COMMUNITY BENEFITS STRATEGIC IMPLEMENTATION PLAN

2022 – 2024

FOR UMASS MEMORIAL MEDICAL CENTER

AN AFFILIATE OF

UMASS MEMORIAL HEALTH

A COMMUNITY HEALTH IMPROVEMENT APPROACH TO ADDRESSING HEALTH INEQUITIES

UMass Memorial Community Benefits Strategic Implementation Plan 2022-2024

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I. Introduction

Located in Worcester, UMass Memorial Medical Center (UMMMC) is the four-campus academic medical center of UMass Memorial Health (UMMH), the largest not for-profit health care delivery system in Central Massachusetts with 2,100 physicians and 15,500 employees. UMMMC is a teaching hospital and the clinical partner of the University of Massachusetts Medical School. UMass Memorial Health's Community Benefits Mission incorporates the World Health Organization's broad definition of health defined as "a state of complete physical, mental and social well-being and not merely the absence of disease." UMMH's Community Benefits Mission was developed and recommended by the Community Benefits Advisory Committee and approved by the UMass Memorial Health Board of Trustees.

Community Benefits Mission Statement

UMass Memorial Health is committed to improving the health status of all those it serves and to addressing the health problems of the poor and other medically underserved populations. In addition, nonmedical conditions that negatively impact the health and wellness of our community are addressed.

UMass Memorial recognizes that health care delivery represents only a portion of an individual's and a community's health and in order to totally transform our communities, we must use our full reach to more actively address the social, economic and environmental factors that are the primary contributors to a healthy community. Our Community Benefit Plan targets the social/health factors that are important in the delivery of care. Our work with public health, schools, health centers, youth-at-risk, academia and the Coalition for a Healthy Greater Worcester leverages unique opportunities to address social factors and improve the health of the Greater Worcester community.

Our Community Health Improvement Approach and Guiding Principles:

The following principles are the foundation of our community health improvement approach:

- Health Equity is at the core of all of our work
- Address Social Determinants of Health/Root Cause Issues
- Partner with Public Health and community-based organizations
- Cross/multi-sectoral Partnerships
- The community knows best. Everyone can contribute to developing and implementing efforts to address root causes of health inequities
- The UMass Memorial Health Anchor Mission builds upon our Community Health Improvement work
- The use of accurate data
- Identify Community Health Needs through a robust assessment process
- Develop a Community Health Improvement Plan with targeted strategies and outcome measures

UMass Memorial Anchor Institution Mission

In 2018, to build upon and maximize the impact of our Community Benefits programming, UMass Memorial Health elevated and enhanced its community benefits work with the formal adoption of the Anchor Institution mission and strategy, which includes a $4.0 million investment fund that targets Social Determinants of Health (SDOH). The systemwide Anchor Mission addresses SDOH in the local community by leveraging the full breadth and depth of the system's assets. The concept is developed by the Democracy Collaborative, a national research institute. The Anchor Mission encourages and challenges large institutions, with strong roots in a specific locale, to expand their traditional business practices and strength to more broadly improve and develop the economy of the areas they serve with a targeted focus on distressed neighborhoods. This means moving from a more clinically focused approach, to a wider perspective including nonclinical, social, and environmental factors that affect a person's health such as housing, education, poverty, nutrition, economic stability and physical environment.

The Anchor Mission is comprised of four pillars: investing – devoting 1% of our investment portfolio to initiate local projects that bring neighborhood revitalization and economic vitality to the community; hiring – identifying opportunities to ensure employee diversity is reflective of our community; purchasing – supporting local businesses by buying locally whenever we can; and volunteering – offering opportunities where employees can get involved and contribute to the mission of our organization outside of their traditional roles. The Anchor Mission focuses on four primary pillars of: Investing, Hiring, Purchasing and Employee Volunteerism.

With the Anchor Mission, UMass Memorial, along with community stakeholders and a commitment to local investment, will create new opportunities to improve the economic outlook of vulnerable, low-income populations in our region. Active investment guided by the Anchor Mission, has included strategic investment in housing for vulnerable populations in Worcester and for the redevelopment of the former Ionic Avenue Boys Club into a creative arts community. In addition, the hospital system is working closely with community-based workforce organizations in developing employment strategies for vulnerable populations, including creating a hiring pipeline to positions within our organization. Additionally, the hospital system is incorporating efforts to buy locally, improve access to employment and investments into neighborhoods that are economically-challenged.

Community Benefits staff are highly engaged in each of the four Anchor Mission pillar areas as well as a targeted effort identifying and establishing an Anchor District in the City of Worcester in one of the city's most economically-distressed areas with high Social Vulnerability Index (SVI), a census tract level composite measure, used for determining communities that will likely be in need of support before, during, and after emergency events. SVI calculations are based on measures associated with socioeconomic status, household composition, minority and language status, housing, and transportation.

Community Health Needs Assessment

UMass Memorial Medical Center conducted the 2021-2024 Greater Worcester Community Health Needs Assessment (CHA) in conjunction with the Worcester Division of Public Health (WDPH), Fallon Health, the Hanover Insurance Group and the Coalition for a Healthy Greater Worcester. The CHA was approved by the Community Benefits Committee of the UMass Memorial Health Board of Trustees on September 22, 2021. Findings of the CHA and identified priority areas are used to update the Greater Worcester Community Health Improvement Plan (CHIP) which serves as a roadmap for the future health of the region. The completed CHA is available on UMass Memorial's website at this link:
https://www.ummhealth.org/sites/umass-memorial-hospital/files/Documents/About/Community_benefits/2021_CHA_UMassMemorialEvalOfImpact.pdf

UMass Memorial Community Benefits Strategic Implementation Plan utilizes the findings from the CHA and aligns with the 2021 Greater Worcester CHIP report to maximize collective impact. This document provides an overview of our Priority Areas, partnerships, and community-based work. Questions or inquiries regarding UMass Memorial Medical Center's Community Benefits strategies and efforts can be directed to the Office of Community Relations.

Notation: This Plan is intended to be a fluid document that will be updated annually according to new opportunities, programming and partnerships and to coincide with the latest version of the Greater Worcester Community Health Improvement Plan (CHIP). UMass Memorial recognizes that through the CHA process, many

needs have been identified. However, due to limited resources it is not possible to address all identified community health needs. As such, we focus on priorities identified through the community engagement process in which we can partner and leverage resources to achieve the greatest impact.

II. Targeted Geography and Vulnerable Populations

UMass Memorial aims to adhere to both the letter and the spirit of the IRS Community Health Needs Assessment (CHA) regulation in that it will be addressing the health needs and concerns of the region's most underserved populations. The IRS mandate gives hospitals flexibility in how they define the community discussed in the CHA. The community could be defined by a specific geographic area or target populations (e.g., children, elderly), as long as the definition still captures the interests of the most vulnerable groups such as the underserved, low income, or minority populations.

A. Geography

The City of Worcester, the second largest city in New England, is very ethnically-diverse, with a high poverty rate and many social-economic challenges, and to this end, UMass Memorial Medical Center's Community Benefits program targets the vulnerable populations of the City of Worcester. The 2021-2024 CHA and subsequent CHIP focus on the City of Worcester and the outlying towns of the Central Massachusetts Regional Public Health Alliance (CMRPHA), which include Grafton, Millbury, Shrewsbury and West Boylston, a sub-section of its primary service area. This specific geographic area is the focus for the City of Worcester Division of Public Health's regionalization initiative and overlaps with UMass Memorial Medical Center's service area and of many other local organizations. Focusing UMass Memorial's CHA on this geographic area facilitates the alignment of the hospital's efforts with community and governmental partners, specifically the city health department, the area's Federally Qualified Health Centers, and multiple community-based organizations. This focus also facilitates collaboration with the CHIP Advisory Committee, of the Coalition for a Healthy Greater Worcester that will be implementing key strategies of the CHIP so that future initiatives can be developed in a more coordinated approach. The CHA and CHIP processes serve multiple purposes, including: 1) as the community health needs assessment for the hospital's Schedule H/Form 990 IRS requirements and Massachusetts Attorney General guidelines; and 2) engage the community in a collaborative health planning process to identify shared priorities, goals, objectives, and strategies for moving forward in a coordinated way.

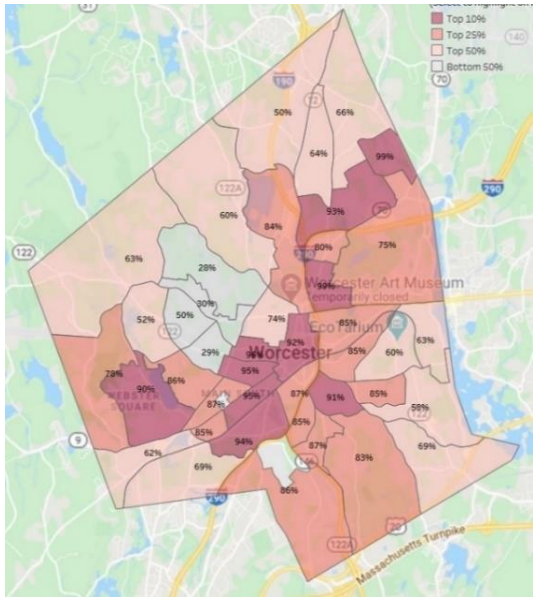
The Mobilizing for Action through Planning and Partnerships (MAPP) framework was used to guide the CHA assessment. The MAPP Framework was developed by the National Association of County and City Health Officials (NACCHO) with support from the Centers for Disease Control and Prevention (CDC) and represents a best practice model for health improvement planning.

B. Focus on Health Equity and Social Determinants of Health

UMass Memorial Medical Center and its partners also recognize the need for the CHA to be aligned with the region's broader agenda of promoting health and well-being, addressing health disparities and conducting their efforts in the context of health equity. Health equity is the attainment of the highest level of health for all people. Achieving health equity requires valuing everyone equally, with focused, ongoing societal efforts to address avoidable inequalities, underlying socioeconomic factors and injustices, whether historical or contemporary.

Source: Robert Wood Johnson Foundation

Social Vulnerability Index of Worcester, by Zip Code, and SVI Percentage Compared to the nation, 2018



SVI Percentage by Zip Code	
Bell Hill	99%
Great Brook Valley	99%
Pleasant St/Park Ave	96%
Chandler St/Park Ave	95%
University Park	95%
South Worcester	94%
Lincoln Village/ Beverly Rd	93%
City Center	92%
Union Hill	91%
Coes Pond	90%
Water St/Grafton St	87%
Park Ave/Main St	87%

Source: UMass Memorial Office of Clinical Integration

As is shown in the map on the previous page, the social determinants of poverty, unemployment, and low educational achievement are found throughout the municipalities in the CMRPHA Alliance towns, with the most intense interaction of all three occurring in Worcester. The legend provides the number of block groups within the Alliance in each category. The health profile data presented in this report underscores the need to give attention to social equity factors. Rates of chronic diseases, maternal and child health indicators, and overall mortality vary consistently by race and ethnicity. Even in Massachusetts with near universal health insurance coverage, there are barriers to accessing care because of language, transportation, lack of out-of-pocket money for co-payments, and providers who do not accept Medicaid, among other reasons.

