted by the Baystate Health Board of Trustees on September 10, 2019









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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. Their core services are research, assessment, evaluation, and convening. The range of expertise enables PHIWM 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. PHIWM was formerly known as Partners for a Healthier Community.

Consultants

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

Franklin Regional Council of Governments (FRCOG) is a voluntary membership organization, serving the 26 towns of Franklin County, Massachusetts, a 725 square mile area. Services include regional and local planning for land use, transportation, emergency response, economic development, and health improvement. FRCOG convenes a number of 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. FRCOG also provides shared local municipal government services on a regional basis, including inspections, accounting, and purchasing. To ensure the future health and wellbeing of our region, FRCOG staff are also active in state and federal 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.

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I. Executive Summary

Introduction and Methods

Baystate Franklin Medical Center (Baystate Franklin) is an 89-bed facility located in Greenfield, Massachusetts, that provides high-quality inpatient and outpatient services to residents of rural Franklin County and North Quabbin. Baystate Franklin is part of Baystate Health, a not-for-profit, multi-institutional, integrated health care organization serving more than 800,000 people throughout western Massachusetts. Baystate Health, with a workforce of about 12,000 employees, is the largest employer in the region and also includes: Baystate Medical Center, Baystate Franklin Medical Center, Baystate Wing Hospital (and Baystate Mary Lane Outpatient Center), Baystate Noble Hospital, Baystate Medical Practices, Baystate Home Health, and Baystate Health Foundation.

Baystate Franklin has more than 1,150 employees and more than 200 physicians on active and courtesy staff. The hospital sees over 24,000 emergency department visits and over 5,000 inpatient admissions each year. It performs 3,600 surgeries annually in a new state of the art surgery center. More than 400 babies are born at Baystate Franklin's Birthplace, which is widely known for its progressive, midwifedriven service, including birthing tubs, single room birthing suites, and wrap-around care for mothers affected by substance use disorder.

Inpatient services include behavioral health, intensive care, medical-surgical care, and obstetrics/ midwifery. Outpatient services include cardiology, cardiac rehabilitation and wellness, emergency medicine, gastroenterology, general surgery, neurology, oncology, 3D mammography, radiology, cancer care and infusion, ophthalmology, orthopedics, pediatrics, physical medicine and rehabilitation, pain management, endoscopy, pulmonology and sleep medicine, sports medicine, vascular surgery, and wound care and hyperbaric medicine. In addition, through a partnership with the CHCFC, a dental clinic is located in the Baystate Franklin emergency department.

Baystate Franklin is a member of the **Coalition of Western Massachusetts Hospitals/Insurer** (Coalition), a partnership among eight non-profit hospitals and insurers in the region. The Coalition formed in 2012 to bring hospitals in western Massachusetts together to share resources and work in partnership to conduct their triennial **community health needs assessments** (CHNAs) and address regional needs. Baystate Franklin worked in collaboration with the Coalition to conduct this assessment and update findings of the Baystate Franklin 2016 CHNA.

The goals of the 2019 CHNA were to:

- improve the hospital's understanding of the health needs of the communities it serves
- meet its fiduciary requirement as a tax-exempt hospital
- serve as a resource for community organizations for data that is not readily available in other ways

 guide Baystate Franklin's Community Benefits Strategic Implementation Plan (SIP) development efforts

The assessment focused on **Franklin County and North Quabbin**, the **primary geographic service area** of Baystate Franklin. The Coalition engaged over 1,200 residents across the counties of western Massachusetts in data collection and outreach about the CHNA.

The 2019 CHNA was conducted with **equity as a guiding value**, understanding that everyone should have a fair and just opportunity to be healthy, and that this requires removing obstacles to health. Obstacles include poverty, discrimination and the resulting unequal access to jobs, education, housing, safe environments, and health care. Where possible, the CHNA provides data to illustrate unequal access to resources, the impact of structural racism and other forms of discrimination, and inequitable distribution of good health.

When identifying the areas that can be addressed to improve the health of the population, the assessment used the Massachusetts Department of Public Health (MDPH) social and economic determinants of health framework, recognizing that these factors contribute substantially to population health. The MDPH framework also offers guidance for community engagement for CHNAs and Determination of Need (DoN) processes when hospitals make capital improvements and allocate funds for community benefits.

The **prioritized health needs** identified in the 2019 CHNA include community level social and economic factors that impact health, access and barriers to quality health care, and health conditions and behaviors. The assessment included analysis and synthesis of the following types of data:

- a variety of social, economic, and health data, such as data from the U.S. Census Bureau, the Massachusetts Department of Elementary and Secondary Education, and the MDPH;
- findings from recent Franklin County, North Quabbin region, and regional assessment reports;
- information from four focus groups with 1) transgender and gender nonconforming residents of the region, 2) youth of color, 3) clients of a rural food pantry, and 4) people experiencing homelessness. Three of these focus groups were supported by funds made available by the CHCFC and the University of Massachusetts School of Public Health and Health Sciences;
- information from four key informant interviews with members of the CHCFC Leadership Team, the Franklin County Sheriff's Office Re-Entry Team, the Baystate Franklin Population Health Manager, and the Interfaith Council of Franklin County;
- five interviews with public health leaders across western Massachusetts; and
- community input from one Community Conversation held in collaboration with the Franklin County/North Quabbin Community Health Improvement Plan (CHIP) in January 2019 and seven "Community Chats" gathering input from groups of stakeholders and local residents. In total, about 150 individuals across the Franklin County/North Quabbin region were engaged in outreach and data collection.

Priority populations were identified using a health equity framework with available data.

In referring to races and ethnicities in Franklin County and North Quabbin, this CHNA uses the terms Latino, white, black, Native American, and Asian, while recognizing that these terms do not necessarily capture how each individual might choose to identify. For more information on the terminology of race and ethnicity as well as other definitions, please see the Glossary in Appendix II.

Information from this CHNA will be used to inform the development of Baystate Franklin's Community Benefits Strategic Implementation Strategy (SIP), the updating of the Franklin County/North Quabbin CHIP, and the strategic plan of the CHCFC. It will also inform the Coalition's regional efforts to improve health.

Findings

Below is a summary of the prioritized community health needs identified in the 2019 CHNA.

COMMUNITY LEVEL SOCIAL AND ECONOMIC DETERMINANTS THAT IMPACT HEALTH

A number of social, economic, and community level factors were identified as prioritized community health needs in Baystate Franklin's 2016 CHNA and continue to impact the health of the population in Baystate Franklin's service area. Social, economic, and community level needs identified in the 2019 CHNA include:

- Social environment includes relationships between people, connectedness to community, and broader societal values and norms. Different people may experience different health outcomes as a result of inequities in social environments. For example, in the Baystate Franklin service area, social isolation and loneliness are problems for many older adults, people with disabilities, people in remote rural areas, older teens and young adults who are not in school or employed, and people in marginalized groups who do not feel entirely welcome in the broader community. On a societal level, structural racism and other forms of discrimination affect health through multiple pathways.
- Housing needs about one-third of residents are housing cost-burdened, paying more than 30% of their income on housing. Typical households pay more than half of their income on housing plus transportation, whereas 45% of income is considered a manageable percent. Massachusetts has some of the oldest housing stock in the country, and local housing is older than housing statewide, meaning that it is typically less healthy, with issues of lead, mold, outdated wiring and plumbing, and inefficient heating systems. Homelessness is a persistent problem in the area, and area agencies are not able to meet the demand for shelter and services.
- Access to transportation, healthy food, places to be active, and broadband most residents of Franklin County and the North Quabbin area are car-dependent, and the 7% of households

without a car struggle to get to where they need to go. For many families, cars are simultaneously a necessity (to get to work, to school, to shopping) and a luxury (because budgets are stretched to keep them running). Pockets of the general population, such as Greenfield Community College (GCC) students, have high rates of food insecurity, despite the many resources the community offers people experiencing hunger. Rural adults are typically less physically active than urban and suburban residents because they are car-dependent on roads that are not pedestrian-friendly, and they have less access to exercise facilities, due to lower income and/or distance. Broadband is gradually becoming available across the region, but as of the 2013-2017 period, one in five households did not have internet access, an increasingly essential element of our daily lives.

"FRTA promises new bus stops, and then cuts back. There's no weekend or evening bus.

This town needs weekend bus service."

Focus Group Participant, Focus Group of People Experiencing Homelessness, Wells Street Shelter

- Lack of resources to meet basic needs while the local poverty rate is similar to the rest of Massachusetts (11%), the percent of households with incomes below 200% and 300% of the federal poverty level is higher locally. Eligibility for most federal and state benefits falls off between 100% and 200% of the poverty level. Most local households must earn between 200% and 300% of the federal poverty level to meet their basic needs. This means that compared to Massachusetts residents as a whole, more local residents are struggling to get by.
- Educational attainment about nine in ten adults in the Baystate Franklin service area graduated from high school, which aligns with the statewide rate. A smaller percent of area adults hold a college degree than adults statewide. Franklin County and North Quabbin public schools are graduating students at a rate close to that of the state, and are sending approximately 15% fewer graduates off to higher education immediately after high school. Local schools are working to improve relationships within the school community, which affect student behavioral, academic, and mental health outcomes.
- Violence and trauma intimate partner violence, dating violence, child abuse and neglect, elder
 abuse and neglect, and other forms of violence affect the physical and psychological health of
 victims, their families, and the surrounding community. Medical providers, social service staff,
 and school personnel recognize the ways in which these forms of violence subject community
 members to trauma, compounding the immediate impact of violence.

BARRIERS TO ACCESSING QUALITY HEALTH CARE

Barriers to quality health care identified as prioritized community health needs in the 2019 CHNA include:

- Limited availability of providers the Baystate Franklin service area has fewer providers per resident than the state as a whole, resulting in long wait times, inability to get in to see one's own doctor, or forgoing a service that is in short supply. A local shortage of specialists sends residents to Springfield for specialty care and causes general practitioners to treat and prescribe outside their comfort zones. Shortages are particularly acute for lower income residents because not all providers accept MassHealth.
- Lack of care coordination lack of coordination among providers is particularly problematic at
 points of transitions, such as when a resident comes out of a treatment program or from jail into
 the community. More coordination is needed across sectors that are traditionally separate,
 including medical care, dental care, mental health, and social services.

"Even the way we think about collaboration needs to be rethought. We tend to connect administrators together. I talk to clients every day and I have no idea what's going on out there. We need collaboration among people who are actually doing the work."

Key Informant Interview, Franklin County House of Corrections Reentry Team

- Insurance and health care related challenges residents are perplexed and frustrated by many
 of their encounters with insurance and health care systems, and sometimes give up when they
 can't figure out how to answer a question in the paperwork, or get a human being on the
 phone. Those who work within the health care system remark on its perverse incentives and
 note that some measures that would save money and provide better care are not reimbursable.
- Need for increased culturally humility local providers do not reflect the diversity of the
 patients they see. They need training, experience, and sensitivity to competently and
 respectfully treat people from traditionally disadvantaged groups, including people of color,
 transgender and gender nonconforming people, people with mental health and substance use
 disorders, people with low-income, and people experiencing homelessness.
- Need for transportation lack of transportation options limit local residents in many ways, including in accessing health care. Transportation is a barrier for residents of rural towns who have to travel to Greenfield for appointments or prescriptions. It is a barrier for residents of all towns when they have to travel to Springfield for a service that is not available locally.
- Health literacy and language barriers patients need to understand what their providers tell
 them about their health, and be able to give informed consent and manage medications and
 home care appropriately. Medical providers and community agencies must communicate
 effectively, mindful that a portion of the population does not have a high school education, and

that some of their patients may not be fully literate. In addition, a small but growing percent of the local population is best served in Spanish, Moldovan, or another language other than English.

HEALTH OUTCOMES

• Mental health and substance use - mental health is the focus of rising concern in the community. It has an impact across the lifespan. Locally, rates of depression and anxiety are increasing among young people, mental health hospitalization rates are high for adults in the prime of life, and one in three seniors aged 65 and over have been diagnosed with depression. Tobacco, alcohol, and drug use among youth, while declining, is an issue of concern because of the vulnerability of the teen brain to harm from addictive substances. For many teens today, their first experience with an addictive substance is with nicotine in the vaping devices that have taken their demographic by storm. The opioid crisis has resonated throughout the community. Franklin County and North Quabbin have lost more than 100 people to opioid overdose deaths in the past seven years, with the death toll hitting its highest peak yet in 2018.

"For young people, it's almost the norm that you have anxiety of some sort."

Key Informant Interview, Franklin/Hampshire Systems of Care Collaborative

- Chronic health conditions chronic conditions of obesity, cardiovascular disease, diabetes, respiratory disease, and cancer are common in the region. Heart disease and cancer are the two leading causes of death for area residents. More than one in four residents is obese and more than one in ten has diabetes. Asthma is the most common chronic disease among the area's children. These conditions are more likely to affect people of color, people with low-income, and others who are disproportionately impacted by social determinants of health and by barriers to quality health care.
- Infant and perinatal health of the fourteen Massachusetts counties, Franklin County has the
 highest percentage of pregnant women getting adequate prenatal care, and lower proportions
 of preterm birth and low birthweight babies than the state as a whole. However, in 2016, the
 rate of smoking during pregnancy in Franklin County was more than twice that of the state. An
 issue of recent concern is neonatal abstinence syndrome among infants of mothers who have
 used opioids during pregnancy.

PRIORITY POPULATIONS

Local populations identified as high priority due to impacts of inequities in social determinants of health, access to health care, and health outcomes include:

- Residents with incomes below 300% of the federal poverty level many residents with incomes
 below this level struggle to make ends meet and may face tradeoffs between items they need
 for good health, like nutritious food and medicine.
- Black and Latino residents of the service area black and Latino residents of Franklin County
 and North Quabbin face substantial inequities in income, housing, and other social determinants
 of health. Largely because of these inequities, local blacks and Latinos have higher rates of
 disease. In particular, blacks often develop diseases at a younger age than their white neighbors
 do.
- Gay, lesbian, bisexual, queer, and questioning (GLBQ+) youth compared to their heterosexual
 peers, GLBQ+ youth are more likely to have been abused as children, to feel like outsiders at
 school, to suffer from depression, to consider suicide, and to self-medicate with substances.
- People re-entering the community after incarceration reentry means a transition from intensive care to self-motivated care, a challenge for the many people serving time at the Franklin County House of Corrections who have a history of trauma and suffer from mental health and/or substance use disorders.
- Transgender, non-binary, and gender nonconforming people transgender and gender nonconforming people have difficulty finding appropriate and welcoming health care, and often experience feelings of isolation and exclusion from the community at large.
- Children who have experienced trauma many area children have histories of trauma that show up in disruptive behaviors in the classroom, in depression and anxiety, or in other behavioral or physical symptoms. A legacy of trauma can follow children into adulthood and affect health and well-being across the life span.
- Older adults in Franklin County, about one in five residents is age 65 or older, and that share of
 the population is projected to grow to about one in three by 2030. About one-third of older
 adults in Franklin County experience depression and diabetes; about 1 in 4 in some communities
 has been diagnosed with anxiety and respiratory disease, and three-quarters have hypertension.
 In particular, older adults are at increased risk of being socially isolated and lonely, and isolation
 and loneliness have profound effects on health and mortality. Instances of older adults with
 chronic disease and who are isolated will only increase.

Summary

Franklin County and North Quabbin continue to experience many of the same prioritized health needs identified in Baystate Franklin's 2016 CHNA. Social and economic challenges contribute to the health conditions that afflict area residents, and to health inequities observed across demographic groups. Barriers to affordable quality care remain, in part due to social and economic conditions, and in part due to constraints of the health care system. Through interviews, focus groups, and community conversations, contributors to the CHNA almost universally identified economic hardship, housing, and transportation as core problems for the community. They also drew attention to mental health and substance use disorders as key health concerns that were not being adequately addressed. Populations of concern identified in this report are people with incomes below 300% of the federal poverty level; the area's black and Latino residents; young people who identify as gay, lesbian, bisexual, queer, or questioning; people re-entering the community after incarceration; transgender, non-binary, and gender nonconforming people; children who have experienced trauma; and older adults.

II. Introduction

1. About Baystate Franklin Medical Center

Baystate Franklin Medical Center (Baystate Franklin) is an 89-bed community hospital located in Greenfield, Massachusetts (40 miles north of Springfield near the Vermont border) that provides high-quality inpatient and outpatient services to residents of rural Franklin County and North Quabbin. Baystate Franklin is part of Baystate Health, a not-for-profit, multi-institutional, integrated health care organization which includes the following: Baystate Medical Center, Baystate Franklin Medical Center, Baystate Wing Hospital (and Baystate Mary Lane Outpatient Center), Baystate Noble Hospital, Baystate Medical Practices, Baystate Home Health, and Baystate Health Foundation. In addition to its 12,000 employees, Baystate Health has 1,500 medical staff, 2,000 nurses, 2,000 students including residents, fellow, medical, nursing, and allied health students, and over 900 volunteers. Inpatient services include behavioral health, intensive care, medical-surgical care, and obstetrics/ midwifery. Outpatient services include cardiology, cardiac rehabilitation and wellness, emergency medicine, gastroenterology, general surgery, neurology, oncology, 3D mammography, radiology, cancer care and infusion, ophthalmology, orthopedics, pediatrics, physical medicine and rehabilitation, pain management, endoscopy, pulmonology and sleep medicine, sports medicine, vascular surgery, and wound care and hyperbaric medicine.

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

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

2. Coalition of Western Massachusetts Hospitals/Insurer

Baystate Franklin is a member of the **Coalition of Western Massachusetts Hospitals/Insurer** (Coalition). The Coalition is a partnership between eight non-profit hospitals/insurer in western Massachusetts: Baystate Medical Center, Baystate Franklin Medical Center, Baystate Noble Hospital, Baystate Wing Hospital, Cooley Dickinson Hospital, Mercy Medical Center (a member of Trinity Health – New England), Shriners Hospitals for Children – Springfield, and Health New England, a local health insurer whose service areas covers the four counties of western Massachusetts. The Coalition formed in 2012 to bring hospitals within western Massachusetts together to share resources and work in partnership to conduct their triennial **community health needs assessments** (CHNAs) and address regional needs.

3. Community Health Needs Assessment (CHNA)

Improving health and equitable distribution of health outcomes across western Massachusetts is a shared mission across the Coalition. To gain a better understanding of these needs, and as required by the 2010 Patient Protection and Affordable Care Act (PPACA), Coalition members conducted CHNAs in 2018-2019 to update their 2016 CHNAs. The PPACA requires tax-exempt hospitals and insurers to "conduct a Community Health Needs Assessment [CHNA] every three years and adopt an implementation strategy to meet the community health needs identified through such assessment."

Integral to this needs assessment was the participation and support of community leaders and representatives who provided input through the CHNA Regional Advisory Council (RAC) and the Baystate Franklin Community Benefits Advisory Council (CBAC), stakeholder interviews, focus groups, a Community Conversation, and Community Chats (more detail on these elements of the process in Section 5 below on Community and Stakeholder Engagement). A special thanks to the Baystate Franklin CBAC members who participated in the RAC: Ann Darling of Community Action Pioneer Valley and Elaine Puleo, Town of Shutesbury.

Based on the findings of the CHNA and as required by the PPACA, Baystate Franklin will develop a **community benefits strategic implementation plan (SIP)** to address select prioritized needs. The CHNA data also will inform the development of the 2020-2024 **Franklin County/North Quabbin County Health Improvement Plan (CHIP)**.

III. Methodology for 2019 CHNA

1. Equity as a Guiding Value

The CHNA process was conducted with a focus on equity. According to the Robert Wood Johnson Foundation, health equity means that "everyone has a fair and just opportunity to be as healthy as possible. This requires removing obstacles to health such as poverty and discrimination, and their consequences, including powerlessness and lack of access to good jobs with fair pay, quality education and housing, safe environments, and health care."

The Coalition and the CHNA RAC created a proposition that the CHNA reflect values of health equity, cultural humility, and social justice within a framework of social determinants of health. As part of this, the CHNA process was conducted with an inclusive, community-engaged process that strove for: 1) a transparent account of the conditions that affect health of all people in western Massachusetts; and 2) an actionable CHNA for communities in western Massachusetts at the local level.

Poverty can make it difficult to find adequate housing, get a good education, purchase nutritious food, join a gym or have leisure time for physical activity, afford health care, and more. Discrimination is a factor in the health of many classes of people, whether that discrimination is based on race, ethnicity, gender, sexual orientation, class, disability status, or immigration status. Inequity can be measured in economic terms, using poverty, income, wealth, and similar metrics, and it can be measured in health, in health behaviors, disease rates, and life expectancy. Inequity impacts health. Progress towards health equity, then, means reducing disparities in health and its determinants that adversely affect excluded or marginalized groups.

The Coalition, guided by the RAC (see below for description of the RAC) used the following methods to conduct this CHNA with a guiding belief in the need to consider health equity:

- having a more diverse collection of community representatives as part of the RAC than in previous years
- engaging substantially more residents from diverse organizations in the community in data collection and outreach activities than in prior years
- disaggregating outcomes and health determinants by race whenever possible
- including discussion of the impact that systemic and institutional policies and practices have on social determinants of health

Life expectancy in Massachusetts overall is 81 years (80.7), the sixth highest in the nation, but this average obscures gaps between groups of people in wealth, health, and longevity. In America, we tend to live in neighborhoods with people who are similar to us and have incomes on a par with our own, so opportunities to lead a long and healthy life vary dramatically by neighborhood and by town.² Low life

expectancy areas have lower incomes, higher unemployment, lower educational attainment, and more nonwhite residents.³ Among the 23 census tracts of Franklin County and North Quabbin, there is a 13.5 year difference between the census tract with the highest and lowest life expectancy (86.6 years in the census tract that includes Leverett, Shutesbury, and New Salem versus 73.1 years south of downtown in Greenfield. See Figure 1).

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Figure 1. Life Expectancy at birth in our region, 2010-2015

Life Expectancy at Birth By Census Tract

>81 years (greater than average MA life expectancy)

78-81 years (less than average MA life expectancy)

75-78 years (less than average MA life expectancy)

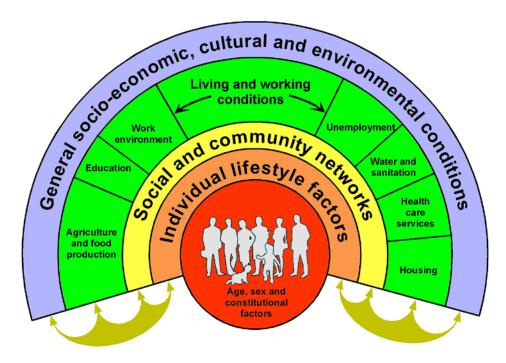
<75 years (premature mortality)</p>

Source: National Center for Health Statistics, Life Expectancy for Massachusetts 2010-2015.

2. Social and Economic Determinants of Health Framework

Similar to the 2016 CHNA, this CHNA was conducted using a determinant of health framework recognizing that social and economic environments contribute substantially to population health. Research shows that genetics or biology account for less than a third of health status. Health is largely determined by the social, economic, cultural, and physical environments that people live in and the health care they receive (Figure 2).

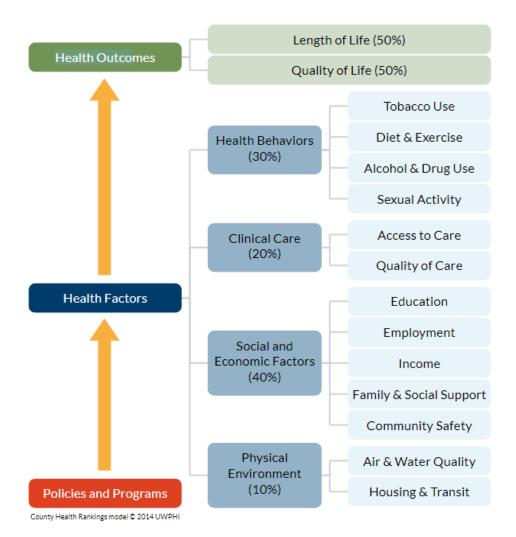
Figure 2. Determinants of Health



Source: Dahlgren and Whitehead, 1993

Among modifiable factors that affect health, research shows that social and economic environments have the greatest impact. The County Health Rankings model (Figure 3), developed by the Robert Wood Johnson Foundation and the University of Wisconsin Population Health Institute, estimates the proportion of health that modifiable factors contribute to, based on reviews of the scientific literature. It is estimated that social and economic factors account for 40% of people's health, followed by health behaviors (30%), clinical care (20%), and the physical environment (10%). Many health disparities occur as a result of inequities in these determinants of health.

Figure 3. County Health Rankings Model - Health Factors



Since the 2016 CHNA, MDPH has prioritized six broad categories of determinants, which they refer to as health priorities: housing, employment, education, violence and trauma, the built environment, and the social environment.⁵ (Figure 4) MDPH also has delineated health issues of focus: substance use, mental illness and health, and chronic disease. This CHNA is organized according to the MDPH categories and focus issues.

Figure 4. Massachusetts Department of Public Health Priorities



3. Assessment Methods

The 2019 CHNA updates the prioritized community health needs identified in the 2016 CHNA. The prioritized health needs identified in the 2019 CHNA include community level social and economic determinants that impact health, barriers to accessing care, and health behaviors and outcomes. We also provide context for the role that social policies and the practices of systems have on health outcomes.

The assessment included analysis and synthesis of the following types of data:

- 1. social, economic, and health data from MDPH, the U.S Census Bureau, the County Health Ranking Reports, the Massachusetts Healthy Aging Collaborative, and other data sources
- 2. findings from recent Franklin County and North Quabbin region and regional assessment reports
- 3. four focus groups with individuals from priority populations
- 4. key informant interviews with providers and community leaders
- 5. community input from a Community Conversation held in collaboration with the regional CHIPs in January 2019 and seven "Community Chats" gathering input from groups of stakeholders
- 6. a Community Forum held in June 2019 to present preliminary findings and provide an opportunity for community comment

More detail on items 3-6 is provided in Section 5 on Community and Stakeholder Engagement below.

The assessment focused on county-level data and, where available, select town-level data. It includes data for the larger population centers of Athol, Greenfield, Montague, and Orange. Where possible, data is reported for North Quabbin, a cohesive region that spans two counties (including the towns of Erving, New Salem, Orange, Warwick, and Wendell in Franklin County, and Athol, Petersham, Phillipston, and Royalston in Worcester County), and for West County (including the towns of Ashfield, Buckland, Charlemont, Colrain, Conway, Hawley, Heath, Monroe, Rowe, and Shelburne), a cluster of small rural towns.

Some of the data sources supplied data in rates (e.g., rates per 100,000 of the population), including the main source of data for health outcomes, the MDPH. Creating rates allows us to compare outcomes from geographies that might be drastically different in size or population, e.g., the state of Massachusetts and the town of Montague. If all we could report was the number of people hospitalized, for example, it would not be possible to compare how Montague is doing compared to the state. For example, if 159 people in a town of 8,480 were hospitalized in one-year for cardiovascular disease, the rate is 1,339 per 100,000. If over 92,000 people across the approximately 6.9 million people in the state of Massachusetts were hospitalized for the same thing in one-year, the rate is 1,216 per 100,000. Thus, we can see that the town of Montague had a higher rate of hospitalization even though they had far fewer people hospitalized.

CHNAs are required to identify "vulnerable populations". With equity as a guiding principle for our process, assessment, and report, we intentionally use the term "priority populations". This decision was intentional as language matters; our words reflect mindsets, influence behaviors, empower or stigmatize people within our communities. To the extent possible, given data and resource constraints, priority populations were identified using qualitative and quantitative information. Qualitative data included focus group findings, interviews, input from our RAC and CBACs, and community outreach. We used quantitative data to identify priority populations by disaggregating by race/ethnicity, age with a focus on children/youth and older adults, and GLBQ+ (gay/lesbian/bi-sexual/queer/questioning) and transgender individuals.

4. Prioritization Process

The 2019 prioritization process used the 2016 CHNA priorities as a baseline with a goal of reprioritizing if quantitative and qualitative data, including community feedback, indicated changes. For the 2016 CHNA prioritization, health conditions were identified based on consideration of magnitude and severity of impacts, populations impacted (including priority populations), and rates compared to a referent (generally the state rate). Prioritized health needs were those that had the greatest combined magnitude and severity or that disproportionately impacted priority populations in the community. Quantitative, qualitative, and expanded community engagement data confirm that priorities from 2016 have continued into 2019.

5. Community and Stakeholder Engagement

"We are too often talking about people, not with people. Community needs to be at the table, have their voices valued. They don't feel heard."

Key Informant Interviewee, Public Health Official

The Coalition recognized the importance of community input into the CHNA and sought out the involvement of key stakeholders and of the community-at-large. The primary mechanisms for community and stakeholder engagement are listed below. See Appendix 1 for a list of public health, community representatives, and other stakeholders included in the process.

A CHNA RAC that included representatives from each hospital/insurer Coalition member as well
as public health and community stakeholders from each hospital service area. Stakeholders on
the RAC included local and regional public health and health department representatives;
representatives from local and regional organizations serving or representing medically
underserved, low-income, or populations of color; and individuals from organizations that

represented the broad interests of the community. The Coalition conducted a stakeholder analysis to ensure geographic, sector (e.g. schools, community service organizations, healthcare providers, public health, and housing), and racial/ethnic diversity of RAC. The RAC met in workgroups (Data and Reports, Engagement and Dissemination, and Health Equity) to guide the consultants in the process of conducting the CHNA, and prioritize community health needs, CHNA findings, and dissemination of information. Assessment methods and findings were modified based on Steering Committee feedback. The RAC consisted of 45 people, including Coalition members and consultants. The RAC met monthly from September 2018 through June 2019.

- Four **focus groups** with: (1) transgender and gender nonconforming residents of the region, (2) youth of color, (3) clients of a rural food pantry, and (4) people experiencing homelessness. Three of these focus groups were supported with funds made available by Baystate Franklin CBAC members Ed Sayer of the CHCFC, and Jin Kim-Mozeleski and Elaine Puleo of the University of Massachusetts School of Public Health and Health Sciences. Focus groups were conducted from February 2019 through March 2019. Focus groups engaged 38 people in Franklin County. This CHNA also used focus group data from other hospital service areas as appropriate.
- **Key informant interviews** with members of the CHCFC Leadership Team, the Franklin County Sheriff's Office Re-Entry Team, members of the Franklin County Interfaith Council, participants in the Franklin/Hampshire Systems of Care Collaborative, the FRCOG Director of Community Services as coordinator of the regional CHIP, and the Baystate Franklin Population Health Manager. Key informant interviews were conducted from February 2019 through March 2019. Key informant interviews engaged 48 people in Franklin County. This CHNA also used key informant data from other hospital service areas as appropriate.
- Community input from a Community Conversation held in collaboration with the regional CHIP in January 2019 and seven "Community Chats", gathering input from groups of stakeholders. In total, about 150 individuals across the Franklin County/North Quabbin region were engaged in outreach and data collection. For Community Chats, RAC members brought information about the CHNA and gathered priorities in regular meetings of service providers, community-based organizations, and hospital clinical staff and administrators.
- A Community Forum was held in June 2019 to share the findings of this assessment and solicit
 community comment. More than 100 people attended, with broad representation from across
 the community, including participants from the focus groups, interviews, Conversations, and
 Chats, and community stakeholders representing priority populations identified in this
 document.

6. Limitations and Information 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 was 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)

A limitation frequently hindering data collection and reporting across all the Baystate Health hospitals is the problem of small numbers. When the number of cases of a particular characteristic or condition is small, it is usually withheld from public reports, so as to protect confidentiality. For example, the MDPH will report on suspected opioid overdoses by town if there are five or more in the given time period. If fewer, the report indicates <5. This is common practice in reporting public health data.

The small numbers problem extends beyond the availability of data. When numbers are small, estimates can be unstable and have large margins of error. That is, it can be deceptive to report a statistic when numbers are small, because that statistic may change substantially year to year without indicating that something meaningful has happened to make the numbers different. When estimates based on small numbers are presented in this assessment, the text will note that margins of error are large and that estimates are unstable and should be interpreted with caution.

Ideally, we would disaggregate data for a better understanding of people who identify with different races and ethnicities, yet this data is often not available, or is based on estimates that come with a large margin of error. Beyond broad categories, we recognize that there are differences among those who identify as Mexican, Puerto Rican, or Cuban that aren't captured by the term "Latino," and differences among those who identify as Chinese, Japanese, or Korean that aren't captured by "Asian." Similarly, within the "black" population there are culturally and linguistically diverse identifies, including, but not limited to, West Indian, Caribbean, African, and African-American. We recognize that some groups are underrepresented in this CHNA, such as Native Americans, Asian Americans, non-English speaking populations, people with disabilities, and undocumented immigrants. It is also important to consider intersectionality, the holistic and integrated identities of people. What impact does being young, black, and gay in a rural community 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. We were able to gather valuable information through focus groups with specific priority populations, while recognizing that a handful of focus groups cannot begin to cover the broad diversity of our people present in our community.

These issues also affect reporting by geography. Many sources provide data by county, and much of the data in this assessment is specific to Franklin County. When sources report by town, the larger towns in the area often have enough cases so that data is not suppressed, so in many charts in the report, data is shown for Athol, Greenfield, Montague, and Orange. When sources provided data for all towns in Massachusetts, we were able to add up data for the nine towns of North Quabbin and report on the North Quabbin as a region. In some instances, we also combined data for nine West County towns to present statistics on some of the most rural parts of the service area.

7. Hospital Service Area

The service area for Baystate Franklin includes all 26 communities within Franklin County (Table 1 and Figure 5), as well as four Worcester County towns that are part of North Quabbin. The region is the only county in Massachusetts recognized as entirely rural, with one small city, Greenfield, as the center of the county. Most towns in the region are under 2,000 in population, and the region is 80% forested. Broadband and cell phone access are still not available in some of the region's most rural communities. In addition, the Franklin Regional Transit Authority (FRTA) serves only some of the communities and has no weekend or night time service. Franklin County had the second highest number of farms and the highest amount of farm sales revenue of all counties in Massachusetts in the most recent Agricultural Census.⁶

According to the 2017 population estimates shown in Table 1 below, the region's population density is just under 102 people per square land mile, compared to 875 per square land mile for the state as a whole. Decennial census figures indicate the population of Franklin County peaked in 2000. The current trend of population stagnation or decline is being experienced in the surrounding rural counties as well.

Monroe Florida Heath Colrain Northfield Royalston Shelburne Savoy Athol BERKSHIRE Wendell Plainfield Ashfield Deerfield Conway Leverett Petersham Goshen Whately Shutesbury Barre Hatfield Pelham Hardwick HAMPSHIRE Belchertown South Hadley Granby North Brookfield

Figure 5. Baystate Franklin Service Area

Source: Public Health Institute of Western Massachusetts

Table 1. Municipal Communities in the Baystate Franklin Service Area

Town	Town County 2017 Popula				
		Estimate			
Ashfield	Franklin	1,733			
Athol	Worcester	11,711			
Bernardston	Franklin	2,111			
Buckland	Franklin	1,874			
Charlemont	Franklin	1,240			
Colrain	Franklin	1,665			
Conway	Franklin	1,878			
Deerfield	Franklin	5,026			
Erving	Franklin	1,767			
Gill	Franklin	1,499			
Greenfield	Franklin	17,442			
Hawley	Franklin	337			
Heath	Franklin	699			
Leverett	Franklin	1,853			
Leyden	Franklin	715			
Monroe	Franklin	118			
Montague*	Franklin	8,259			
New Salem	Franklin	1,017			
Northfield	Franklin	2,988			
Orange	Franklin	7,651			
Petersham	Worcester	1,250			
Phillipston	Worcester	1,744			
Rowe	Franklin	388			
Royalston	Worcester	1,272			
Shelburne	Franklin	1,848			
Shutesbury	Franklin	1,754			
Sunderland	Franklin	3,644			
Warwick	Franklin	762			
Wendell	Franklin	883			
Whately	Franklin	1,551			
Total Service Area 86,679					

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

^{*}The villages of Montague City, Montague Center, Lake Pleasant, Millers Falls, and Turners Falls are part of service area

The region is aging, like the state and country, but at a faster pace. Currently, people aged 65 and over make up about 19% of the population of Franklin County, as shown in Table 2. By 2030, seniors aged 65 and over are projected to comprise 34% of the population, compared to 22% statewide. The demographic shift is even more pronounced in the rural towns of West County, where seniors are projected to make up 42% of the population in 2030.⁷

Franklin County is significantly less racially and ethnically diverse than the state or nation. According to U.S. Census American Community Survey (ACS) 2013-2017 estimates, 6% or a little over 4,200 people within Franklin County's total population of 70,700 identified as nonwhite or multi-racial, compared to 21% for the state and 27% for the nation. The percent of residents who identified as Hispanic or Latino for Franklin County was 4% or about 2,800 people, compared to 11% for the state and 18% for the nation. The current political climate has exacerbated threats to immigrant health related to the behavioral, cultural, and structural systems that determine individual health decision on a daily basis.⁸

The school-aged population of the Baystate Franklin service area has more racial and ethnic diversity than the population as a whole. Sixteen percent of students in local public schools identify as Latino/a, a race other than white, or more than one race. This percentage is higher in Greenfield (28%), Gill-Montague (20%), and R.C. Mahar (17%) school districts. Among students of color, Latinos make up the largest share (9% overall; 19% in Greenfield). At GCC, 20% of students enrolled in 2018 identified as people of color.⁹

Table 2. Sociodemographic Characteristics of Franklin County/North Quabbin Region, with comparison to Massachusetts

Sociodemographic Characteristic	Franklin County	North Quabbin*	MA
Age			
Median age (years)	46	N/A**	39
<18 years	18%	19%	20%
18-64	63%	64%	64%
65 and over	19%	17%	16%
Race and ethnicity			
Latino or Hispanic	4%	3%	11%
Not Latino or Hispanic:			
American Indian & Alaska Native	0.2%	0.1%	0.1%
Asian	2%	1%	6%
Black or African American	1%	1%	7%
Hawaiian or Pacific Islander	0.1%	0.0%	0.0%
White	91%	93%	73%
Some other race	0.1%	0.0%	0.7%
Two or more races	2%	2%	2%
Language Spoken at Home (age over 5)			
Speaks language other than English at home	7%	4%	23%
Disability			
Residents with a disability	15%	17%	12%
Children with a disability	6%	6%	5%
Educational Attainment (age 25+)			
Less than high school graduate	7%	11%	10%
High school graduate (or equivalency)	28%	37%	25%
Some college or associate's degree	28%	31%	24%
Bachelor's degree or higher	37%	22%	42%
Income			
Median household income	\$57,307	N/A***	\$74,167
Percent of population below poverty level	11%	12%	11%

Source: U.S. Census, ACS, 2013-2017

^{*} North Quabbin figures include the towns of Erving, New Salem, Orange, Warwick, and Wendell in Franklin County, and Athol, Petersham, Phillipston, and Royalston in Worcester County

^{**} Median age in the North Quabbin ranges from 41.9 in Erving to 55.8 in Warwick

^{***} Median household income in the North Quabbin ranges from \$42,750 in Wendell to \$75,893 in Phillipston

Of the population 25 years of age and older, only 7% of Franklin County residents do not have a high school or equivalent diploma, compared to 11% for the state and 13% for the nation (Table 2). Among the 50 states, Massachusetts has the highest percentage of residents (42%) with a bachelor's, graduate, or professional degree. The percent of Franklin County's population with a bachelor's or higher (37%) compares favorably to the nation (31%), and is higher than all but six of the states (US Census Bureau, American Community Survey 2013-2017).

In 2018, the unemployment rate for Franklin County was 3.0%, down from 3.4% in 2017 and lower than both the state (3.3%) and national (3.9%) 2018 rates. These figures reflect the trend of decreasing unemployment rates since the Great Recession, experienced from late 2007 through 2010. ¹⁰

The median income of Franklin County residents (\$57,307) is close to that of the nation (\$57,652) and, along with other counties of western Massachusetts, substantially lower than the median income for the state (\$74,167, US Census Bureau, ACS 2013-2017). While it is recognized that real estate costs and other factors that go into the cost of living are lower in western Massachusetts, there are other costs that are higher here, notably transportation (average annual cost of transportation in Franklin County is \$13,540, compared to \$8,761 in Boston). Without a robust public transit system in Franklin County, most residents must rely on their own vehicle to access jobs and services, while other areas of the Commonwealth have more extensive public transit services. In addition, these residents often must drive longer distances to access jobs and services (Franklin County average of 22,566 vehicle miles a year, compared to 11,202 in Boston). 12

One way of comparing the adequacy of income to cover costs of living is to compare a living wage to area median household income. For example, take a family of four (two parents, two children) with one working parent. In Franklin County, that family needs to earn close to the area's median household income just to pay all the bills on time every month. In contrast, looking at median household income and living wage for the state as a whole, a family of the same size would need to earn only about three quarters of median household income. These contrasts are evident for every family type. People need to have relatively higher incomes to get by in Franklin County than they do across the state.¹³

As of 2017, the average income per job in Franklin County was \$44,635, compared to the state's \$73,246 and the nation's \$60,660. Franklin County has consistently had a lower average wage per job than both the state and nation. In comparison to the other fourteen counties in Massachusetts, Franklin County has had the lowest average earnings per job since 2002.¹⁴

IV. Prioritized Health Needs of the Community

In this section, prioritized health needs of the Baystate Franklin service area are grouped into three categories: 1) social and economic factors that impact health, 2) barriers to accessing quality health care, and 3) health conditions and behaviors.

1. Social and Economic Factors that Impact Health

Below, local issues related to social determinants of health are organized into the six broad categories of the MDPH framework described in Section 2 of the Methodology to this report. These issues were identified as prioritized health needs in the Baystate Franklin 2016 CHNA, and they remain ongoing challenges in the hospital's service area today.

- Social Environment social isolation, connection to community, structural racism, and other forms of discrimination
- Housing Needs affordability, quality, stability, and tenure
- Access to transportation, healthy food, places to be active, and broadband
- Employment and Income poverty, living wages, unemployment, and workplace policies
- Educational Needs educational attainment and systemic barriers to quality education
- Violence and Trauma physical, sexual, and emotional violence and violence-related trauma

A. SOCIAL ENVIRONMENT

Elements of the social environment were elevated as priority health needs in the Baystate Franklin service area. Social isolation and the many individual and community-level barriers to connecting with other people and the broader society must be addressed to achieve better health and wellbeing.

We live in social networks that tie us to others, and these relationships affect our mental health, health behaviors, and physical health. Participants of focus groups and interviews conducted for this health assessment gave examples of how their connections to community contributed to their health: rural food pantry users said they always had something to eat if they pooled resources with their neighbors; cancer support group members said they would not have survived without their support groups; and parents of children with disabilities said connecting with other parents helped them find resources.

"We live in three different places, but we cook together. We're Native Americans, we're family."

Focus Group Participant, Focus Group of Rural Food Pantry Users, Charlemont

Conversely, isolation is detrimental to health – as dangerous as cigarette smoking, according to one study. ¹⁶ Isolation may be particularly likely when people are physically remote (as in our most rural areas), when they have health constraints that limit their community engagement (as is the case for some disabled or elderly people), when they do not speak English, or when they face discrimination that makes them feel unwelcome.

Among organizations and service providers in Franklin County and North Quabbin, there is broad recognition that membership, interconnection, and collaboration are great strengths in the region. Franklin County is rich in membership associations (12.4 per 10,000 population, more than the state average of 9.4 per 10,000)¹⁷, and has many overlapping coalitions working to improve local conditions. Another measure of community engagement—voter turnout—is high in the region with 77% of eligible voters in Franklin County turning out in 2016, slightly higher than the state rate of 75% and much higher than the nation's 61%. But isolation is a growing fact of American life, and here in Franklin County and North Quabbin, focus groups and key informant interviews indicated that many people may feel lonely and not a part of community.

"Our culture has shifted away from a community-based model to an isolated model. We've lost sense of community, and there's a mindset that the world outside your house is dangerous. Before, if you were having trouble in your home, you could go to your neighbor's house."

Key Informant Interview, Franklin/Hampshire Systems of Care

Social isolation was a particular concern voiced by faith leaders in interviews. Through their ties with congregants they witness isolation and its impact on area residents. One faith leader said she had agreed to be interviewed specifically because she wanted to highlight the issue of isolation and loneliness.

In Franklin County, 32% of all households are single-person households, and 14% of all households are occupied by a single person over age 65 (US Census, ACS 2013-2017). With older age and disability, people may need additional support to get out into the community and maintain social connections, and many residents fall into these categories. Currently about one in five Franklin County residents is 65 years old or older, and that percentage is projected to increase to one in three in 2030 (US Census, ACS 2013-2017). Fifteen percent of all Franklin County residents have a disability, and nearly a third (31%) of residents aged 65 and over has a disability (US Census, ACS 2013-2017). In a national survey of rural adults, people with a disability were more likely to report feeling lonely or isolated than any other group. Thirty-one percent said that they always or often felt lonely or isolated, as compared to 12% of rural adults without a disability.²¹

Isolation is not just a matter of contact with others, but a sense of being important and having a function in the community.

"Social connections and networks for social activities and support are as important as medical and mental health care. Older adults want to feel valued and involved in the community."

Community Forum Participant, Older Adults Community Forum

Others who may experience barriers connecting to the larger community include:

- residents with limited English 4,527 Franklin County residents speak a language other than English at home, and 1,532 speak English less than very well (US Census, ACS 2013-2017)
- disconnected youth 6% of Franklin County teens and young adults ages 16-19 are not working and not in school (US Census, ACS 2013-2017)
- groups who face discrimination

Focus group participants gave examples of how discrimination had worked as a barrier to inclusion. They described situations when they had felt excluded because:

- they were transgender
- they had low income and made use of government support
- they were experiencing homelessness
- they had a mental health or substance use disorder
- they were people of color

"Whether you live in the Hilltowns or in the city, some places you get frowned on because you get food stamps." Focus Group Participant, Focus Group of Rural Food Pantry Users, Charlemont

"There's a stigma about being homeless. They assume we're just trying to get a free ride. I don't have a home, no car. Sometimes you have to rely on people in the community."

Focus Group Participant, Focus Group of People Experiencing Homelessness, Greenfield

"I can't go to the gym and do the things I want to do, be with people in that setting, and maybe develop a friendship. I can't have that because I don't think they're ready for it. And specifically in my case, it's because I do not pass."

 $Focus\ Group\ Participant,\ Focus\ Group\ of\ Transgender,\ Non-binary,\ and\ Gender\ Nonconforming\ People,\ Greenfield$

Barriers to connecting with community are not just a function of individual characteristics and interpersonal relationships. Barriers are raised by broad societal and community-level factors, as illustrated in the discussion of racism below.

Racism impacts health through several channels, many deeply rooted in history and ingrained in our institutions, systems of power, and social interactions.²² These channels include:

- economic injustice
- residential segregation
- environmental exposures and occupational hazards
- state-sanctioned violence (e.g. police violence in black neighborhoods, genocide of American Indians)
- discriminatory incarceration
- lesser access to quality health care and discriminatory treatment in the health care system
- political exclusion
- targeted marketing of health-harming substances to communities of color
- maladaptive coping behaviors
- chronic exposures to everyday racism that raise stress levels and increase biomarkers of disease (cortisol levels, inflammation, or allostatic load)

Racism, as the Racial Equity Institute puts it, is "in the groundwater" in our nation. ²³ Racial inequity cuts across systems. It has an impact that cannot be explained away by differences in socioeconomic status, and it emanates from systems regardless of individuals' beliefs and behaviors.

Figure 6 illustrates how inequity cuts across systems by showing the relative likelihood of a bad outcome for black residents as compared to non-Hispanic white residents of Franklin County and North Quabbin. In Figure 6, white residents (represented by the orange line) serve as the reference group, and the blue line shows how many times more likely a black resident is to have a given bad outcome in six measures spanning economic well-being, education, and health. For example, the chart shows that black residents are nearly five times as likely to live in poverty as the region's whites.

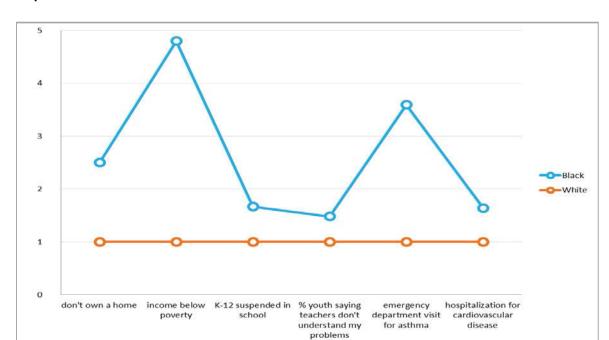
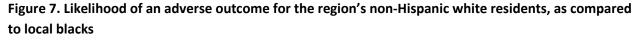
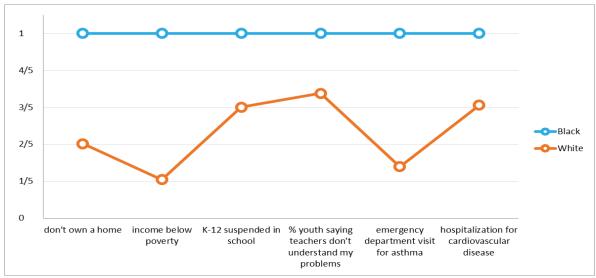


Figure 6. Likelihood of an adverse outcome for the region's black residents as compared to local non-Hispanic whites

Source: Chart follows the Racial Equity Institute's model, using data from US Census ACS 2013-2017, Massachusetts DESE, MDPH, FC/NQ Teen Health Survey

Figure 7 flips the chart, showing the same data, but this time using blacks as the reference group to show how much less likely the region's white residents are to have these bad outcomes, and remind us that whiteness conveys an advantage that cuts across systems, including in health.





Source: Chart follows the Racial Equity Institute's model, using data from US Census ACS 2013-2017, Massachusetts DESE, MDPH, FC/NQ Teen Health Survey

B. HOUSING NEEDS

Housing that is affordable and safe is essential to good health, and remains a community need in the Baystate Franklin service area. When housing costs are high, residents face tradeoffs between housing and other basic needs. Substandard housing contributes to a host of health problems, including chronic disease, injury, and harm to child development. Homelessness can undermine health and untether individuals and families from jobs, school, services, and social support. Historically, housing has been a critical vector for the transmission of racism, with far-reaching impact on education, employment, wealth accumulation, safety, and health.²⁴

Housing insecurity - housing is commonly considered affordable when a household spends no more than 30% of its income on housing, including utilities. Under this definition, about one-third of households in the Baystate Franklin service area are housing cost-burdened (US Census Bureau, ACS 2013-1017). With more than 30% of their income going to housing, the budgets of these households are strained to cover other basic needs including transportation, food, medical care, food, exercise, and clothing.²⁵

About one-third of all households in the hospital service area, and about one-half of those who rent are housing cost-burdened. Renters are substantially more likely to be housing cost-burdened than homeowners (Figure 8).

In Franklin County, 15% of households are severely cost-burdened, meaning they spend more than half their income on housing, leaving little money for other important health determinants. About threequarters of households with incomes under \$35,000 are housing cost-burdened. Figure 9 shows the extent to which housing cost is a burden to lower-income households.

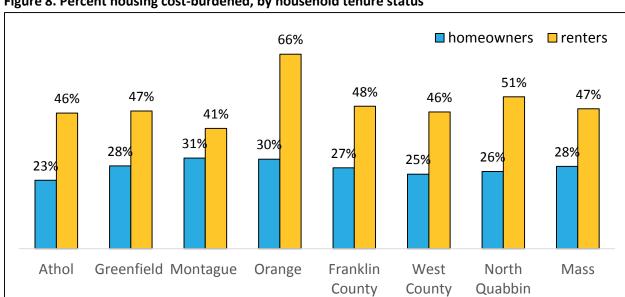


Figure 8. Percent housing cost-burdened, by household tenure status

Source: U.S. Census, ACS 2013 - 2017

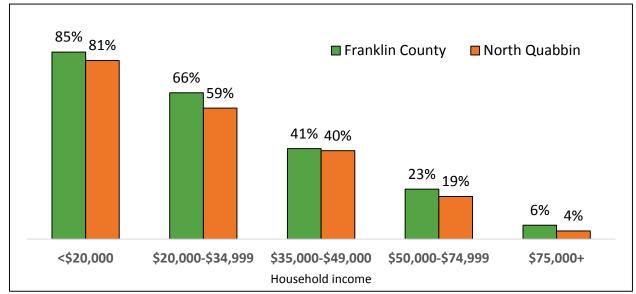


Figure 9. Percent housing cost-burdened, by household income

Source: U.S. Census, ACS 2013 - 2017

The shortage of affordable housing is most acute for lower income groups. A 2014 study of housing in Franklin County found a deficit of more than 4,000 affordable housing units for county residents with incomes under \$25,000. The same report identified a growing need for senior housing, as the number of the region's residents who are 65 and over is high and poised to increase rapidly. Housing assistance is targeted to households that earn less than 80% of the area's median household income (\$57,307 for Franklin County) (US Census, ACS 2013-2017), and 61% of households headed by seniors, or about 4,600, are currently eligible under those guidelines. This figure far exceeds the 600-700 subsidized units set aside for elders and people with disabilities. All 100 people with disabilities.

At the other end of the age spectrum, a recent survey of 66 colleges across the country found that at GCC, 48% of students experienced some degree of housing insecurity, including frequent moves, overcrowded conditions, moving in with others due to financial constraints, rent hikes that were difficult to cover, or failing to pay rent or utilities in full.²⁹

The effort to expand affordable housing is hampered by several factors: inability of the private market to provide housing when costs of construction or rehabilitation exceed potential income from affordable rent; a deficit of government funding and the complexity of coordinating multiple sources to fund a project; and weak public support for affordable housing.³⁰

One development since the 2016 CHNA in access to affordable housing is the explosion of the short-term rental business (such as Airbnb). With the passage of new state legislation officially designating these units as businesses that pay lodging tax, many communities are beginning to explore the extent to which this business takes affordable housing off the market for residents.³¹

Poor housing quality - "affordability" can sometimes come at the expense of quality. On the private market, housing that is affordable to low-income families may be in poor condition and in need of maintenance and repair, or it may contain hazards like mold, asbestos, and lead. Older houses tend to be of lower quality because of wear and tear, and because they may not have been upgraded to modern standards. For example, lead-based paint was banned in 1978, so without remediation, housing built before then could pose a risk of exposures that are particularly harmful to children under the age of six. Housing built before 1940 is prone to a host of additional problems such as the presence of asbestos, outdated wiring, faulty plumbing, and lack of insulation.

In the Baystate Franklin service area, about 70% of housing units were built before lead paint was banned, with higher percentages of older housing found in the larger population centers. Forty to fifty percent of housing in the larger population centers was built before 1940 (Figure 10).

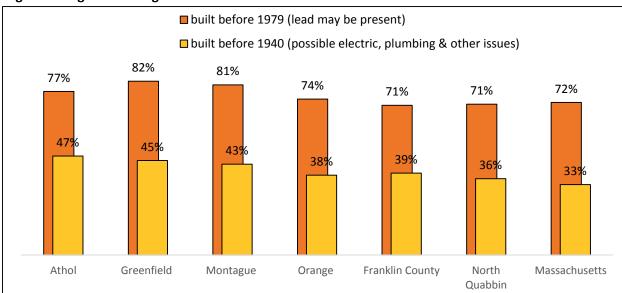


Figure 10. Age of housing stock

Source: U.S. Census, ACS 2013 - 2017

Rental housing tends to be older than owner-occupied housing. In Franklin County, 43% of rental housing was built before 1940, as compared to 33% of owner-occupied housing (U.S. Census, ACS 2013-2017). Sixteen percent of households in Franklin County have severe housing problems, defined as overcrowding, high housing costs, lack of kitchen facilities, or lack of plumbing facilities.³² In the recent needs assessments for the LifePath Area Plan on Aging, housing upkeep and repair emerged as a top need for seniors.³³ One of the only sources of funding for housing rehabilitation is local Community Development Block Grant funding, which is available sporadically to most of the region's small towns, and faces stiff competition for funding with other projects. Once a town has received these funds, many low-income and elder households face challenges in providing the documentation required to qualify for the zero-interest loans, with only one in five actually able to access the funds.³⁴

Housing tenure - owning a house rather than renting can support good health both directly, by providing stable housing, and indirectly, by providing a means to accumulate generational wealth.³⁵ Historically, intentional policies, practices, and norms have denied black and Latino families the ability to create stability and wealth through home ownership. These policies and practices include: redlining (the discriminatory practice of denying credit or insurance to people living within certain neighborhoods where the majority of residents are people of color); racial discrimination in mortgage acquisition in the GI bill; aggressive predatory lending in communities of color; and segregation imposed by federal, state, and local policy and reinforced by cultural norms.^{36,37} Inequities in wealth by race and ethnicity are arguably due in large part to differential access to home ownership.³⁸ In 2016, median wealth of white families in the United States was \$171,000 – almost ten times that of black families (\$17,600) and more than eight times that of Latino families (\$20,700).³⁹

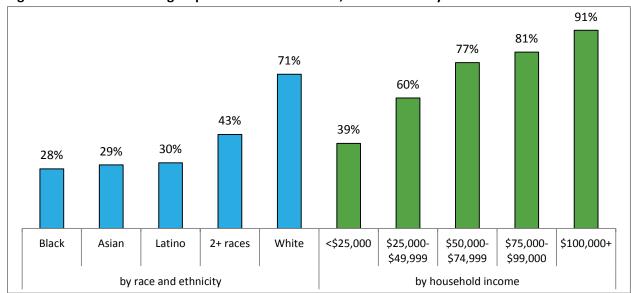


Figure 11. Percent in each group who are homeowners, Franklin County

Source: U.S. Census, ACS 2013 - 2017

About seven in ten white households in Franklin County live in a home they own, as compared to about three in ten black, Asian, and Latino households.

Home ownership is strongly associated with household income. Homeownership can provide a foundation for housing stability. In Franklin County, about 80% of homeowners have lived in their current residence more than a decade, compared to about 25% of renters. Housing stability also enables the development of relationships with neighbors over time to create a spirit of community, belonging, and mutual support.

Financial obstacles such as lack of down payments or poor credit history prevent many of the area's middle income families from purchasing their own homes, even if they could manage the monthly costs of owning. Their participation in the rental market puts additional pressure on availability of rental property for lower income families.⁴⁰

Homelessness - poor health can be both cause and consequence of homelessness. Especially for people with very low-incomes, poor health can start a spiral to homelessness through job loss, medical debt, depletion of savings, and exhaustion of personal support networks. Whatever set of circumstances causes the loss of a home, people are likely to see their health deteriorate once on the street or in a homeless shelter. Managing chronic disease is challenging without a stable place to live, and people experiencing homelessness are at heightened risk of exposure to communicable disease, violence, and harmful weather. Some people experiencing homelessness have a complex mix of severe physical, psychiatric, substance use, and social problems that make it difficult for them to maintain housing without supportive services, even when housing is affordable.

A January 2018 "point-in-time count" found 651 people experiencing homelessness in Franklin, Hampshire, and Berkshire Counties, including those who are unsheltered (8% of the total), in emergency shelters (61%), or in transitional housing (30%). Point-in-time counts assess the number of people experiencing homelessness at a single time point, and are conducted across the nation every January as a requirement for federal funding. While they are currently our most common tool to gauge numbers of people experiencing homeless, they do not capture the full extent of homelessness. Not only are they likely to miss people, they also do not include those who are couch-surfing or doubled up with another family. 41

Of the people included in the 2018 point-in-time count in the three county area, 245 (38%) were in families with children. Massachusetts guarantees shelter when families with children become homeless, but the guarantee does not remove the stress and trauma of housing loss. Housing loss disrupts lives as parents lose control over where they live, how they raise their children, and where their children go to school. They may be placed out of their home communities, away from their support networks. Many families are sheltered in Springfield where western Massachusetts shelter units are concentrated.⁴²

Victims of domestic violence, and particularly women and children with limited resources, are at heightened risk of homelessness.⁴³ Stable housing can also be hard to find for women who have lost custody of their children. They often cannot get their children back without having housing, but may need to have their children living with them to obtain affordable housing.

The point-in-time count captured 31 young adults age 18-24 in the three-county area, a critical period for completing education, starting work, and establishing self-sufficiency. A separate 2018 Massachusetts Youth Count identified 48 people under 25 in the three-county area who were not in parental custody and lacked a fixed, regular, and adequate nighttime residence. Marginalized segments of the young adult population are at heightened risk for homelessness. Of the youth identified statewide in the 2018 Massachusetts Youth Count, 26% were pregnant or parenting with custody, 26% had been in the foster care system, 34% had juvenile criminal justice involvement, and 24% identified as GLBQ+ and/or transgender. 44

Of those captured in the count, blacks and Latinos were overrepresented in the homeless population when compared to their proportion in the population as a whole. While blacks make up only 2% of the general population in the three-county area, 18% of all people captured in the homeless count were black. Latinos make up 5% of the general population and were 20% of the homeless population. ⁴⁵

In Franklin County alone, the count found 90 people experiencing homelessness, with a concentration in Greenfield where services are easier to access. ⁴⁶ Members of the reentry team at the Franklin County House of Corrections estimated that local homeless numbers were likely at least double that, noting the connection between incarceration and homelessness. A history of incarceration narrows opportunities for housing, and many individuals released from jail end up couch-surfing in unsafe conditions. Those with criminal records, and especially those with a record with a sexual offense, are particularly hard-pressed to find stable housing. This issue was brought to the public's attention when a registered sex offender and his partner who were living unsheltered in Greenfield froze to death on a sub-zero night in January 2019. ⁴⁷

Homelessness affects local schools as well. In a 2018 survey of middle and high school students in Franklin County and North Quabbin, 3% of respondents reported spending most nights sleeping somewhere other than at home with their parents or guardians. Seven percent said that at some point in the previous 12 months, they had lived away from their parents or guardians because they ran away, were kicked out, or abandoned. These young people who had experienced housing instability were much more likely than their peers to struggle in school, use substances, and engage in other risky behaviors. 48

In addition to a shortage of affordable housing, the region lacks enough shelter space to cover the need. In winter 2019, the Wells Street Emergency Shelter in Greenfield had space for 20 residents and had 30 people on the waiting list (though couches and chairs were made available for additional people to sleep in on cold nights). ⁴⁹ In a focus group among residents of the shelter, participants said they had to wait weeks or months for space to open up for them to move in. They described the complex set of issues they faced, including accessing care and managing medical conditions, behavioral health issues, and substance use. They advocated for gathering places and constructive things to do during the day when the shelter is closed. They cited transportation as a barrier, especially when they had to be somewhere on the weekends when there is no bus service, or had to go out of Greenfield. For example, one shelter resident was traveling to Springfield daily for methadone treatment.

Sober housing – long-term stable housing is a critical component of recovery from substance use disorder. In recent years, substance use treatment resources have increased substantially in Franklin County and North Quabbin in response to the opioid crisis. The region now has 252 treatment beds for detox and residential recovery, up from zero in 2015. Ideally, people discharged from treatment facilities would have an option of stepping down to sober housing to help sustain their recovery. The region now has 16 sober housing beds with a current prospect for 12 more – spaces for barely more than 10% of those in treatment facilities, and far short of the need. ⁵⁰

C. ACCESS TO TRANSPORTATION, HEALTHY FOOD, PLACES TO BE ACTIVE, AND BROADBAND INTERNET

The places we live, work, and play shape our health in profound ways. In its model of the social determinants of health, the MDPH draws attention to three aspects of the built environment that influence the choices available to us and the choices we make for our health: transportation, access to healthy food, and opportunities for physical activity. Included here as an issue of particular relevance to rural communities is access to high-speed internet.

Transportation - as in past CHNAs, access to transportation arose as an overwhelming need in the Baystate Franklin service area in 2019. Reliable transportation is critical to keeping us healthy, productive, and engaged in the world. It connects us to school, work, stores, medical appointments, recreation, opportunities for social engagement, and more. The forms of transportation available have an impact on health, with car-dependent areas typically less healthy than those with a variety of transportation options such as public transit and walkable and bikeable roadways. ⁵¹

Franklin County is the most rural county in the state with its residents dispersed over 699 square land miles, a population density of 102 people per square mile (versus 875 for the state). Its services are concentrated in Greenfield, and to a lesser degree in smaller towns. The FRTA has the largest service area of any of the state's regional transit authorities. It operates ten fixed bus routes within Greenfield and between Greenfield and neighboring towns on weekdays. There is no service in the evenings after 7:30 pm or on the weekends. The fixed bus routes do not reach the smaller towns, and traveling by bus outside of the area requires transferring to bus routes of other regional transit authorities. This is the case for residents of North Quabbin, which straddles two counties, and for the many Franklin County residents working in Hampshire County.

"In the North Quabbin where transportation is a huge issue, anything [for youth] that has to do with the library, the arts, or music doesn't seem accessible. If you are an athlete, there are local opportunities for extracurricular activities, but if you don't fit in that bubble, you don't fit anywhere."

Key Informant Interview, Franklin-Hampshire Systems of Care

In focus groups and interviews, transportation repeatedly emerged as a key problem for area residents. Those without a car said they sometimes find they simply cannot get where they need to go when they need to get there, or find themselves with long waits for the next bus to take them home. The lack of transportation exacerbates inequities, as people miss out on education, work, and help in places they cannot reach without a car. Seven percent of Franklin County households do not have a vehicle available (Figure 12). Of renter-occupied households, which tend to be lower income than owner-occupied, 18% do not have a vehicle available.

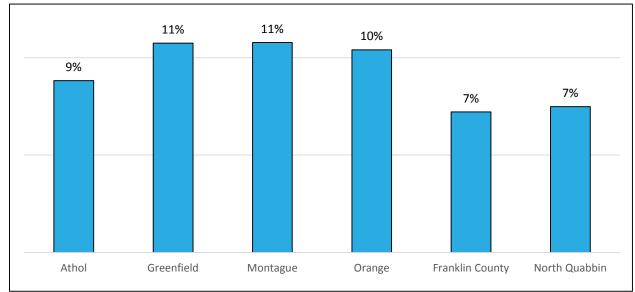


Figure 12. Percent of households with no vehicle available

Source: US Census Bureau, ACS 2013-2017

Cars are an important asset for area residents, and a costly one. For low-income households that do have a car, the cumulative cost of gas, insurance, maintenance, and repairs means that cars may go uninsured or be poorly maintained. Problems for the household compound if family members who depend on an unreliable car end up missing appointments or getting to work late.⁵²

At the same time a dependence on cars can undercut health. Car dependence means lower use of healthier active means of transportation (walking, biking, or even public transportation), more air pollution and greenhouse gas emissions, and more motor vehicle accidents. Between 2014 and 2016, there were a total of 3,647 crashes in Franklin County, with 882 (24%) resulting in injury and 20 (1%) resulting in fatalities. About a tenth of these crashes were due to distracted driving. ⁵³ In 2013-2017, 28% of traffic fatalities in Franklin County were attributable to alcohol. ⁵⁴

The Housing and Transportation (H+T®) Affordability Index rates Franklin County as an area that is "cardependent with very limited or no access to public transportation," and notes that residents of rural areas like Franklin County and North Quabbin tend to have higher transportation costs than more densely populated places. ⁵⁵ According to the H+T® Index, an affordable place to live is one where the costs of housing and transportation do not exceed 45% of household income. For the typical household in Franklin County, housing and transportation consume 53% of income, and lower income households are likely to pay more.