C. Vulnerable Populations/Target Populations

Target populations for UMass Memorial's Community Benefits initiatives are identified through a community input and planning process, collaborative efforts, and a Community Health Needs Assessment (CHA) which is conducted every three years. Our target populations focus on medically-underserved and vulnerable groups of all ages in Worcester. Our most vulnerable populations include children, elders, ethnic and linguistic minorities and those living in poverty. These populations often become isolated and disenfranchised due to negligence, misperceptions and even fear. Targeted subpopulations have been defined as follows:

Worcester Senior Population: In the U.S., state and CMPRHA region older adults are among the fastest growing age groups. Seniors experience barriers to accessing medical and dental care, including a lack of transportation, mobility problems, insurance status and enrollment. Older individuals typically have more physical and mental health vulnerabilities and are more likely to rely on immediate community resources for support compared to young people. The first "baby boomers" (adults born between 1946 and 1964) turned 65 in 2011. Over the next 20 years, these baby boomers are now entering the older adult cohort. Chronic/complex conditions are by far the leading cause of death among older adults 73 and older are much more likely to develop chronic illnesses such as hypertension, diabetes, COPD, congestive heart failure, depression, anxiety, Alzheimer's disease, Parkinson's disease and dementia than younger adult cohorts. By 2030, the CDC and the Healthy People 2020 Initiative estimate that 37 million people nationwide (60% of the older adult population ages 65 and over) will need to manage more than one chronic medical condition. Major proportions of this group experience hospitalizations are admitted to nursing homes and receive home health services and other social supports in home and community settings. The ability to live independently and to "age in-place"—or at least to find the least restrictive housing option—is a leading concern among older adults and their caregivers. According to the U.S. Census, over 13% of Worcester's population is over the age of 65.

Ethnic and Linguistic Minorities: The City of Worcester is very ethnically-diverse and that diversity continues to grow primarily due to the city being a Federal Refugee Resettlement Site. According to the U.S. Census, the racial/ethnic makeup of Worcester was majority White alone (69%), followed by Hispanic/Latino of any race (22%), Black or African American alone (13%) and Asian alone (7%). In other CMRPHA municipalities, racial/ethnic breakdowns generally mirrored that of the Commonwealth, with the majority of residents identifying as White alone and significantly smaller percentages of residents identifying as Black/African American, Asian, other races, or Hispanic/Latino of any race. One exception, however, is Shrewsbury, where compared to the Commonwealth, there was a significantly higher percentage of residents identifying as Asian alone (17%). According to research, Shrewsbury has one of the highest concentrations of Indian Americans in the Commonwealth, with the population doubling between 2000 and 2010. The number of Hispanics living in the City of Worcester has grown by 35% over the past 10 years. Refugees from Iraq currently account for the greatest percentage of new immigrants followed by refugees from Bhutan, Burma, Liberia and other African nations. Compared to the Commonwealth overall, most of the municipalities in the 2021-2023 CHA service area had significantly lower percentages of non-English speakers. However, Shrewsbury has a significantly higher percentage of non-English speakers, specifically those that speak Indo-European languages, Asian and Pacific Islander languages and other languages. In Worcester, approximately 35% of residents speak a language other than English and among those residents, 17% have limited English proficiency.

Populations that are Food Insecure, Hungry, Obese/Overweight: Lack of physical fitness and poor nutrition are among the leading risk factors associated with obesity and chronic health issues. Both factors help to prevent disease and are essential for the healthy growth and development of children and adolescents, while overall fitness and the extent to which people are physically active reduce the risk for many chronic conditions and are linked to good emotional health. Over the past two

decades, obesity rates in the United States have doubled for adults and tripled for children. Overall, these trends have affected all segments of the population, regardless of age, sex, race, ethnicity, education, income, or geographic region. People who are overweight are more likely to have type 2 diabetes, heart disease, stroke, gall bladder disease, cancer and musculoskeletal disorders (MDPH). Children who are obese at age 8 are 90% more likely to be overweight or obese as adults (MDPH). Nearly 30% of children in Worcester County are considered to be obese. Among adults in Worcester County, nearly 70% of Hispanics were overweight or obese; however, within ethnic groups, Blacks were more likely to be obese.

Populations Living in Poverty: Economic and social insecurity often are associated with poor health. Poverty, unemployment, and lack of educational achievement affect access to care and a community's ability to engage in healthy behaviors. Without a network of support and a safe community, families cannot thrive. Ensuring access to social and economic resources provides a foundation for a healthy community. The average unemployment rate in the City of Worcester in October 2021 was 5.3%. According to the U.S. Census population estimates, 21.8% of the City of Worcester's total population lives in poverty. Additionally, 35.1% of children under the age of 18 live in households for who poverty status is determined and 39.7% live in households receiving Supplemental Security Income (SSI), cash public assistance income, or Food Stamp/SNAP benefits, according to the US Census Bureau, American Community Survey 2013-2017. Poverty is highly correlated to poor health outcomes and barriers to accessing needed care and services and other factors impacting health. Lack of access to affordable and nutritious food has a negative impact on the health of children and families. High rates of unemployment and underemployment in the region have created a high risk of homelessness and a strong need for food assistance services for families and children. Of students in the Worcester Public School system, over 60% are eligible for the free school lunch program. According to the 2020 U.S. Census, the population of the City of Worcester grew from 181,045 in 2010 to 206,518 in 2020. The median household income in the City of Worcester according to 2019 Census figures was to $48,139, compared to the state Median Household Income of $81,215.

Targeted Low-Income Neighborhoods: UMass Memorial conducts focused outreach in Worcester's Bell Hill neighborhood and brings programs directly to where people live, such as community gardens to address food insecurity and an urban agricultural youth leadership development program for youth residents of the neighborhood as a means of reducing violence, providing job skills and leadership development opportunities as a means of promoting positive career pathways and addressing the poverty cycle.

Underinsured/Uninsured: Access to affordable health care is vital to the health of individuals and the community. Massachusetts has made great strides in making health insurance attainable for nearly all residents. In 2016, only 2.5% of Massachusetts residents were uninsured, the lowest rate in the nation. Despite these factors, there are still substantial numbers of low-income, MassHealth-insured, uninsured and otherwise vulnerable individuals who face health disparities and are not engaged in appropriate preventive, acute and chronic disease management services in the areas of medical, behavioral, and oral health services. Efforts must be made to support the safety net across the health, social service and public health continuum, expand access to services and reduce the barriers to care for vulnerable populations. The most significant barrier in this regard is related to a shortage of providers and practice sites that serve MassHealth-insured and uninsured residents. This is particularly true in the areas of behavioral health and oral health services. Nearly everyone that was interviewed for the Community Health Needs Assessment commented on the lack of access to providers who are willing and able to serve MassHealth-insured or uninsured patients.

Youth at Risk: Over 35% of children under the age of 18 live in households for whom poverty status is determined and 39.7% live in households receiving Supplemental Security Income (SSI), cash public assistance income, or Food Stamp/SNAP benefits, according to the US Census Bureau, American Community Survey 2013-2017. Poverty, low educational attainment and limited job opportunities are among the top social determinants leading to lower utilization of health care services and poor health outcomes. As a result, Worcester youth are at high-risk for obesity, gang involvement, violence, poor oral health and a need for mental health services.

III. Community Health Needs Assessment (CHA) Planning

UMMH's Community Benefits Programs meet the Schedule H/Form 990 Internal Revenue Service and Massachusetts Attorney General reporting requirements for not-for-profit hospitals. Our programs mirror the five core principles outlined by the Public Health Institute in terms of the "emphasis on communities with disproportionate unmet health-related needs; emphasis on primary prevention; building a seamless continuum of care; building community capacity; and collaborative governance." We embraced the Affordable Care Act requirements to conduct community health needs assessments and best practice creation of a community health improvement plan. UMass Memorial, the City of Worcester Division of Public Health (WDPH), Fallon Health and the Hanover Insurance Group led a collaborative, comprehensive community health planning effort to measurably improve the health of greater Worcester area residents. Our planning process is data-led, evidence-based and demonstrates true community partnerships and engagement.

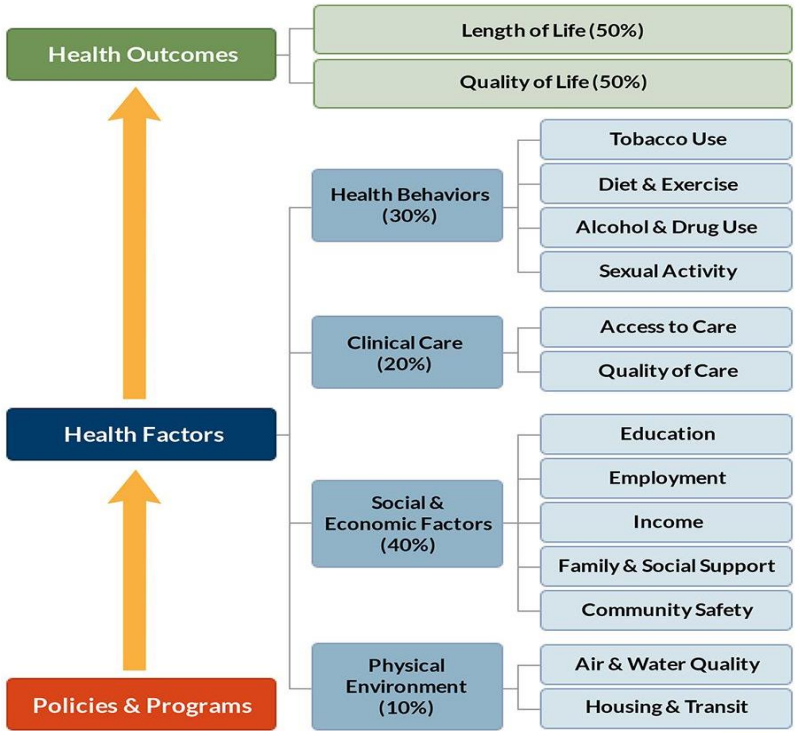
The UMass Memorial's Community Benefits Program works closely with medically underserved populations; neighborhood groups; local and state government officials; local and state Health Department staff and other city departments; faith-based organizations; advocacy groups and neighborhood; schools and other community-based organizations. In 2018 - 2021, the Community Benefits Program supported initiatives in such areas as: youth physical activity; healthy eating; youth employment; positive youth development; safe driving for teens; mobile health and dental care; community-based oral health; culturally sensitive health care for underserved and disconnected populations; residential substance use treatment for Latino men; youth mental health services and healthy behaviors; insurance enrollment, a medical legal partnership and community/clinical linkages for pediatric asthma. Beginning in March 2020, the UMass Memorial Ronald McDonald Care Mobile program staff were redeployed for critical COVID-19 community outreach, education and testing efforts to reach vulnerable populations and address disparities among high risk and highly impacted populations including Black and Hispanic in the City of Worcester and surrounding area. These multi-pronged, community-based approaches were implemented to combat COVID-19 within neighborhoods targeting populations most at-risk. Beginning with the COVID-19 Feet on the Street outreach, the hospital's Care Mobile staff were redeployed to provide onsite education and demonstration on handwashing, proper masking, answers to COVID-19 questions in Spanish and English and written materials in multiple languages. In addition, a mobile COVID-19 vaccination program that serves at risk populations in Worcester and surrounding communities was instrumental in combating the pandemic.