In a focus group of West County residents who use the food pantry at the Charlemont Federated Church, much of the conversation centered around the challenges of getting themselves to the services they needed and ideas for getting those services to come to them, such as periodic walk-in clinics, mobile medical services, pharmacy delivery, and telehealth.

Focus Group Participant, Focus Group of Rural Food Pantry Users, Charlemont

Access to healthy food - Healthy food access arose as a community health need for the Baystate Franklin service area. Regular access to adequate amounts of healthy food is essential for people to live healthy, active lives. Food insecure households lack that access and are forced to engage in coping strategies such as eating cheaper foods that are high in calories but low in nutritional value. Diets low in healthy foods like fruits and vegetables can contribute to obesity, diabetes, and other chronic diseases and communities with high rates of food insecurity also tend to have a higher prevalence of these conditions. ⁵⁶ Children who do not have enough food to eat have twice the chance of poor or fair health compared to those who do, and are at risk of falling behind their peers academically and socially. ⁵⁷

Food insecure families lack the economic resources to eat as well as they would like, and may not live near a store that carries healthy food or have a way to get there. Neighborhoods where lower income families and people of color live typically have worse access to grocery stores, and they have more fast food restaurants and more liquor retailers. ⁵⁸ In Franklin County, 6% of residents are low-income and do not live near a grocery store. ⁵⁹

Nine percent of Franklin County residents and 12% of the county's children were food insecure in 2017.⁶⁰ Of those who were food insecure, one in five had an income above the threshold to qualify for food assistance. In communities such as Montague and Orange, more than 1 in 5 households receive SNAP benefits (Supplemental Nutritional Assistance Program) (Figure 13). In the vast majority of households receiving SNAP benefits (73%), one or more people are working (U.S. Census. ACS 2013-2017).

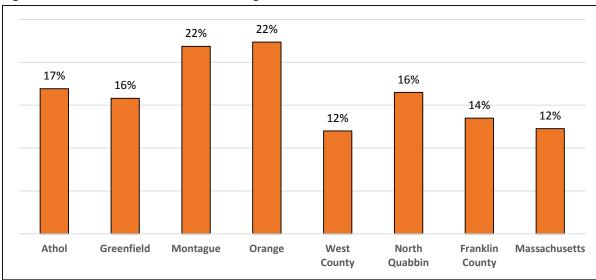


Figure 13. Percent of households receiving SNAP

Source: US Census Bureau, ACS 2013-2017

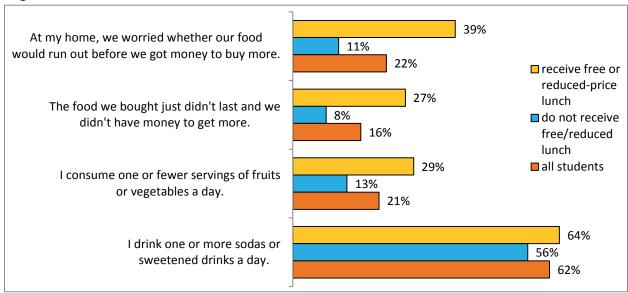
Food insecurity - in the 2018 fiscal year, 430 women and 1,096 children were enrolled in the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) in Franklin County. WIC provides supplemental foods, health care referrals, and nutrition education to low-income pregnant and postpartum women and their children up to age five. Of the 430 women, 87% entered the program with one or more risk factors such as hypertension or inadequate vitamin supplementation that could be ameliorated with a healthy diet. Among low-income residents of Franklin County, even young women and children are experiencing health consequences of food insecurity.

Food insecurity is evident in local schools as well. In 2018, 22% of Franklin County/North Quabbin middle and high school students said that in the past year, their family "sometimes or often worried about whether their food would run out before they got money to buy more".48 Students eligible for free or reduced price lunch (a rough measure of lower family income) were more likely than their peers from higher income families to be food insecure, to eat fewer fruits and vegetables, and to drink sodas or sugary drinks (Figure 14). These statistics highlight the importance of healthy free or low cost breakfasts and lunches at school. Cafeteria staff in area schools are collaborating to increase healthy offerings through trainings, sharing of best practices, and efforts to procure locally produced foods. 62

"Extra food from the cafeteria is put into a room and kids can come get it. We keep clothing and hygiene products there as well. And teachers are providing snacks out of own pockets."

Community Chat, Regional School Health Task Force of the Communities That Care Coalition of Franklin County and North Quabbin

Figure 14. Food insecurity among middle and high school students, Franklin County/North Quabbin Region



Source: 2018 Franklin County/North Quabbin Teen Health Survey

Among young adults, 35% of GCC students who responded to a recent 10-item USDA survey reported low or very low food security. Only half the students said they felt fully food secure.⁶³ Twenty-one percent of respondents said they use SNAP. Food insecurity, along with other risk factors such as low-income and housing insecurity, affect students' ability to stay in school.⁶⁴

In 2018, the Center for Self-Reliance Food Pantry in Greenfield and the West County Emergency Food Pantry in Shelburne Falls served 3,843 people.⁶⁵ A survey of area residents who use the food pantries found the vast majority of them had substantial worries about having enough food, paying other bills, and eating nutritiously. But they said they felt welcome and respected when they came to pick up food, and nine out of ten said the food pantry helped them eat healthier and get enough to eat. Participants in the focus group of rural food pantry users in Charlemont expressed similar sentiments, and partiality to their own food pantry. In both the survey and focus groups, food pantry users said they were looking for healthy options and specific dietary needs (low salt, low sugar, gluten free, fresher produce).

In a focus group of people experiencing homelessness in Greenfield, while participants experienced challenges with housing, transportation, health care, and more, they said that between the food available at the shelter and at daily hot community meals around town they were able to feed themselves well, with healthy choices.

Access to opportunities for physical activity - access to opportunities for physical activity arose as a health need in the Baystate Franklin service area. Physical activity is key to good health, and people are more likely to be active when they have safe and accessible places to go. Communities that are pedestrian and bike-friendly enhance opportunities for physical activity.

Rural adults are typically less physically active than urban and suburban residents.⁶⁶ While residents of rural areas have more open space around them for recreation, they also have less access to exercise facilities due to lower income and/or distance. And unlike city dwellers that often use some combination of public transit and active transportation, residents of rural areas rely on cars to get wherever they need to go each day. In Franklin County, more than three-quarters of the workforce (77%) drive to work alone, and about half of those (36% of the workforce) have a commute of 30 minutes or more.⁶⁷ The more time people spend in a car, the less physical activity they tend to get and the higher their risk for high blood pressure and obesity.⁶⁸

Given the rurality of the area, most roads do not have sidewalks, bike lanes, substantial shoulders, or lighting, and are therefore often unsafe or uninviting for pedestrians, and there are close to 1,700 miles of roads in Franklin County. That said, the Franklin County Transportation Plan calls for an increase in walking and biking options, and many of the region's towns are working on "Complete Streets" plans to enable safe access for all users, including pedestrians, bicyclists, motorists, and transit riders of all ages and abilities. ⁶⁹

The Centers for Disease Control and Prevention (CDC) recommends that adults get a minimum of 2.5 hours of moderate-intensity physical activity a week. In Massachusetts 51% of adults met the CDC recommendation in 2017 (data not available for Franklin County).⁷⁰ In Franklin County, 19% of adults

reported they were getting no physical activity in their leisure time. This is similar to the state rate (20%) and slightly better than the national rate (22%).⁷¹

The CDC recommends that children and adolescents get 60 minutes of moderate or vigorous physical activity every day. In a survey of Franklin County/North Quabbin middle and high schools, about 1 in 5 (22%) of students reported meeting the CDC recommendation for daily physical activity. Fifty-six percent said they engaged in an hour of physical activity most, but not all, days. Not surprisingly, participation in sports teams helped young people increase their daily activity levels. Forty-six percent of students who played on three or more teams met the CDC recommendation, as compared to 18% of those who did not join teams.⁷²

Access to high-speed internet - access to a reliable and affordable broadband network can help to overcome some barriers of rurality and distance with regard to health care access as well as social determinants of health such as the ability to search for jobs, education, and social connection. There is a "digital divide" across the country, with rural areas, including the Baystate Franklin service area, less likely to have access to broadband than cities and suburbs, limiting their access to information, communication, participation in the digital economy, and use of telehealth services. ⁷³ According to a recent national survey of rural residents, 21% of rural adults said that accessing broadband is a problem for their households. ⁷⁴

About one in five Franklin County households (22%) did not have broadband in the 2013-2017 period, according to the latest U.S. Census American Community Survey data release. Access to broadband varied by income. One in ten households with an income over \$75,000 lacked a broadband internet subscription as compared to about a quarter (23%) of households with income of \$20,000-\$75,000, and almost half (46%) of household with an income under \$20,000 (US Census, ACS 2013-2017).

The region has a high-speed "middle mile" network which serves as the backbone to connect the "last mile" (the local system that connects subscriber homes and businesses) to the global network. The current challenge is with the last mile connection to those communities, residents, and businesses that still do not have broadband access. Thirteen Franklin County towns have cable TV broadband systems (with pockets of unserved areas), nine have DSL (Digital Subscriber Line through phone networks) within finite areas, one has its own wireless network, and one has its own fiber-to-the-home network. Two towns do not have broadband coverage. Last mile coverage is expanding with investments from local communities and grants from the state.⁷⁵

D. LACK OF RESOURCES TO MEET BASIC NEEDS

The lack of resources to meet basic needs continues to be a priority community health need in the Baystate Franklin service area. Income and health are inextricably linked. Higher income is associated with better health and longer life expectancy. Further down the income ladder, families have fewer resources to support good health. This is particularly true for those who lack the resources to meet basic needs and who regularly face trade-offs between buying food or medicine, or paying the rent or the gas bill. The impact of poverty goes beyond lack of resources. People with lower incomes are subject to the chronic stress of having little control while trying to make ends meet.

Beyond the income that employment provides, jobs affect health through workplace conditions, policies, and practices. Jobs may be physically demanding, unduly stressful, or entail hazards.⁷⁷ They may support health by providing benefits such as vacation, sick leave, and subsidized health care.⁷⁸ They may be family-friendly and offer predictable scheduling, or they may discriminate or provide a toxic atmosphere for classes of people.⁷⁹

In Franklin County, as in the state as a whole, two-thirds of the population aged 16 and older is in the labor force (US Census Bureau, ACS 2013-2017). The unemployment rate (the percentage of those 16 and older that are unemployed but seeking work) in Franklin County is 3%, on par with the state and down from a high of 10% in 2010. While this employment picture is positive overall, many residents of the Baystate Franklin service area have an income that falls short of what they need to cover basic expenses. In addition, women, children, and populations of color are disproportionately affected by low-income. For example, for every dollar white men earn, white women in Franklin County earn 83 cents, Latinas earn 46 cents, and black women earn 41 cents. 81

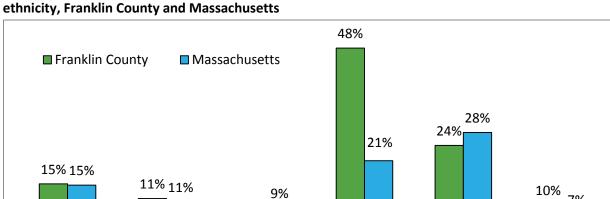
There are many ways to measure economic well-being. Common measures are median household income and percent of people who have an income that is below the federal poverty level.

- Median household income in Franklin County is about \$16,000 lower than the median income
 for the state as a whole, and the median income in the county's population centers is lower than
 the median income countywide (Figure 15).
- Children in Franklin County are more likely to live in poverty than adults, and adults aged 18-64 are more likely to live in poverty than seniors (Figure 16).
- The poverty rate for white residents of Franklin County is less than half that of Latinos and close to one-fifth of that of black residents. Due to the small number of blacks and Latinos living in Franklin County, there is substantial variability in these estimates, and they should be interpreted with caution. Nonetheless, under the most conservative estimate for the 2013-2017 period, the poverty rate for blacks in Franklin County was 33% and 17% for Latinos (Figure 16).

\$74,167 \$50,417 \$47,821 \$43,191 Athol Greenfield Montague Orange Franklin County Massachusetts

Figure 15. Median household income

Source: US Census Bureau ACS 2013-2017; Small Area Income and Poverty Estimates 2017



Black

Latino

by race and ethnicity

6%

age 65+

Figure 16. Percent of people with income at or below the poverty level, by age and by race and ethnicity. Franklin County and Massachusetts

Source: Source: US Census Bureau ACS 2013-2017

age 18-64

by age

age <18

White

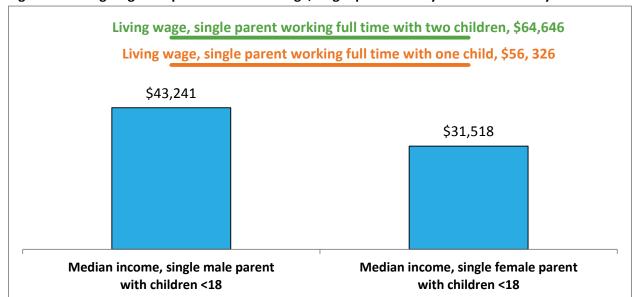


Figure 17. Living wage compared to median wage, single-parent family in Franklin County

Source: MIT Living Wage Calculator; US Census, ACS, 2013-2017

Some households in Franklin County are not making enough to cover basic expenses. The Massachusetts Institute of Technology (MIT) Living Wage Calculator (Calculator) compares what people actually earn to what is required to meet basic needs, including housing, transportation, food, child care, medical care, and other essentials. The Calculator provides specific estimates for households of different types and sizes in specific geographical areas. Income at living wage for a single-parent household in Franklin County shows that single-parent households in Franklin County typically make much less than a living wage (Figure 17). Median household income for a single father is about \$12,000 below living wage, and median household income for a single mother is about \$25,000 below living wage. As a point of comparison, single-parents who work full time at minimum wage earn \$22,880 over the course of a year, a fraction of the living wage.

Another way of gauging adequacy of income to meet basic needs is to consider how household income compares to the poverty level. Using the Calculator as a guide, an income at 100% of the poverty level is insufficient to meet needs for any size household. People with incomes at this level may be able to access federal and state assistance for essentials such as housing, food, and health care. With incomes at 200% of the poverty level, some households come close to meeting their basic needs, though they also lose eligibility for government benefits. Many households need to earn 300% of the poverty level to make ends meet (namely, single-parent families, or families with two parents working who have to pay for childcare).

Poverty rates are similar in Franklin County, North Quabbin, and the state as a whole (Figure 18, red bars). About one-third of households with incomes at 200% of the poverty level (orange bars) to nearing two-thirds of households at 300% of the poverty level (yellow bars), are struggling to meet basic needs (Figure 18).

When household income is too low to meet basic needs, challenges interact and compound. In 2019, the CHCFC screened patients for deficits in social determinants of health. Of the 160 patients screened, 65 were MassHealth recipients, representing a lower income population. Of the MassHealth recipients:⁸³

- 65% reported food insecurity (versus 5% for the 61 CHCFC patients with private insurance who were screened)
- 27% had employment issues (versus 3% of those with private insurance)
- 23% reported unsafe housing (versus 16% of those with private insurance)
- 12% were worried about losing their housing (versus 0% of those with private insurance)
- 23% said utilities were unaffordable (versus 3% of those with private insurance)
- 31% had challenges with transportation for non-medical reasons (versus 0% of those with private insurance)

■ 300% FPL (sufficient to meet basic needs) ■ 200% FPL (threshold for benefits) ■ 100% federal poverty level 59% 51% 51% 50% 50% 45% 41% 36% 35% 32% 31% 31% 29% 15% 15% 13% 12% 10% 11% Athol Greenfield Montague Orange Franklin North MA County Quabbin

Figure 18. Percent of people with incomes below 100%, 200% and 300% of the poverty level

Source: US Census Bureau ACS 2013-2017

E. EDUCATIONAL NEEDS

Educational needs are a community health need in 2019 in the Baystate Franklin service area. Education is a path to good health. People with higher levels of educational attainment tend to have better health and live longer than those with less education. The Robert Wood Johnson Foundation identifies three interconnected pathways through which education influences health:

- 1. Education affects employment and income, working conditions, benefits, and degree of control and stress on the job.
- 2. Education can increase knowledge, problem-solving, and coping skills, enabling people to make better-informed choices about health behaviors and medical care.
- 3. Education provides social and psychological benefits that can reduce stress, shape health behaviors, and provide practical and emotional support. 84

Educational opportunities in the United States are not and have never been equitably distributed. Historically, people who were enslaved were forbidden to learn how to read or write, and Jim Crow laws required schools to be racially segregated, causing the descendants of slaves to be educated in substandard schools. While no longer legally mandated, racial segregation in schools persists today, with huge disparities in funding between schools that serve communities that are predominately white and those that serve communities with people of color in the majority. Even when students of color attend integrated schools, they can be held back by racial biases in teacher expectations, by an unwelcoming school climate, or by discipline policies that are unevenly applied. Because most funding for public schools comes from local property taxes, schools in lower-income communities tend to be under-resourced when compared to schools in wealthier neighborhoods. Schools in rural areas like Franklin County and North Quabbin have the additional challenge of serving a small, dispersed, and declining population, so per pupil costs are higher than in cities and suburbs. In Massachusetts in 2016, rural districts spent \$18,678 per in-district student, compared to \$16,692 in non-rural districts.

Overall, the percent of adults in the Baystate Franklin service area aged 25 and over who have graduated from high school is comparable to or higher than national and state rates. The percent of adults with a college degree in Franklin County is lower than the percent in Massachusetts, but high compared to the nation (31%). Educational attainment varies by race and ethnicity locally, as it does elsewhere in the country, though estimates shown here for blacks and Latinos should be interpreted with caution because they are based on small numbers.

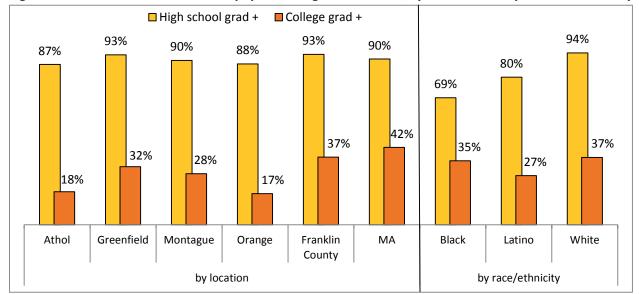


Figure 19. Educational attainment of population age 25 and over, by location and by race and ethnicity

Source: US Census Department, ACS 2013-2017

In the Baystate Franklin service area, eleven public school districts served more than 8,500 students in the 2018-2019 school year. As noted in the Methodology to this report, the school-aged population has more racial and ethnic diversity than the population as a whole. Sixteen percent of students in local public schools identify as Latino, a race other than white, or more than one race, with a greater proportion of students of color in Greenfield (28%), Gill-Montague (20%) and R.C. Mahar (17%) school districts.⁸⁹

Compared to students across the state, a higher percentage of local students are economically disadvantaged (40% versus 31%) or have disabilities (22% versus 18%). Students who speak a first language other than English represent a small (4%) but growing share of the local student population, notably in Greenfield, where 10% of students have a first language that is not English. ⁹⁰ These factors add to the challenges and costs for local schools.

School climate and student connectedness to the school community are key contributors to student well-being and academic success. On a 2017 student survey, 72% of local middle and high school students said they felt a part of the school, and 75% said they had an adult they could talk with at school. These are strong majorities, but it also means that about a quarter of students do not feel well connected to school. Feelings of belonging are not equally shared among all groups, with white, higher income, and heterosexual students agreeing that they "feel a part of the school" more often than students of color, those with lower incomes, and GLBQ+ students (Figure 20).

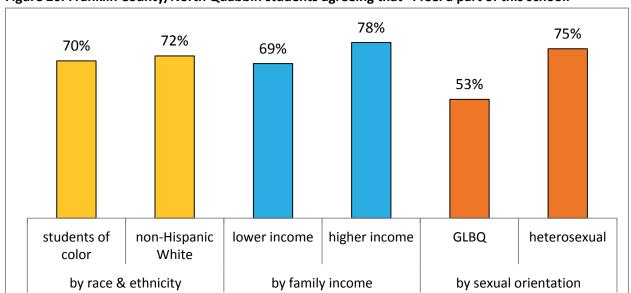


Figure 20. Franklin County/North Quabbin students agreeing that "I feel a part of this school."

Source: 2017 Franklin County/North Quabbin Teen Health Survey

One component of school climate is discipline policy. Each year schools report to the state on the number of students disciplined with in- and out-of-school suspension, expulsion, removal to an alternate setting, or emergency removal. A larger proportion of students in the Franklin County/North Quabbin area were disciplined compared to the state in the 2017-2018 school year. Black and Latino students were disciplined more often than their white counterparts, as were students with disabilities and those who are economically disadvantaged (Figure 21).

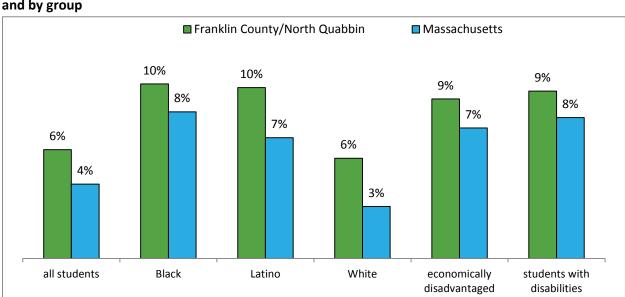


Figure 21. Percent of students disciplined, Franklin County/North Quabbin and Massachusetts, overall and by group

Source: DESE School and District Profiles

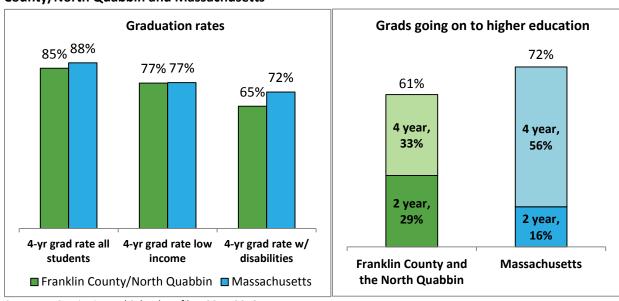
In a focus group with young people of color from Franklin County, students said they felt they were treated differently from white students. For example, they felt the dress code was more strictly enforced for them than for white students. They felt that staff sometimes violated their personal space, for instance by tugging off a hood rather than asking the student to remove it. White students confirmed that enforcement seemed stricter for students of color than for themselves.

Local schools are increasingly recognizing that many of their students have been exposed to trauma, and they are coming to understand the ways in which trauma can affect student behavior and learning. (Trauma is addressed in the section on violence below). District and regional initiatives are taking steps to address trauma and student well-being by integrating social-emotional learning into the curriculum, and by working to build a safe and welcoming school environment. One such step involves greater use of restorative justice, an approach to conflict resolution that focuses on repairing harm and building community, rather than on punishing and excluding students who have violated rules.

Graduation rates and high school graduates moving on to higher education are two other indicators of educational attainment. In Franklin County and North Quabbin, 85% of students complete high school within four years. Graduation rates are lower for students from low-income families (77%), and students with disabilities (65%). About two-thirds, or 61%, of graduates go on to college right after high school, compared to 72% statewide (Figure 22).

Of students who matriculate at GCC, 36% of full-time students and 48% of part-time students drop out during their first year or do not return for a second year. Staying in school can be an economic challenge. As noted above, many GCC students experience a degree of housing insecurity (48%) and food insecurity (35%). 93

Figure 22. Four-year graduation rate and percent of graduates attending higher education, Franklin County/North Quabbin and Massachusetts



Source: DESE District and School Profiles, 2017-2018

F. VIOLENCE AND TRAUMA

Interpersonal violence and self-harm are health concerns in the Baystate Franklin service area. Violence affects health both directly, by causing physical injury and death, and indirectly through its impact on mental health. Violence has been linked to post-traumatic stress disorder (PTSD), anxiety, depression, unhealthy coping behaviors such as drug and alcohol use and addiction, chronic disease, and injury to sexual and reproductive health. ⁹⁴ The landmark Adverse Childhood Experiences (ACEs) study documents how children exposed to violence are at increased risk of physical and mental health problems throughout their lives. ⁹⁵ Not only victims of violence, but family, friends, and surrounding communities can suffer its effects. Violence is increasingly being viewed as a public health issue, rather than a matter to be addressed through police action and incarceration. ⁹⁶

Trauma is an emotional response to an event or an experience that is deeply distressing. Trauma is considered "complex" if the exposure happens repeatedly and with cumulative effects, as in the case of a child subjected to abuse or neglect over a period of years. People react to disturbing events differently, and symptoms may be resolved quickly, or may last a lifetime. The impact of trauma can range from psychological, social, and behavioral problems to impaired health and even early death. 97

Intimate partner violence and dating violence - research suggests that intimate partner violence may be more prevalent and less frequently reported in rural areas than in urban areas. Poverty, lack of affordable housing, and distance from support can factor into reluctance to come forward. In addition, there may be concerns that confidentiality would not be maintained in a small town because many people know each other and a breach could mean even more abuse. 98

The volume of restraining orders filed provides some measure of domestic violence, though it is estimated that only one in five victims of intimate partner violence receives a restraining order. ⁹⁹ In the 2018 fiscal year, 422 restraining orders were filed in Greenfield District Court and 215 in Orange District Court. ¹⁰⁰ The rate of filing of restraining orders in Greenfield District Court was 43% higher than the state rate and the rate in Orange District Court was 46% higher than the state. ¹⁰¹ New England Learning Center for Women in Transition (NELCWIT), the sexual and domestic violence crisis center of Franklin County and North Quabbin, received 2,242 calls on its crisis hotline in FY 2018. ¹⁰²

According to a 2014 report from the Governor's Council to Address Sexual and Domestic Violence, groups that are particularly likely to be victims of domestic or sexual violence are people with disabilities, immigrants, and people who identify as lesbian, gay, bisexual or transgender. ¹⁰³

Youth are not immune to domestic violence. Of Franklin County/North Quabbin middle and high school students who have dated, 7% said they had been physically hurt by a date, and 7% said they had been forced into sexual activity by a date.72 Students identifying as "gay, lesbian, bisexual, or not sure" experienced the highest rates of harm from a date. Fifteen percent said they had been physically hurt by a date, and 14% said they were forced into sexual activity by a date (Figure 23).

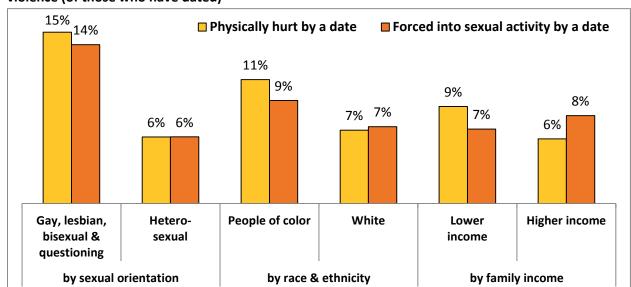


Figure 23. Percent of local middle and high school students reporting they have experienced dating violence (of those who have dated)

Source: 2016 Franklin County/North Quabbin Teen Health Survey

Child abuse and neglect - the Massachusetts Department of Children and Families (DCF) disclosed that in the last quarter of 2018 in Greenfield, where Franklin County reports are filed, over 443 reports of child abuse or neglect were filed and screened in for investigation. Of these, 36% were supported (immediate danger to the child), and an additional 16% posed substantiated concern (potential for abuse, but danger to child not immediate), with both categories requiring DCF intervention. At the end of 2018, a total of 2,705 people (1,226 children under 18 years old, 355 youth 18+, and 1,410 adults) had open cases with the Greenfield DCF office. Parental substance misuse is the most frequent reason for reporting to DCF (36% in 2017), followed by physical abuse (16%), and domestic violence (16%).

Sexual abuse of youth is also a concern in the Baystate Franklin service area. The Children's Advocacy Center of Franklin County and North Quabbin (CAC), which provides a child-friendly setting for forensic interviews of children who have been abused, interviewed 93 children in 2017, its first year of operation. Sixty-five percent of the allegations in these cases were related to sexual abuse. In 2016, 8% of local middle and high school students surveyed reported that someone had sexual contact with them against their will, and 5% said they had been forced into sexual intercourse (Franklin County / North Quabbin Teen Health Survey). Responses varied by group, with the highest rates evident among students who identify as gay, lesbian, bisexual, or not sure (Figure 24).

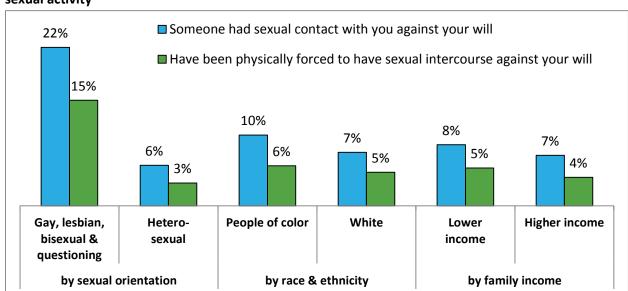


Figure 24. Percent of local middle and high school students reporting they have been forced into sexual activity

Source: 2016 Franklin County/North Quabbin Teen Health Survey

"Intercept Zero," a project undertaken by the Franklin County Resource Network's Policy Council and the Opioid Task Force in 2017-2018 to trace the roots of the opioid epidemic to potential early points of intervention, identified childhood abuse and trauma as common seeds of disrupted lives. These factors, especially if magnified by poverty and family instability, may lead to a path that starts with self-medication and evolves into a substance use disorder. The report concluded that becoming a more trauma-informed community is a vital step toward reducing substance use and mental health disorders.

People who have been traumatized as children often struggle with parenting skills. While most parents who experienced abuse as children do not in turn abuse their children, they are at increased risk of doing so.¹⁰⁷ They may need extra parenting support, and such support is in short supply in the region.¹⁰⁸

"We see trauma and re-traumatization. When you can't get housing, that's traumatizing. When your kids are taken away, that's traumatizing. It's a generational problem for most of our clients."

Key Informant Interview, Franklin County House of Corrections Reentry Team

Elder abuse and neglect – nationally about one in ten older adults experiences some type of physical abuse, psychological or verbal abuse, sexual abuse, financial exploitation, or neglect each year. ¹⁰⁹ Most of these cases are never reported to Adult Protective Services.

The Massachusetts Executive Office of Elder Affairs reported 9,779 confirmed abuse and neglect cases statewide in 2018, up from 6,831 in 2014, a 43% increase. In 2018, 44% of these cases involved self-neglect (nationally, the most common reason for reporting to Adult Protective Services). The remaining cases involved neglect (19%), financial abuse (13%), emotional abuse (13%), physical abuse (10%), and sexual abuse (1%). In 2018, LifePath, the Franklin County Area Aging Services Access Point where reports of abuse and neglect are filed, investigated 907 reports of abuse and neglect.

Youth violence – as shown above, young people may be victims of violence or witnesses to violence in the larger world. They may also be involved in violence among their peers as perpetrators, victims, or both. Bullying involves repeated aggression or intimidation that can include physical, verbal, or relational/social violence by someone in a position of more power. In 2016, 20% of Franklin County/North Quabbin middle and high school students said they had been bullied in the past year.

Socially isolated students and students who are perceived as being different from their peers are at heightened risk for bullying. ¹¹⁵ Locally, one in five middle and high school students reports being bullied, and Figure 25 shows that some groups of students are more likely to be targets. The good news is that bullying behavior tends to abate as students mature, as indicated by the decrease from 8th to 10th to 12th grade.

Self-harm – over the past 20 years, suicide rates have been rising across the nation. ¹¹⁶ In the Northeast, suicide is the second leading cause of death among 15-35 year olds, after unintentional injury, ¹¹⁷ and it is far more common in rural areas than in cities. ¹¹⁸ In Massachusetts, suicide rates are lower than national rates, but also rising. ¹¹⁹ According to the latest data available, there were 29 suicide deaths in Franklin County in 2013-2015 (MDPH Vital Statistics). In 2016, 15% of Franklin County/North Quabbin middle and high school students said they had seriously considered suicide in the past 12 months. Figure 26 shows how suicidality among students varies by group.

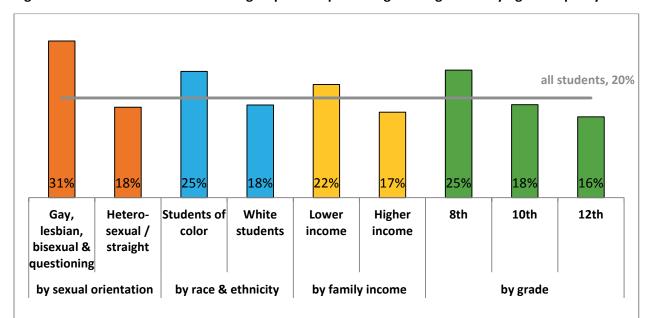
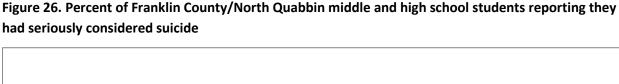
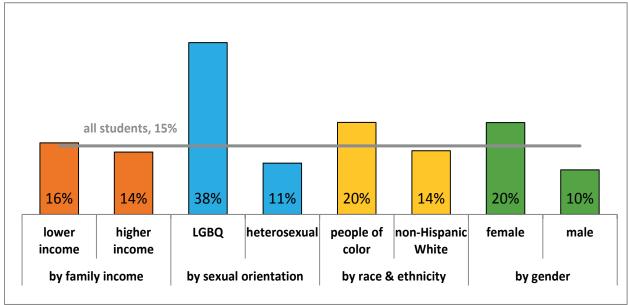


Figure 25. Percent of students in each group who report being the target of bullying in the past year

Source: 2016 Franklin County/North Quabbin Teen Health Survey





Source: 2016 Franklin County/North Quabbin Teen Health Survey

2. Barriers to Accessing Quality Health Care

The following barriers to accessing health care were prioritized needs in the 2016 CHNA and continue to be needs today:

- Limited availability of providers
- Lack of care coordination
- Insurance and health care related challenges
- Need for increased culturally humility
- Need for transportation
- Health literacy and language barriers

A. LIMITED AVAILABILITY OF PROVIDERS

"I can't find a doctor and I've been looking a year. No one's accepting new patients."