IV. Methods

Over the past decade, there has been an increased understanding—among policymakers, public officials and service providers—of the importance of developing broad system-wide plans to guide public and private agencies, service providers and other stakeholders as they work collectively to address barriers to care, improve health status and strengthen regional health systems. To be effective, these plans and their assessments and recommendations must be:

- Comprehensive—involving the full range of health care, social service and public health providers
- Data-driven—applying quantitative and qualitative data from primary and secondary sources in ways that allow for sound decision making
- Collaborative—engaging all relevant stakeholders including, public agencies, service providers and the at-large community in a transparent, inclusive process
- Action-oriented, measurable and justifiable—providing a clear path or roadmap that guides action in clear, specific, measurable ways and allows for the implementation of short-term and long-term strategies
- Evidence-based—implementing projects and strategies that are proven, rooted in clinical or service provider experience and that take into consideration the interests and needs of the target population. The CHA utilized a mixed-methods assessment approach that integrates quantitative and qualitative data. The 2021 effort focused on compiling information through an extensive community engagement effort that involved stakeholder interviews, focus groups, and a community health survey, as described below. Data and findings from recent local assessment and planning efforts have also been integrated.

Historically, health care systems have focused more on clinical services, physical health and treatment of chronic conditions, such as heart disease, cancer, asthma and diabetes. Over the past decade, there has been a clear shift to focus on preventing and addressing the underlying social, economic, behavioral and physical determinants of health. There is increasing awareness that these issues are at the root of poor individual health status, community well-being and overall population health. As shown in the Figure on the right, there is growing body of research shows that only a small portion of one's overall health can be attributed directly to access to and quality of clinical care. The remainder is linked to genetics, health behaviors, social and economic factors, and physical residential environments. With respect to community health assessment and improvement, the efforts of the Greater Worcester Regional CHA, the CHIP, along with the expectations of the Commonwealth, the federal government, and PHAB are framed with these ideas in mind.



Source: Robert Wood Johnson Foundation

The Community Health Improvement Planning process for the Greater Worcester area includes two major components:

1. A Community Health Assessment (CHA) to identify the social-economic factors and health-related needs and strengths of the Greater Worcester area and six surrounding towns, and
2. A community-based Community Health Improvement Plan (CHIP) to determine major health priorities, overarching goals, and specific objectives and strategies that can be implemented in a coordinated way for this region.

Given the synergy in geography and processes, findings of the recent CHA inform both the CHIP and this UMass Memorial Community Benefits Strategic Implementation Plan. The CHA-CHIP processes utilized a participatory, evidence-based community-driven approach guided by the Mobilization for Action through Planning and Partnerships (MAPP) process.[1, 2] To develop a shared vision and plan for improved community health, and help sustain implementation efforts, the Greater Worcester assessment and planning process engaged multi-sector community organizations, community members, and partners through different avenues:

[1] www.uwgmc.org/CHA)

[2] MAPP, a comprehensive, planning process for improving health, is a strategic framework that local public health departments across the country have utilized to help direct their strategic planning efforts. MAPP is comprised of four distinct assessments that are the foundation of the planning process and includes the identification of strategic issues and goal/strategy formulation as prerequisites for action. Since health needs are constantly changing as a community and its context evolve, the cyclical nature of the MAPP planning/implementation/ evaluation/correction process allows for the periodic identification of new priorities and the realignment of activities and resources to address them. Advanced by the National Association of County and City Health Officials (NACCHO), MAPP's vision is for communities to achieve improved health and quality of life by mobilizing partnerships and taking strategic action. Facilitated by public health leaders, this

a) UMass Memorial, the City of Worcester Division of Public Health, Fallon Health and the Hanover Insurance Group partnered to develop a plan to update the 2021-2024 CHA and the CHIP.

b) A Community Health Assessment **Advisory Committee** was established to guide and offer feedback on the CHA process (See Appendix A for a full listing). Working in partnership, UMass Memorial, Worcester Division of Public Health, and Fallon Health provided leadership and sought guidance from the CHA Advisory Committee (Coalition for a Healthy Greater Worcester). The 202~~12~~-202~~34~~ CHA, conducted in the central region of Massachusetts, ensured that the Greater Worcester community was represented in all its diverse aspects: business, education, communications, transportation, health and wellness, faith-based groups, philanthropic organizations, civic and government, vulnerable populations (disabled, seniors, etc.), and other organizations and specialized areas.

Completion of the CHA included input from hundreds of individuals who participated in interviews, focus groups, community forums and strategic retreats (held virtually due to COVID). (See Appendix C for a full listing). Participants included representatives of health and social service organizations, public health departments, academic institutions, community-based organizations and advocacy groups, residents as well as businesses leaders and individuals who live and work in the community. In addition, over 1,200 people in Greater Worcester completed community health surveys, either in person at community events or via email. The information gathered through these efforts enabled the CHA Facilitators to engage the community and gain a better understanding of the region's capacity, strengths, and weaknesses, as well as health status, barriers to care, service gaps and underlying determinants of health. While it was not possible for this assessment to involve all community stakeholders, it engaged a comprehensive and inclusive sample of the population; those involved showed commitment to strengthening the region's health system, particularly for people most at-risk.

Secondary and primary data from multiple sources was utilized in the completion of the CHA and special attention was given to social and economic indicators. The results of these efforts were synthesized in the CHA report and were announced publicly to approximately 200 community stakeholders at the Coalition for a Healthy Greater Worcester's Annual Meeting held virtually on March 23, 2021. to provide a comprehensive portrait of the region and set the foundation for the CHIP.

The UMass Memorial Medical Center 2022 Community Benefits Strategic Implementation Plan is developed taking into consideration needs and priorities identified in the 2021-2023 CHA/CHIP. Based on this foundation, priority areas were identified, goals were defined and objectives created for each goal and to operationalize these objectives and ensure alignment with the CHIP. Outcome indicators and a timeline were established for each priority area. The Community Benefits Plan is approved by the Community Benefits Committee of the UMass Memorial Health Board of Trustees.

V. Summary of Community Needs

The following issues were identified in the CHA and prioritized for inclusion in the CHIP using an agreed upon set of selection criteria. These needs informed the priorities, goals, objectives, and strategies of the UMass Memorial Medical Center Community Benefit Strategic Implementation Plan.

The 2021 Community Health Needs Assessment (CHA) prioritization process was led by the Worcester Division of Public Health, Fallon Health and the hospital Vice President of Community Health Transformation and included input from approximately 100 community stakeholders. This process will result in the update of the Greater Worcester Community Health Improvement Plan (CHIP). UMass Memorial Medical Center's Community Benefits Strategic Implementation Plan has alignment with the Greater Worcester CHIP. The other needs that are not included in the CHA/CHIP are not being addressed because they are not a part of the identified priority CHIP Domain Areas and due to limited funding.

framework helps communities apply strategic thinking to prioritize public health issues and identify resources to address them. More information on MAPP can be found at: http://www.naccho.org/topics/infrastructure/mapp/

The CHA identified six **Priority Populations**. Priorities were set in order to concentrate efforts, drive collective impact, and focus discussions in developing the Greater Worcester Community Health Improvement Plan. In alphabetical order they are as follows:

1. Vulnerable Children and Families
2. Youth and Adolescents
3. Immigrants and Non-English Speakers
4. Racial/Ethnic Minorities & Others Facing Discrimination
5. Homeless and Unstably Housed
6. Older Adults
7. Racial and vulnerable populations experiencing health disparities generally and specific to COVID

The Facilitating Partners framed the leading community health issues into four priority areas:

- Mental health
- Substance use
- Social determinants of health
- Chronic/complex conditions and their risk factors
- Disparities in COVID/pandemic positivity rates

The Facilitating Partners also identified two cross-cutting issues that underlie the leading health priorities and that they believe must be addressed to improve overall health status and reduce existing disparities:

- Racism, discrimination and health equity
- Health system issues (e.g., workforce issues, health literacy, care coordination, health information technology, and health information exchange)

VII. UMass Memorial Medical Center Community Benefits Strategic Implementation Plan

Priority: Address Food Insecurity/Hunger and Healthy Eating

Food insecurity has been a longstanding issue in Worcester and has been identified in the Greater Worcester Community Health Needs Assessments since 2012 as a priority sand has been a priority for UMass Memorial Community Benefits throughout this time. Food insecurity is linked to poverty, insufficient and unstable income. In Worcester over 30% of children live in households at or below the poverty level, according the U.S. Census. Food insecurity and related concerns including obesity and behaviors associated with obesity, such as access to healthy nutrition and physical activity, have been identified as priority areas in our three most recent Greater Worcester Community Health Needs Assessments. The data supports that these issues are considered critical given that heart disease and diabetes are among the leading causes of morbidity and mortality. Of particular concern is limited access to healthy foods and environments supporting active living for vulnerable populations and immigrant communities. The pandemic has increased food insecurity among families with children and communities of color, who were already faced hunger at much higher rates before the pandemic. The Worcester County Food Bank (WCFB) reports that there are over 75,000 food insecure households in Worcester County in 2021—approximately 1 in 12 people and 1 in 9 children. Among children, the rate is 1 in 8. Across the region, patrons visit food pantries in the short term to sustain them through periods of disability or job loss. Increasingly, food pantries are being used as long-term strategies to supplement monthly shortfalls in food. Pantries and

community meal programs have evolved from providing temporary or emergency food assistance to providing ongoing support for individuals, families, seniors living on fixed income, people with disabilities and adults working multiple low-wage jobs to make ends meet. Food insecurity is linked to chronic disease and health outcomes. UMass Memorial continues to tackle this complex issue through a multipronged approach including through community-based partnerships and programming and through local and state policy and advocacy.

Priority: Promote Positive Youth Development

Those who live in isolated, under-resourced, low-income communities are more likely to be exposed to a multitude of risk factors that influence their health, economic opportunities and overall well-being. Some of these "place-based" factors include unsafe housing, limited public transportation, limited access to healthy foods and safe places to exercise, exposure to crime and violence, and lack of health care facilities. For example, children and youth who live in depressed, isolated, low-income communities are more likely to live in families with parents or caregivers who have limited education and health literacy. Children, youth and adults living in such areas are also more likely to have been affected by violence and trauma than those in more affluent, highly resourced communities. The extent to which a child lives in a stable, well-resourced home with strong family or social supports and parents/caregivers who are socially and emotionally competent is one of the clearest predictors of good health and long-term success. Conversely, child maltreatment and neglect, domestic violence, children's disabilities, substance use and parental mental illness are some of the strongest predictors of poor health, toxic stress and long-term disparities in health status. While these challenges occur in families at all income levels, many—such as depression, domestic violence, and child abuse—are disproportionately frequent among low-income families.