Focus Group Participant, Focus group of Rural Food Pantry Users, Charlemont

Qualitative and quantitative data both point to the fact that Franklin County and North Quabbin do not have enough primary care providers, specialists, and dentists to meet local need. Table 3 shows that Franklin County has fewer providers per resident than the state as a whole for primary care and dentistry. The U.S. Health Resources and Services Administration has designated all of North Quabbin and much of Franklin County a Health Care Professional Shortage Area. The region is also considered "medically underserved," a designation based on a shortage of primary care providers, high infant mortality, high poverty, or a high elderly population. Apart from the regional shortages of providers, the shortage is particularly acute in the public service sector at the community health centers, and among providers who accept MassHealth.

"It's a struggle to recruit and staff the health center. Loan reimbursement can help attract doctors, but not nurses, dental assistants, etc. What can we do to make this a destination career?" Key Informant Interview, Community Health Center of Franklin County

Table 3. Population to provider ratios

	Franklin County	Massachusetts
Primary care	1280:1	960:1
Dentists	1410:1	990:1
Mental health providers	130:1	180:1

Source: Robert Woods Johnson Foundation, County Health Rankings

The Massachusetts Office of Rural Health reports that of the fourteen counties in the state, Franklin County has the fewest dentists and the second fewest dental hygienists per capita. The office tracks health in six clusters of rural towns across the state, including West Franklin and North Quabbin. Less than 2% of the state's dentists practice in these rural areas, and they tend to be older (and closer to retirement) than dentists who practice in urban or suburban areas. Sixty-one percent of dentists in the rural clusters are age 55 or older, compared to 39% of dentists statewide. The shortage of dentists is particularly acute for adults with MassHealth. While several area dentists accept MassHealth for their pediatric patients, fewer treat adults with MassHealth. In dentistry, the shortage of dental specialists is even more acute than the shortage of providers for basic dental care.

"We have one oral surgeon in the region, which is nowhere close to enough, and he is about to retire, and when he does we are going to have an absolute crisis."

Key Informant Interview, Community Health Center of Franklin County

Despite the favorable population to provider ratio for mental health, there was a consensus in key informant interviews and focus groups that the need for mental health care exceeds the current capacity of the system. Public health officials noted a shortage of psychiatric prescribers. School staff reported that mental health needs of students are growing, adding to the workload of counselors and mental health providers in schools who are already overextended.

"There are fewer adjustment counselors at schools. Kids with IEPs [Individualized Education Program plans for students eligible for special education] are not meeting with counselors as they're mandated to. And now we manage kids in school that used to be residential care. A handful of students can disrupt the whole ecosystem of a school."

Community Chat, Regional School Health Task Force of the Communities That Care Coalition of Franklin County and North Quabbin

In interviews and focus groups, participants pointed to gaps between the mental health expertise available and the expertise needed, notably for survivors of trauma, for child victims of sexual abuse, for youth substance misuse, and for residents with both mental health and substance use disorders. Some pointed to a mismatch between the demographics of mental health providers and the demographics of people seeking services, including people whose first language isn't English and transgender and gender nonconforming people.

"There's an epidemic of dual diagnosis, and there's a terrible lack of treatment for it."

Focus Group Participant, Focus Group of People Experiencing Homelessness, Greenfield

"The minute the community knows of a Spanish speaking clinician, they come looking for this person..."

Focus Group Participant, Children's Advocacy Center Community Needs Assessment Focus Group with Providers

"It's hard to get the services they need in the mental health system. There's high turnover, low pay, and the
environment is difficult. It's hard to find therapists for children."
Focus Group Participant, Children's Advocacy Center
Community Needs Assessment Focus Group with Law Enforcement and Child Protection

Participants of interviews and focus groups also noted shortages of specialists in the area, especially specialists who will take MassHealth, so that residents must go to Springfield for specialty care. Providers said that one consequence of the shortage of specialists, like dental specialists, dermatologists, or psychiatrists, is that primary care providers are pressed to work and prescribe outside their comfort zones.

Focus group participants commented on long wait times for care, and were disappointed they could not get in to see their own primary care providers because those providers were so tightly scheduled. When shortages mean long wait times and people feel some urgency about having their issues addressed, they may seek care in the emergency department. Key informant interviewees in administrative roles confirmed that these kinds of barriers result in higher utilization of emergency department services and drive up healthcare costs.

B. LACK OF CARE COORDINATION

"Structures of power get in the way. It's not a lack of resources, it's isolation of systems."

Key Informant Interview, Public Health Official

Care coordination involves deliberately organizing patient care activities and sharing information among all of the participants concerned with a patient's care to achieve safer and more effective care. Those interviewed for this CHNA went beyond advocating for coordination of individuals care and called for one-stop shopping and consolidation of services. Many noted the need for the traditionally separate strands of health care to be integrated, including medicine, behavioral health, dental health, and social services.

"We need release waivers so we can get communication among community providers, schools, and DCF. When we have a kid in our program, we can't call the school and say, here's what we're seeing, here's what's working, what's not – and the school can't call us. We can't coordinate. So much stuff is falling through the cracks. [There are] so many collective approaches we could have together."

Key Informant Interview, Franklin/Hampshire Systems of Care Collaborative

Interviewees called for tighter connections between public health, community providers, and the hospital. Suggestions for ways in which the hospital could engage the community and use its influence on behalf of the community included:

- attracting and recruiting specialists
- funding a common electronic health record
- ensuring hospital staff make use of Look4Help, the local database of non-medical supports for resident
- providing a clearinghouse for best practices
- closely collaborating with CHCFC, which has deep expertise and experience with the area's priority populations
- putting political pressure on the state to strengthen the public health system

The Franklin County House of Corrections Reentry Team described the impact of the lack of coordination on their clients, many of whom have histories of trauma and mental health and substance use disorders. Clients have intense wrap-around support in jail, but that level of support doesn't follow them into the community. When they seek services upon reentry to the community, they may have to go to multiple providers—telling their story each time—and each retelling involves some degree of re-experiencing the trauma. The Reentry Team said that a barrier to providing their clients a "warm handoff" to providers in the community is that therapists from the community cannot bill for treating clients in jail and establish a relationship before they are released.

"We need warm handoffs. Our clients have chronic anxiety, depression, and have experienced trauma. We say to them, 'When you get out of here, you're going to talk to some new people and they're going to help you.' Of course they're not going to go! The way we've created transitions is not suited to the clients. We should start from the assumption that they're not going to go." Key Informant Interview, Franklin County House of Corrections Reentry Team

The lack of coordination is often evident at points of transition, especially if a person moves out of a program without a clear next step. The opioid crisis highlighted this issue when it became clear that sending people home after detoxification was not effective treatment and that services were needed at different levels of care.

> "There's not enough follow up to mental health and substance use care. When you're discharged from a program, it's hard to get the meds you need."

Focus Group Participant, Focus Group of People Experiencing Homelessness, Greenfield

lt would be great if we had naturally flowing levels of care. Step downs, with direct partnerships instead of" hoping, hoping. Now it's all reliant on an incredible amount of effort and resourcefulness." Key Informant Interview, Franklin County House of Corrections Reentry Team

Participants in the focus group of transgender and gender nonconforming people described how information about trans-friendly providers is spread through informal networks and not easy to access, especially for people new to the area. They called for a single place, a hub they could go to for information about providers, services, and activities.

"Resources are so fragmented. I've seen at least three separately compiled documents made by different groups that list all the trans-friendly providers in the area, with 90% overlap, but people at three different organizations had to painstakingly put these together separately and then give them to, like, the five people they interact with."

Focus Group Participant, Focus Group of Transgender, Non-binary, and Gender Nonconforming People

C. INSURANCE AND HEALTH CARE RELATED CHALLENGES

While 97% of residents of the Baystate Franklin service area are covered by health insurance (US Census Bureau, ACS 2013-2017), many continue to have difficulty accessing quality health care services, and recognize this as a priority community health need. Some cannot find providers in the area who take their insurance. Some choose to skip care because of trade-offs between paying for deductibles and copays and other necessities. Many are put off by difficulties navigating the health care and insurance systems. Some find that insurance rules prevent them from accessing services they need.

In Massachusetts in 2017, 35% of children and 22% of adults age 19-64 were covered by MassHealth, but not all providers accept MassHealth patients. ¹²² Compared to other forms of insurance, MassHealth has lower reimbursement rates and more bureaucratic requirements, frustrating provider and patient alike. ¹²³ This creates an extra shortage of providers for people with MassHealth (on top of the general shortage discussed above), especially in the rural areas.

Social service providers interviewed said that an exception to this rule is in behavioral health for children, due to the MassHealth Children's Behavioral Health Initiative (CBHI). The CBHI has expanded access to behavioral health care for children who have MassHealth, with the result that behavioral health is now more available to children with MassHealth than to children with private insurance.

Even with insurance, costs can be prohibitive. The Affordable Care Act has reduced the number of people without insurance, but in the past decade, the number of underinsured has grown. In a 2018 national survey, 35% of adults aged 19-64 said they had chosen not to visit a doctor when they were sick, did not fill a prescription, or did not receive recommended follow-up care because of out-of-pocket costs. ¹²⁴ Underinsurance is an issue locally as well. As shown in the previous section on social determinants of health, many of the region's residents do not earn a livable wage, and do not have an income that allows them to avoid trade-offs among needs. A survey conducted by the Center for Self-Reliance Food Pantry in Greenfield found that 75% of food pantry users had to choose between buying food and paying for other essentials. ¹²⁵ In that context, a \$250 deductible or even a \$20.00 copay can feel prohibitively expensive, and people go without care.

In a Community Chat in North Quabbin, participants drew attention to "the cliff" when people lose eligibility for MassHealth and other benefits when their income rises above those thresholds, but not high enough to meet basic needs. The Massachusetts Health Policy Commission reported that in 2017, people with employer-based insurance whose incomes were between 139% and 299% of the federal poverty level spent approximately one-third of their total income on health care, including premium spending, out-of-pocket spending, and taxes to fund state and federal health care programs. ¹²⁶

"We have a broken health care system. Those who most need stable services are the least likely to get them."

Key Informant Interview, Faith Community Leaders, Franklin County

Frustrations with insurance and the medical care system were voiced over and over in focus groups and interviews, ranging from fundamental critiques to exasperation with paperwork and endless phone menus. Providers noted that insurance does not pay for some measures that would improve patient care and save money, such as hiring community health workers or using telehealth. In addition, the system creates incentives that lead to unintended and undesirable results. For example, in an interview with providers, one participant stated that some providers put off seeing patients with high deductible plans until the end of the year when the deductible is most likely paid.

"Fee for service and medical models are not equipped to deal with the enormity of people's problems."

Key Informant Interview, Baystate Franklin Director of Population Health

Focus group participants were looking for a central place to go for information or people who know the system to help them navigate its parts. At Baystate Franklin, Community Action of Pioneer Valley, and the CHCFC, Certified Application Counselors are available to help residents with insurance coverage challenges. These counselors report that their clients find the applications for MassHealth and Connector Care perplexing and overwhelming. Applicants may struggle to answer questions appropriately (for example, guessing about what their income will be) or avoid going online to apply altogether. Once they acquire insurance, they may lose it if they don't keep their information up to date, for instance by neglecting to give notification of changes in family status or employment.

"Referrals can get complicated, confusing. You get frustrated and you go without care."

Focus Group Participant, Focus group of Rural Food Pantry Users, Charlemont

D. NEED FOR INCREASED CULTURALLY HUMILITY

Cultural humility refers to a commitment among health care and social service providers to self-reflection (fully understanding their own identities, perspectives, power, and prejudices) and openness to their patients' identities in a way that acknowledges that the patients are the experts on their own experiences. The aim is to reduce the power imbalance between patients and providers, and to develop care partnerships that are based on mutual respect and equality.¹²⁷

Interviews and focus groups identified cultural differences between people in the community and providers as an issue that affects quality of care. While the vast majority of providers are committed to treating all patients equally and treating them well, racism and other forms of discrimination are so ingrained in our systems that good intentions are not enough to ensure equitable care. Issues of cultural humility arise with respect to race, ethnicity, socioeconomic status, and stigmatized groups such as people with mental health or substance use disorders, people experiencing homelessness, transgender or gender nonconforming people, or people involved in the criminal legal system.

"I had a phobia of seeking medical treatment because of how I've been treated because of my addiction and mental health diagnosis. I have a history of going to emergency departments and not being listened to, being discriminated against."

Focus Group Participant, Focus Group of People Experiencing Homelessness, Greenfield

Focus group participants called out two main ways to address these issues, with the best way being to recruit a diverse group of providers that reflects the population served. Short of that, and important in any case, is training and experience for all providers to be ready to work with all kinds of patients. Focus group participants said it is especially important for mental health providers to reflect the communities that are seeking care or be highly knowledgeable and sensitive to their needs.

Participants in the focus group of transgender and gender nonconforming people were outspoken about the lack of cultural humility they experienced in the health care system. They gravitated to the small handful of providers they felt were knowledgeable and sensitive. In addition, they speculated that other providers use the presence of trans-friendly providers in the community as an excuse to not become informed themselves. They made clear that they expected medical providers to meet a higher bar for trans-competence than the general public meets and said that patients should not need to be in the position of educating their medical providers.

In other focus groups, participants described experiences when they felt they had not been listened to or had not been treated respectfully because they were homeless or poor, or because they had a mental health or substance use disorder.

"I worry that a history in the mental health system can affect how you're treated in the medical system. You say something's going on and they say, 'It's just in your head."

Focus Group Participant, Focus Group of Transgender, Non-binary, and Gender Nonconforming People

E. NEED FOR TRANSPORTATION

As discussed in the section above on transportation as a social determinant of health, lack of transportation options limit local residents in many ways, including in accessing health care.

Residents of the smaller towns have to travel some distance to get to care, or even to pick up a prescription. At the focus group of rural food pantry users, participants said they drive, carpool, take the bus - and wait around until they can catch a bus home - to get to appointments. They mentioned that MassHealth members can get a PT-1 (Prescription for Transportation) voucher for transportation to a scheduled MassHealth-covered service and noted that option was not available to those just above the MassHealth threshold. The focus group participants were looking not only for ways to get into town for care, but ways for services to come out to them, such as mobile clinics, pharmacy delivery, telehealth, or "anything mobile," as one participant put it. One public health official agreed he would like see health care go mobile, with hospital vans going out to the rural towns, with partnerships with Emergency

Medical Services to do wellness checks, and with a good supply of community health workers to meet people where they are.

"You can get prescriptions by mail for maintenance drugs. But you can't get prescriptions that way for acute needs. The doctor calls in a prescription. How are you going to get into Greenfield to get it?"

Focus Group Participant, Focus group of Rural Food Pantry Users, Charlemont

Transportation can be a barrier for residents of the population centers, too, especially when services are not available locally. For example, Greenfield has limited capacity to treat patients with methadone, so residents of towns near Greenfield needing methadone have to travel to Springfield daily. A trip on the bus can take up much of a day, with changes in bus lines in both directions. And, as noted above, visits to specialists of all kinds often entail a trip to Springfield.

F. HEALTH LITERACY AND LANGUAGE BARRIERS

The CDC defines health literacy as "the degree to which individuals have the capacity to obtain, process, and understand basic health information and services needed to make appropriate health decisions.¹²⁸ People need information on health conditions and on services available, and they need to be equipped to advocate accessing the information and services they need.

The issue arose as a need in the Baystate Franklin service area both in the doctor's office and in the community. Patients need to understand what their providers tell them about their health, as well as be able to give informed consent and manage medications and home care appropriately. That said, on average, Americans spend one hour a year in the doctor's office or a hospital and they access the majority of health information in their homes and communities. Health care providers and community organizations should be mindful that while the vast majority of the area's adult population has a high school degree and more than half have studied in college, some patients will not have had that level of education. Seven percent of Franklin County residents are not high school graduates and 2% have less than a 9th grade education.

The area's non-English speaking population is small but growing, and in need of translation to make use of health care services. Seven percent of Franklin County households speak a language other than English at home and 2% speak English less than "very well" (US Census Bureau, ACS 2013-2017). At Baystate Franklin from 2015-2018, 2% of patients spoke a language other than English, and at the CHCFC, 4% were best served in a language other than English. CHCFC staff expressed particular concern about the migrant agricultural worker population in the area and estimated there were close to 2,000 of them in Franklin County. The CHCFC treats about 300 of these seasonal workers annually and has found that they face barriers of language and insurance, are unfamiliar with our system, and are not in a position to advocate for themselves. In addition, the CAC identified an urgent need for Moldovan child mental health providers.

3. Health Conditions and Behaviors

This section addresses the priority health conditions in the Baystate Franklin service area:

- Mental health and substance use
- Chronic health conditions of obesity, cardiovascular disease, diabetes, respiratory disease, and cancer
- Infant and perinatal health, including low birth weight, preterm birth, teen birth, utilization of prenatal care, smoking during pregnancy, and neonatal abstinence syndrome

RATES AND REPORTING ON RACE/ETHNICITY

In this section, many of the charts show rates of disease or hospitalizations per 100,000 people in a given time period. A rate compares the number of cases of a particular condition to the size of the population in a given group. Rates provide a means to compare one group of people to another to determine whether some groups are at greater risk of an outcome, like being hospitalized for asthma, or developing cancer. In this section, charts compare hospitalization rates for different conditions by county, and where available, by race and ethnicity.

As noted in the limitations and information gaps section in the methodology to this assessment, because the number of people of color living in the Baystate Franklin service area is small, it is often not possible to report on health conditions by race and ethnicity. When numbers of cases are small, the MDPH withholds data from published reports to protect confidentiality. In addition, when numbers are sufficient to be reported, estimates may be unstable, with large margins of error. In the section on health conditions below, when estimates with large margins of error are reported, the text will note that they should be interpreted with caution.

A. MENTAL HEALTH AND SUBSTANCE USE

Mental health and substance use were identified as priority health needs in the 2016 Baystate Franklin CHNA, and they continue to be priority needs in 2019. Public health officials, key informant interviewees, and focus group participants consistently identified mental health and substance use as urgent issues for the region.

Mental Health

Mental health disorders are common. About a quarter of American adults live with a mental health disorder in any given year, and nearly half will have a mental health disorder sometime in their lives. ¹³⁰ Mental health is affected by the same social determinants that influence physical health, and mental health status varies by race, ethnicity, gender, sexual orientation, and geography.

On average, Franklin County residents reported they felt their mental health was not good on 4.5 days a month, close to the state's average of four days a month ("not good" can include stress, depression, and problems with emotions). Twelve percent of residents said they experienced poor mental health on 14 or more days in a month. Many participants in interviews and focus groups said they believed that a growing number of area residents were struggling with mental health conditions. At Baystate Franklin, emergency department visits by residents with a mental health diagnosis increased from 965 in 2015 to 1,117 in 2018 (a 16% increase), even though emergency department visits overall declined slightly. In 2012-2015, the Franklin County residents went to emergency departments for mental health issues at about the same rate as the overall state rate (Figure 27).

"Anxiety and depression have increased. It seems like everyone has some psychiatric diagnosis that needs managing."

Key Informant Interview, Community Health Center of Franklin County

At the same time, several mental health care professionals interviewed said they believed part of the increase was due to increased reporting, possibly reflecting greater awareness and somewhat reduced stigma around mental health issues.

"We're seeing more PTSD, including from dysfunctional families. We may be identifying it more than before. People see a behaviorist and things start to come out."

Key Informant Interview, Community Health Center of Franklin County

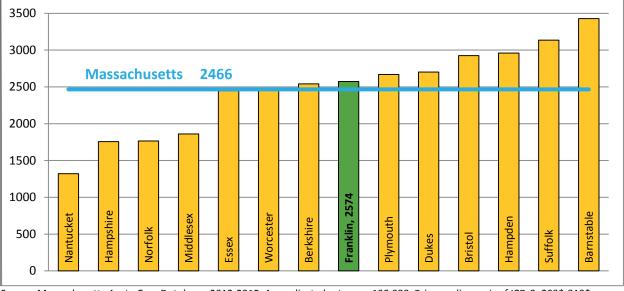


Figure 27. Mental health emergency department visits by county of residence in Massachusetts

Source: Massachusetts Acute Care Database, 2012-2015. Age-adjusted rates per 100,000. Primary diagnosis of ICD-9: 290*-319*

Mental health disorders affect people of all ages in Franklin County. The median age of Baystate Franklin patients with a mental health diagnosis was 39; half of all patients with a mental health diagnosis were

between age 30 through 60.¹³³ Medicare data indicate that about one- third of the region's residents age 65 and older has been diagnosed with depression and about one-quarter have been diagnosed with anxiety. The highest rates of depression among the elderly are in Greenfield (38%) and Montague (37%), and the lowest rates are in Ashfield, Buckland, and Conway (23%). The percent of the elderly who have been diagnosed with post-traumatic stress disorder is higher across the entire Baystate Franklin service area than it is statewide, with the highest rate in Greenfield (4.6% compared to the state's 1.8%).¹³⁴

Mental health is a rising concern for young people as well. Nationwide rates of depression have been increasing among teens in recent years, and particularly among teen girls. Similar trends are evident locally (Figure 28). Students who identify as lesbian, gay, bisexual, or questioning are at high risk for depression. In 2018, 72% of GLBQ+ youth had the risk factor "Depressive Symptoms," compared to 41% of their heterosexual peers.

52% female

34% male

31%

2003 2006 2009 2012 2015 2018

Figure 28. Percent of Franklin County and North Quabbin middle and high school students with risk factor "Depressive Symptoms" 1

Source: Franklin County/North Quabbin Teen Health Survey

Many key informant interviewees, focus group participants, school counselors, and teachers voiced concern about youth mental health, and particularly about depression and anxiety. Community Health Center staff confirmed they were seeing many children with behavioral health issues and saw the toll those issues took, not just on the child, but on the whole family. Youth focus group members said that life is stressful, with multiple demands of school, homework, chores at home, and for many, work. They added that cliques and social expectations can be stressful in school and that school doesn't help young people deal with their emotions.

¹ The risk factor "Depressive Symptoms" is a measure calculated from student responses to four questions in the research-based Prevention Needs Assessment Survey. Questions include "In the past year, have you felt sad or depressed most days, even if you felt okay sometimes?" and "All in all, I am inclined to think that I am a failure."

"It's not good for your body to be so stressed out. You get panic attacks, anxiety. We see lots of it. I know so many people at school who have eating disorders or anxiety."

Focus Group Participant, Focus Group with Youth of Color, Greenfield

Substance Use

Substance use continues to be a priority health concern in the Baystate Franklin service area. Substance use disorder refers to the recurrent use of drugs or alcohol that result in health and social problems, disability, and inability to meet responsibilities at work, home, or school. Risk factors include age at first exposure, community and family norms, genetics, and a history of trauma. Substance use disorders put people at greater risk for a host of negative outcomes including disease, accidents, family disruption, job loss, and early death.

In 2012-2015, Franklin County residents went to the emergency department for substance use at a rate that was lower than the state average (Figure 29).

Figure 29. Emergency department visit rates per 100,000s for a substance use disorder (drugs and alcohol) by county in Massachusetts

Source: Massachusetts Acute Care Database, 2012-2015. Age-adjusted rates per 100,000. Primary diagnosis of ICD-9: 0702, 0703, 2652, 3575, 4255, 5353, 5723, 5733, 7607, 7795, 7903, 9650, 9685, 9701, 9773, 9800, 9801, 9802, 9808, 9809

At Baystate Franklin, about one in five (19%) area residents admitted to the hospital between 2015-2018 had a substance use disorder diagnosis (not necessarily the principal diagnosis or cause for admission, but a diagnosis in the record recognizing a substance use issue). Emergency department visits by residents with a substance use diagnosis increased from 932 in 2015 to 1,102 in 2018, with a spike to 1,707 in 2016.¹³⁵

Franklin County has a rate of excessive drinking like that of the state with about one in five adults reporting recent binge drinking. ¹³⁶ In Franklin County and North Quabbin, a higher percentage of people

aged 65 and over have been diagnosed with a drug or alcohol use disorder than in Massachusetts as a whole. The state rate is 6.6%, compared to 9.4% in Greenfield, 10.6% in Montague, and 8.4% in Orange and Athol. Substance use among youth in Franklin County and North Quabbin has decreased over the past 15 years (Figure 30). The reduction has been most dramatic among the youngest students surveyed, of critical importance because of the association between early onset of use and later addiction. Alcohol use among 8th graders has fallen by 73% from 2003 to 2018, marijuana use by 69%, and cigarette smoking by 88%.

alcohol

29%

marijuana

25%

21%

cigarettes

prescription drugs

3%

2003

2006

2009

2012

2015

2018

Figure 30. Trends in substance use among Franklin County and North Quabbin middle and high school students

Source: Franklin County/North Quabbin Teen Health Survey

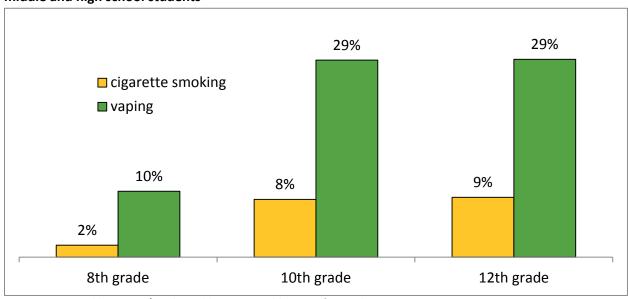
Despite legalization of medical marijuana in 2012 and recreational marijuana in 2016, local youth marijuana use has stayed remarkably steady. This is encouraging given the evidence that youth marijuana use is different from and riskier than adult use. Regular use of marijuana at a young age is potentially harmful to healthy brain development. ¹³⁸

Tobacco and nicotine - reductions in cigarette smoking are widely trumpeted as a public health victory, and yet the problem of tobacco and nicotine use persists, in part due to innovations in the products available and the marketing of them.

In Franklin County, 16% of adults smoke cigarettes, a rate slightly higher than the state rate of 14%.¹³⁹ The proportion of Franklin County adults age 60 and over who smoke is higher than the state average (12% versus 9%).¹⁴⁰ Youth are less likely to smoke than adults. In 2018, 6% of Franklin County/North Quabbin middle and high school students reported recent smoking.48

Vaping is three times more common than cigarette smoking among 10th and 12th graders and five times more common among 8th graders (Figure 31). As cigarette smoking has become increasingly unpopular among the area's youth in recent years, it has been entirely overtaken by the new phenomenon of vaping. Vaping involves inhaling the aerosol produced by an e-cigarette or similar device, and while many young people believe vaping to be harmless, almost all of these aerosols contain nicotine and other potentially harmful chemicals. While more research is needed to understand the full risks associated with vaping, it has become evident that teens are developing nicotine addictions from vaping, and those teens that vape are more likely to starting smoking combustible tobacco products than their non-vaping peers. Many adults remain largely unaware of this trend among youth, and many vaping devices are made to look like pens or USB memory sticks, allowing youth to keep their vaping concealed from unsuspecting adults.

Figure 31. Prevalence of vaping as compared to cigarette smoking, Franklin County/North Quabbin middle and high school students



Source: 2018 Franklin County/North Quabbin Teen Health Survey for youth

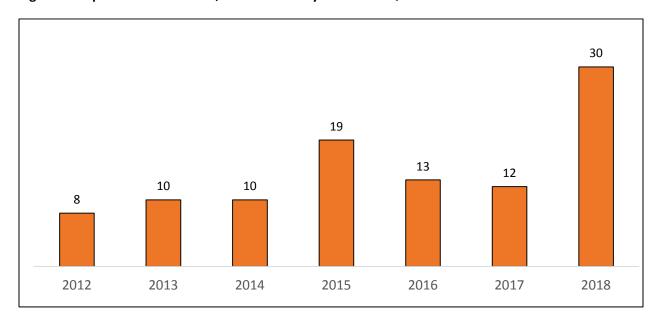


Figure 32. Opioid-related deaths, Franklin County and North Quabbin

Source: Opioid Task Force PowerPoint presentation May 22, 2019, based on data from NWDA and MDPH. 142,143 Some cases for 2017 and 2018 are still being confirmed by the Office of the Chief Medical Examiner

Opioids - in the past decade, opioid use in the Baystate Franklin service area has risen dramatically, with tragic results. In 2017, Massachusetts had the seventh highest opioid overdose death rate in the country - 28 per 100,000 people, up from 10 per 100,000 in 2011, and twice as high as the national rate. In Massachusetts in 2018, opioid overdoses accounted for 27% of all deaths among 15-24 year olds, 48% of all deaths of 25-34 year olds, and 35% of all deaths of 35-44 year olds. The powerful synthetic opioid fentanyl has been playing an expanding role in these deaths. In 2018, 89% of opioid overdose deaths in Massachusetts screened positive for fentanyl. In 2017-2018, the Massachusetts opioid death rate edged downward slightly, but deaths in Franklin County, along with the other counties of western Massachusetts, shot up, likely due to the increased presence of fentanyl. ¹⁴⁴

The rise in opioid use began early this decade and signs of the increase were evident in many corners of the community, including in hospitals, treatment facilities, police records, courts, jail, and social services. Opioid-related hospitalizations of Franklin County and North Quabbin region residents rose sharply between 2011 and 2015 (Figure 33). The number of ambulance trips due to probable opioid-related overdoses has trended upward in area towns (Figure 34). State Police drug cases rose from 2015 to 2018 (Figure 35). More than half of these cases involved opioids. As opioid use grew, residents of the Baystate Franklin service area increasingly sought treatment for opioid use disorder. Figure 36 shows what percent of those entering treatment said that opioids were the primary substance they were seeking treatment for.

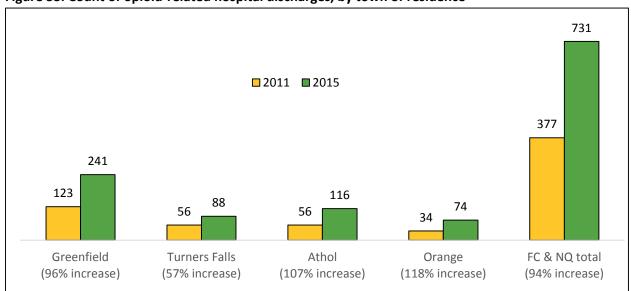
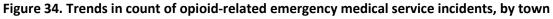
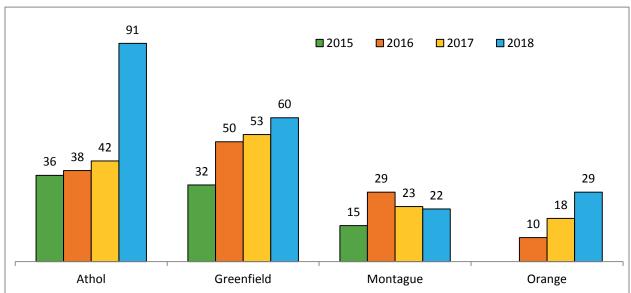


Figure 33. Count of opioid-related hospital discharges, by town of residence

Source: Massachusetts Health Policy Commission, 2011 and 2015





Source: Massachusetts Department of Health, 2015 - 2018^{145}

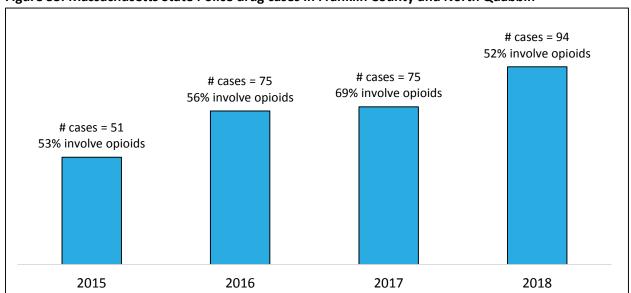


Figure 35. Massachusetts State Police drug cases in Franklin County and North Quabbin

Source: personal communication from Carol L. Fitzgerald, Research Analyst III, Massachusetts State Police. Each case may involve more than one person and/or more than one charge

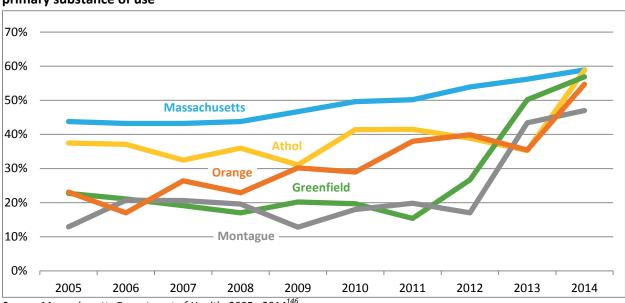


Figure 36. Trends in percent of admissions to substance use disorder treatment with opioids as primary substance of use

Source: Massachusetts Department of Health, 2005 - 2014¹⁴⁶

The opioid crisis incurs many costs – in lives, in families disrupted, in trauma passed to children, in lost productivity, in health care, in the courts and jails, in the social service sector, and more. The opioid crisis is estimated to cost the United States \$78.5 billion a year in health, productivity, and criminal justice costs.¹⁴⁷

The MDPH calculated a measure of burden on communities based on four factors: fatal overdoses, nonfatal overdoses, naloxone kits distributed, and neonatal abstinence syndrome cases. Athol, Greenfield, and Orange are in the top fifth of Massachusetts towns most burdened by the opioid epidemic. Montague is in the second fifth. Based on an analysis of local opioid mortality, health care costs, criminal justice costs, and worker productivity, the American Enterprise Institute estimated that in 2015 the opioid crisis cost \$257 per resident of Franklin County. The human cost cannot be quantified.

B. CHRONIC HEALTH CONDITIONS

A chronic health condition is one that persists over time and typically can be controlled but not cured. Chronic health conditions were identified as prioritized needs for Baystate Franklin service area residents for 2016 and continue to be prioritized in 2019. This section addresses the following issues that are leading causes of death and disability in Franklin County and North Quabbin: obesity, heart disease, diabetes, respiratory disease, and cancer.

Obesity

Obesity is a health condition that increases the risk of heart disease, stroke, diabetes, kidney disease, bone and joint problems, and other chronic diseases. Obesity is highly influenced by social determinants of health and it serves as a proxy measure for poor diet and limited physical activity. 150

In 2015, more than one out of every four (27%) of Franklin County adults were obese, a rate slightly higher than that of the state (24%). ¹⁵¹ In Massachusetts in 2015, 24% of white adults, 33% of Hispanic adults, and 38% of black adults were obese. ¹⁵² While data for groups within Franklin County and North Quabbin are not available, local rates of obesity likely vary by race, ethnicity, and socioeconomic status. An indicator of the impact of education on health (as shown above in the section on social determinants of health) is that 30% of adults who did not complete high school were obese, as compared to 16% of those with a college degree. ¹⁵³

Obesity in childhood is of particular concern. It increases risks of immediate health problems such as high blood pressure, type 2 diabetes, and asthma. It is a stigmatized condition, and obese children are often teased or are targets of bullying. Obese children are also likely to stay obese into adulthood, with accompanying long-term risks to their health. 154

In Massachusetts schools, students are screened for overweight and obesity in grades 1, 4, 7, and 10, with height and weight measurements used to calculate BMI. These measurements show 16% of the state's school children to be obese, and an additional 16% overweight. Students in most schools in Franklin County have similar or higher rates of obesity than the state rate (Figure 37).

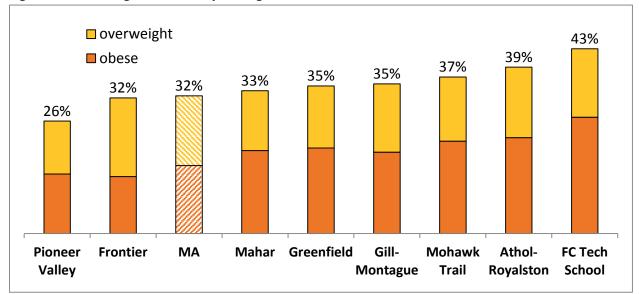


Figure 37. Overweight and obesity among students in area schools

Source: MDPH, 2015¹⁵⁵

Childhood obesity is associated with socio-economic status, with rising levels of parental education, and higher family income predicting less obesity in children. According to a Franklin County/North Quabbin region teen health survey in which respondents reported height and weight, local youth who are obese are more likely than their normal weight peers to be eligible for free or reduced price lunch, a proxy for lower family income (52% versus 40%). The fact that the children who are obese are also less likely to report having breakfast or eating fruits and vegetables points to the importance of healthy options in food served at school.72

In 2017, students surveyed about school climate were asked whether students in their school are picked on for race or ethnicity, disability, cultural or religious background, sexual orientation, or body size and personal appearance. Forty-seven percent said students get picked on about body size or personal appearance, whereas other groups were much less likely to be picked on 92 Students who were obese (based on BMI calculated from self-report of height and weight) were more likely to report being bullied, feeling signs of depression, or considering suicide than their normal weight peers (Figure 38).

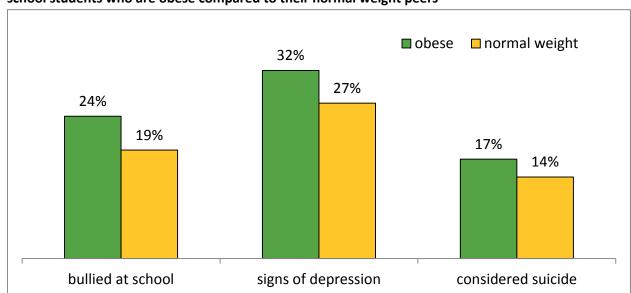


Figure 38. Bullying and depressive symptoms among Franklin County/North Quabbin middle and high school students who are obese compared to their normal weight peers

Source: 2016 Franklin County/North Quabbin Teen Health Survey

Cardiovascular Disease

Heart disease, or cardiovascular disease (CVD), is a broad term that includes many different conditions of the heart and blood vessels. The most common kind of CVD is coronary heart disease (or coronary artery disease, or ischemia), when the blood vessels that provide oxygen to the heart harden and narrow, which can lead to a heart attack or stroke. Heart disease is a leading cause of death in Franklin County and North Quabbin, as it is across the state and the nation. At the Community Health Center of Franklin County, more patients are diagnosed with hypertension than with any other condition, and hypertension is a potent risk factor for almost all cardiovascular diseases. 158

Residents of Franklin County had a lower CVD hospitalization rate in 2012-2015 County than did the state as a whole (Figure 39). However, rates were higher for black (1,714) and Latino (1,121) residents of Franklin County than for whites (1,047). Estimates of black and Latino admissions are based on small numbers and should be interpreted with caution. These differences are consistent with national data that show blacks to be at higher risk for heart disease, with higher death rates from heart disease and stroke than non-Hispanic whites. ¹⁵⁹

CVD is most prevalent in the older demographic, as risk for heart disease rises with age. About three quarters of area residents over 65 have high blood pressure and about 40% have coronary heart disease. As the region's population ages, heart disease rates are likely to rise.

That said, subgroups of the population are experiencing heart disease at a younger age. At Baystate Franklin, 18% of all admissions of residents of Franklin County and North Quabbin had a diagnosis of congestive heart failure, a condition in which the heart isn't pumping enough blood to meet the body's needs. Among residents of Franklin County hospitalized at Baystate Franklin with a diagnosis of congestive heart failure, blacks are on average much younger than non-Hispanic whites. The median age

for black residents of Franklin County and North Quabbin admitted to Baystate Franklin for congestive heart failure was 59 in 2015-2018, compared to 76 for Latinos and 77 for whites (Figure 40). Almost one-half of congestive heart failure hospitalizations for whites occurred past the age of 79, the life expectancy for blacks in Massachusetts. A disparity by age is also evident for admissions for diabetes, as discussed further below.

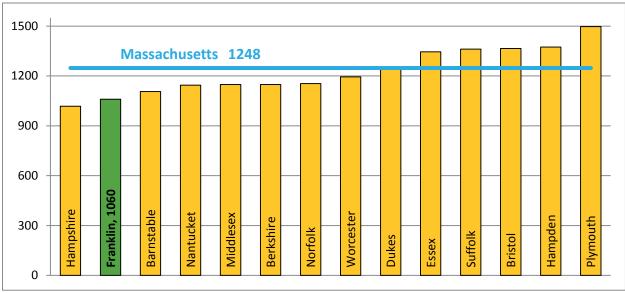


Figure 39. Cardiovascular disease hospital admissions by county in Massachusetts

Source: Massachusetts Acute Care Database, 2012-2015. Age-adjusted rates per 100,000 people. Primary diagnosis of ICD-9: 390*-449*

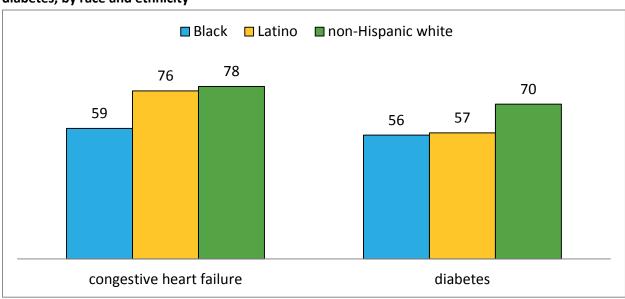


Figure 40. Median age of inpatient admission to Baystate Franklin for congestive heart failure and for diabetes, by race and ethnicity

Source: Baystate Franklin Emergency Department visit data, 2015-2018

Diabetes

When people have diabetes, they lack insulin or the ability to use insulin, and sugar builds up in their blood. Diabetes can cause serious health complications including heart disease, blindness, kidney failure, and lower-extremity amputations. In 2015, 11% of Franklin County residents had diabetes, not statistically different from the state rate of 9%. While the local rate is not unusually high, nationally and locally diabetes extracts a huge and growing cost in disability, lost productivity, years of life lost, and in health care expenditures. The American Diabetes Association estimated that the cost of diabetes to the nation in 2017 was \$327 billion, up 26% since 2012. 163

While diabetes can often be managed with physical activity, diet, and medications to control blood sugar, costs rise when diabetes is not well controlled and complications land patients in the emergency department or hospital. Diabetes complications have been increasing nationwide since 2010.¹⁶⁴ The Commonwealth Fund attributes this trend in part to rising deductibles and higher prices on insulin that cause diabetes patients to skip recommended visits or take less than the prescribed dose of insulin.¹⁶⁵

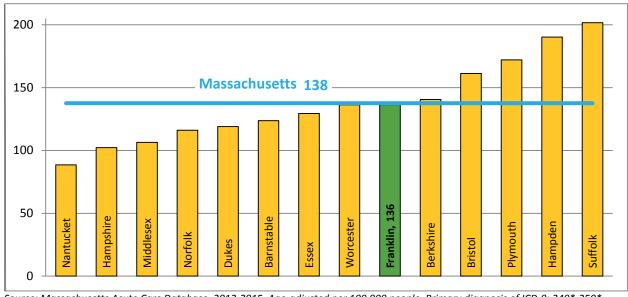


Figure 41. Diabetes hospital admissions by county in Massachusetts

Source: Massachusetts Acute Care Database, 2012-2015. Age-adjusted per 100,000 people. Primary diagnosis of ICD-9: 249*-250*

The MDPH reported that in 2012-2015, black residents of Franklin County were admitted for diabetes at a rate of 1,088 per 100,000. Numbers were small for black admissions and there is sizable uncertainty in the estimate, but even the most conservative estimate indicates white residents were hospitalized for diabetes at about one-sixth the rates of blacks in Franklin County (MDPH, Massachusetts Acute Care Database, 2012-2015). In 2015-2018, 33% of black residents of the service area admitted to Baystate Franklin had a diabetes diagnosis (any diagnosis, not necessarily the reason for admission), compared to 27% of Latinos and 23% of whites. ¹⁶⁶

The disparities by race should not distract from the fact that diabetes is a leading health problem for all races in Franklin County and North Quabbin. With an adult diabetes prevalence of 11%, the service area has close to 7,500 residents diagnosed with diabetes, and many more with prediabetes, a condition that can lead to diabetes if left untreated. County-level data is not available by income or education, but residents in lower socio-economic strata are likely affected disproportionately. Nationally, 7.2% of those with more than a high school education have diabetes, as compared to 12.6% of those who did not complete high school. Franklin County and North Quabbin residents aged 65 and over are another high-risk group; about one in three seniors have diabetes. 168

Respiratory disease

Asthma and chronic obstructive pulmonary disease (COPD) were elevated as priority health needs in the Baystate Franklin service area in the 2019 CHNA. Asthma is a common chronic respiratory condition in which airways become inflamed, making breathing difficult. For some it is a manageable condition; for others, asthma limits daily activity and may involve a life-threatening attack. Chronic lower respiratory disease, a classification that includes asthma and chronic obstructive pulmonary disease, was the third leading cause of death in Franklin County in 2016.157

Ideally, asthma and COPD are managed through self-care and healthcare visits to outpatient settings. Rates of admissions to the hospital and visits to the emergency department for these respiratory conditions can be an indicator of how well they are being addressed in the community outside the hospital. Franklin County's 2012-2015 inpatient admission rates for asthma, at 92 people admitted per 100,000 people, was lower than the state rate (Figure 42). The county rate of asthma visits to the emergency department was similar to the state rate (MDPH, Massachusetts Acute Care Database, 2012-2015).

Asthma is the most common chronic disease in children. MDPH maintains a surveillance program to estimate asthma prevalence among children in kindergarten through 8th grade at the community level. In the 2016-2017 school year, 12% of children statewide were estimated to have asthma. ¹⁶⁹ In 2016-2017, local rates of childhood asthma exceeded the state rate in Athol (18%) and Orange (15%) (Figure 43).

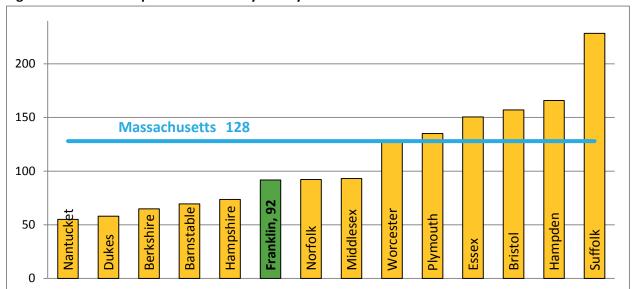


Figure 42. Asthma hospital admissions by county in Massachusetts

Source: Massachusetts Acute Care Database, 2012-2015. Age-adjusted rates per 100,000 people. Primary diagnosis of ICD-9: 493*

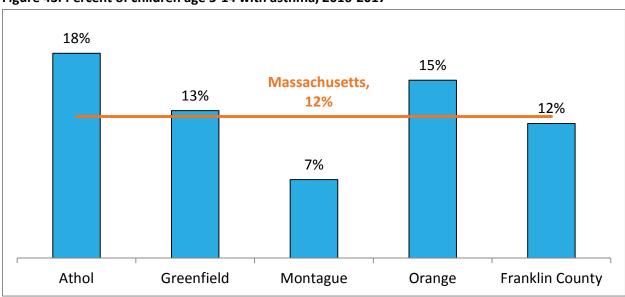


Figure 43. Percent of children age 5-14 with asthma, 2016-2017

Source: Massachusetts Environmental Public Health Tracking

A second respiratory condition with significant impact on health in the Baystate Franklin service area is COPD, a progressive lung disease that obstructs airflow and interferes with normal breathing. It is caused by long-term exposure to irritating gases or particulate matter, most often from cigarette smoke. People with COPD are at increased risk of developing heart disease, lung cancer, and a variety of other conditions. Franklin County's 2012-2015 inpatient admission rate for COPD (272 per 100,000) was slightly lower than the state rate (Figure 44). The emergency department visit rate was slightly higher (MDPH, Massachusetts Acute Care Database, 2012-2015).

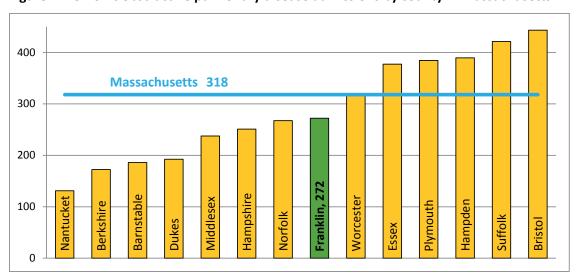


Figure 44. Chronic obstructive pulmonary disease admissions by county in Massachusetts

Source: MDPH, Massachusetts Acute Care Database, 2012-2015. Age-adjusted rate per 100,000 people. Primary diagnosis of ICD-9: 490* - 496*

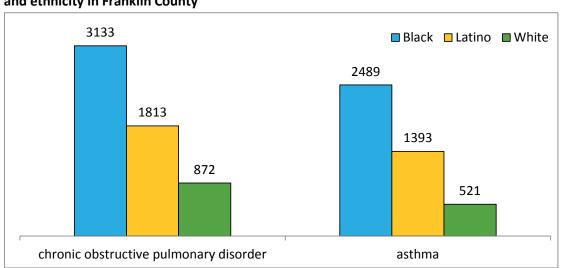


Figure 45. Chronic obstructive pulmonary disease and asthma emergency department visits by race and ethnicity in Franklin County

Source: MDPH, Massachusetts Acute Care Database, 2012-2015. Age-adjusted rate per 100,000 people

Local rates for emergency department visits for respiratory conditions vary by race and ethnicity. White residents of Franklin County go to the emergency department for COPD at about half the rate of Latinos and about one-third the rate of blacks. Whites go to the emergency department for asthma at about one-third the rate of Latinos and one-fifth the rate of blacks (Figure 45).

In Massachusetts, 22% of residents aged 65 and over have been diagnosed with COPD and 15% have been diagnosed with asthma. In the Baystate Franklin service area, the highest rates of COPD among seniors are in Greenfield (24%), Montague (26%), and Athol (27%), and the highest rates of asthma among seniors are in Montague (16%) and North Quabbin (16-17%).¹⁷⁰

Cancer

Along with heart disease, cancer is a leading cause of death in the Baystate Franklin service area, as it is across the state and the nation. Cancer is a set of related diseases in which some of the body's cells begin to divide without stopping and spread into surrounding tissues. Cancer is a priority area of concern due to Franklin County's rapidly aging population. By 2030 seniors aged 65 and older are projected to comprise 34% of the population compared to 22% statewide. This demographic shift is even more pronounced in the rural towns of West County, where seniors are projected to make up 42% of the population in 2030. The Massachusetts Cancer Registry (MCR) collects information on all newly diagnosed cases of cancer in the state. The registry shows that in 2011-2015 cancer incidences (rate of newly diagnosed cases) was lower in Franklin County than in other parts of the state, and that Franklin County had the lowest incidence of cancer of the 14 Massachusetts counties. Incidence of colorectal (colon and rectal), breast, prostate, lung, and bronchus cancers was lower in Franklin County in 2011-2015 than in the state as a whole. Differences for breast and prostate cancer are statistically significant.

490 Massachusetts 459

— 436

— Franklin County 372

2011 2012 2013 2014 2015

Figure 46. Trends in age-adjusted cancer incidence, Franklin County and Massachusetts

Source: Massachusetts Cancer Registry, 2012-2015. Age-adjusted rate per 100,000 people

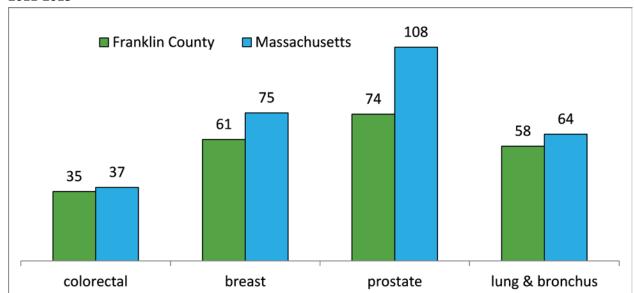


Figure 47. Incidence of four types of cancer per 100,000 people, Franklin County and Massachusetts, 2011-2015

Source: Massachusetts Cancer Registry

The cancers with the highest incidence are not necessarily the most deadly. In Massachusetts in 2016, cancer of the bronchus and lung was the leading cause of cancer death for both men and women, followed by prostate cancer and pancreatic cancer for men, and breast cancer and colorectal cancer for women. ¹⁷¹

C. INFANT AND PERINATAL HEALTH

Infant and perinatal health were identified as prioritized health needs in the 2016 Baystate Franklin CHNA, and they continue to be priority needs in 2019.

Preterm birth (<37 weeks gestation) and low birth weight (<2,500 grams) are leading causes of infant mortality (infant death before age one) in the United States, and can lead to health complications throughout the life span. Adequacy of prenatal care (a measure of early entry into prenatal care and number and timing of visits) and smoking during pregnancy are risk factors for preterm birth, low birth weight, and infant mortality. ¹⁷²

In 2016, Franklin County was the highest performing county in the state for adequacy of prenatal care. Overall, 12% of Franklin County mothers did not receive adequate prenatal care, compared to 18% statewide (Figure 48, green bars). However, in Franklin County in 2016, women with lower incomes were less likely to receive adequate prenatal care than women with higher incomes. In Figure 48, payer is used as a proxy for family income (yellow bars). Adequacy of prenatal care was similar for teen mothers and mothers who were 20 or older (Figure 48, blue bars).

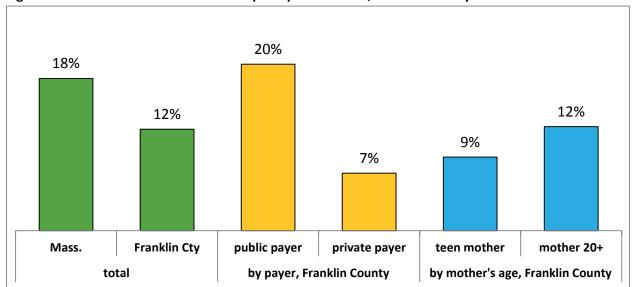
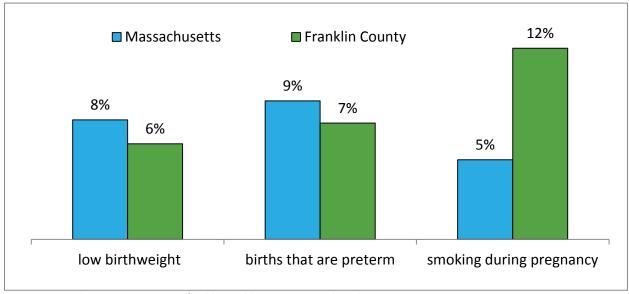


Figure 48. Percent of births without adequate prenatal care, Franklin County

Source: Massachusetts Department of Public Health, 2016

Figure 49. Low birthweight, preterm birth, and smoking during pregnancy, Franklin County and Massachusetts



Source: Massachusetts Department of Public Health, 2016; National Vital Statistics System

In 2016, Franklin County compared favorably to the state as a whole in low birthweight and preterm births (Figure 49). Paradoxically, women in Franklin County are more than twice as likely to smoke during pregnancy compared to their peers statewide. In 2016, higher income women (using proxy of private pay prenatal care) were about one-fifteenth as likely to smoke during pregnancy as their peers with lower income (Figure 50 yellow bars). Mothers who were 20 or older were half as likely to smoke during pregnancy as teen mothers (figure 50 blue bars). In 2012-2016 smoking rates among pregnant women varied by town, with almost one in three pregnant Orange residents smoking during pregnancy (Figure 50 orange bars).

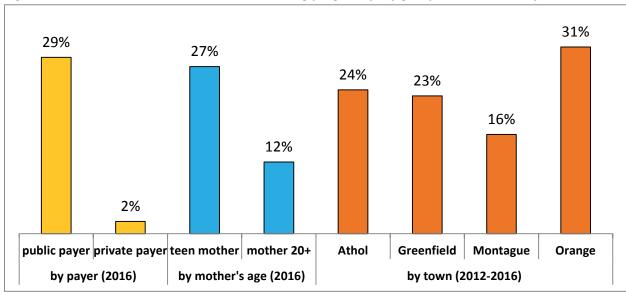


Figure 50. Percent of mothers who smoked during pregnancy, by group, Franklin County

Source: Massachusetts Department of Public Health, 2016 and 2012-2016

In 2016, Massachusetts had the lowest teen birth rate of all the states: 8.5 births per 1,000 teen girls age 15-19.¹⁷³ At 13.1 births per 1,000, the Franklin County rate was higher than the state, but well below the national rate of 20.3 (MDPH).

A rising concern accompanying the opioid epidemic is the increase in the number of infants exposed to opioids or other illicit substances in utero, and the rise of neonatal abstinence syndrome, in which babies show signs of withdrawal after birth and require medical management of their symptoms. Western Massachusetts has had a higher rate of newborns with neonatal abstinence syndrome than the state as a whole. (More recent data is not available for this measure). In 2015, the Baystate Franklin rate was about twice that of the state, but the rate has since come down (Figure 51).

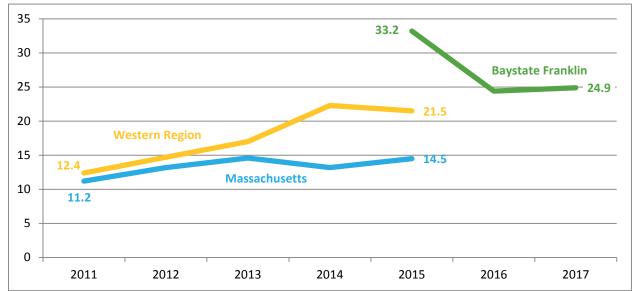


Figure 51. Rate of neonatal abstinence syndrome per 1,000 live births

Source: MDPH, Baystate Franklin 2016-2017¹⁷⁴

At Baystate Franklin in 2016 and 2017, the number of babies who were exposed to opioids and other illicit drugs was more than twice as high as those who developed neonatal abstinence syndrome. Early identification of opioid use disorder in pregnant women, medication assisted treatment, and coordinated care and support services can reduce the percent of substance-exposed babies who develop neonatal abstinence syndrome. ¹⁷⁵

A 2019 statewide report of the Perinatal, Neonatal Quality Improvement Network (PNQIN) shows that, on average over the past two years, Baystate Franklin has treated two opioid-exposed infants a month. Baystate Franklin participates in a state-wide quality improvement initiative in the care of pregnant women and newborns affected by opioid use disorder. On most of the 19 measures PNQIN collects from participating hospitals, Baystate Franklin is among the top performers, and on all measures, Baystate Franklin has improved over the past two years. For example, in the latest 12-month reporting period (March 2018 through February 2019):

- 100% of pregnant mothers of opioid-exposed infants were on Medication-Assisted Therapy (MAT)
- 12% of exposed infants required pharmacologic treatment for neonatal abstinence syndrome, the third lowest rate of all 23 participating hospitals
- 100% of newborns at risk for neonatal abstinence syndrome received mother's milk during hospitalization (of those who were eligible for mother's milk)
- the average length of stay for opioid-exposed infants was 5.8 days, the second lowest in the state
- 94% of opioid-exposed newborns were discharged home with the biological parent, the second highest rate among PNQIN hospitals

4. Priority Populations of Concern

The following groups were identified as priority populations in the 2019 CHNA because of disparities in social determinants of health, access to care, and/or high rates of health conditions:

Local residents with incomes below 300% of poverty - this category includes 45% of Franklin County residents and 50% of those who live in North Quabbin. While the usual conversation about the challenges for those with a low-income focuses on people who live below the poverty line, a poverty-level income does not begin to approach a living wage. Federal and state benefits provide some help above the poverty line as well as below, but between 100% and 200% of the poverty level, people fall off "the cliff" and lose eligibility for benefits. As a result, a raise can make people worse off than they were before. An income close to 300% of the poverty level is necessary for many households to meet their basic needs. Income is a primary driver of health status and longevity in the United States. People with lower incomes have worse physical and mental health, more risk factors, higher rates of disease and shorter life spans.¹⁷⁷ The fact that nearly half of local residents are living without an adequate income is especially concerning, given that childhood poverty is understood to be a form of childhood trauma that has life-long adverse effects on health and well-being.¹⁷⁸

Black and Latino residents of the service area - there are close to 1,000 black residents in the Baystate Franklin service area and about 2,400 Latinos. The data presented in this report shows that, compared to whites in Franklin County and North Quabbin, black and Latino residents tend to have lower incomes, lower home ownership rates, higher rates of homelessness, and greater exposure to trauma and abuse as children. Given these inequities in social determinants of health, it is not surprising that the data also show blacks and Latinos have higher rates of disease and blacks in particular often develop diseases at a younger age than their white peers. Focus groups and interviews made clear that in addition to the structural factors that shape opportunities to thrive for people of color, these populations face interpersonal racism in their daily lives. These experiences, whether intended by white community members or not, can harm health by keeping levels of cortisol and other stress hormones constantly elevated, leading to increased risk of poor health outcomes.

Gay, lesbian, bisexual, queer, and questioning youth - GLBQ+ youth fare worse than their heterosexual peers in many measures of health and well-being. They are more likely to have been abused as children, to feel like outsiders at school, to suffer from depression, to consider suicide, and to self-medicate with substances.

People re-entering the community after incarceration - the majority of people serving time at the Franklin County House of Corrections have a history of trauma and suffer from mental health and/or substance use disorders. While in jail, they receive intensive treatment and psychological support, and when released, they have to build their own support systems. Their histories of incarceration make self-sufficiency difficult, particularly with barriers to accessing housing and finding employment. For those with an opioid use disorder, reentry is a dangerous time. According to MDPH, the opioid overdose death rate is 120 times higher for those recently released from incarceration compared to the rest of the adult population. ¹⁷⁹

Transgender, non-binary, and gender nonconforming people - transgender and gender nonconforming people face specific medical and mental health challenges that require a level of expertise and empathy to address. The region is short on providers who meet those standards of expertise and empathy, and trans people experience biases in the health care system at all levels, from providers, to support staff, to forms and medical records. Being transgender or gender nonconforming can also be isolating, with exclusion taking a toll on health.

Children who have experienced trauma - there is broad agreement in the community among medical and mental health providers, social service staff, and school teachers and administrators that many of the behavioral issues and mental health problems they see among local children stem from trauma. The Adverse Childhood Experiences Study makes clear that without intervention, the legacy of trauma is likely to follow these children into adulthood and affect their health and well-being throughout the life span. ¹⁸⁰

Older adults - in Franklin County, about one in five residents is age 65 or older, and that share of the population is projected to grow to about one in three by 2030. About one-third of older adults in Franklin County experience depression and diabetes; about one in four in some communities has been diagnosed with anxiety and respiratory disease, and three-quarters have hypertension. In particular, older adults are at increased risk of being socially isolated and lonely, and isolation and loneliness have profound effects on health and mortality. Instances of older adults with chronic disease and who are isolated will only increase.

5. Geographic Areas of Concern

Table 4 lists the 23 census tracts in Franklin County and North Quabbin, in order of life expectancy, from lowest (73.1) to highest (86.6). ¹⁸¹ It also shows measures of educational attainment, household income, and availability of a vehicle (a measure of ease of access to transportation). For each measure, the census tracts are ranked, with darker red colors indicating impediments to good health, yellow colors indicating intermediate values, and green colors indicating values that are most favorable for good health. The colors in the chart provide a loose sense of how social determinants of health are related to life expectancy, with the reddest cells clustering towards the top of the chart with lowest life expectancy, and the greenest cells toward the bottom with the highest life expectancy.

The table focuses attention on the socioeconomic and health issues of the area's population centers of Greenfield, Athol, Orange, and Turners Falls. Of course these measures do not capture the full picture of a community. They gloss over pockets of poverty in the most rural areas and the struggles of individuals in the areas that are wealthier and healthier as a whole. A participant in the focus group of rural food pantry users offered a corrective to the tendency to generalize:

"Because our population is small, our priorities get kicked down the road."