Priority: Increase Access to Care

Whether an individual has health insurance—and the extent to which it helps to pay for needed acute services and access to a full continuum of high-quality, timely and accessible preventive and disease management or follow-up services—has been shown to be critical to overall health and well-being. Access to a usual source of primary care is particularly important, since it greatly affects the individual's ability to receive regular preventive, routine and urgent care—and to manage chronic diseases. However, social determinants of health and the impact they have on health is very important and as such, are part of our Community Benefits Strategic Implementation Plan. Lack of gainful and reliable employment is linked to several barriers to care, including lack of health insurance, inability to pay for health care services and copays, and inability to pay for transportation to enable individuals to receive services. While Massachusetts has one of the highest health insurance coverage rates in the U.S., there are still pockets of individuals without coverage, including young people, immigrants, and refugees, as well as those with low incomes. In the 2021 CHA, many key informants and focus group participants identified issues around navigating the health system, including how to access health insurance, as a major barrier to care. In a focus group, medical interpreters reported that they often go beyond their traditional scope of work to help connect patients to additional services and ease care transitions. Non-English speakers, new immigrants, and refugees face cultural and linguistic barriers that may lead to lapses in care, inappropriate utilization of emergency services, and noncompliance (e.g., follow up plans, medication regimens). Based on the academic literature and information gathered through the CHA, immigrants, refugees, asylees and non-English speakers—groups that are well represented in Greater Worcester—are known to be extremely vulnerable and much more likely to be uninsured. The diversity of languages and cultures within these groups that must be supported yet doing so can place a high burden on the health care system, especially the health safety net, institutions like UMass Memorial. These populations often struggle with access to care and face disparities with respect to social determents, chronic conditions, and other health-related outcomes.

<u>Oral health and access to oral health services</u>

Poor oral health not only causes pain and discomfort, but also contributes to various diseases and conditions—including cardiovascular disease, diabetes, infectious disease, Alzheimer's disease and school absenteeism. Poor oral health exacerbates chronic health conditions including heart disease and diabetes. Nearly 96 percent of adults 65 or older are affected by cavities and 1 in 5 have untreated tooth decay; these numbers are worse for people of color and with low income. Maintaining good oral health is especially important for children, as untreated dental conditions may lead to issues with development related to speech, eating and learning. Several CHA key informants and focus group/forum participants discussed the importance of routine oral health care, especially for children. According to a 2016 University of Massachusetts Medical School report on oral health in Worcester, the city has fewer oral health providers who accept MassHealth. CHA key informants corroborated

this information, especially the need for a more effective safety net to provide oral health care for low-income children and families. Community water fluoridation, in which a fluoride compound is added to the public water supply, is not mandated in Massachusetts, though many cities and towns have chosen to participate. However, Worcester is one of the few municipalities in the state that lacks fluoride in its water supply.

Priority: Health Equity/Health Disparities (Cross Cutting All Priorities)
Disparities in health status are large and pervasive nationally. For example, for most of the 15 leading causes of death—including heart disease, cancer, stroke, diabetes, kidney disease, hypertension, liver cirrhosis and homicide—African Americans have higher death rates than whites. Other data indicate that nationally, each year, nearly 100,000 Black people who die prematurely would live if there were no racial disparities in health. Hispanic women in Worcester have a higher infant mortality rate compared to White women. While the ethnic diversity in the region was described as an asset in the greater Worcester area by nearly all respondents, many also cited dynamics of racism and classism in the region that influence the health of residents of color and low-income residents. Reducing racial and ethnic and socioeconomic health disparities/inequalities emerged as a particular concern among many interviewed participants in the 2021 CHA. Quantitative data confirm that there are excess rates of chronic diseases among African Americans, Hispanics, and low-income residents in the greater Worcester area. Participants also explained that populations of color generally had limited access to healthy, affordable food and safe, affordable housing and spaces to engage in physical activity, behaviors they described as linked to these health disparities. There was a clear consensus that racism, discrimination, and health equity needed to be identified as priority in the CHA report, and as such is a strategy that is cross-cutting across all priorities.

The Community Benefits Strategic Implementation Plan

UMass Memorial Health is committed to improving the health status of all those it serves and to addressing the health problems of the poor and other medically underserved populations. In addition, nonmedical conditions that negatively impact the health and wellness of our community are addressed. The summary of UMass Memorial Community Benefits Priority Areas and Goals are listed below, followed by the detailed Community Benefit Strategic Implementation Plan. As mentioned previously, UMass Memorial's Plan aligns with findings of the CHA and the Greater Worcester Community Health Improvement Plan. The Community Benefits Strategic Implementation Plan will be tracked and updated annually.

VII. a. Priority Areas and Goals:

Priority Areas	Goal	
Priority Area 1: **Increase Access to Health Care**	**Goal:**	Support programs and develop collaborative efforts that will improve access to care for the medically underserved/uninsured in Greater Worcester.
Priority Area 2: **Address Food Insecurity/Hunger and Healthy Eating**	**Goal:**	Reduce barriers to access healthy food and nutrition through sustaining existing, and developing new, interventions and partnerships with community-based organizations as well as through local and state policy efforts.
Priority 3: **Chronic diseases and Injury Prevention**	**Goal:**	Develop and sustain community/clinical linkages with community stakeholders to address high rates of chronic conditions and injury prevention and other programs that reach vulnerable populations for screenings/education and other prevention efforts.
Priority Area 4: **Promote Positive Youth Development**	**Goal:**	Support at-risk youth programs that promote positive youth development (e.g., workforce development, access to physical activity, and violence prevention).
Priority Area 5: **Enhance the Public Health Infrastructure of the Community**	**Goal:**	Community-Wide Public Health Strategy: Develop and support strategies and systems that enhance the public health infrastructure of the Greater Worcester community.
Priority Area 6: **Address disparities (e.g.; COVID and other) through utilzation of data**	**Goal:**	Address racial and ethnic disparities related to the COVID pandemic and other community health needs through a multi-pronged approach including neighborhood-level interventions such as: COVID Testing, Vaccination, and Mobile Vaccine Equity Enhancement Program (MVEEP) including homebound and disabled populations.
Cross-Cutting: Promote Health Equity and Systemic Health Disparities	**Goal:**	Support programs and policies that promote health equity and reduce health disparities (e.g., workforce issues, health literacy, care coordination, health information technology, and health information exchange) Support the institution's Anchor Mission Strategy

Note: Measures of success/metrics (intended impact) are identified for the above Priority Areas at the Objective and Strategy levels outlined later in this document. Programs, activities and outcomes listed below may be affected by or subject to potential restrictions related to the COVID pandemic.

Priority 1 - Goal: Increase Access to Health Care

Objective 1.1:	**Deliver neighborhood-based medical and preventive dental mobile services at 10 sites and 20 schools as a means of decreasing access to care barriers and connecting underserved populations to on-going care.** ***** See Priority 6 (below) for Care Mobile COVID Pandemic Community Outreach, Testing and Vaccination Redeployment**	
Outcome Indicators: (UMass Memorial Care Mobile & Oral Health Task Force)	**Intended Annual Impact**	**Actual Outcomes**
• Number of patients seen at neighborhood sites through the Care Mobile program	A minimum of 1,000 total patients	Year 1: Year 2: Year 3:
• Number of people vaccinated (childhood school vaccinations) at Care Mobile clinics	A minimum of 250 people	Year 1: Year 2: Year 3:
• Number of Care Mobile patients who would have sought care at the ED as identified by the medical or dental provider.	200 people	Year 1: Year 2: Year 3:
• Reduce the proportion of children with dental caries experience in their primary and permanent teeth in the City of Worcester by providing the following preventive services through the UMass Memorial Care Mobile school-based program which includes: • Screenings • Sealants • Fluoride varnishes • Dental prophylaxis • Oral Health education	Minimum of 2,500 total visits	Year 1: Year 2: Year 3:
• Coordination of Oral Health Providers Task Force to ensure preventive services are delivered in schools in the City of Worcester due to the lack of flouridation in the wáter supply.	Meets a minimum of three times annually	Year 1: Year 2: Year 3:
STRATEGIES		**Timeline: Year 1,2,3**
1.1.1 Sustain neighborhood-based medical and dental services at a minimum of 11 sites through the Care Mobile program		1,2,3
1.1.2 Sustain preventive dental services for underserved children at a minimum of 20 schools through the Care Mobile program		1,2,3
1.1.3 Provide health education and vaccines through the Care Mobile and participate at a minimum of three community-based events. (screenings: BMI, hypertension, blood glucose, dental and other)		1,2,3
1.1.4 Coordinate the Oral Health Providers Task Force to ensure dental services are offered to Worcester school-aged children		1,2,3

Objective 1.1:	Deliver neighborhood-based medical and preventive dental mobile services at 10 sites and 20 schools as a means of decreasing access to care barriers and connecting underserved populations to on-going care. *** See Priority 6 (below) for Care Mobile COVID Pandemic Community Outreach, Testing and Vaccination Redeployment	
1.1.5	Address high levels of lead among children; Develop a partnership with the City of Worcester Healthy Homes Office to address the high level of lead among children in the City of Worcester	1,2,3
1.1.6	Sustain referral relationship with Community Health Centers to anchor patients to a dental/medical home	1,2,3
1.1.7	Develop a partnership with Clinton public schools to meet the medical/preventive dental needs of recently arrived new immigrant children.	1,2
1.1.8	Participate in Community-based events (limited due to COVID restrictions)	1,2,3

Monitoring/Evaluation Approach:

- Number of avoidable ED visits provided on the Care Mobile
- Tracking patients served
- Number of school-based dental visits
- Number of community events participated in
- Number of vaccinations delivered
- Evidence of developed partnership with the City of Worcester and the number of lead screenings for children
- Evidence of new partnership with the Clinton public schools/number of services provided

Hector Reyes Substance Use Treatment facility

Objective 1.2:	Execute the delivery of a medical model that treats Latino males with a substance use disorders in a culturally-sensitive way in a residential treatment program while placing emphasis on opiate addiction.	
Outcome Indicators:	**Intended Annual Impact**	**Actual Outcomes**
• Number of Latino men receiving medical services at the Hector Reyes residential substance use treatment program	80 men annually	Year 1: Year 2: Year 3:
STRATEGIES		**Timeline: Year 1,2,3**
1.2.1 UMass Memorial physician provides medical care for Latino men who have/or are at risk for developing chronic diseases due to substance use at the Hector Reyes House.		1,2,3
1.2.2 Sustain collaborative relationship with UMass Memorial Medical Center departments of Psychiatry and Infection Disease for specialty care and follow up		1,2,3
1.2.3 Implement workforce opportunities through trainings and job placements at the Reyes Café and a new automotive repair program		1,2,3

Objective 1.2:	**Execute the delivery of a medical model that treats Latino males with a substance use disorders in a culturally-sensitive way in a residential treatment program while placing emphasis on opiate addiction.**
Monitoring/Evaluation Approach: • Tracking/ reporting/ patient services • End of year reports	

Health Insurance Enrollment

Objective 1.3:	**UMass Memorial Benefits Advisors conduct insurance enrollment for uninsured/underinsured individuals.**	
Outcome Indicators:	**Intended Annual Impact**	**Actual Outcomes**
• Number of UMass Memorial Insurance Application Assistance	Number of patients needing service –variable, depending on state prerequisites and need	Year 1: Year 2: Year 3:
STRATEGIES		**Timeline: Year 1,2,3**
1.3.1: Financial Benefit Advisors assist with insurance enrollment, education and advocacy		1,2,3
Monitoring/Evaluation Approach: • Tracking of people served/ end of year report		