Focus Group Participant, Focus Group of Rural Food Pantry Users, Charlemont

Table 4. Life expectancy by census tract, with educational attainment, median household income, and availability of a vehicle

Census tract and town(s)	Life expectancy at birth	% Bachelor's degree or more	Median household income	No vehicle available
414: Greenfield (east of I91 south of downtown, & Deerfield St)	73.1	14%	\$35,924	23%
7031: Athol (downtown)	73.7	15%	\$47,278	10%
413: Greenfield (downtown)	76.1	25%	\$32,582	13%
405.01: Orange (northeast and center)	76.9	14%	\$44,648	15%
405.02: Orange (remaining town)	78.2	20%	\$40,682	6%
7032: Athol (north)	78.5	19%	\$57,059	6%
407.01: Montague (Turners Falls)	78.7	23%	\$43,100	16%
7042: Phillipston, Petersham	79.1	28%	\$70,682	2%
410: Greenfield (west of I91)	79.2	36%	\$72,500	4%
7022: Royalston, Winchendon	79.4	18%	\$77,683	7%
412: Greenfield (Pierce to Silver Street)	79.6	39%	\$54,909	8%
7033: Athol (east & south)	80	21%	\$52,250	10%
411: Greenfield (east of I91 north of downtown, & High St)	80.4	41%	\$68,393	8%
402: Bernardston, Gill, Leyden	81.1	37%	\$66,764	4%
403: Northfield	81.5	38%	\$69,028	4%
404: Erving, Warwick, Wendell	81.6	28%	\$58,571	4%
409: Deerfield	82.3	55%	\$78,949	3%
415.02: Buckland, Shelburne	82.9	44%	\$53,500	5%
407.02: Montague (remaining town)	83.4	32%	\$60,444	6%
401: Charlemont, Colrain, Hawley, Heath, Monroe, Rowe	84	30%	\$54,308	4%
408: Sunderland, Whately	84.7	53%	\$61,146	6%
415.01: Ashfield, Conway	85.5	55%	\$81,458	2%
406: Leverett, New Salem, Shutesbury	86.6	61%	\$80,795	2%

Source: National Center for Health Statistics; U.S. Census ACS 2013-2017

V. Community and Hospital Resources to Address Needs

Hospital Resources			
Organization Name	Description of Services Provided	Contact/Website	
Baystate Behavioral Health	Continuum of high-quality inpatient and outpatient care, information, support groups, and education. Child and Adolescent Psychiatric Care, services for families, Adult Psychiatric Care, and Geriatric Psychiatric Care.	https://www.baystatehealth.org/services/behavioral-health	
Baystate Medical Practices - Pioneer Women's Health - Greenfield	The certified nurse-midwives are highly educated professionals with backgrounds in both nursing and midwifery. The practice offers a wide range of choices when it comes to birthing a baby. Mothers recovering from addiction are invited to participate in EMPOWER, a program that provides early referrals. Services include OB/GYN, Urogynecology, Midwifery, and Behavioral Health.	https://www.baystatehealth.org/locations/pioneer-womens-health	
Baystate Franklin Area Health Education Center (AHEC)	Program designed to immerse health professional students in a long-term, interprofessional, community-based clinical, experiential, and didactic learning experience that introduces and strengthens core knowledge, skills, and behaviors for the effective care of priority populations in rural and underserved communities.	Justin Ayala Director, Baystate-Franklin Area Health Education Center (AHEC) Justin.ayala@baystatehealth.org	
Bridge Team	Baystate Franklin has prioritized focusing on those at highest risk in our service area by creating a Bridge Team, which is a consortium of interdisciplinary team members from across multiple community-based organizations with a shared vision for improving the health and well-being of our mutual patients/clients. The team intends to fill the gaps that exists in rural areas by creating one interdisciplinary team across organizations with expertise in addressing high risk care transitions, care coordination, and connection to services.	Cheryl Pascucci, RN, MS, FNP-BC Program Director, Integrated Population Health Cheryl.pascucci@baystatehealth.org	

Hospital Resources			
Organization Name	Description of Services Provided	Contact/Website	
Heart & Vascular Care Services	Comprehensive diagnostics and treatment options for coronary artery disease (CAD), heart rhythm disorders (arrhythmias), and heart failure; cardiac surgeries for adults and children; cardiology clinical trials.	https://www.baystatehealth.org/services/ heart-vascular	
Physical Therapy Services	Information, resources, coaching and education, stretching, core strengthening, walking, and strength training to improve or restore physical function and fitness levels.	https://www.baystatehealth.org/services/rehabilitation	
Population-based Urban and Rural Community Health (PURCH)	The PURCH track in the University of Massachusetts Medical School at Baystate is a unique educational experience where students can focus on health care issues common to urban and rural under-served populations—and come to understand the complex interwoven social and environmental factors that affect them.	https://www.baystatehealth.org/education-research/education/umms-baystate-campus/purch	
The Birthplace at Baystate Franklin Medical Center	Certified nurse-midwives, board-certified obstetricians, and highly-skilled nurses believe in empowering patients with a personalized birthing experience in a private room. Whether the birth plan includes a water birth or patient-controlled epidural anesthesia, staff ensures patients are respected, cared for, and safe.	https://www.baystatehealth.org/services/ ob-gyn/labor-and-delivery/birthplace-at- bfmc	

Community Resources		
Organization Name	Description of Services Provided	Contact/Website
Athol Area YMCA	Fitness sessions, swimming, dance classes, after-school care, summer camps, senior health initiatives, yoga, Live Strong, weight loss programs, and Diabetes Prevention Program.	http://ymcaathol.org/
Behavioral Health Network (BHN) Addiction Services	Comprehensive addiction services including detox, post-detox residential series, long-term residential, day treatment programs, and outpatient services.	http://bhninc.org/content/addiction- services
Center for New Americans	A community-based, non-profit adult education center that provides the under-served immigrant, refugee and migrant communities of Massachusetts' Pioneer Valley with education and resources to learn English, become involved community members, and obtain tools necessary to maintain economic independence and stability.	https://www.cnam.org
Center for Self-Reliance at Community Action Pioneer Valley	Offers food to families, information, and referrals to other services and programs; hosts fresh food and cooking demonstrations and nutrition workshops.	http://www.communityaction.us/center- for-self-reliance-food-pantry
Children's Advocacy Center of Franklin County and North Quabbin	The CAC is dedicated to minimizing secondary trauma to child victims by streamlining the handling of cases of child sexual abuse, serious child physical abuse, and child exploitation.	https://cacfranklinnq.org/
Clean Slate Addiction Treatment Center	Patient-focused treatment for opioid, alcohol, and other drug addictions; appointment-based outpatient treatment.	http://cleanslatecenters.com/
Clinical & Support Options	Comprehensive behavioral health corporation; provides Emergency & Acute Services, Community Based Family Support Services, Outpatient Mental Health and Substance Abuse Services, and Clubhouses.	http://www.csoinc.org/
Communities that Care Coalition	Brings together youth, parents, schools, community agencies, and local governments to promote the health and well-being of young people in Franklin County and North Quabbin.	http://www.communitiesthatcarecoalition.org/

Community Resources			
Organization Name	Description of Services Provided	Contact/Website	
Community Action Pioneer Valley	The WIC, Family Center, and Healthy Families programs provide considerable support to women and their families during the prenatal and postpartum periods, in collaboration with partners in the Perinatal Support Coalition, including the Empower Program, Family Drug Court, and Franklin County House of Correction, among others.	https://www.communityaction.us/	
Community Health Center of Franklin County (CHCFC)	Medical and dental clinics with the mission to provide excellent medical care to all residents of Franklin County regardless of insurance status or income.	http://www.chcfc.org/home.html	
Community Legal Aid	Provides free civil legal services to low-income and elderly residents.	https://communitylegal.org/	
Cooperative Public Health Service (CPHS) Regional Public Health Nurse	The Public Health Nurse holds walk-in clinics assisting residents of any member town with a variety of health care needs (medication management, assessment and monitoring of health conditions, medication information).	https://frcog.org/program- services/cooperative-public-health- services/	
	The CPHS is a regional health department serving fourteen towns in Franklin County, working to improve the public's health through environmental health inspections, communicable disease investigation and prevention, code enforcement, education, wellness, and special programs.		
DIAL/SELF	A community based non-profit agency that works to foster youth involvement and community empowerment by connecting them with housing, employment, education, and civic opportunities.	http://www.dialself.org/	
Franklin County Community Meals Program	A program to provide food and household supplies to Franklin County citizens in need.	https://www.fccmp.org	
Franklin County Perinatal Support Coalition	Improve maternal mental health care at the community level. The coalition has become the gold standard for MotherWoman's Community-based Perinatal Support Model, which is now being replicated statewide and has received national awards for best	https://motherwoman.org/perinatal- support-coalitions/ Linda Jablonski Linda.jablonski@baystatehealth.org	
	received national awards for best practice.		

Community Resources		
Organization Name	Description of Services Provided	Contact/Website
Franklin County Regional Housing and Redevelopment Authority (HRA)	Serves the housing and community development needs of the twenty-six towns of Franklin County in northwestern Massachusetts. HRA works with residents to successfully access a wide variety of housing resources.	https://www.fcrhra.org/
Franklin Regional Transit Authority (FRTA)	Provides public transportation principally to Franklin County and North Quabbin of Massachusetts.	http://frta.org/
Greenfield Community College (GCC)	Serving over 3,000 students, GCC is Franklin County's only higher educational institutional. GCC is known for the caring and supportive attitude of the faculty and staff, academic excellence, and for the broad support it enjoys from the surrounding community.	https://www.gcc.mass.edu/
Greenfield YMCA	Fitness sessions, swimming, dance classes, after-school care, summer camps, senior health initiatives, yoga, Live Strong, weight loss programs, Prescribe the Y, and Diabetes Prevention Program. Baystate's MIGHTY program is also offered the Greenfield Y.	http://www.ymcaingreenfield.org
LifePath	Help elders and persons with disabilities maintain independence and quality of life in their own homes and communities, through the Meals on Wheels program and evidence-based chronic disease selfmanagement classes. As well as help caregivers to find relief and help loved ones to choose the right path.	https://lifepathma.org/
Mass In Motion Franklin County	Community-based coalition to improve health equity through improved access to healthy eating and active living.	http://frcog.org/what-is-mass-in-motion
Montachusett Regional Transit Authority	A regional transit system that services 22 area cities and towns.	http://www.mrta.us/mart
Montague Catholic Social Ministries	Works to strengthen, encourage, and support people in our community through outreach, family education, positive conflict resolution, leadership development, and group empowerment.	https://mcsmcommunity.org
MotherWoman	Developed the western Massachusetts Perinatal Support Coalition Network; provides support groups and training.	http://www.motherwoman.org/

Community Resources			
Organization Name	Description of Services Provided	Contact/Website	
North Quabbin Community Coalition	Online youth programs directory including prevention and health promotion programs.	http://nqcc.org/youth_directory.html	
Opioid Task Force of Franklin County and North Quabbin	Regional coalition that works to prevent and reduce opioid abuse and substance use; supports and advocates for expanded support and recovery services; train, educate, advocate, and provide support and resources on opiate abuse and overdoses.	http://opioidtaskforce.org/	
Partnership for Youth	Promotes teen health in Franklin County and North Quabbin; works with school and community partners to establish and support effective youth development and health-promotion programs, provides training and technical assistance on evidence-based practices, involves and empowers youth.	http://frcog.org/program- services/partnership-youth/	
Pioneer Valley Asthma Coalition	Community partnership that works to improve the quality of life for individuals, families, and communities affected by asthma.	www.pvasthmacoalition.org	
Stone Soup Café	A community space where people from all walks of life come together every Saturday to share free nourishment, connection, and learning for body, mind, and spirit.	https://www.thestonesoupcafe.org	
Tapestry Harm Reduction Program	Needle exchange programs in Holyoke and Northampton, provides sterile needles to injection drug users, trainings on Naloxone, education and counseling, health education, and screening on infectious disease.	http://www.tapestryhealth.org/index.ph p/services/prevention/needle-exchange	
The Literacy Project	With sites in Greenfield and Orange, this project provides free adult education classes at 3 levels: basic literacy, pre GED, through GED. Provides access to post-secondary education and job training skills.	http://www.literacyproject.org/	
Valuing Our Children	Provides programs and services to all families in North Quabbin at no charge. Including: group and individual based parent education, individual family support and advocacy, home visiting, support groups, parent/child activities, drop in play time at our Family Center, free clothing closet, book and toy lending library, leadership development, and	https://www.valuingourchildren.org	

Community Resources		
Organization Name	Description of Services Provided	Contact/Website
	parent engagement.	
Western Massachusetts Food Bank	Distribute food to independent pantries, meal sites, and shelters. Serve as an important resource to all of our member agencies to help strengthen the emergency food network, increase their capacity, and develop long-term projects to fight the underlying causes of hunger in our community.	https://www.foodbankwma.org/who-we- are/about-us/
Brown Bag Food for Elders	Food Bank of Western Massachusetts provides a free bag of healthy groceries to eligible seniors once a month at local senior centers and community organizations.	https://www.foodbankwma.org/get- help/brown-bag-food-for-elders
Worcester Community Action Council, Inc.	Federally designated Community Action Agencies serving low-income individuals and families.	http://www.wcac.net/
Worcester County Food Bank	Collects and inspects perishable and non- perishable food and distributes it through a network of 131 partner agencies in all 60 cities and towns of Worcester County.	http://foodbank.org/

VI. Input and Actions Taken Since Previous CHNA

1. Community Input on Previous CHNA and Implementation Strategy

To solicit written input on Baystate Franklin's prior CHNA and Implementation Strategy, both documents are available on our hospital website (www.baystateyhealth.org/communitybenefits). They are posted for easy access and we include contact information for questions or comments. We have verified and confirmed that we have not received any written comments since posting the 2016 CHNA and Implementation Strategy.

2. Impact of Actions Taken by Hospital Since Last CHNA

It is important to highlight that the actions taken by Baystate Franklin as described below address at least one, if not multiple health priorities and populations. In addition, many of the actions taken since the prior CHNA iteration reflect the collaborative efforts of the Baystate Franklin CBAC.

COMMUNITY LEVEL SOCIAL AND ECONOMIC DETERMINANTS OF HEALTH

Back to School Drive - each year, Baystate Franklin employees collect backpacks and school supplies to support United Way of Franklin County's Annual Blooming Backpacks. The backpacks are distributed to United Way's partner agencies and given to children in need. In 2018, 30 backpacks were filled with notebooks, pens, pencils, folders, binders, paper, rulers, and even calculators. An additional two boxes were filled with supplies with a third packed with items that would be helpful to teachers, such as hand sanitizer and disinfecting wipes. In total, United Way received over 400 backpacks from community members and organizations – this means that 400 children will start school well prepared and ready to learn.

Holiday Toy Drive - in the spirit of giving, Baystate Franklin's employees gave back in two different ways during the 2018 holiday season. Some individuals and departments chose to "sponsor a youth" in the Department of Children in Families program, and were given a wish list for a specific child. Thanks to their generosity, more than 30 youth in the community received exactly what they wished for last holiday season. Baystate Franklin also had drop-off boxes for the Salvation Army of Greenfield's initiative, which resulted in more than a dozen boxes and bags filled with games, books, and toys. The Salvation Army sets up a "store" in which parents can pick out items based on their child's individual interest. The families are also sent home with a full turkey dinner, complete with side dishes and warm clothing for everyone in the household.

MotherWoman Cultural Humility Training - Baystate Franklin staff, grantees, and community partners participated in a Cultural Humility training. Cultural humility is a philosophy that empowers individuals to effectively engage in interpersonal relationships that are dynamically diverse and mutually respectful. Unlike cultural competence, cultural humility is a life-long and ongoing process of self-reflection and self-critique in which individuals expand their capacity for learning, listening, and understanding, regardless of their experiences with cultures other than their own. Incorporating cultural humility as part of one's lifestyle empowers the individual to recognize and redress power-imbalances that exist within their immediate social and organizational structures.

Northwestern District Attorney's Children's Advocacy Center of Franklin County and North Quabbin (CAC) - bringing legal, medical, and social services together under one roof, the CAC concept, which has been active elsewhere in the Pioneer Valley, took root in Franklin County with the creation of a center in Greenfield. In addition to providing medical and administrative counsel to the Franklin County CAC, Baystate Franklin provided start-up funding to purchase medical equipment and support renovations.

United Way of Franklin County Diaper Drive - Baystate Franklin donated 29,712 diapers to United Way of Franklin County (UWFC). For 80 years, UWFC has brought caring people together to address the needs of the whole community. This diaper donation is a way to meet the basic needs of local families and ensure that all children get access to basic, but necessary, resources.

BARRIERS TO ACCESSING QUALITY HEALTH CARE

Baystate Franklin continues to provide much needed **financial counseling** services to its community and patients who have concerns about their health care costs. Financial Counselors are dedicated to: identifying and meeting their clients' health care needs; providing assistance to apply for health insurance; navigating the health care industry; as well as determining eligibility for the Baystate Financial Assistance Program. They can also assist in linking their clients to health insurance and community resources. There has been an increase in providing additional community support, including assisting patients with finding a new primary care physician, providing information on behavioral health services, and also contacting pharmacies to straighten out insurance issues.

Baystate Financial Assistance Program - Baystate Health is committed to ensuring that the community has access to quality health care services provided with fairness and respect and without regard to a patients' ability to pay. Baystate hospitals not only offers free and reduced cost care to the financially needy as required by law, but has also voluntarily established discount and financial assistance programs that provide additional free and reduced cost care to additional patients residing within the communities served by the hospitals. Baystate hospitals also make payment plans available based on household size and income.

Baystate Franklin Area Health Education Center (AHEC) - a new nationally recognized program designed to immerse health professional students in a long-term, interprofessional, community-based clinical, experiential, and didactic learning experience that introduces and strengthens core knowledge, skills, and behaviors for the effective care of priority populations in rural and underserved communities.

Learning is focused around core topic areas including interprofessional/team-based care, social determinants of health, cultural competency, integrated behavioral health, practice transformation, and emerging/urgent health care topics such as the opioid epidemic. Baystate Franklin will now serve as an AHEC site for a primary care residency program.

Baystate Franklin Bridge Team - Baystate Franklin has prioritized focusing on those at highest risk in our service area by creating a Bridge Team, which is a consortium of interdisciplinary team members from across multiple community-based organizations with a shared vision for improving the health and wellbeing of our mutual patients/clients. The Bridge Team will first focus on supporting people with or at risk for opioid use disorder (OUD) through a newly awarded, \$1 million federal Health Resources and Services Administration (HRSA) Rural Communities Opioid Response grant. The idea to create a Bridge Team was in response to feedback about lack of care coordination often experienced by patients being treated for OUD (oftentimes with co-occurring mental health challenges). The Bridge Team will identify, engage, and assess people with OUD or at risk for OUD, then hold space and/or connect individuals with whatever service or support system the individual values. With the support of Community Health Workers, Recovery Coaches, and Peer Advocates on the team, an individual in distress or suffering because of a social condition - such as food insecurity, homelessness, lack of identification, transportation, or lack of connection to support groups - can be helped. The goal is to ultimately use this same model of care for those with complex disease or mental health challenges who experience unmet needs or inequities but value support in making connections and care coordination of services. By creating a Bridge Team, Baystate Franklin intends to fill the gap that exists in rural areas by creating one interdisciplinary team across organizations with expertise in addressing high risk care transitions, care coordination, and connection to services. This model augments primary care and will contract with payers operating in urban areas so that we can deliver services across our population and rural service area through outreach, including mobile and telehealth modalities.

Community Action's Building Bridges for Coordinated Care (look4help.org) - seeks to improve coordination between the social service and medical sectors with the goal of improving health outcomes for patients in Franklin County. Built into the community organizing approach is a reliance on data as a means of identifying intervening variables (also sometimes referred to as risk and protective factors) that can effectively move the dial on desired outcomes. A result of the Baystate Franklin partnership with Community Action is the look4help.org database. Launched in 2019, this resource provides a benefit to the region in providing a one-stop shop for non-medical resource information in sectors such as food, housing, education, and more.

Population-based Urban and Rural Community Health (PURCH) — a track in the University of Massachusetts Medical School based at Baystate Health is a unique educational experience where students can focus on health care issues common to urban and rural under-served populations—and come to understand the complex interwoven social and environmental factors that affect them. The PURCH Longitudinal Community Health Education (LCHE) experience complements and augments the biomedical education of medical students in the PURCH Track. The LCHE provides students with immersive community health education opportunities, focused on determinants of health, health disparities, and health equity. Through these experiences, students begin to understand the factors

which impact quality patient care and population health outcomes. The educational experiences are built upon year to year so students are able to progressively develop knowledge and skills while building important community relationships to improve health outcomes in under resourced communities. The population and community education experiences are designed based on the health priorities of the communities served by Baystate Health. The health priorities are identified from the CHNA and the regional CHIPs.

Stop the Bleed Trainings - Baystate Medical Center's Trauma and Injury Prevention team has been educating the community members on Stop the Bleed, including residents and employees in Franklin County. The members are given information so they can confidently perform life-saving hemorrhage control until pre-hospital personnel can arrive and assume the care of the injured. Providing these basic life-saving techniques that anyone can perform at the scene will save lives. Training kits have been purchased so Baystate Health can continue to build and grow is training capacity in the region.

HEALTH CONDITIONS AND BEHAVIORS

Franklin County Perinatal Support Coalition - a multi-sector and provider initiative launched, convened monthly, and facilitated by nurse leaders from the Birthplace at the Baystate Franklin. Efforts include universal postpartum depression protocols for screening from first prenatal visit through second year post-partum, weekly support group, and a community resource and referral guide. The Coalition has now transitioned to improving coordination and resources for mothers with substance use disorders.

MIGHTY (Moving, Improving and Gaining Health Together at the Y) - a community-based multi-disciplinary pediatric obesity treatment program. The MIGHTY program includes 14 two-hour sessions that encompass physical activity, nutrition, and behavior modification. It targets children and adolescents age 5-21 and lasts for one-year. Sessions are augmented by individual exercise training, weekly phone calls, and monthly group activities, cooking classes, free swimming lessons with the YMCA, behavioral health consults, and gardening experience. In addition, participants and their families are given a free six-month long membership to their local YMCA. Ongoing monthly maintenance groups are available to all previous program participants. In 2017 the Greenfield YMCA received a two-year \$200,000 grant from Kohl's Cares to expand the program. In 2018, MIGHTY partnered with Greenfield YMCA to:

- Train new staff (Baystate and YMCA) to implement the MIGHTY program at the Greenfield YMCA, thus expanding services to Franklin County.
- Engage local pediatricians in the Greenfield area and educate them and their teams on how to identify children that would benefit the most from the program and how to refer patients and families to the program.
- Engage local schools and school nurses in the Franklin County and North Quabbin region and educate them and their teams on how to identify children that would benefit the most from the program and how to refer patients and families to the program.

COMMUNITY BENEFITS ADVISORY COUNCIL INVESTMENTS

Baystate Franklin's CBAC continues to meet regularly the fourth Thursday of each month and is inclusive of employees, representatives of the community, and target populations that the hospital serves. The CBAC's core roles include advocacy for community benefits within Baystate Health and in the community, reviewing the hospital's annual community benefits reports, providing input into the hospital's CHNA and strategic implementation plan (SIP), formerly referred to as implementation strategy, and helping the hospital link its community benefit strategy to an overall vision of reducing health disparities, promoting community wellness, and improving access to care for vulnerable populations.

Baystate Franklin's CBAC continued to foster community partnerships and awarded grant funding to select partners through a request for proposal process to further address health needs identified in the 2016 CHNA. The funded community partners and initiatives over the past three years include:

- Communities that Care Coalition the Communities That Care Coalition of Franklin County and North Quabbin brings together schools, families, youth, and the community to improve youth health and well-being by building the community's capacity to implement evidence-based strategies that address identified local needs and improve young people's ability to reach their full potential and thrive. The Baystate Franklin CBAC awarded the Coalition with a three-year grant to promote health and reduce health disparities in the area by building the community's capacity to implement evidence-based strategies that reduce youth tobacco, alcohol, and other drug use, promote healthy eating and active living, and measurably improve health equity in the region.
- Community Action Pioneer Valley: Perinatal Partnerships Community Action Pioneer Valley assists people who have low-incomes to achieve economic stability and security, and works to build communities in which all people have the opportunity to thrive. Community Action's WIC, Family Center, and Healthy Families programs provide considerable support to women and their families during the prenatal and postpartum periods, in collaboration with partners in the Perinatal Support Coalition, including the Empower Program, Family Drug Court, and Franklin County House of Correction, among others. Perinatal Partnerships was awarded a three-year grant to enhance the ability to integrate services and remove barriers to access, including transportation, group support, additional lactation consultants with advanced certification appropriate to high-risk situations, and staffing to maintain collaborations and provide one-on-one assistance for women and their families.
- DIAL/SELF a community-based non-profit agency that has been serving the youth and communities of western Massachusetts since 1977 and provides a wide array of services that foster youth empowerment and community service. The mission of DIAL/SELF is to help young people become independent by connecting them with housing, employment, education, and civic opportunities. A one-time grant was awarded to DIAL/SELF with the goal of enhancing capacity to provide direct services to youth including street outreach, drop-in center hours, organization outreach events, regional presentations distributing service information materials, brochures, and resource cards. The program is an evidence-informed model that draws on Positive Youth

Development and uses Motivational Interviewing to help youth understand how to take action with the support of staff and other positive influences in their lives.

- Just Roots, Inc. the Just Roots Farm Share Program serves more than 140 local, low-income families annually (300 total families served) in Franklin County. The program has grown to be the largest low-income Community Supported Agriculture (CSA) program in Massachusetts with a continued goal of offering wrap-around services focused on whole health and building the habits of health that last beyond the 24 week season. The Baystate Franklin grant helped provide partial support (40% of the total cost) for CSA shares in three low-income housing developments in Greenfield (Oak Courts, Greenfield Gardens, and Leyden Woods).
- Montague Catholic Social Ministries for over 24 years, Montague Catholic Social Ministries (MCSM) has strengthened, encouraged, and supported families in Franklin County through direct aid, community outreach, family education, conflict resolution, leadership development, and group empowerment. The M.I.N.D program (Montague Institute for New Directions) and the S.O.A.R. program (Skills, Opportunity, Action, Recognition) are two interconnected programs developed by the MCSM Women's Center to teach leadership skills and build self-empowerment for women who have experienced trauma and compromised physical health and well-being. The M.I.N.D and S.O.A.R programs were awarded a one-year grant to continue addressing the economic effects of exposure to trauma, while helping women define objectives and take steps toward attaining their goals. The intent is to offer the programs to Spanish speaking women in Franklin County who have vocalized a desire to improve their lives and economic circumstances.
- Safe Prescriber Pledge a one-time grant was provided to this initiative managed by a healthcare coordinator and educator at Valley Medical group that provided guidance to area primary care and specialty practices, and to hospital-based physicians (Emergency, Hospital Medicine) in best practices to support care of patients who have been prescribed opioid medications for pain management and/or who may need assistance to cease opioid use. The priority health needs addressed by this project were increasing access to behavioral and substance abuse services.
- The Opioid and Overdose Prevention Education Project managed by Tapestry Health, this was a
 one-year program that provided the community with competency-based education on opiates,
 overdose prevention, and nasal naloxone administration throughout Franklin County and North
 Quabbin. The priority health needs that were addressed by the initiative were substance abuse
 prevention and support of mental health.

VII. Summary

The Baystate Franklin service area of Franklin County and North Quabbin in Massachusetts continues to experience many of the same prioritized health needs identified in Baystate Franklin's 2016 CHNA. Social and economic challenges experienced by the population in the service area contribute to the high rates of chronic conditions and other health conditions identified in this needs assessment. These social and economic factors also contribute to the health inequities observed among priority populations, which include children who have experienced trauma, older adults, blacks, Latinos, GLBQ+ youth, transgender and gender nonconforming people, people with low-income, people re-entering society from incarceration, and those experiencing homelessness. Additional data is needed to better understand the needs of these populations in order to reduce inequities. The Baystate Franklin service area population continues to experience a number of barriers that make it difficult to access affordable, quality care, some of which are related to the social and economic conditions in the community, and others which relate to the health care system. Mental health and substance use disorders were consistently identified as top health conditions impacting the community, and the inadequacy of the current systems of care to meet the needs of individuals impacted by these disorders arose as an important issue that needs to be addressed.

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IX. Appendices

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Appendix I. Stakeholders Engaged in the 2019 CHNA Process

Regional Advisory Committee (RAC)

Name (Last, First)	Title	Organization	Organization Serves Broad Interests of Community	Organization Serves Low- Income, Minority, & Medically Underserved Populations	State, Local, Tribal, Regional, or Other Health Department Staff
Bankert, Sarah	Program Manager, Healthy Hampshire	Collaborative for Educational Services	Х	Х	
Bruno, Kathleen*	Health Management Program Manager	Health New England	Х	х	
Cardillo, Beth	Executive Director	Armbrook Village	Х	Х	
Darling, Ann	Director of Planning and Resource Development	Community Action Pioneer Valley	Х	х	
Douglas, Henry Jr.	Recruitment & Retention Specialist	Men of Color Health Awareness (MOCHA), MLK Family Services	х	х	
Fallon, Sean*	Manager of Community Benefits and Health	Mercy Medical Center; Trinity Health of New England	Х	х	
Frutkin, Jim	Senior Vice President Business IFU	ServiceNet; Western Massachusetts Veterans Outreach	Х	х	
Golden, Annamarie*	Director, Community Relations	Baystate Health	х	х	
Goldman, Doron	Freelance baseball researcher/histori an	Cooley Dickinson Hospital Patient Family Advisory Council	х	х	
Gonzalez, Brittney*	Community Benefits Specialist	Baystate Health	Х	Х	
Gorton, George*	Director of Research, Planning & Business Development	Shriners Hospital for Children - Springfield	Х	х	
Harris, Aumani	Project Manager	Springfield Department of Health & Human Services	х	х	Х
Harness, Jeff*	Director, Community Health and Government Relations	Cooley Dickinson Health Care	Х	х	
Kaufmann, Sally*	Director, Post Acute Business Integration and Development	Baystate Health	Х	Х	
Knapik, Michael*	Vice President, Government and	Baystate Health	Х	Х	

Name (Last, First)	Title	Organization	Organization Serves Broad Interests of Community	Organization Serves Low- Income, Minority, & Medically Underserved Populations	State, Local, Tribal, Regional, or Other Health Department Staff
	Community				
Lake, Eliza	Relations Chief Executive	Hilltown Community			
Lake, Liiza	Officer	Health Center	X	X	
Lamas, Kelly	Project	Baystate Springfield	V	V	
	Coordinator	Educational Partnership	Х	Х	
Landrau,	Senior	Mass Mutual			
Madeline	Relationship Manager		Х		
Lee, Jennifer	Systems Advocate	Stavros Center for	Х	Х	
		Independent Living	^	^	
Lopez, Luz	Executive Director	Metrocare of	Х	X	
Patrissi, JAC	Director of	Springfield Behavioral Health			
Patrissi, JAC	Domestic Violence	Network, Inc.	Х	X	
	& PATCH Services	rectwork, me.	^	^	
Perez-McAdoo,	Board of Health	East Longmeadow	Х	Х	Х
Sarah	Member	Board of Health	^	^	^
Pluguez-	President	National Association of			
Moldavskiy,		Hispanic Nurses of	X	X	
Melissa Puleo, Elaine	Community	Western Massachusetts Town of Shutesbury			
ruleo, Liaille	Member	Baystate Franklin			
	Wichibei	Medical Center	Х		
		Community Action			
		Council			
Reed-McNally, Maureen	Director	Mass Mutual	Х		
Robinson, Frank*	Vice President, Public Health	Baystate Health	Х	Х	
Rosenthal, Sarah*	Administrative	Shriners Hospital for	Х	Х	
	Coordinator	Children - Springfield	X	X	
Silverman, Risa	Outreach Director	Western MA Health			
		Equity Network,			
		University of	V	V	
		Massachusetts - Amherst School of	Х	X	
		Public Health & Health			
		Sciences			
Stevens, David P.	Executive Director	Massachusetts Councils	V	V	
		on Aging	Х	Х	
Walker, Phoebe	Director of	Franklin Regional			
	Community	Council of	X	X	
Wilson Claris NA	Services	Governments			
Wilson, Gloria M.	ACO Care Manager MSC, RN	Western Massachusetts Black Nurses	х	X	
	IVISC, IXIV	Association	^	^	

^{*}Coalition of Western Massachusetts Hospitals/Insurer member

Focus Group Participants

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

Franklin County

Baystate Franklin Medical Center: People Experiencing Homelessness

- 9 participants
- 4 women and 5 men
- 3 age 31 40; 4 age 41 50; 1 age 51 60
- 7 white, 1 black Latina, 1 American Indian

Baystate Franklin Medical Center: People Who Use a Rural Food Pantry

- 13 participants
- 10 women and 3 men
- 1 age 22 30; 1 age 31 40; 2 age 41 50; 5 age 51-6-; 3 age 61 70; 1 age 71 80
- 10 white; 2 American Indian; 1 Bi-Racial (white/American Indian)

Baystate Franklin Medical Center: Youth of Color

- 11 participants
- 5 women, 4 men, 2 no gender selected
- 10 under 18 years; 1 age 18 21
- 5 Latinx; 2 black; 2 Asian; 2 Bi-Racial (black/American Indian and Asian/Other)

Baystate Franklin Medical Center: People who are Transgender, Non-Binary, and/or Gender Non-Conforming

- 5 participants
- People identified as unmanifested genderless/manifested female, transgender (1); female, male, & non-binary, prefer not to say whether transgender (1); male, transgender (1); non-binary transgender (2)
- 4 age 22 30; 1 51 60
- 4 white, 1 Semitic

Key Informant Interviewees

Findings from interviews with 48 individuals conducted in Franklin County informed this CHNA. Key informants were health care providers, health care administrators, and local and regional public health officials, local leaders that represent the interests of the community or serve people who are medically underserved, have low incomes, or are people of color. Key informants were:

Name (Last, First)	Title	Organization	Organizatio n Serves Broad Interests of Community	Organization Serves Low-Income, Minority, & Medically Underserved Populations	State, Local, Tribal, Regional, or Other Health Department Staff
		Baystate Franklin Medical C	enter		
Pascucci, Cheryl	Family Nurse Practitioner	Baystate Franklin Community Hospital Acceleration, Revitalization & Transformation Program (CHART)		х	
 Calabrese, Jessica Carey, Cameron Ewart, Jared Hamilton, Wes Heidenreich, Maria Hoynnoski, Arley Jacobson, Allie Luippold, Susan Petrie, Maegan Sayer, Ed Van der Velden, Allison Welenc, Susan 	1. Chief Operating Officer 2. Development Director 3. Accountant 4. Chief Information Officer 5. Medical Director 6. Chief Financial Officer 7. Information Officer 8. Human Resources 9. Accountant 10. Chief Executive Officer 11. Dental Director 12. Population Health	Community Health Center of Franklin County	x	x	
Bowman, Sue	Retired from ministry	Interfaith Council			
Kiener, Andrea Stephens, Kate	Rabbi Pastor	Temple Israel Interfaith Council	X		
1. Avery, Jennifer 2. Brzezinski, Jen 3. Chartrand, Ken 4. Laurel, Charles 5. Margosian, Alex 6. Mercado, Reuben 7. Neubauer, Deb 8. Pliskin, Ariel 9. Schwartz, Levin	1. Reentry Caseworker 2. Reentry Caseworker 3. Reentry Coordinator 4. Clinician 5. LICSW Clinician 6. Reentry Caseworker 7. Clinician 8. Clinical Intern	Franklin County Sheriff's Department		Х	

Name (Last, First)	Title	Organization	Organizatio n Serves Broad Interests of Community	Organization Serves Low-Income, Minority, & Medically Underserved Populations	State, Local, Tribal, Regional, or Other Health Department Staff
 Heather Bialecki-Canning Mary-Jo Crowley Erica Donahue Gretchen Emond Chase Giroux Kelly Herbert Margery Jess Dana Mengwasser Shawna Osman Stefanie Shippee Debbie Spencer Kelly Thibodeau Sandy Walters Debbie Williams Andrew Tomsho-Dexter Prity Shah Destiny Crews Dona Havens Katelyn Merz 	9. Director, Clinical and Reentry Services	1. North Quabbin Community Coalition 2. Clinical and Support Options 3. Center for Human Development 4. Clinical and Support Options 5. Clinical and Support Options 6. Clinical and Support Options 7. Support Network 8. Brick House 9. Clinical and Support Options 10. Department of Children and Families 11. Clinical and Support Options 12. Clinical and Support Options 13. Clinical and Support Options 14. Mass Behavioral Health Partnership 15. CA Health Families 16. CA Health Families 17. Center for Human Development 18. Clinical and Support Options 19. Center for Human			
		Development Public Health Personne	<u> </u>		
Caulton-Harris, Helen	Commissioner of Public Health	City of Springfield, Public Health Department			х
Cluff, Ben	Veterans' Services Coordinator	Massachusetts Department of Public Health, Bureau of Substance Use Services			х
Hyry-Dermith, Dalila	Supervisor	Massachusetts Department of Public Health, Division for Perinatal, Early Childhood and Special			Х

Name (Last, First)	Title	Organization	Organizatio n Serves Broad Interests of Community	Organization Serves Low-Income, Minority, & Medically Underserved Populations	State, Local, Tribal, Regional, or Other Health Department Staff
		Needs, Care			
		Coordination Unit			
Walker, Phoebe	Director of	Franklin Regional Council			V
	Community Services	of Governments			Х

Community Chats

RAC and CBAC members identified existing community or provider meetings to bring information about the CHNA and gather priorities. Findings informed prioritization of CHNA health needs.