UMass Memorial/Medical Legal Partnership

Objective 1.4:	**Legal Department implements a UMass Memorial/Medical Legal partnership with Community Legal Aid to integrate legal services into clinical sites to address underlying social/economic factors among socially-complex populations**	
Outcome Indicators:	**Intended Annual Impact**	**Actual Outcomes**
• Number of cases resolved	A mínimum of 180 patients will receive legal intervention at four primary care clinics	Year 1: Year 2: Year 3:
• Produce program evaluation document that measures impact of medical/legal intervention	Completed Evaluation Plan that is updated annually	Year 1: Year 2: Year 3:
STRATEGIES		**Timeline: Year 1,2,3**
1.4.1 Serve patients at four UMass Memorial clinical sites		1,2,3
1.4.2 Sustain a panel of 120 lawyers to do pro bono work		1,2,3
1.4.3 Update the evaluation plan		1,2

Objective 1.4:	Legal Department implements a UMass Memorial/Medical Legal partnership with Community Legal Aid to integrate legal services into clinical sites to address underlying social/economic factors among socially-complex populations
1.4.4 On-going coordination of Medical-Legal Task Force	1,2,3
Monitoring/Evaluation Approach: • On-going monitoring and Evaluation Plan execution	

Maternal/Infant Health

Objective 1.5	Support Worcester's Healthy Baby Collaborative efforts to address Infant Mortality disparities and promote equity in practices among maternal/child health population; Utilize Community Health Workers (CHW) to work with high-risk mothers to help ensure the health of the mother and baby pre-and post-pregnancy as a means of improving health outcomes and address infant mortality among at-risk Latino and other vulnerable populations (e.g.: CDC REACH grant that includes a focus on identifying Social Determinants of Health including food insecurity and access to healthy nutrition).	
Outcome Indicators:	**Intended Annual Impact**	**Actual Outcomes**
• Hire and train a bi-lingual staff for the Community Health Worker position (training: REDCap, CHW & home virtual visiting)	Staff hired and trained	Year 1
• Continued development and implementation of the intervention utilizing CHWs established in the Maternal Fetal Medicine department as part of a REACH (Racial and Ethnic Approaches to Community Health) grant from the Centers for Disease Control and Prevention (CDC) in collaboration with the Worcester Division of Public Health.	A Minimum of 40 patients annually	Year 1: Year 2: Year 3:
• CHWs connectivity to high-risk mothers identified in the Maternal Fetal Medicine clinic.	A Minimum of 40 (virtual/home) visits conducted annually	Year 1: Year 2: Year 3:
• CHWs identification of SDOH needs among intervention participants and connectivity to community resources addressing those needs.	A Minimum of 40 patients annually connected to resources addressing SDOH needs	Year 1: Year 2: Year 3:
STRATEGIES		**Timeline: Year 1,2,3**
1.5.1 Train and incorporate the role of Community Health Workers in intervention		1,2
1.5.2 Continue to develop and sustain an intervention utilizing CHWs established in the Maternal Fetal Medicine Department as part of a REACH (Racial and Ethnic Approaches to Community Health) grant from the Centers for Disease Control and Prevention (CDC) grant received by the City of Worcester Division of Public Health in 2018 to increase breast feeding among high-risk mothers with a focus on Latinx mothers.		1,2,3
1.5.3 Utilize CHWs to work with high-risk mothers to help ensure health of the mother and baby pre-and post-pregnancy to improve health outcomes and prevent infant mortality among at-risk Latino and other populations within the nine census tracks of the City of Worcester.		1,2,3

Objective 1.5	**Support Worcester's Healthy Baby Collaborative efforts to address Infant Mortality disparities and promote equity in practices among maternal/child health population; Utilize Community Health Workers (CHW) to work with high-risk mothers to help ensure the health of the mother and baby pre-and post-pregnancy as a means of improving health outcomes and address infant mortality among at-risk Latino and other vulnerable populations (e.g.: CDC REACH grant that includes a focus on identifying Social Determinants of Health including food insecurity and access to healthy nutrition).**
• Utilize CHWs to work with identified high-risk mothers and bring connectivity to resources to reduce health disparities among racial and ethnic populations with the highest burden of chronic disease (i.e., hypertension, heart disease, Type 2 diabetes, and obesity) through culturally-tailored systematic interventions that address community conditions and impact access to care, poor nutrition, and physical inactivity.	1,2,3
Monitoring/Evaluation Approach: • Tracking of patients served and virtual/home visits conducted by Community Health Workers • Number of patients receiving virtual/home visits • Number of patients connected to community resources addressing SDOH needs and number of resources referred to.	

Objective 1.6	**Enhance the CommunityHELP IT platform that integrates community resources (social determinants of health), and entities that provide services to community members and caregivers, and expand reach into Central Massachusetts**	
Outcome Indicators:	**Intended Annual Impact**	**Actual Outcome**
• Number of "claimed" participating organizations and programs in the CommunityHELP platform • Number of monthly usage searches in the system	A minimum of 120 new participating organizations and a minimum of 10,000 monthly searches in the system	Year 1: Year 2: Year 3:
STRATEGIES		**Timeline: Year 1,2,3**
1.6.1 Increase the number of "claimed" participating organizations and programs in the CommunityHELP platform by five organizations/10 programs per month		1,2,3
1.6.2 Increase general knowledge of CommunityHELP across Central Massachusetts entities		1,2,3
1.6.3 Secure alignment of CommunityHELP to the Greater Worcester Community Health Improvement Plan (CHIP) strategies		1,2,3
1.6.4 Community Benefits staff to continue to serve on the CommunityHELP governance committee structure for ongoing integration, and innovation utilizing CommunityHELP		1,2,3
Monitoring/Evaluation Approach: • End of year reports documenting efficiency and use		

Road to Recovery – Mobile Addiction Van

Objective 1.7: Reduce opioid disorder and substance use related morbidity and mortality, through a mobile addiction unit designed to reach out to those experiencing homelessness and substance use disorder. The Road to Recovery Addiction Van offers medical and behavioral health services and is designed to mitigate barriers such as lack of transportation or mistrust in health care systems.		
Outcome Indicators:	**Intended Annual Impact**	**Actual Outcomes**
• Number of served • Number of patients connected to wrap-around services	A Minimum of 500 patients annually	Year 1: Year 2: Year 3:
STRATEGIES		**Timeline: Year 1,2,3**
1.7.1 Reduce opioid related morbidity and mortality by mitigating barriers such as lack of transportation or mistrust in health care and meeting people where they are -in shelters or on the Street		1,2,3
Monitoring/Evaluation Approach: • Tracking/ reporting/ patient services • End of year reports		

Priority 2- Goal: Address Food Insecurity/Hunger and Healthy Eating

Objective 2.1:	**Address food insecurity/poor nutrition and hunger by increasing the availability of and access to affordable fresh and local fruits and vegetables for low-income residents.**	
Outcome Indicators:	**Intended Annual Impact**	**Actual Outcomes**
• Number of urban agricultural opportunities (e.g. community gardens etc.)	• Continued support of the Grant Square Garden with a minimum of 30 youth and community gardeners • Minimum of 500 pounds of produce grown at Bell Hill urban agriculture program	Year 1: Year 2: Year 3:
• Number of individuals/ families accessing fresh fruits and vegetables through the Veggie Mobile, Mobile Farmers Market	Provide produce to 2,800 families	Year 1: Year 2: Year 3:

Objective 2.1:	**Address food insecurity/poor nutrition and hunger by increasing the availability of and access to affordable fresh and local fruits and vegetables for low-income residents.**	
• Evidence of new intervention research, development and partnerships to address food insecurity	Minimum of one new intervention researched/developed annually	Year 1: Year 2: Year 3:
• Number of efforts supported through a range of means including; oral and written testimony and support of other Worcester Food Policy Council, Worcester Together Food Group, City of Worcester Mayor's Task Force on Food Insecurity and Massachusetts Food is Medicine Coaltion.	Participation in a minimum of three comunity coalition-based efforts annually	Year 1: Year 2: Year 3:
STRATEGIES		**Timeline: Year 1,2,3**
2.1.1 Promote and support community-based resources to increase access to healthy food • Veggie Mobile • Community Garden(s)		1,2,3
2.1.2 Collaborate to support youth urban agriculture opportunities		1,2,3
2.1.3 Identify áreas of new collaborations and connectivity of resources such as the Regional Environmental Council mobile markets to Community-and faith-based organizations serving ethnic and linguistic minorities and vulnerable groups facing food insecurity and language/cultural barriers to accessing services as a means of ensuring access to healthy nutrition and education and connectivity to resources such as SNAP and HIP incorporating a focus on chronic disease prevention. (e.g.: free fresh produce voucher purchase for REC mobile market at African Ghanaian Church on Vernon St.)		1,2,3
2.1.4 Research and identify opportunities for nutrition interventions among at-risk populations (e.g.: development of a REC mobile market free fresh produce purchase program among food insecure children and families identified in the Care Mobile preventive-dental program working with school nurses)		1,2,3
2.1.5 Support a range of efforts to address food insecurity and healthy nutrition among vulnerable poluations through continued active participation as a member of the Worcester Food Policy Council Steering Committee which convenes the Greater Worcester Community Health Improvement Plan (CHIP) and other community coalitions including Worcester Together Food Group and the City of Worcester Mayor's Task Force on Food Insecurity.		1,2,3
2.1.6 CB staff to participate in the Massachusetts Food is Medicine State Planning Council, an effort led by the Harvard University Center for Health Law and Policy Innovation and a home meal-delivery system, Community Servings, that works to increase access to medically-tailored foods for discharged patients and to improve availability of nutritious food through policy change and advocacy for food insecurity screening and solutions within the clinical care system.		1,2,3
Monitoring/Evaluation Approach: • End of year reports • Number of gardens • Number of new interventions researched and adopted • Policies adopted to address access to healthy foods		

Objective 2.2:	In collaboration with the Worcester Division of Public Health, the Worcester Food Policy Council, the Food is Medicine Massachusetts and other stakeholders, support policy efforts to promote healthy weight and address food insecurity and hunger.	
Outcome Indicators:	**Intended Annual Impact**	**Actual Outcome**
• Number of policy efforts that support or promote access to healthy food	1 policy	Year 1: Year 2: Year 3:
STRATEGIES		**Timeline: Year 1,2,3**
2.2.1 Collaborate and support community-based efforts of the Food Policy Council focus including: SNAP benefits and range of issues to improve access in underserved, food insecure areas including healthy food retailers, SNAP food stamp) and expanding urban agriculture opportunities.		1,2,3
2.2.2 Serve as member of the planning Massachusetts Food is Medicine State Planning Council, an effort led by the Harvard University Center for Health Law and Policy Innovation and Community Servings, that works to increase access to medically-tailored foods and improve availability of nutritious food through policy change and advocacy for food insecurity screening and solutions within the clinical care system.		1,2,3
Monitoring/Evaluation Approach: • End of year reports • Evidence of policy development		