Organization (4)	Population	Location	# of Participants (total: 32)
	Franklin County (2) N = 12		
Baystate Franklin Medical Center Emergency Department	Emergency Department Staff	Greenfield	3
Baystate Franklin Medical Center Social Workers	Social Workers	Greenfield	9
	Worcester County (2) N = 20		
North Quabbin Children's Health and Wellness System of Care	Community Members	Athol	12
North Quabbin Recovery Center	Community Members	ers Athol 8	

Community Conversations

Community Conversations were bi-directional information sharing meetings conducted for each Baystate Health hospital service area. Findings informed prioritization of community health needs.

Baystate Franklin Medical Center: At John Olver Transit Center in Greenfield

• 40 people from across Franklin County and the North Quabbin region

Appendix II. Glossary of Terms

- **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 outside of the Coalition of Western Massachusetts 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 Strategic Implementation Plan (SIP) an assessment of the needs in a defined community. A CHNA and strategic implementation plan are required by the Internal Revenue Service in order for nonprofit hospitals/insurers to maintain their nonprofit status. The SIP uses the results of the CHNA to prioritize investments and services of the hospital or insurer's community benefits strategy. Note: the Internal Review Service uses the term "implementation strategy", however, Baystate Health as opted to use the term, "strategic implementation plan".
- 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

- o **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 groups 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 one purpose, but is being used by the researcher for another purpose (e.g., rates of disease compiled by MDPH).
- Determination of Need (DoN) 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 MDPH. The goal of the DoN process is to promote population health and increased
 public health value by guiding hospitals to focus on the social determinants of health with a
 proportion of funds allocated for the proposed changes.
- **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 (World Health Organization).
- **Health Equity** the highest standards of health should be within reach of all, without distinction of race, religion, political belief, and economic or social condition (World Health Organization).
 - 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
 - Health equity is 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.
- 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.
- **GLBQ+** gay, lesbian, bisexual, queer, questioning, and all other people who identify within this community.
- **Transgender** refers to anyone whose gender identity does not align with their assigned sex and gender at birth.
- **Non-Binary** people whose gender is not male or female.

- **Gender Nonconforming** a person who has, or is perceived to have, gender characteristics that do not conform to traditional or societal expectations.
- Race groups of people who have differences and similarities in biological traits 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. Race is a socially created construct as opposed to true categorization.
 - Black we use the term "black" instead of African American in this report in reference to the many ethnicities with darker skin, noting that not all people who identify as black descend from Africa.
 - Latino/a we use the term "Latino" or "Latina" in this report in reference to the many cultures who identify as Latin or Spanish-speaking. We chose to use Latino/a instead of Hispanic or Latinx, noting that there is a current discussion on how people identify. Latinx is a gender-neutral term, a non-binary alternative to Latino/a.
- 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. (World Health Organization)
- Social Justice justice in terms of the distribution of wealth, opportunities, and privileges within a society.

Appendix III. Focus Group Summaries

Coalition of Western Massachusetts Hospitals/Insurer 2019 Community Health Needs Assessment

Focus Group Report: Transgender, Non-Binary, and Gender Nonconforming (GNC) People

Primary Hospital/Insurer: Baystate Franklin Medical Center

Topic of Focus Group: Transgender, non-binary, and gender nonconforming (GNC) people

Date of Focus Group: 2/19/2019

Facilitator: Kat Allen **Note Taker:** Jeanette Voas

Executive Summary

A. Participant Demographics:

- Five participants
- Four participants were between the ages of 22 and 30. One was between the ages of 51
 60
- o Four were white, one was Semitic
- One unmanifested genderless, manifested female, transgender; one Female, male, & non-binary, prefer not to say whether transgender; one Male, transgender; two nonbinary transgender

B. Areas of Consensus:

- "Transgender, non-binary, and gender nonconforming" works as an acceptable set of labels. There are many other culturally specific identities like "two-spirit." [In this report "trans" – the word the participants used most often – is used as short hand to cover a range of identities.]
- O The health care system needs to be more trans-friendly and trans-knowledgeable at all levels. There are a few good PCPs that trans/GNC people go to, but not enough, and sometimes other providers use the fact that someone else is trans-friendly as an excuse to not need to become more informed. And most specialists do not have the needed sensitivity and knowledge.
- There are not enough behavioral health care providers who are transgender (the ideal situation) or trans-friendly and trans-competent.
- Medical providers should be expected to meet a higher bar for trans-competence than the general public does. Patients should not need to be in the position of educating their medical providers.
- The administrative level of health care does not feel trans-friendly, e.g. forms and protocol disregarding information provided about preferred names, asking patients to fill out forms with inscrutable questions about transgender status.

- The lack of coordination among agencies can make it difficult to find trans-friendly care and services.
- O There's a general lack of sensitivity in the community, which can be socially isolating, especially for transgender people who don't "pass."
- All of the participants agreed that they felt uncomfortable or afraid going to any of the gyms in town.

C. Recommendations:

- Recruit trans-friendly and trans-knowledgeable providers (including and especially behavioral health specialists), and providers who are themselves transgender. Involve trans people in the hiring/interviewing process.
- Train everyone in the hospital or medical practice in trans issues to build competence throughout the organization.
- Provide training to community organizations to make them trans-friendly and motivate them to involve transgender people. Gyms are a good place to start.
- Create a single GLBQ+ and transgender hub that people know about and can go to for information about providers, resources, events, etc. (Cooley Dickinson just hired someone for a similar role.)

D. Quotes:

- o "I need Baystate to understand that people are falling through the cracks. We're *not* healthy, we're *not* doing great, we're suicidal, struggling to maintain employment and paying all the bills, so it's so difficult to do self-care. There's a lot of personal responsibility on me taking care of myself, but also I need those resources to be there and available and accessible, and to be treated like a human being."
- "I have never been in a gym where I have not felt terrified 100% of the time I was there. I just want to exercise!"
- o "I can't go to the gym and do the things I want to do, be with people in that setting, and maybe develop a friendship. I can't have that because I don't think they're ready for it.

 And specifically in my case, it's because I do not pass."
- "Not passing is a huge barrier to everything."
- "When I feel like I am expressing myself in a way that's true to myself, most people in society don't know how to read that or be with it."
- "There's this idea that you're moving from one side of the binary to the other, you're in transition, and you're always trying to get somewhere. I'm non-binary but that doesn't mean I'm trying to find a means to an end. I hope that health care can get used to the idea of people just being people and identifying as themselves without having to reach some gender identity. This idea that people have to look at you and have to diagnose you as something is really frustrating."
- "Even the hormones they put trans people on were usually designed for cis people. So much of what happens with trans people, there's no research, there's no knowledge."
- "Before coming here I went to Fenway Health in Boston, which is specifically for GLBQ+ and transgender community. Here I feel like providers lack interest in becoming well-

- read and accepting and caring. It feels like they're doing it because they're being mandated to, or because people are reacting against the things that they're not doing."
- "I swear medical school steals people's souls. Every time I deal with a medical assistant or nurse practitioner, they're so great...doctors terrify me."
- o "I seek out only trans-friendly physicians. I go to people I trust."
- "If they're taking new patients."
- "There's no network. Coming here and finding a therapist who's trans-friendly... In Boston, there's a network you can go to and there's actual information about the providers and what their experiences are with trans people. Here I have no idea."
- "Resources are so fragmented. I've seen at least 3 separately compiled documents made by different groups that list all the trans-friendly providers in the area, with 90% overlap, but people at three different organizations had to painstakingly put these together separately and then give them to like the five people they interact with."
- o "In this area, people think, 'everyone's queer,' so we don't need queer-specific resources, we don't need a GBLQ+ and transgender center like Fenway."
- "Some weeks what I do to stay healthy is I eat well and I exercise and some weeks what I do to stay healthy is I eat McDonalds and I sleep for 15 hours and I try again the next week. I don't want a health care system that's going to shame me because I have to do that sometimes."

Key Issues

Question	Synthesis of Responses
1. Obstacles to being healthy	 Lack of awareness, sensitivity, and competence around trans issues in the health care system Providers need to be better educated about trans issues. Otherwise the burden falls on the patients to teach the providers. Ideally, there would be good providers who are themselves transgender. Second choice: loving, caring providers who have the knowledge and understanding.
	 There are not enough mental health providers who are transgender themselves or trans-friendly and trans-competent. And mental health support is a big need for trans people. It's difficult to seek behavioral health. Five years ago I knew I'd be approached a certain way, asked to do certain tests. Now I get a lot of apologies. It's just too much. Some providers lack sensitivity, and others will say, "I treat transgender people like everyone else." But there are extra issues with being transgender. The providers need to be knowledgeable about that. There are a few providers who are known to be trans-friendly, and everyone goes to them. Because those few providers are

Question	Synthesis of Responses
	out there, other providers, especially specialists, seem to feel they don't need to become trans-knowledgeable themselves. I have health issues that have nothing to do with being trans, but when I go to a specialist, all they want to know is whether I'm on testosterone. The administrative level needs training as well. They're the first line. They don't use your preferred name and they give you forms with questions that are not helpful and hard to answer. Lack of sensitivity in the community, no welcome feeling The gyms in town do not feel welcoming. Fear that someone will freak out in the locker room and call 911. Gyms aren't ready for us. "I have never been in a gym when I have not felt terrified." Social isolation if you don't fit in If you don't pass, you're a provoker. Not passing is a huge barrier to everything. There are lots of nonpassing transgender women who don't leave the house. People don't see us as we are. Capitalism! We live in a system that funnels power and wealth to people who don't tend to be transgender or care about transgender people.
2. Health challenges unique to transgender people & how well are they being addressed	 Not enough research on health issues for transgender people. What are long-term effects of hormones? What about interaction of hormones and other medications? How best to deal with other health issues that are different for transgender people? It's like we're being experimented on. There are not many providers who are themselves transgender. Getting into those fields can be hostile to transgender people. A lot of trans-specific health care happens to people before they're 18, when they can't speak or decide for themselves. One participant reported medical abuse as a child, including having medications and treatments that weren't explained to them, perhaps because of their gender nonconformity. I worry that if you have a history in the mental health system, as many transgender people have, that can affect how you're treated in the medical system. You say something's going on and they say, "It's just in your head." Trans people don't all want the same things, the same combination of hormones & surgery. One participant said: Insurance has had restrictive rules, e.g. you can't get top surgery unless you're on hormones Another said: rules have changed in Massachusetts, so that's no longer the case

Question	Synthesis of Responses
	 Another said: providers need to be able to educate patients about things like that At times, there have been shortages of HRT meds and I have been unable to get them at the pharmacy. It's awful.
3. Where do you get medical care & do you get the care you need?	 CHC, Baystate, VMG, CSO, alternative providers Mix of satisfaction with providers: I'm comfortable, I'm ready to move, I don't talk with my doc about anything Dental is awesome at CHC! Bad experiences: Hole in the system: I hit my head at work, I have symptoms that prevent me from working, but I don't have a diagnosis and without a diagnosis, I can't get disability or any kind of assistance. In CT, when I was suicidal I was admitted to hospital into awful conditions, with people freaking out all around and guards. There was no trans support, no recognition. You've got to make accommodations and be trans knowledgeable. I was ready for help and that's how I got treated. I've been in Baystate psych ward. They're not trans knowledgeable. And the reason why is that they send trans people up to Brattleboro Retreat, but that unit is poorly resourced, as compared to other units.
4. Local resources that have helped you be healthier	 (Long silence before anyone answered) Recovery Learning Center, for community and mental health support
5. What else/what other services would be helpful?	 A central go-to place for trans people to find out where to get transfriendly services. An GLBQ+ and transgender resource center. A hub that people know about, one entry point. There's word of mouth, and everyone says to go to the same provider and that provider is booked solid For someone new in town, it's hard to navigate When people go into crisis here, they often get sent to respite. But respite sucks for trans people. Their policies make no sense, so they usually don't accept trans people. Trans people who could be in a less locked-down situation end up getting pushed into the hospital. Opportunities for improving health & talks about health resources that don't all go back to exercise and eating well. Some of us can't exercise, and the healthy food is the most expensive food.
6. What do you do to stay healthy?	 Exercise, take care of yourself be fit & active, mentally healthy and happy Dance, as often as possible I need Baystate to understand that people are falling through the

Question	Synthesis of Responses
	cracks.Marijuana has been helpful. Looking for increased accessibility and lower price.
7. Recommendations from one participant who wrote up her thoughts for us	 Remove gender-specific signage Stockpile and make available HRT meds when supplies become low Set a gift fund for transgender surgical procedures for those who cannot afford them. Hire health care providers—especially mental health providers—who are themselves trans or GNC Recruit medical professionals with specific training with trans people. Conduct mandatory training of all health care employees for transfriendly environment Involve trans people in provider hiring & interviewing process Get involved in retraining influential people and the community at large to create a more inclusive environment

Coalition of Western Massachusetts Hospitals/Insurer 2019 Community Health Needs Assessment

Focus Group Report: Youth of Color

Primary Hospital/Insurer: Baystate Franklin Medical Center

Topic of Focus Group: Youth of Color **Date of Focus Group:** 2/19/2019

Facilitator: Kat Allen

Note Taker: Jeanette Voas

Executive Summary

A. Participant Demographics: Eight participants

- o Five women, three men
- Six people seemed to be over age 45, and two seemed to be in their early 30's
- Six people were white, two were Latino

B. Areas of Consensus:

- Life is stressful, with multiple demands of school, homework, chores at home, and for many, work.
- School can be a stressful environment, with social expectations, cliques, unnecessary drama, and a school environment that doesn't help young people deal with the emotions and the stress
- The students said they see a lot of anxiety, eating disorders, and depression among their peers.
- They report instances of being stereotyped by their peers, being treated unfairly at school because of race, or being less likely to be hired because of race.
- Young people need a place to hang out that's not school.

C. Key Recommendations:

- Support social emotional learning in schools
- Work to destigmatize mental health issues
- Provide lots of support for students transferring into a school
- Train students and staff in diversity/cultural humility
- Continue support for programs like CAYP Shout Out group.
- Consistently and fairly apply school discipline policies and school dress code across gender, race, ethnicity, class, and appearance.
- o Incidents of teachers and school staff not respecting students' physical space (i.e. dress code violations) are not uncommon and should be avoided.
- Community activities and resources such as "lightskating" and a skate park and greater access to the YMCA would provide healthy ways for youth to feel more connected and engaged.

D. Quotes:

- "School's supposed to be a learning environment, but it stresses you out. There's not enough time to socialize, time to learn social skills."
- o "There aren't enough hours in the day to get everything done in a way that's acceptable to your peers and your parents."
- "When I get angry, I don't show my emotions for nothing. People can use it against you. I
 feel bottled up by too much emotion. Sometimes I don't pay attention because I'm so
 stressed, it slows me down."
- o "It's not good for your body to be so stressed out. You get panic attacks, anxiety. We see lots of it. I know so many people at school who have eating disorders or anxiety."
- o "If you transfer in to our school, it's not easy to integrate in. Everyone stays with their own friend group."
- "Teachers care about the work, not the student well, not every teacher. I can stay after to talk about school work, but I can't stay after to talk with a teacher about emotional problems."
- "In school they don't teach you how to deal with emotional stress. You can end up being depressed about it."
- o "There's a lot of stigma against mental health. I know a girl who's depressed and her friends told her, 'I don't get it, just be happy.' She's afraid to go to therapy because people don't understand."

Key Issues

Question	Synthesis of Responses
Things that get in the way of being healthy	 Financial issues Expense of health insurance and health care Some people don't have enough money to go to the doctor and doctors shame and threaten parents that they should take better care of their kids. It's too expensive to go to the Y or to have exercise equipment Family has moved a lot, and that makes it hard to be healthy. You have to adjust to everything, to new schools. No rides; it takes a long time to get places Lack of a healthy social environment in school It's hard to transfer into a new school and fit in Peer pressure to spend money and have certain clothes, shoes, technology. It makes people stressed out. Stressors People compare their body types to others. I know a lot of people with eating disorders. School + work + homework + chores + sports is exhausting. It's hard to stay awake during the day.

Question	Synthesis of Responses
	 We see lots of anxiety, panic attacks, depression JUULing, including in school Some parents are against vaccination; kids can't decide on their own to get vaccinated
2. Health issues unique to young people of color?	 It's harder to get hired. There are social expectations – people expect you to be something you're not, and that adds to stress. Because of Asian stereotype, everyone wants to be in a group with me and make me do all the work. People get labeled for how they look or act. People get called messed up names. There's drama that's unnecessary and so common. There's unequal treatment, for example in dress code violations. It doesn't happen to white girls like it does to me.
3. How well are those challenges addressed	 Some teachers care about school work, not about the students. We complain, for example about school food, and nothing is done about it. Teachers can be disrespectful, for example, yanking off a hood instead of asking you to take it off.
4. Discrimination that impacts health	 A guy told me I was unattractive because I'm black. It took a toll on me. I keep my emotions bottled up. In school they don't teach you how to deal with emotional stress. You can end up being depressed about it. There's a stigma against mental health. Someone might not go to therapy because people don't understand.
5. Local resources that contribute to health	 CAYP, Family Center. The Shout Out advisor bought me a planner and helped me plan. Therapy Friends can be therapists, too Family members It's good to have someone you can trust Being alone
6. What else is needed	 A place for youth to go hang out Friday night "Lightskating" with lights and DJ was good, but they don't do it anymore Skatepark is gone and Turners is so far Boredom makes kids do crazy things Transportation – Leyden Woods is so far from everything

Question	Synthesis of Responses
7. How do you stay healthy	 Sports Spending time alone Hike to Sachem's Head – it's so peaceful Dance when I clean Go to the Y Have pets

2019 Community Health Needs Assessment Focus Group Report ServiceNet Wells Street Shelter in Greenfield, Jan 23, 2019

Focus Group Report: People Living Unsheltered in Greenfield, Massachusetts

Primary Hospital/Insurer: Baystate Franklin Medical Center

Topic of Focus Group: People living unsheltered in Greenfield, Massachusetts

Date of Focus Group: 1/23/2019

Facilitator: Kat Allen

Note Taker: Jeanette Voas

Executive Summary

A. Participant Demographics: Nine participants

o Four women, five men

- o Seven non-Hispanic white, one black Latina, one American Indian
- Three age 31-40; four age 41-50; one age 51-60

B. Areas of Consensus:

- Shortage of mental health/substance use care
- o Problems with coordination of care and continuity of care
- There's a shortage of shelter space and a need for warm places to go during the day
- Transportation can be a barrier to accessing services; lack of transportation on evenings & weekends
- Shelter residents have good access to healthy food

C. Key Recommendations:

- Identify warm places to be during the day, with volunteer opportunities for shelter residents
- Weekend bus service is needed
- o More shelter beds are needed
- Increased access to MAT is needed

D. Quotes:

- "There's not enough follow up to mental health and substance use care. When you're discharged from a program, it's hard to get the meds you need."
- "Trying to get a provider and get prescriptions after you've been discharged from a program is a huge challenge."
- "There's a stigma about being homeless. They assume we're just trying to get a free ride. I
 don't have a home, no car. Sometimes you have to rely on people in the community."
- o "There are plenty of meals. Food is not hard to find, if you can get there."
- "FRTA promises new bus stops, and then cuts back. There's no weekend or evening bus. This
 town needs weekend bus service."

Key Issues

Question	Synthesis of Responses
1. Biggest things that make it hard for you to be as healthy as you would like to be	 Inadequate mental health care, especially for those with dual diagnoses. Not enough beds Not enough capacity at Greenfield methadone clinic Nursing homes don't take people on methadone Not enough follow up, continuity of care when you leave a program It's taken a long time to get an accurate diagnosis DMH beds for respite are taken up by people who don't want to be there and aren't taking advantage of services; and there are others who need higher level of care People with substance use disorders and mental health diagnoses are not listened to and face discrimination in medical system. Long waits for appointments, can't get in to see my own doctor, communication problems with provider organizations
2. Services currently available to people experiencing homeless in Franklin County	 In Greenfield, excellent resources for a small town. We need more shelters. Here it's a transportation issue. Sometimes you have to travel a ways for care (e.g. to methadone clinic in Springfield) If you're in any kind of treatment you can get a free bus pass. Greenfield needs weekend and evening bus service. We have to leave the shelter at 8:00am and there's nowhere to go. Breakfast and lunch at Salvation Army & you can shower there. Plenty of meals offered – if you can get there
3. Barriers for people experiencing homelessness to accessing these services	 Transportation No weekend service If you don't have a stable address, you don't get PT1
4. What else is needed to help people experiencing homelessness be healthier	 Warm places to be during the day Productive things to do during the day We could volunteer to help out, to make things Keep old buildings and let the homeless people who want to better themselves get to work on them
5. Source/availability of	Have used many medical resources in town – Baystate, Valley

Question	Synthesis of Responses
medical care	 Medical, CHCFC, Health Care for the Homeless (Springfield) – and have moved among them Have had both positive and negative experiences with medical system Are able to get preventive care if they choose to Limited availability of dental care – only a certain number of patients on certain days
6. Measures to stay as healthy as you can while experiencing homelessness	 Eat healthy food Ready availability of food Plenty of fruits and vegetables A lot of options at shelter; can cook own food Shout out to Stone Soup! Rest Walk Garlic/herbs/other personal remedies and habits

2019 Community Health Needs Assessment Focus Group Report Charlemont Federated Church in Greenfield, Jan 31, 2019

Focus Group Report: Users of a Rural Food Pantry

Primary Hospital/Insurer: Baystate Franklin Medical Center

Topic of Focus Group: Users of a Rural Food Pantry

Date of Focus Group: 1/31/2019

Facilitator: Kat Allen

Note Taker: Jeanette Voas

Executive Summary

A. Participant Demographics: 13 participants

o Ten women, three men

- o Ten non-Hispanic white; two American Indian; one white/American Indian
- One age 22-30; one age 31-40; two age 41-50; five age 51-60; three age 61-70; one age 71-80

B. Areas of Consensus:

- Transportation is the #1 issue
- Shortage of good primary care physicians, mental health providers, and participants often have to go to Springfield for specialists.
- o Insurance doesn't cover things the participants feel they need, and trying to get referrals or deal with insurance is frustrating.
- Social networks among neighbors are recognized as an asset.
- Pretty good access to healthy food; participants said the Charlemont Federated Church food pantry was the best. HIP at farmers' markets is a plus.

C. Key Recommendations:

- Satellite or mobile clinics would be very useful for rural residents.
- o Telehealth and telemental health services would be very useful
- o Pharmacy delivery services (which used to exist) would be very useful
- A clothing closet (perhaps mobile, perhaps paired with other mobile services) would be very useful
- Expand community health nursing programs

D. Quotes:

- "Some places you get frowned on because you get food stamps whether you live in the Hilltowns or in the city."
- "If you get together with your neighbors, you will always have something to eat."
- o "Transportation is the ultimate question. It's a big trip to Greenfield. You ask the neighbors, 'Who's going in today?'"
- o "What is needed? Anything mobile."
- o "Because our population is small, our priorities get kicked down the road."

Key Issues

Question	Synthesis of Responses
1. Biggest things that make it hard for you to be as healthy as you would like to be	 Transportation! Bus comes through 2-3 times a day. Some people can't get down to the bus. If you go into Greenfield you have to wait around to catch a bus back. People can get PT-1, but people not on MassHealth need rides, too. Shortage of primary care physicians, not enough mental health care, providers not accepting new patients. No ENT, No rheumatology. You get sent to Springfield. Referrals get complicated confusing. You get frustrated and you go without care.
2. Sources of food, and access to healthy food	 Charlemont Federated Church food pantry is the best. Difference of opinion about others (from "food pantries and offerings are good" to "they ask you lots of questions and the food is not very good.") Farmers' markets and HIP are good. Several in the group had used HIP; not everyone knew about it.
3. What you do if you run out of food	 Go hunting Turn to family and neighbors ("Stone Soup")
4. Source and adequacy of medical care	 Various, mostly in Greenfield, including Valley Medical, CHCFC, Franklin Adult Medical, Shelburne Family Practice, CHD, and Minute Clinic (participant says she has been unable to get her own doc) Had to go to Orange for dental care because it's easier to get in there Medication can be hard to get; insurance doesn't cover supplements and some tests we need Walk-in clinics at the church are helpful
5. Transportation	 The ultimate question! There's a bus in the morning, and 11:20, and then you're stuck all day. I've hitchhiked. People who have bicycles use them
6. Missing services, other things that would help	 Sidewalks. To get to the bus I have to walk ¼ mile in the road. The town plans a bicycle trail and sidewalks, with construction to begin in the spring. Even two more buses would help. A rural clinic for all the towns around here. Anything mobile, e.g. a mobile unit from Baystate or CHCFC that would do lab draws, prescriptions.

Question	Synthesis of Responses
	 Pharmacies that deliver up here. Ambulance could take people to appointments when it's not on call. Telehealth Group exercise classes Clothing closet (there's one in Colrain at First Baptist)
7. What you do to stay healthy, despite the challenges	 I don't smoke or drink I go to bed at a reasonable hour I walk my dog I garden We have a strong social network

Appendix IV. Key Informant Interview Summaries

Coalition of Western Massachusetts Hospitals/Insurer 2019 Community Health Needs Assessment

Key Informant Interview Report

Hospital/Insurer: Baystate Franklin Medical Center **Interviewer:** Kat Allen, with Jeanette Voas taking notes **Interview Format:** In-person interview, 1 hour in length.

Participants: Franklin/Hampshire Systems of Care: Heather Bialecki-Canning (NQCC), Mary-Jo Crowley (CSO), Erica Donahue (CHD), Gretchen Emond (CSO), Chase Giroux (CSO), Kelly Hebert (CSO), Margery Jess (Support Network), Dana Mengwasser (Brick House), Shawna Osman (CSO), Stefanie Shippee (DCF), Debbie Spencer (CSO), Kelly Thibodeau (CSO), Sandy Walters (CSO), Debbie Williams (Mass Behavioral Health Partnership), Andrea Tomsho-Dexter (CA Health Families), Prity Shah (CA Health Families), Destiny Crews (CHD), Donna Havens (CSO), Katelyn Merz (CHD)

Question	Synthesis of Responses
1. What mental health issues are you seeing among the young people you serve?	 High rates of early trauma among young kids. Kids are presenting with higher needs at school. Kids can't sit in a chair and do what they need to do. Anxiety is through the roof, even more than depression. Depression and anxiety go hand in hand – they're responses people have. Among kids most at risk of out of home placement, there's an increase in hopelessness that's not alleviated by clinical or pharmacological interventions. They're not healing and there's a lack of clarity around why. There's a lot of social anxiety, e.g. fear of making a phone call. It makes it hard to have even a small group getting together to share. For young people, it's almost the norm that you have anxiety of some sort. It's almost normal to be 6 and have a therapist.
2. Why do you think you're seeing this change?	 Social media has a huge impact. It's isolating. Poverty is a piece of this. Either both parents are at home not working, on transitional assistance, or both parents are working at not at home for kids. Violence in schools, trauma kids experience just by having a drill. We have children who do not want to go to school. Lack of motivation. They have dreams as kids, then they go into middle school and they're on their phones and tablets, then in high

Question	Synthesis of Responses
3. Do you think there is a real increase in mental health problems, or is there a change in recognition/ reporting?	 school, maybe college, and they're still living with their parents 5-10 years down the road. I don't like to go to that place that it's all about social media, or that parents are working. It's different. I don't even see kids racing to get their license at 16. Significant trauma underlying anxiety. There are other things going on in the home we're not aware of. Our culture has shifted away from a community-based model to an isolated model. That's the biggest impact. Parent paranoia. Different parenting today. Many parents are over protective because of what we see in the news. Parents believe it's dangerous out there. Parents don't let kids go out. There's a mindset that the world outside my house is dangerous. Drop off in parent engagement. It seems like that 10-12 range is when parents are all of a sudden done. There's an instant access to violence – and increased level of paranoia. We're always saying, this is different from before. When I was a kid Everyone's becoming more aware of mental health We might be doing a better job of teaching kids to identify their emotions, so they recognize it more. I'd say yes there's more awareness. In CBHI (Children's Behavioral Health Initiative), we use outcome measures, and in the beginning, there's no trauma, and half way through the symptoms are through the roof. They've learned the language, learned to identify anxiety, trauma. At risk kids will say things like: I can't control myself. This is impossible for me. They made me see a therapist and it didn't work. We have to be mindful that being a human being can be challenging. We need balance. We don't want to create issues. Yes, I think there's less stigma. It varies. We've had a shift in understanding of the mind-body connection. I wonder whether kids had somatic complaints a few years back that kids are now articulating as mental health issues. There's greater a
4. What's happening in the world of care in response?	 emotions, so they recognize it more. Schools are looking at creative solutions that are outside the box. They're looking at Community Health Workers, support worker positions to be liaisons. Schools are only seeing one aspect of this young person's life. We
	 operate in silos. We need to be integrated to get the best outcome. CBHI (MassHealth Children's Behavioral Health Initiative) has helped

Question	Synthesis of Responses
	 spread child mental health access. But access is not as good for people with private health insurance. That's supposed to change in July. There's intensive care coordination for kids with MassHealth and mental health diagnosis, providing someone with lived experience to partner with the person raising the child, plus care coordinator to connect to natural and professional supports.
5. What's missing?	 Services that connect children, schools and families. There's a huge issue with parent responsiveness or school perception of parent responsiveness. There's a big disconnect with parents. It's hard for parents who aren't as aware of mental health. They didn't deal with it at their age, or they had bad experiences and they don't want their kid to go through it. There's been a huge rise in out of home placements in adolescents, the ones that are hardest to find homes for. Leaning towards kinship homes, but that can be problematic because of family histories of mental health issue. There's an increase in courts ordering kids into DCF care. We don't have to place them and we sometimes keep them in the home. We're balancing our need to provide safety, and our desire to provide normalcy. We need trauma-informed care in school systems. There's a presentation of "we are trauma informed", but in practice "Trauma informed" is a buzz word. People don't really understand the complexity of it. The community needs to step up to provide protective factors when a
6. What else?	 kid's risk factors rise. There are not a lot of extracurricular activities at school that don't cost an arm and a leg. Parents cringe every sports season when the fees go up. If you are an athlete, there are opportunities for extra curriculars, but if you don't fit in that bubble, you don't fit anywhere. In the North Quabbin where transportation is a huge issue, anything that has to do with the library, arts, music doesn't seem accessible.

- "It's hard to coordinate care. We have difficulty getting parental engagement. We need release waivers so we can get communication among providers and schools, DCF. We in the agency can't call the school and say, here's what we're seeing, here's what's working, what's not, or vice versa. We can't coordinate. If you have a release waiver, you can call the DCF worker, and work on things to help avoid intervention -- so we don't have to file a 51A. So much stuff is falling through the cracks. So many collective approaches we could have together."
- "CBHI for MassHealth has helped spread child mental health access. But we've seen folks with
 private insurance not having access and getting on 3-month wait lists. That's going to be
 changing in July 2019. Will the workforce be able to respond?"
- "Among young kids, the early trauma rates, ACE scores, are through the roof, and I wonder how that correlates with what we're seeing with older kids' depressive symptoms.
- "It seems like the 10-12 age range is when parents are all of a sudden done with parent engagement in the schools. It's intimidating to go into school with older kids."
- "Kids are presenting with higher needs and our ratios of students to teachers are too high.
- "Social media has a huge impact. It's isolating."
- "Poverty is a piece of this. Either both parents are at home not working, on transitional assistance, or both parents are working at not at home for kids."
- "Kids don't know how to fit in. There are not a lot of extracurricular activities at school that don't cost an arms and a leg. Parents cringe every sports season when the fees go up."
- "If you are an athlete, there are opportunities for extracurriculars, but if you don't fit in that bubble, you don't fit anywhere. In the North Quabbin where transportation is a huge issue, anything that has to do with the library, arts, music doesn't seem accessible."
- "I don't like to go to that place that it's all about social media, or that parents are working. It's different. I don't even see kids racing to get their license at 16."
- "The reality is that there's no more trauma now than there ever has been. Our culture has
 shifted away from a community-based model to an isolated model. We've lost sense of
 community. That's the biggest impact. Before you could go to your neighbor's house if you had
 trauma in the home."
- "There's different parenting today. Many parents are overprotective because of what we see in the news."
- "We might be doing a better job of teaching kids to identify their emotions, so they recognize it more"
- "We have to be mindful that being a human being can be challenging. We need balance. We don't want to create issues."
- "We hear parents aren't engaged, people are isolated because they're on social media, neighborhoods don't feel safe these are protective factors. The community needs to step up to provide protective factors when a kid's risk factors rise."
- "We need trauma-informed care in school systems. There's a presentation of "we are trauma informed", but in practice..."
- "Trauma-informed is a buzz word. People don't really understand the complexity of it."

Key Informant Interview Report

Hospital/Insurer: Baystate Franklin Medical Center

Interviewer: Ilana Gerjuoy, with Jeanette Voas taking notes

Interview Format: In person interview, 1.25 hours

Participant: Cheryl Pascucci, Community Hospital Acceleration, Revitalization, & Transformation

(CHART) Program

Question	Synthesis of Responses
What are the 3 most urgent health needs/problems in your community/service area?	The CHART Program worked with the highest utilizers of emergency department & inpatient services. For these patients (n=543), primary issues were pain, suffering*, and substance use disorder. 55% of this population had substance use disorder (SUD), and those who did not typically had severe mental illness or were chronic disease/end of life cases. *Suffering can include psychological distress, SUD and withdrawal, trauma, and troubles related to social determinants of health.
What health issues have emerged and/or dramatically increased in prevalence in the last 1-2 years in your area?	 SUD is escalating, particularly in rural areas. Our health care system is too medicine and procedure-based. There's very little attention to self-care or instilling hope.
What specific vulnerable populations are you most concerned about?	 People who have pain and don't have a plan. People who are suffering with mental illness. People who are dually eligible for Medicare & Medicaid but are under age 65 are a very high risk population.
What specific gaps to health care are you most concerned about? For whom are these most critical?	 Fee for service and medical models are not equipped to deal with the enormity of people's problems. Clinicians' "person-centered care" shouldn't be disease-specific; what's missing is attention to whatever the person says they need. There's a lack of integration of medicine, behavioral health and social services.
What specific barriers to health care are you most concerned about? For whom are these most critical?	 The way health care is paid for (before transition to ACO model). Lack of capacity of clinicians to spend time with people.
What does the available data NOT show about health needs and gaps, meaning, what's missing?	 We need a team to work with high-needs population under age 65 who are dually eligible for Medicare & MassHealth. We don't have a good way of working with this population here. The North Quabbin is completely left out.