Priority 3- Goal: Address Chronic Disease and Injury Prevention

Address High Rates of Pediatric Asthma

Objective 3.1:	Pediatric Pulmonology will sustain an intervention with the ED and in-patient departments that targets patients most at risk	
Outcome Indicators:	**Intended Annual Impact**	**Actual Outcome**
• Activate the Pedi-Asthma CHW Home Visiting Intervention, incorporating lessons learned and new methods developed during the COVID pandemic (e.g.; incorporation of virtual home visits and check-ins, texting and utilization of streamlined intervention format and datacapture system in REDCap)	Reduce # of pediatric asthma related hospital admissions	Year 1
• **Hospital In-Patient Intervention**: Captures all asthmatic children admitted to the pediatric floor and provides asthma teaching as well as connection to community asthma resources provided through the CHW Home Visiting Program.	Reduce # of pediatric asthma related hospital admissions	Year 1: Year 2: Year 3:

Objective 3.1: Pediatric Pulmonology will sustain an intervention with the ED and in-patient departments that targets patients most at risk		
• **AsthmaLink, Medication-in-School Program**: Provides preventative daily asthma therapy delivery through the school nurse for high risk asthmatic children in the Worcester Public Schools to ensure daily adherence to effective preventative therapy and reduces asthma morbidity for children. Incorporate lessons learned during the COVID pandemic when school closures occurred and communications methods such as texting of medication reminders and check ins.	Serve a mínimum of 30 students annually Reduction of school absenteeism among program participants Evidence of improved medication adherence	Year 1: Year 2: (possible increase to 80) Year 3:
STRATEGIES		**Timeline: Year 1,2,3**
3.1.1 Sustain linkage with ED/Pediatrics, Pedi-Pulmonology and Provider Champion		1,2,3
3.1.2 Hospital In-Patient Intervention: Identify all children admitted to the hospital for asthma→ Introduce programs (asthma home visit, medication in school, Community Legal Aid) to every admitted asthmatic→ Asthma teaching for every admitted asthmatic→ Sign consent for program enrollment→ Enroll in one of Asthma Intervention programs		1,2,3
3.1.3 Reactivate coordination of community-based Asthma Task Force Co-Chaired by UMass Memorial		1,2,3
3.1.4 ED Intervention: Identify all children in the ED who have ED visits in the last year for asthma→ Introduce Asthma programs→ Obtain consent for programs in person or by phone→ Enroll in one of Asthma programs		1,2,3
Monitoring/Evaluation Approach: • Tracking home visits by CHW • Tracking number of children receiving meds at school • Tracking number of ED visits for children in the Meds at School Program • Tracking absenteeism for children in the Meds at School Program		

Intervention members:

Pedi-Pulmonology, Pedi-ED, Pedi-Primary Care, Worcester Public Schools, community-wide Pediatric Asthma Task Force

Objective 3.2: Identify high risk population and improve care for pediatric asthma patients served by Pedi-Primary Care to decrease asthma related health disparities		
Outcome Indicators:	**Intended Annual Impact**	**Actual Outcomes**
• Self management education for all persistent pediatric patients (medications, Asthma Action Plan (AAP), Flu shot, triggers)	90%	Year 1: Year 2: Year 3:
• Asthma control: Asthma Control Test in last 12 months; conducted in the clinical setting and administered by CHWs at each intervention visit	90%	Year 1: Year 2: Year 3:
• Referral for home visits among identified high risk patients for education, assessment of environmental asthma triggers, medication usage, and trigger mitigation (bed casings, etc) by Community Health Worker (CHW)	70%	Year 1: Year 2: Year 3:

Objective 3.2: Identify high risk population and improve care for pediatric asthma patients served by Pedi-Primary Care to decrease asthma related health disparities		
• Completion of Home Visits for enrolled	60%	Year 1: Year 2: Year 3:
STRATEGIES		**Timeline: Year 1,2,3**
3.2.1 Utilize EMR to identify all pediatric patients with asthma and assess severity		1,2,3
3.2.2 Provider Champion to develop office work flow, train personnel, and managed care		1,2,3
3.2.3 Utilize CHW to provide case management and implement home visit program (Contact patient, schedule and provide home visits, follow-up, communicate with schools and Community Legal Aid referrals		1,2,3
3.2.4 Utilize CHW to follow-up on ER visits and hospitalizations of all pediatric persistent asthma patients through EPIC		1,2,3
3.2.5 On-going participation and communication with the City-Wide Pediatric Asthma Task Force		1,2,3
Monitoring/Evaluation Approach: • Monitor patient registry monthly, follow up emergency department visits and hospitalizations • Individual children identified as high risk will be monitored at least quarterly through a combination of clinic visits, home visits, and/or contact with CHW • Monitor Home Visits (REDCap database)		

Objective 3.5: Cancer Prevention		
Outcome Indicators:	**Intended Annual Impact**	**Actual Outcomes**
• Develop a partnership with the YWCA to address disparities	Evidence of a community outreach agenda and activities	Year 1: Year 2: Year 3:
• Work with Cancer Committee to develop a plan to address social determinants of health barriers to care for cancer patients (e.g. food insecurity/transportation/parking)	Evidence of plan and activities	Year 1: Year 2: Year 3:
• Community Benefits staff to facilitate connectivity of Cancer Committee members to Community-based organizations to bring cancer prevention related education and connectivity to screening and care among minority populations facing disparities in health outcomes and accessing care.	Evidence of connectivity to targeted Community-based organziations	Year 1: Year 2: Year 3:
Strategies:		**Timeline: Year 1,2,3**
3.5.1 Assemble community outreach staff and appropriate clinical providers to support the agenda and activities		1,2,3
3.5.2 Leverage and connect Cancer Committee members to community resources and venues with a targeted focus on addressing inequities in Health outcomes and barriers to connectivity and access care among minority populations (Latino, Black and ethnic and linguistic minorities)		1,2,3

Objective 3.5: Cancer Prevention
Monitoring/Evaluation Approach: • Regular participation of Community Benefits staff in Cancer Committee meetings • Number of connections facilitated to Cancer Committee members and efforts to community-based organizations

Objective 3.6: Reduce high rates of injury and injury-related death, ED use and hospitalization through a variety of programs targeting gun-related injury (accidental and intentional) and vehicular accidents and driving related-injuries. (Programs, activities and outcomes below subject to potential limitations due to COVID pandemic restrictions)		
Outcome Indicators:	**Intended Annual Impact**	**Actual Outcomes**
Goods for Guns: Working in collaboration with area Police Departments and the District Attorney's Office, sustain the annual Goods for Guns programs in Worcester and 14 surrounding communities that incentivize members of the community to turn in unwanted firearms, educates participants on gun safety in the home and provides free trigger locks as a means of a means of reducing gun-related injuries, death, crime and suicide.	A minimum of 300 guns retrieved annually	Year 1: Year 2: Year 3:
Child Passenger Safety: Provides parents with education on the importance of the proper use of child restraints/child car seats. The program teaches proper installation of car seats and provides seats to those who have financial need.	Provide education to a minimum of 275 families annually Provide approximately 125 car seats to families in need annually Install approximately 150 car seats annually	Year 1: Year 2: Year 3:
Teen DRIVE: The program teaches safe driving behaviors to youth through interactive driver simulations including themes such as distractions (texting, phone, peers), impairments (alcohol, fatigue, mediations) and seat belt use.	Educate and provide driver simulation training to a mínimum of 700 youth annually	Year 1: Year 2: Year 3:
Teen RIDE: To teach teens that they are responsible for their actions and safe driving practices and the impact their decisions and risky behaviors can have on the rest of their lives.	Provide program to a minimum of 125 youth annually. (subject to availability of Teen RIDE training vehicle)	Year 1: Year 2: Year 3:
STRATEGIES		**Timeline: Year 1,2,3**
3.6.1 Provide programs targeting injury prevention through education, driver simulation, safe driving and gun reclamation and community engagement as a means of reducing high rates of injury, fatalities due to injury and ED visits and hospitalizations due to injury		1,2,3
3.6.2 Develop linkages with community-based organizations and stakeholders to leverage resources and program Implementation		1,2,3
Monitoring/Evaluation Approach: • Yearly Reports		

Priority 4- Goal: Promote Positive Youth Development

Objective 4.1:	**Develop a strategic plan to identify and address community health priorities for at-risk, youth of color post-COVID**

Outcome Indicators:	**Intended Annual Impact**	**Actual Outcomes**
• HOPE Youth Coalition; Completion of strategic plan	TBD	Year 1:
STRATEGIES		**Timeline: Year 1,2,3**
4.1 Develop a strategic plan to identify and address community health priorities for at-risk youth of color post-COVID		1,2,3
Monitoring/Evaluation Approach: • Completion of strategic plan with actionable goals, timeline and metrics		

Objective 4.2:	**Address trauma (Adverse Childhood Trauma Experiences – ACE) in young children who witness violence through a partnership with mental health providers and the Worcester Police Department. (UMass Memorial's HOPE Coalition)**

Outcome Indicators:	**Intended Annual Impact**	**Actual Outcomes**
• 75 households with children under 10 are screened for trauma exposure; 80% of those screened receive services (Worcester ACTS Program)	Decreased likelihood that children under the age of 10 who are exposed to violence experience long-term negative outcomes	Year 1: Year 2: Year 3:
• Families will demonstrate increased resilience and community connection as measured by Family Strengths and Needs Assessment	Increase family resilience through deepened connection to trauma-informed community resources	Year 1: Year 2: Year 3:
• Work collaboratively with the Together for Kids Early Childhood Strategic Planning Committee to develop strategic plan for Early Childhood.	Increase the Worcester community's awareness of the impact of trauma on child development and Health	Year 1: Year 2: Year 3:
STRATEGIES		**Timeline: Year 1,2,3**
4.2.1 Utilize Worcester ACTs community health workers/resilience navigators		1-3
4.2.2 Worcester ACTs participation in Together for Kids		1-3

Objective 4.2:	**Address trauma (Adverse Childhood Trauma Experiences – ACE) in young children who witness violence through a partnership with mental health providers and the Worcester Police Department. (UMass Memorial's HOPE Coalition)**
4.2.3 Develop formal linkage with the Worcester Division of Public Health to implement the ACE (Adverse Childhood Experience)/Opiate home visiting intervention	1
Monitoring/Evaluation Approach: • REDCap data management system	

Objective 4.3:	**Support at-risk youth programs that promote positive youth development and workforce opportunities.**	
Outcome Indicators:	**Intended Annual Impact**	**Actual Outcomes**
• **Building Brighter Futures With Youth:** Number of youth participating in jobs/ youth job opportunity programs at UMass Memorial	A mínimum of 13 students annually	Year 1: Year 2: Year 3:
• Number of jobs created for youth city-wide through leveraged state funding	A minimum of 1,000	Year 1: Year 2: Year 3:
STRATEGIES		**Timeline: Year 1,2,3**
4.3.1 Foster relationships with community stakeholders (Worcester Public Schools, City of Worcester Youth Office and Worcester Community Action Council)		1,2,3
Monitoring/Evaluation Approach: • Yearly Reports		

Objective 4.4:	**In collaboration with the City of Worcester, implement summer programs that promote physical activity and active living, summer learning loss prevention programming and healthy meals for at-risk children (Recreation Worcester)**	
Outcome Indicators:	**Intended Annual Impact**	**Actual Outcome**
• Number of children/ youth participating in programming	A minimum of 1,020 children participating in (Recreation Worcester program)	Year 1: Year 2: Year 3:
• Number of meals provided	A minimum of 1,020 children receive two meals a day (Recreation Worcester program)	Year 1: Year 2: Year 3:
• Number of youth employed in the program	A mínimum of 100 youth	Year 1: Year 2: Year 3:

Objective 4.4:	In collaboration with the City of Worcester, implement summer programs that promote physical activity and active living, summer learning loss prevention programming and healthy meals for at-risk children (Recreation Worcester)
STRATEGIES	**Timeline: Year 1,2,3**
4.4.1 Collaborate with the City of Worcester Youth Office, Worcester Public Schools, and other community-based agencies to increase access to physical activity opportunities. • Recreation Worcester summer and afterschool programs	1,2,3
Monitoring/Evaluation Approach: • End of year reports	

Priority 5- Goal: Enhance the Public Health Infrastructure of the Community

Objective 5.1:	Enhance the capacity of the City of Worcester Public Health Department to deliver high quality prevention and promote equity to the residents in Worcester and the Alliance towns through regionalization and accreditation efforts.	
Outcome Indicators:	**Intended Annual Impact**	**Actual Outcomes**
• Support and participate in the development of the Academic Health Center which identifies college students to work with faculty on special projects with the Worcester Division of Public Health	10-15 students	Year 1: Year 2: Year 3:
• WDPH completion of the Community Health Improvement Plan including strategies, measurable outcomes for each Domain Area and regular convening of CHIP Work Groups, ensuring collection of epidemiological data for each CHIP Domain, dissemination of meeting minutes; identification of new policies	Publication and announcement of the completed CHIP report, regular, ongoing CHIP Work Group meetings, distribution of data and Meeting Minutes for each CHIP Work Group and anual report to the community	Year 1: Year 2: Year 3:
• Support the Coalition for a Healthy Greater Worcester to successfully implement CHIP strategies	Active participation in Steering Committee, Finance and Access to Care; and Resource & Development Committee; secure funding	Year 1: Year 2: Year 3:
• Develop strategy to successfully allocate DoN funds to support CHIP activities	Develop RFPs and allocate funds via the Resource & Development Committee	Year 1: Year 2: Year 3:
STRATEGIES		**Timeline: Year 1,2,3**
5.1.1 Support the City of Worcester Division of Public Health (WDPH) through the development of a Center for Academic Health Practice; Foster collaboration between WDPH, UMass Memorial, and academic partners to improve community health and develop public health research and practice leaders.		1,2,3

Objective 5.1:	**Enhance the capacity of the City of Worcester Public Health Department to deliver high quality prevention and promote equity to the residents in Worcester and the Alliance towns through regionalization and accreditation efforts.**
5.1.2 Support the Public Health Infrastrastructure and work	1,2,3
5.1.3 Active participants in the update of the Community Health Improvement Plan and annual updates and planning of 2021 Community Health Needs Assessment	1,2,3
5.1.4 Engagement in the Coalition for a Healthy Greater Worcester	1,2,3
5.1.5 Convene and facilitate the Resource Development Committee of the Coalition for a Healthy Greater Worcester; DoN allocation of funds	1,2,3

Monitoring/Evaluation Approach:

- End of year reports
- Number of policies implemented
- Number of college students placed to conduct public health/CHIP activities
- Public health/CHIP activities completed
- Activities that support regionalization and accreditation of the Worcester Division of Public Health and regional Alliance
- Completion of CHIP update
- Evidence of DoN allocation of funds to support CHIP strategies

Priority 6 - Goal: Address disparities in COVID/pandemic positivity rates identified through data

Objective 6.1:	**Implement a multi-pronged, community-based approach to address COVID-related disparities among high risk populations including Black and Hispanic in Worcester and surrounding area (strategies to be carried out and continued on an as-needed basis based on the status of the pandemic)**	
Outcome Indicators:	**Intended Annual Impact**	**Actual Outcomes**
• Conduct community-based COVID testing and program vaccination program that utilizes geomapping and data	Minimum of 4,000 tests	Year 1: Year 2:
• Provide mobile vaccination program for homebound that utilizes geomapping and data	Minimum of 1,500 vaccines	
• Sustain the Health Equity Task Force Outreach & Education Committee; Develop a community-based priority intervention for emergent needs (i.e: chronic conditions, data regarding dispursement of funds)		Year 1: Year 2:
• Establish a health equity fund and a plan to disburse funding		Year 1:

Objective 6.1:	Implement a multi-pronged, community-based approach to address COVID-related disparities among high risk populations including Black and Hispanic in Worcester and surrounding area (strategies to be carried out and continued on an as-needed basis based on the status of the pandemic)	
	STRATEGIES	**Timeline: Year 1,2,3**
6.1.1	Sustain redeployment of the UMass Memorial Ronald McDonald Care Mobile team working in collaboration with UMass Memorial Emergency and Disaster Preparedness and EMS teams to provide community/neighborhood-based COVID Testing in locations that address barriers to access and transportation.	1,2
6.1.2	Sustain the Mobile Vaccination Equity Enhancement Program (MVEEP) for underserved and isolated populations that encounter difficulties accessing the vaccine particularly those with limited mobility (homebound), transportation, language-proficiency or technology access/literacy challenges.	1,2
6.1.3	Community Relations staff to serve as a member of the Worcester COVID-19 Health Equity Task Force co-chaired by UMass Memorial SVP/Chief of Staff and the Commissioner for the City of Worcester Division of Health and Human Services	1,2,3

Monitoring/Evaluation Approach:

- Number of tests provided
- Number of vaccines provided
- evidence of partnerships and leveraged resources

Health Equity (Cross-Cutting Goal)

UMass Memorial Anchor Mission

Objective 7.1	Community Benefits staff to remain highly engaged in the UMass Memorial Anchor Institution Mission and related Leadership, Steering, and Pillar Area Committees as a means of addressing Social Determinants of Health and addressing health inequities. These include: Steering, Implementation, Investment, Hiring, Purchasing, Employee Volunteerism, Anchor District and Food is Medicine Anchor Mission Committees and efforts.	
Outcome Indicators:	**Intended Annual Impact**	**Actual Outcomes**
• **Steering and Implementation Committees** ○ Support ongoing development and activities guidance through participation on leadership committees including the Anchor Mission Steering and Implementation Committees	Regular participation in Committee meetings, planning efforts and activities	Year 1: Year 2: Year 3:

Objective 7.1 **Community Benefits staff to remain highly engaged in the UMass Memorial Anchor Institution Mission and related Leadership, Steering, and Pillar Area Committees as a means of addressing Social Determinants of Health and addressing health inequities. These include: Steering, Implementation, Investment, Hiring, Purchasing, Employee Volunteerism, Anchor District and Food is Medicine Anchor Mission Committees and efforts.**		
• **Investment Committee:** o Explore and identify potential funding opportunities and partners by linking with key stakeholders o Participate in the identification and selection process of projects for investment	Identification of Project for Investment	Year 1: Year 2: Year 3:
• **Hiring:** o Work with committe on further Development and implementation of "Outside-In and Inside-Up" approaches and pathways to employment and career opportunities within the UMass Memorial system for vulnerable populations facing barriers. o Identify potential training avenues/programs for existing and incoming employees o Continue to partner and work closely with key Community stakeholder partners for on-going employee candidate pipeline faciliation and development; identify and alignment of needs between Community partner organizations and hospital system needs and opportunities o Data analytics of internal workforce and highest poverty census tracts	Identification of high turnover, employment needs within hospital system Identification of Community partners Alignment of Community partner needs and hospital opportunities Further development of pipeline for access to applying for identified hospital employment opportunites Development of training program to promote upward career path opportunities	Year 1: Year 2: Year 3:
• **Employee Volunteerism** o Serve in guiding role as it relates to Community organization and Employee volunteerism opportunity identifcation and devedlopment in alignment with needs identified through the Community Health Needs Assessment and other Community-engaged processes. o Community Health Worker in Community Relations Office to work closely with Employee Volunteerism leaders for the planning and implementation of special voluneerism annual events such as the United Way Day of Caring, National Night Out and others.	Evidence of volunteer opportunity connectivity and planning to community opportunities in the City of Worcester	Year 1: Year 2: Year 3:

Objective 7.1 **Community Benefits staff to remain highly engaged in the UMass Memorial Anchor Institution Mission and related Leadership, Steering, and Pillar Area Committees as a means of addressing Social Determinants of Health and addressing health inequities. These include: Steering, Implementation, Investment, Hiring, Purchasing, Employee Volunteerism, Anchor District and Food is Medicine Anchor Mission Committees and efforts.**		
• **Food is Medicine** ○ Serve as member of the UMass Memorial overarching Food is Medicine Committee to implement connectivity to healthy foods to patients identified as being food insecure in the Cancer Center initially with plans to broaden to other Medical Center and system level efforts in the future. ○ Serve as planning team member for efforts to establish a Food Pharmacy/Food Pantry model at the Medical Center for Cancer Center patients identified as being food insecure (effort on hold while seeking funding for Facilities modifications for accessibiity) ○ Support and bring connectivity to Community-based organzations addressing food insecurity for related efforts (such as voucher program with Fresh Connect for fresh produce purchases (Fresh Connect connectivity was lead by Philanthropy)	Evidence of participation in planning efforts for on-going Development of the Food is Medicine effort at the Medical Center with the objective of ultimate expansión at other system locations	Year 1: Year 2: Year 3:
• **Anchor District** ○ Conduct neighborhood-based data analysis to identify needs, community interests, and opportunities ○ Develop a strategy plan to engage community leaders and neighborhood stakeholders	Evidence of data analysis Development of interview/engagement tool Development of an Action Plan Evidence of investments	Year 1: Year 2: Year 3:
Strategies:		**Timeline:** **Year 1,2,3**
7.1.1 Define working infrastructure that incorporates engagement with Office of Clinical Integration, Anchor Mission and Community Health Improvement Department and areas– develop Steering Committee		1
7.1.2 Establish working committees including a range of expertise and departments for each of the three Anchor Mission Pillars		1
7.1.3 Each committee to conduct research, and develop approaches for Anchor-mission specific actions; identify and evaluate best Community partners and leveraging of existing efforts and assets within the hospital system's service área		1
7.1.4 Utilize OCI data analytics team to inform and develop on target Anchor Mission efforts and reporting		1
7.1.5 Establish a Communications Plan with UMass Memorial Marketing and Public Relations to communicate the system's Anchor Mission and activities inside the organization and to the Community at-large; and engage employees and Community partners in the Anchor Mission work		1,2,3
Monitoring/Evaluation: • Evidence of functioning committees, work plans in place, policies developed, community engagement/partnerships established and actionable metric		

Objective 7.2:	**Support partnerships that address community-based health equity; incorporate and apply critical knowledge and learning gained through the multi-pronged community-COVID outreach and response into addressing not just COVID, but health equity and community health improvement programming and intervention development through targeted efforts.**	
Outcome Indicators:	**Intended Annual Impact**	**Actual Outcomes**
• Establish a Health Equity Fund Committee	Identified needs and allocation of funds	Year 1: Year 2: Year 3:
• Partner with the City of Worcester for the ongoing planning and efforts of the Health Equity Task Force	Identify priorities post-COVID	Year 1: Year 2: Year 3:
STRATEGIES		**Timeline: Year 1,2,3**
7.2.1: Incorporate lessons learned and methods adopted during the COVID pandemic to reaching vulnerable populations, ethnic and linguist minorities experiencing health disparities and barriers to resources, health and SDOH related education, resources and care. (e.g. transportation, language, technology divide)		1,2,3
7.2.2: Incorporate t knowledge/learnings in working with community partners in emergent situations specifically for working with and reaching vulnerable populations		1,2,3

Monitoring/Evaluation Approach:

- Ongoing coordination of various associated committees and strategy outcomes

APPENDICES

Appendix A: Community Health Assessment Sponsors 2021-2023 (listing from CHA report):

Central Massachusetts Regional Public Health Alliance:
The mission of the Worcester Division of Public Health (WDPH) /Central Massachusetts Regional Public Health Alliance (CMRPHA) is to equitably improve health outcomes and quality of life for all residents by providing high quality, data drive, public health leadership and services. The Division provides an array of public health services including public health nursing, community health initiatives, emergency preparedness and response, environmental health inspections and policy technical assistance. In 2016, WDPH / CMRPHA became the first nationally accredited public health department in Massachusetts.