Question	Synthesis of Responses
	There are successful models in Springfield. In rural areas, we need to
	collaborate to make it work.
What are the opportunities	Community Health Workers trained for person-centered care, including
for better prevention to keep	helping patients develop their own action plans, build their confidence,
people you serve out of the	advocate for themselves. (WRAP – Wellness Recovery Action Plan is a
hospital? In addition to more	model.)
funding, what other	Telemedicine
resources do you need to	• Integrated teams, with outside agency (e.g. CSO, DMH) real time access
better address emerging or	to someone in the hospital for communication when a client comes into
increasing health concerns?	the emergency department/hospital.
	• CHWs fare better as part of a team. When they're in it by themselves
	they burn out quickly and there is high turnover.
Externally, what do you wish	Police are being trained to recognize individuals experiencing a mental
you could refer people to?	health crisis or in withdrawal, but there is no place for police to call in or
	drop people off other than the ED for overnight & weekends.
How would you recommend	Commonwealth Care Alliance (OneCare for <65) is the model with teams
that the western	providing and coordinating a full spectrum of health services. The patient
Massachusetts Hospital	experience is enhanced and the cost of care goes down.
Coalition work in closer	
partnership with local and	
regional public health	
organizations after the CHNA	
is completed?	
What specific ways can such	Follow the money. We need to partner with the entity that is financially
a partnership be supported	responsible for the outcomes of the human being. The ACO needs to step
and sustained?	up.
Other	CHART data shows reductions in emergency department visits and
	inpatient admissions over the (short) span of the program.

- "The way we deliver health care is medicine- and procedure-based, with very little attention to self-care. There's very little hope instilled by primary care or in the hospital."
- "Change the experience of care to make it person-centered. The person says it's better and they stop coming to the hospital because they're connected to community."
- "We need to sell the story that models with integrated primary care, mental health, and social services work. We need the ACO to look at the data, say this is valuable, and get them to pay for it."
- "How is LifePath is going to survive when money all goes to primary care? Part of it is proving your value. It's a huge leap. Primary care is afraid they're going to fail under the ACO model."
- The CHART team's progression in working with patients was: "Do for, do with, cheer on."

Key Informant Interview Report

Hospital/Insurer: Baystate Franklin Medical Center **Interviewer:** Kat Allen, with Jeanette Voas taking notes

Interview Format: In person interview, 1 hour

Participants: Community Health Center of Franklin County Leadership Team of Ed Sayer (CEO), Jared Ewart (Acctnt), Arcey Hoynnoski (CFO), Maria Heidenreich (Med Dir), Cameron Carey (Dev Dir), Maegan Petrie (Acctnt), Allison van der Velden (Dental Dir), Allie Jacobson (Info), Jessica Calabrese (COO), Susan Welenc (pop health), Susan Luippold (Human Res.), Wes Hamilton (CIO)

Question	Synthesis of Responses
1. 3 most urgent health needs/problems	 Homelessness Access issues (including # providers, transportation, social determinants, expenses), e.g. for oral health – urgency because of lack of access Behavioral health; too few psych prescribers, so primary care providers end up prescribing outside their comfort zones Shortage of dental specialists, so dental providers work outside their comfort zones
2. Health issues that have emerged and/or dramatically increased in prevalence in the last 1-2 years	 Opioid crisis isn't new but it's gotten more visible in past couple of years Anxiety and depression – everyone has some psych diagnosis that needs managing Obesity continues to mount, and that causes other health problems New diagnoses of PTSD including from dysfunctional families. We may be identifying it more than before. People see a behaviorist and things start to come out.
3. Specific vulnerable populations of concern	 Migrant seasonal agricultural workers (we take care of about 300 – there are close to 2,000 in FC) with usual problems plus language, cultural barriers, insurance. They are unfamiliar with our system & don't advocate for themselves. CHC doesn't have enough bilingual staff Pediatric population: More kids with anxiety, OCD, ADD When our dental providers see kids, they're often well down the path of oral disease Behavioral health issues affect school attendance, health regimes & take a toll on families GLBQ+ and transgender – we're trying to get better at providing

Question	Synthesis of Responses
	services for them • Elderly – we don't tend to their needs specifically, e.g. no fall risk
	screening
4. Gaps to health care of	Transportation
most concern	Gaps in reimbursement structure, e.g. telehealth, community health
	workers
	When people shift to high deductible plans, docs will wait until the
	end of the year to see them when deductible is paid
5. Barriers	Lack of coordinated care (primary care, oral health, behavioral health) Transportation
5. barriers	• Transportation
	Language Developting convices
	Psychiatric servicesHousing
	Food insecurity – has gotten worse
	Poverty Poverty
	• Illiteracy
6. What's missing that we're	Just starting to capture social determinants
not seeing in the data	 We have data on those who are using the system; we don't know
J	about those who are not.
7. Opportunities for	Transitions of care: we contact discharged patient within 48 hours and
prevention to keep people	follow up on meds, questions, services, appointments. It's reimbursed
out of hospital	through CMS (Centers for Medicare & Medicaid Services) if patient not
	readmitted within 30 days.
	Complex case management is not reimbursable or sustainable
	 Work on getting patient buy-in, holding patients accountable,
	responsible for self-care
	More oral health providers and space where people can get regular
	restorative care. Emergency department visits for dental issues are a waste of \$\$.
8. What's needed apart from	Access to healthy food
more funding	 Healthy social support systems to address loneliness, isolation, lack of
more randing	transportation
	Places to congregate
	 Exercise opportunities and associated social connections
	More community health workers
9. Resources to refer people	Dental specialists (oral surgeons, periodontists, orthodontists). We
to from the CHC	have regional shortages, and it's even worse in the public service
	sector.
	Groups for social support, weight loss, etc
	Psychiatry for ongoing care
10. Recommendations for	• This is important. Now we have a Balkanization of health services.
connections between	Hospitals can:
hospitals and public health	Attract and recruit specialists
	 Fund common electronic health record

Question	Synthesis of Responses
	 Provide clearinghouse for best practices Legal services to help people navigate issues, e.g. with landlords
11. How to support such a partnership	Subscription. CHCFC would be ready to pay into a menu of services.
12. Other	 It's shocking how weak the connection is between the hospital and the CHCFC. More than 80% of our patients are below 200% poverty. There needs to be a lot more cooperation. CHC has the most comprehensive picture of the low-income population. It's a struggle to recruit and staff the health center. Loan reimbursement can help attract doctors, but not nurses, dental assistants, etc. What can we do to make this a destination career?

- "There are too few psychiatric prescribers, so primary care providers end up prescribing outside their comfort zones."
- "There are too few dental specialists, so dental providers have to work outside their comfort zones, too."
- "Anxiety and depression have increased. It seems like everyone has some psychiatric diagnosis that needs managing."
- "I'm concerned about migrant seasonal agricultural workers. We take care of about 300 of them and there are close to 2000 in Franklin County. Apart from the usual problems, they have barriers of language, culture, insurance. They are unfamiliar with our system and don't advocate for themselves. The Community Health Center doesn't have enough bilingual staff."
- "When we see children in the dental clinic, they're often well down the path of oral disease."
- We are seeing more kids with anxiety, OCD, ADD. Behavioral health issues impact school attendance and health regimes, and they take a toll on families."
- "It's a struggle to recruit and staff the health center. Loan reimbursement can help attract doctors, but not nurses, dental assistants, etc. What can we do to make this a destination career?"
- "Hospitals are the hub of the healthcare system. It's shocking how weak the connection is between the hospital and the CHCFC. More than 80% of our patients are below 200% poverty. CHC has the most comprehensive picture of the low-income population. There needs to be a lot more cooperation."

Key Informant Interview Report

Hospital/Insurer: Baystate Franklin Medical Center **Interviewer:** Kat Allen, with Jeanette Voas taking notes

Interview Format: In person interview, 1 hour

Participants: Andrea Kiener, Temple Israel; Kate Stephens, Interfaith Council of FC/pastor; Sue Bowman,

Interfaith Council, retired from ministry

Question	Synthesis of Responses
1. Most urgent health issues	 Housing, homelessness Isolation Stressed-out families: income insecure, parenting at a young age, parenting without good modeling or skills The growing gap between the rich and poor, and associated nexus of interrelated problems Issues like addiction and homelessness are symptoms of untreated trauma, efforts to self-medicate
2. Issues that are new or increasing	 Addiction isn't new, but now the substances we hear about are opioids Homelessness has caught our attention because of encampment on the common Greater awareness of racism A general despair, background pain because of polarized politics, climate change and lack of problem solving.
3. Specific populations of concern	 Homeless People who have been incarcerated People with substance use disorders
4. Gaps in health care of concern	Mental health careDental careEqual access to quality care
5. Barriers to health care	 Money! Broken health care system; those who most need stable services are the least likely to get them Patchwork of services; need one-stop shopping for services Failure to think and act like a community, care for the community as a whole

Question	Synthesis of Responses
6. What's missing from the data or the conversation that we should pay attention to	 Isolation, despair Plight of sex offenders who have no way out of their situation People with CORIs – it's hard for them to reconnect
7. Better prevention to keep people out of the hospital	 Upset about Baystate decision to locate mental health all in one place. We want to keep care local. Do things to build relationships, keep social connections strong, build social infrastructure, like the library Finding ways to engage people so they feel needed, have responsibilities, have roles. How about turning empty store fronts on Main St into crafting centers – "Sit and Knit." Rehab empty housing Educate community about people transitioning from jail to community, e.g. landlords about accepting people with CORIs
8. What else is needed	 Shelters Transportation Community dialogue, opportunities to meet people in the community who are different from us in age, class, life experience "Social Infrastructure" including libraries, community gathering places and events
9. Resources to refer people to	 Mental health counselors, free behavioral health care and support groups Better information about services available (one-stop shopping)
10. Partnership between hospital and community	 Hospital can act as convener, can train about services and resources available Would like to see hospital participate in jail to community transitions group
11. Anything else	 When groups get together to discuss issues, it's important that people with lived experience with those issues participate

Key Informant Interview Report

Hospital/Insurer: Baystate Franklin Medical Center **Interviewer:** Kat Allen, with Jeanette Voas taking notes **Interview Format:** In person interview, 1.25 hours

Participants: Reentry team of Ken Chartrand (Reentry Coordinator), Jen Brzezinski (Reentry Caseworker), Charles Laurel (Clinician), Ariel Pliskin (Clinical Intern), Levin Schwartz (ADS, Director, Clinical & Reentry Services), Reuben Mercado (Post-Release Reentry Caseworker), Jennifer Avery (Post-Release Reentry Caseworker), Deb Neubauer (Clinician), Alex Margosian, LICSW (Clinician)

Synthesis of Responses
 Livable wages/Housing Housing with support for mental health challenges Housing for people with mental health issues and sex offense charges or arson in their histories. Greenfield has about 200 homeless people; many are formerly incarcerated Many leave here and end up couch surfing in environments that aren't safe Residential treatment, particularly for dual diagnosis (which is true of most of our clients here). To get into a dual diagnosis program you have to be suicidal. People may have to lie to get in. And there are guys in East Spoke who have a plan to kill themselves, but when their insurance hits a limit, they're out of the program. Or any violent behavior can get them dismissed from East Spoke. Case workers and coordination of services in the community We have 3 reentry caseworkers here and hundreds of clients who have left the jail Many services do not communicate with one another Points of transition are when things fall apart the most. There are disconnects between services and levels of care. Barriers to successful reentry are huge for clients with mental health, substance issues and trauma history.

Question	Synthesis of Responses
	retell their story and ask for services.
	Trauma, re-traumatization, passed through generations
2. Emergent issues, increased problems	 Commercial sex trade has come onto our radar since we started housing women. It's a huge issue in our community, and there are no resources out here for it. Many have been exploited & experienced trauma as a result On release, that's how they know how to make money, and it leads back to substance use for coping Proliferation of MAT services While intended as a harm reduction measure, it doesn't always function that way. In the jail, we have clinical services, intense therapy to go with the MAT, when clients get out, if they're on MAT, they're more likely to decline services. MAT alone isn't working. It's problematic that they can be on Suboxone and not be required to be clean on anything else. People are using the Suboxone not as prescribed or selling it and using other substances. We've had some success with Vivitrol.
3. Specific vulnerable	Anyone incarcerated
populations you're worried	Homeless and everyone connected to them
about	 Sex offenders People with mental health, substance use, complex trauma issues who don't have natural supports of family and friends Their connections are to professionals, and those are vulnerable to funding shifts & staff turnover.
	 Young people They need to develop skills for emotional regulation, impulse control. How can you expect them to grow up differently if they're not taught how to deal with adversity, how to deal with emotions
4. Specific gaps to health care you are most concerned about	 Transitions, hand offs A client might have a few days in East Spoke, then respite, then back to homelessness. Handoffs from the jail to the community. Clients get intense support here, and they don't get that on the outside. We have a Nurturing program and family-focused programming, but we don't know who's providing services to the family. We don't know what context our clients are returning to. One barrier to warm handoffs is that outside therapists

Question	Synthesis of Responses
5. What's missing, what important things are not showing up in the data	cannot bill for treating people in jail. Inreach could help. People are free to NOT show up for services. How many follow through with reentry plans and resources, and for those who don't, why not? Because our clients suffer from chronic anxiety, depression and trauma, it's hard for them to follow up, and we should start from the assumption that they're not going to go. Agencies should share data so clients don't have to retell their stories multiple times. We don't need to ask so many questions at intake. Gaps in insurance – restrictions on what's available to whom, for how long Effective contingency programs for MAT. Lack of options for people who have mental health needs and CORIs. They're high-need, not best served in jail, but there's no place for them to go. So they come here. Clinicians to do ride-alongs with police to use discretion to help keep people out of the criminal justice system Community case workers who are not tied to a particular agency, so clients aren't cut off when they're no longer connected to the agency Generational legacies Children are removed from parents who can't take care of them, but what's the long-term success of foster care? What happens to clients who haven't been able to complete treatment because of insurance? For example, they go into intensive treatment to normalize the situation, but may have to leave when they don't feel they're ready.
6. What else is needed to better address health issues 7. What do you wish you could refer people to outside the jail?	 We're pruning the tree, not going for the cause in the roots. The skewed distribution of wealth has put us in this position. Our system of judgment and punishment is proven not to work. We need to unravel this narrative and orient ourselves towards a more scientifically valid perspective. We have a DBT program here, and it applies to teaching skills to clients and to staff, to structuring the environment to make it conducive to this work, and to generalizing skills to clients' natural environments. It's a strategy for applying what you learn in different environments. Housing, housing, housing. There's hardly any sober housing in the western region. The GAAMHA House in Greenfield, with 6 beds for women (no children) is a model. It's where I would want to refer my clients who don't need constant supervision. For those without supports, it's like

Question	Synthesis of Responses
	 a family. But it can accommodate only six! More community reentry caseworkers. Adult leisure services Provide outdoor experiences, music, theater, something to engage in creatively No-cost/inexpensive outlets for leisure Community center with safe environment Being bored is a trigger DMH invested in a Club House model in Boston. It's a turned-up community center, with prosocial stuff, voc rehab, meals. You go and you're participating in community.
8. Partnerships between hospital and public health organizations?	 Let's sit down and talk about how we can work together, including Mayor's office, DA, probation. We need to talk the same language and share the same vision. Baystate plans to relocate behavioral health to one place. How will the hospital help people to relocate back to their own communities? With hospitalization, the emphasis is on stabilization (with drugs so patients don't kill themselves) and release. How can we make subsequent services more available?
9. What else?	 We need collaboration across agencies not just at administrative level but among people on the ground working with clients. Instead of implementing a program and thinking it's done, we need long-term planning and ongoing implementation. Here at the jail, we have latitude to experiment, to see what works and what doesn't. We've focused on transitions, specific needs, and reinforcement throughout the system. When we look at vulnerable groups, we mustn't get sucked into silos – physical health, mental health, co-occurring, homeless, etc)

- "There are guys at East Spoke who have a plan to kill themselves, but when their insurance hits a limit, they're out of the program."
- "We work with clients on the outside no matter what. They will tell us, "I can use all the drugs I want and still get Suboxone." They can sell it."
- On Suboxone: "The thing I'm in jail for is like a door prize they give me as I leave. Do I really need to go to meeting?"
- "It would be great if we had naturally flowing levels of care. Step downs, with direct
 partnerships instead of hoping, hoping. Now it's all reliant on an incredible amount of effort and
 resourcefulness."
- "We see trauma and retraumatization. When you can't get housing, that's traumatizing. When kids are taken away, that's traumatizing. It's a generational problem for most of our clients."
- "One client said the jail was the only home he had ever experienced. When he had a baby, he brought the baby back as if to meet his family."

- "We need warm handoffs. Our clients have chronic anxiety, depression and have experienced trauma. We say to them, "When you get out of here, you're going to talk to some new people and they're going to help you." Of course they're not going to go! The way we've created transitions is not suited to the clients. We should start from the assumption that they're not going to go."
- "We have family-focused programming here, but we don't have another half to this. We don't know who's working with the family. We're kind of hoping. What's the context people are returning to?"
- "There are problems with how people get sorted out who goes to jail, who goes to mental health treatment. I have people here who don't belong in jail. They won't come out of here any better."
- "Even the way we think about collaboration needs to be rethought. We tend to connect
 administrators together. I talk to clients every day and I have no idea what's going on out there.
 We need collaboration among people who are actually doing the work."

Public Health Interview Summary Report

Interviewer: Catherine Brooks

Interview Format: Phone interviews, approximately 30-45 minutes in length.

Participants:

Helen Caulton, Commissioner of Public Health, City of Springfield

• Ben Cluff, Massachusetts Department of Public Health, Bureau of Substance Use Services

• Julie Federman, Health Director, Town of Amherst

 Dalila Hyry-Dermith, Supervisor, Massachusetts Department of Public Health, Division for Perinatal, Early Childhood and Special Needs, Care Coordination Unit

• Phoebe Walker, Director of Community Services, Franklin Regional Council of Governments

Question	Synthesis of Responses
1. What local policies and social conditions predispose people in your community/ service area to good health and mental wellness?	Some of the conditions and policies mentioned included schools, education around prevention issues, nutrition, and health. In more rural areas, there are farms that have farm stands and Community Supported Agriculture programs, and institutional support for local healthy food. In urban areas, there is good access to services. The hospitals do a good job with outreach to communities in general and to people of color. Communities in this area are attuned to wellness and health in implementing policies throughout local government.
1a. Are there groups of people who benefit from these policies/social conditions more than others?	The people who benefit most are white people and people with higher levels of education. The system is oriented toward prevention, so people who are able to hear and incorporate that message are better served. Implementation takes more time and money than prevention does. There is a lack of cultural competence in provider community - it is difficult for people of color to access mental health supports from people who understand their culture.
2. What kind of structural and social changes are needed to tackle health inequities in your community/service area?	There is a need to integrate services that are provided from different organizations. We need an integrated approach to health care, removing structures that get in the way of collaboration. Physician training should include racial equity, family-centered care. We need a graduated income tax, and greater investment in education, child care, transportation, and community health workers. We need one-stop shopping with health care services under one roof. We need cultural humility, diversified offices and staff, public schools with staff who look like the students.
3. What are the 3 most urgent health needs/problems in your service area?	The issues most frequently named were mental health, substance use, obesity, chronic diseases.

Question	Synthesis of Responses	
4. In the last 1-2 years what health issues have emerged or increased dramatically in prevalence in your area? What evidence or data do you have to illustrate this increase?	Public health officials in Hampshire and Franklin counties mentioned tick-borne diseases. These are tracked through the University of Massachusetts, which tracks ticks sent in for testing, and through the Massachusetts Virtual Epidemiologic Network, which tracks diagnoses. Other health issues mentioned include pertussis being spread through unvaccinated people, and influenza. Health departments are facing bigger issues, such as mental health, substance use, and opioids, but these have been around longer.	
5. What gaps in services exist in addressing these needs? What are barriers to filling these gaps?	We need a coordinated system of roles, the widespread use of Community Health Workers, and recovery coaches. Public health professionals need to be out in the community, and value community voices. We need a centralized public health system - some small towns do not have services. We need better transportation in rural areas - I would love it if hospitals would buy vans. Emergency Medical Technicians can provide wellness checks and preventive services. This would be especially important for mental health - there are not enough providers, people have to travel to find them. We need more racial and cultural competence, especially for mental health providers. The current education system for health providers lacks this.	
6. In addition to more funding, what resources do you need to better address these emerging or increasing health concerns?	We need policy changes at the state level - established minimal expectations for public health services at the town level. We need a good public health response and resources around marijuana legalization. We need culturally sensitive practices in health care, which includes providers who look like and are from the community, who understand the culture, and who understand the history of racism. Hospitals need to develop a transportation infrastructure, and to develop the workforce to provide mobile health care (Boston is making a start with this). There needs to be outreach to mental health patients and an increase in prescribers for mental health issues, especially those who accept MassHealth health insurance.	
7. What specific vulnerable populations are you most concerned about? And why? 8. Externally, what	Populations mentioned included: People with mental health issues People coming out of jail African-Americans Transgender population Isolated elders New Americans, from specific communities that lack established outreach Homeless Residents of rural communities Inner city residents All of these communities lack resources, access, culturally sensitive providers. Resources and services mentioned included:	

Question	Synthesis of Responses	
resources/services do you wish people in your area had access to?	 Transportation Better pain management services (Stanford has a course about creative, non-medical approaches to pain management) Housing for people coming out of jail Supports for new Americans Funding for social determinants of health Workforce issues - recruiting and retaining physicians Drop-in day services for people with mental health issues and people experiencing homelessness Easy-to-navigate public health insurance accepted by most providers 	
9. How would you recommend that your local hospitals/insurers and/or Western Massachusetts Hospital Coalition work in	Hospitals are the big organization in any partnership. They need to step back and not always take a leadership role, let smaller community-based organizations lead at times. There is a need to clarify roles and responsibilities within partnerships.	
closer partnership with local and regional municipal public health entities after the CHNA is completed? What specific ways can such a partnership be supported and sustained?	 Working with public health nurses on readmission prevention and discharge planning Partnering with local health departments for workshops on pain management Putting pressure on the state to provide public health, put political power behind the need for a better system Providing Community Health Needs Assessment data for their communities to local health agents Providing forums for community people to come together and talk Supporting partnerships between public health nurses and community liaisons from hospitals. Jeff Harness does this very well, but he is one person Sustainability suggestions include: Using community benefits funding to support and sustain the partnership Working from a project list to sustain momentum The Massachusetts Department of Public Health can provide financial support for forums 	
10. What issues do you see emerging in the next 5 years?	 Issues mentioned included: The opioid crisis will keep evolving, with new types of drugs The warming climate will lead to an increase in tick-borne diseases, mold, respiratory ailments Youth marijuana and vaping Pertussis Child and maternal health Obesity Aging population, especially veterans 	

Question	Synthesis of Responses	
	 The rising cost of health insurance The immigrant community being afraid to access health 	
	insurance and health servicesAutism spectrum disorders	

- "We're too often talking about people, not with people." Helen Caulton
- "Hospitals see themselves as taking leadership roles in places where they should be taking supportive roles, especially in public health." Helen Caulton
- "Health disparities are seriously affected by where you live, your race, your income." Ben Cluff
- "We consider health in all our policies we look at impact on health, not just on traffic, finances" Julie Federman
- "People whose mental health needs are not met become poorer in physical health" Julie Federman
- "Mental health has a social component it's hard to treat people who don't look like you" Dalila Hyry-Dermith

Appendix V. Community Conversation Summaries

Coalition of Western Massachusetts Hospitals/Insurer 2019 Community Health Needs Assessment

Community Conversation Summary Report

Primary Hospital/Insurer: Baystate Franklin Medical Center

Topic of Focus Group: Health needs and social determinants of health/ English

Date of Focus Group: 1/29/19

Facilitator: Phoebe Walker, other members of CHIP Steering Committee **Note Taker:** Phoebe Walker, other members of CHIP Steering Committee

Location: John Olver Transit Center, Greenfield, Massachusetts

Executive Summary

- A. **Participant Demographics (# people, geographic area):** 40 people from across Franklin County and the North Quabbin Region. Included were reps from:
 - o All Souls Unitarian Church
 - Baystate Franklin Medical Center
 - O Brick House Community Center
 - Just Roots Farm and CSA
 - FRCOG Transportation Planning Program
 - Communities That Care Coalition
 - o WIC
 - o MDPH Office of Rural Health
 - Greenfield Community
 Development Office
 - Gill/Montague Community
 School Partnership
 - Northfield Council on Aging
 - o Baystate PURCH
 - o Life Path
 - Heath Board of Health
 - The Recover Project
 - Greening Greenfield
 - CAPV Family Center

- United Cerebral Palsy of WM
- Tobacco Free Community
 Partnership
- o FRCOG Partnership For Youth
- Opioid Task Force
- o Office of Rep. Natalie Blais
- Children's Advocacy Center of Franklin County/North Quabbin
- FRCOG EmergencyPreparedness Program
- Regional Housing and Redevelopment Authority,
- United Way of Franklin County
- Community Action Pioneer
 Valley
- Head Start
- o Community Health Center

B. Areas of Agreement (top health needs and related social determinants of health):

Multi-generational trauma and mental health issues and homelessness were the two top issues listed (See below for entire list)

Question	Synthesis of Table Discussions grouped by thematic cluster
1. What are the top 3 most pressing health needs in your community?	Themes most frequently cited (bullets are language from each table) Cluster One: Trauma/Mental Health Childhood trauma (especially people in poverty) Trauma: addressing and preventing Behavioral health Infant mental health (especially <age3 access="" providers)<="" th="" to=""></age3>
	 Cluster Two: Homelessness, Affordable Housing Homelessness: unaffordability of a simple single room, rural homelessness, elder care (especially GLBQ+ and transgender), lack of local family, no address blocks access to job/health care/dental care Housing Housing (affordable, in community, crisis housing) Lack of shelter and affordable housing Cluster Three: Coordinated Health Care
	 Behavioral health integration with primary care Lack of coordinated care (for families across organizations) Cluster Four: Sexual Health Sexual & relationship health (youth from low-income families)
	 Access to sexual health care & education Cluster Five: Food Security Food insecurity (and nutrition in senior centers, congregate meals, and institutions) Food justice Cluster Six: Transportation Transportation (public transportation and re-education to use it)

Question	Synthesis of Table Discussions grouped by thematic cluster	
	 Cluster Seven: Poverty Wage equity (progressive taxation, legislation and policy) Income Inequality: lack of safety net, living wage 	
	 Cluster Eight: Substance Use Disorder Substance use disorder (education, prevention and information; treatment across all ages and demographics) Substance use & alcohol use disorders 	
	 Issues that each received just one vote: Dental health (including care and education) Stigma related to race, opioid addiction, disability, lack of access to education, age, job discrimination (family size), housing discrimination, social status, language of systems (internalized oppression) Workforce development & recruiting of health care providers 	
2. Who is disproportionately impacted by these problems? How?	Answers varied based on the health issue, but included: • Young people • People of Color • Those living in poverty • Residents of rural areas	
3. Who do you think is being missed in the CHNA process?	One table felt that the issue of stigma was missing from the CHIP and the CHNA thus far.	

Appendix VI. Community Chat Summary

Community and Stakeholder Engagement

The Coalition prioritized the input of the community and other regional stakeholders as an important part of the CHNA process. In an effort to increase community engagement, the CHNA RAC brought information about the CHNA and gathered priorities at the regular meetings of service providers, community-based organizations, support groups, and hospital-based groups in the form of Community Chats.

Methodology

From January 2019 July 2019, the RAC held over 70 Chats throughout Hampden (46+), Hampshire (10), Franklin (2), and Worcester (2) counties. The Chats were selected by Baystate Health through the input of RAC members, CBAC members, and through leveraging existing community relationships. Participation snowballed throughout the process with the assistance of Chat participants suggesting other community groups to include in the process. In total, the RAC reached over 1,200 people through these Chats. Figure 1 shows the role participants identified with during the Chats.

Figure 1: Chat Participants

Nonprofit Staff	23%
Health Care Professionals	21%
Community Members	19%
Youth	13%
Older Adults	8%
Municipal Staff	5%
Community Leaders	5%
Individuals with Disabilities	3%
Transgender and GLBQ+	2%
Faith Leaders	1%

Health Needs, Issues, and Concerns

In 42 of the more than 70 Chats conducted, participants were given two sticker dots and asked to mark on a poster what they believed were the two most pressing health issues in their communities. Facilitators presented options organized by the MDPH Social Determinants of Health Framework, which included: social environment, violence, education, employment, housing, built environment, financial health, as well as more specific subsets of each topic listed. Figure 2 lists how Chat participants voted.

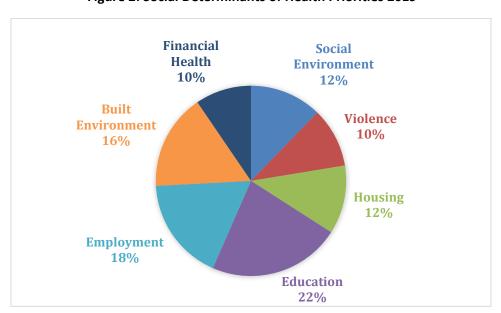


Figure 2: Social Determinants of Health Priorities 2019

Priorities from Chat Participants

- Education the top priority of Chat participants throughout western Massachusetts. Resources
 and opportunities for education were identified as the most pressing issues, followed by social
 and psychological education, and knowledge and behavior. A lack of health literacy was a
 common issue for communities as well. Participants identified limited knowledge of available
 services, and the need for a reference list of all available services and resources within their
 communities.
- **Employment** also identified as a top priority in western Massachusetts. Within the category of employment, Chat participants specifically elevated the issue of income and poverty over some of the other options, such as benefits and resources, employer policies, and physical workspace.

- Built Environment top priorities included transportation, health care access, and food access, respectively. Many Chat participants reported living in transportation deserts or reported inadequate transportation services. Participants also mentioned a lack of sidewalks and sidewalk upkeep. Community members reported issues such as food deserts, unaffordable healthy food, lack of fast-food zoning laws, and stigma around food pantries as challenges. In addition, lack of health care access was indicated in many Chats. This includes: inability to pay for services, difficulty navigating healthcare and health insurance systems, long wait times in the emergency department and to see a health care specialist, and limited service providers. Overwhelmingly, participants reported a lack of mental health and substance use disorder treatment as an issue.
- Social Environment encompasses factors such as language, isolation, racism, poverty, gender discrimination, immigration status, ageism and more. Through the Chats, challenges with the social environment were found at the individual, community, and societal (systems and policies) level. Increased cultural humility among providers, as well as a need for bilingual providers, were areas where participants identified needs. Institutionalized racism was consistently mentioned as a significant contributor to poor health in western Massachusetts. Community members also identified a lack of community engagement and specifically requested more afterschool programs and mentoring programs for youth.
- Housing participants named homelessness as the top issue within the housing category, with some participants also reporting housing stability and quality as an area of concern. Chat participants specified that affordable housing was low quality and aging, but also limited, leading to long waitlists.
- **Financial Health** is built through having access to safe, high-quality financial products and services that help people save, spend, borrow, and plan. Financial health not only improves a person's life today, but it also creates opportunity for their future generations. Overall, Chat participants reported financial health as a general problem.
- **Violence** most frequently reported as a problem at the interpersonal level (such as domestic violence, bullying, and homicide). Self-directed violence, including self-harm and suicide, was also reported as a community concern.

Priority Populations

Commonly cited priority populations and common challenges include:

- Immigrants, refugees, and non-English speakers: lack of access to care, low health literacy, and lack of cultural humility from providers;
- Older adults: isolation, loneliness, unaffordable care, and lack of transportation;
- Youth: substance use (vaping, alcohol, and marijuana), limited school resources, poor mental health:
- GLBQ+ and Transgender: stigma, lack of family and community support, untreated mental health, and lack of GLBQ+ and transgender affirming and knowledgeable providers;
- Low-income people and people of color: adversely impacted by all the challenges and lack of resources stated above in prioritized health challenges;
- People with disabilities: lack of transportation, lack of health care providers.

Community Assets

Community assets were often very specific to the community where the chat was held. However, some consistent community assets included: community centers, local hospitals, schools, support groups, faith communities, libraries, and community colleges.

Limitations and Recommendations

The Chat data has some limitations. Many of the Chats were clustered within Hampden County, particularly within Springfield and Westfield. In addition, older adults, people with disabilities, and youth participated less in the quantitative assessment (voting on social determinants of health) due to the nature of the activity, leading to the potential that this may have skewed the data. In addition, Chats were facilitated by approximately ten different RAC members; questions may have been asked or framed differently depending on who facilitated the conversation. In the future, we hope to select a more geographically diverse population, capture the demographic make-up of the Chat participants, and begin the Chats earlier in the CHNA process to better guide CHNA priorities.

Paper copies of this document may be obtained at Baystate Health, Office of Government and Community Relations, 280 Chestnut Street, Springfield, MA 01199 or by phone 413-794-1016. This document is also available electronically via the hospital website www.baystatehealth.org/communitybenefits.