Fallon Health:
Founded in 1977, Fallon Health is a nationally recognized, not-for-profit health care services organization that is committed to the vision of creating healthier lives by supporting the diverse and changing needs of those we serve. Since its inception, Fallon has worked to improve the quality of life and the health status of individuals by offering access to high quality, affordable medical care and services. As both an insurer and a provider of care, Fallon offers a variety of health plan options, with a renewed focus on—and commitment to—Medicare and Medicaid. Fallon works cooperatively with health care and community-based organizations, as well as state and federal agencies, to lead the creation of innovative health care solutions, seek healthy outcomes and improve access to health care services. Fallon is proud to have a strong record of partnership and collaboration with community organizations and residents throughout the Commonwealth.

The Hanover Insurance Group Foundation:
The goal of The Hanover Insurance Group Foundation, Inc. (The Hanover Insurance Company, and Citizens Insurance Company of America, companies of The Hanover Insurance Group) is to improve the quality of life in communities where our companies—The Hanover and Citizens Insurance— have a major presence, placing a special emphasis on helping to build world-class public education systems and inspiring and empowering youth to achieve their full potential.

UMass Memorial Health:
UMass Memorial Health is the largest not-for-profit health care delivery system in Central Massachusetts, with 1,700 physicians and 15,000 employees. UMass Memorial Medical Center, located in Worcester, is a teaching hospital and the clinical partner of the University of Massachusetts Medical School. UMass Memorial Health's Community Benefits mission incorporates the World Health Organization's broad definition of health, defined as "a state of complete physical, mental and social well-being and not merely the absence of disease." Further, as described in their mission, "UMass Memorial Health is committed to improving the health status of all those it serves and to addressing the health problems of the poor and other medically underserved populations. In addition, nonmedical conditions that negatively impact the health and wellness of our community are addressed."

Acknowledgements of Collaboration:
Since the assessment began in the spring of 2021, hundreds of individuals participated in the CHA, through interviews, focus groups, and a Community Health Survey. The information gathered through these efforts enabled the CHA to engage the community and gain a better understanding of the region's capacity, strengths and weaknesses, as well as health status, barriers to care, service gaps and underlying determinants of health. While it was not possible for this assessment to involve all community stakeholders, it engaged a comprehensive and inclusive sample of the population; those involved showed commitment to strengthening the region's health system, particularly for people most at-risk.

The CHA sponsors would like to thank everyone who was involved in this effort, but particularly the region's service providers, advocacy groups, and community members who invested their time, effort and expertise. They would like to especially acknowledge the participation and in-kind support provided by the Coalition for a Healthy Greater Worcester (CHGW), who provided access to valuable information gathered through CHIP Community Conversations.

Appendix B

A listing of data sources is available in the Community Health Needs Assessment report:
https://www.ummhealth.org/sites/umass-memorial-hospital/files/Documents/About/Community_benefits/2021_CHA_UMassMemorialEvalOfImpact.pdf

Appendix C

2021-2023 Greater Worcester Community Health Needs Assessment Key Informant Interviews, Focus Groups, virtual Community Forums, CHIP Community Conversations and other Engagement Efforts

Key Informant Interviews: were conducted with 45 community leaders, service providers, public officials, advocates, and representatives from community stakeholders, faith-based organizations and academia. Due to the pandemic, all interviews were completed virtually, via phone or Zoom, using a standard interview guide:

Interviewee	Role & Affiliation
Bayda Asbridge	Arabic Interpreter, UMass Medical Health
Sandy Amoakohene	Built Environment & Food Systems Coordinator, Worcester REACH Project
Edward Augustus	City Manager, City of Worcester
Maureen Binienda	Superintendent, Worcester Public Schools
Rev. Louis Bond	Covenant United Methodist Church
Leah Bradley	Executive Director, Central Massachusetts Housing Alliance
Anne Bureau	Worcester Community Connections Coalition
Richard Burke	President and CEO, Fallon Health
Dr. Matilde Castiel	Commissioner, Worcester Health and Human Services
Jonathan Cohen	VP for Programs and Strategy, Greater Worcester Community Foundation
James Cummings	Superintendent, Grafton Public Schools
Dr. Eric Dickson	President and CEO, UMass Memorial Health
David Fort	Chair, Worcester Board of Health
Tim Garvin	President and CEO, United Way of Central Massachusetts
Jennifer Gaskin	President, Worcester Caribbean American Carnival Association
Eve Gilmore	Executive Director, Edward Street Child Care Center
Yahaira Graxirena	Transportation Planner, Central Massachusetts Regional Planning Commission

Interviewee	Role & Affiliation
Isabel Gonzalez	Director, Worcester Interfaith
Alex Guardiola	VP of Government Affairs and Public Policy, Worcester Regional Chamber of Commerce
Sharon Henderson	Covenant United Methodist Church
Dr. Michael Hirsh	Medical Director, Worcester Division of Public Health
Mona Ives	President & Board Chair, Ansaar of Worcester
Carolyn Jackson	CEO, Saint Vincent Hospital
Noreen Johnson Smith	Former VP of Development/Advancement, Family Health Center
Jermoh Kamara	Director of Wellness and Health Equity, YWCA
Steve Kerrigan	President and CEO, Edward M. Kennedy Health Center
Eric Kneeland	Director of Programs & Operations, Worcester Regional Research Bureau
Cheryl Lapriore	Chief of Staff, UMass Memorial Health
Kristen Las	Assistant Town Manager, Shrewsbury
Barry Maloney	President, Worcester State University
Paul Mathews	Executive Director and CEO, Worcester Regional Research Bureau
Kevin Mizikar	Town Manager, Shrewsbury
Gina Plato-Nina	Community Legal Aid Attorney, Central West Justice Center
Dr. Luis Pedraja	President, Quinsigamond Community College
Karen Pelletier	Executive Vice President, Worcester Regional Chamber of Commerce
Brian Pigeon	Senior Transportation Planner, City of Worcester
Dr. Jose Ramirez	Vice President of Operations, Edward M. Kennedy Community Health Center
Robert Ramirez	Spanish Interpreter, UMass Memorial Health
Anh Vu Sawyer	Executive Director, The Southeast Asian Coalition
Dr. Rob Schreiber	VP/Medical Director, Summit Eldercare
Dr. Michael Sheehy	Chief of Population Health and Analytics, Reliant Medical Group
Emily Swalec	Program Director, Worcester Family Resource Center
Jayna Turchek	Director of Accessibility, City of Worcester
Dr. Linda Weinreb	Vice President and Medical Director, Director of Medicaid Programs/ACOs at Fallon Health
Dr. Jan Yost	President and CEO, Health Foundation of Central Massachusetts

Focus Groups

A series of nine virtual focus groups were conducted in completion of the CHA. These sessions allowed for the collection of critical input from service providers and community residents, with an emphasis on understanding the health needs and experiences of vulnerable populations. Focus groups were organized in collaboration with stakeholder interviewees to leverage their community connections and to help ensure participation:

Focus Group Cohort	Date
Worcester Together: Undocumented Working Group	June 9, 2021
Coalition for a Healthy Greater Worcester	June 15, 2021
Worcester Together: Food Insecurity & Food Access	June 22, 2021
Worcester Together -at large meeting	July 8, 2021
Mayor's Mental Health Task Force & Worcester Together: Mental Health Committee	July 14, 2021
Worcester Together: Logistics Committee	July 14, 2021
UMass Memorial Medical Center: Interpreter Services	July 15, 2021
Worcester Together: Older Adults	July 16, 2021
City of Worcester Accessibility Advisory Commission	July 20, 2021

Community Health Survey

A web-based community health survey, open to all individuals who live, work and play in Greater Worcester was developed by the core planning team and administered by the Worcester Division of Public Health. The survey was implemented as a way to gather information from populations that may have not been connected to other assessment activities. The CHA Sponsors worked with staff at the Worcester Division of Public Health to craft a survey that was accessible and easy to understand (Attachment A). It was available in three languages (English, Spanish, Vietnamese) and distributed widely, from June 5, 2021 – August 11, 2021. Methods of distribution included:

- Boards of Health in the CHA Service Area
- Monthly newsletters to towns
- Employee newsletters by all partner organizations
- Postings on partner Facebook pages and social media platforms
- E-newsletter distribution by the Coalition for a Healthy Greater Worcester to approximately 850 community members and organizations (sent three times and posted on social media)
- Distribution to the Worcester Together Coalition including over 150 members
- Other email distribution lists and at community outreach events, such as the COVID-19 Feet on the Street, COVID testing, and vaccination sites

Overall, 909 individuals took the survey. Highlights include:

- When asked to choose the conditions that make for a healthy community, the top five responses were:
    - Access to good health care (93% of respondents)
    - Safety (86% of respondents)

    - Education – good schools, equity in schools (85% of respondents)
    - Access to healthy food (82% of respondents)
    - Public parks and green spaces (82% of respondents)
- 82% of respondents rated their community as healthy (38%) or somewhat healthy (44%)
- 60% responded that they are satisfied with quality of life in their community
- 54% responded that they were satisfied with the health care system in the community
- 82% responded that they feel safe in their community, and 96% responded that they feel safe at home
- 59% responded that they agreed that the community is a good place to raise children
- 49% responded that they agreed that the community is a good place to grow old

CHIP Community Conversations

Data from the Coalition for a Healthy Greater Worcester and the CHIP's "Community Conversations" were used to inform this CHA report. As part of the CHIP's planning effort, community residents were engaged in a series of Community Conversations in November-December of 2020. In total, 97 people were interviewed through 35 1-on-1 and small group discussions. Participants were recruited by advertising on social media, through email, and snowball sampling. Engaging with individuals who had never been a part of the CHIP process, and/or were not employed by CHIP partnership institutions, was paramount to the CHIP's goals around advancing health equity. Individuals who had been part of the CHIP process or who were employed by partnership institutions were not excluded, but the effort aimed to focus on people who had lived experience, and who were disproportionately affected by health system issues outlined in the 2018 CHA.

Quantitative Data & Data Limitations of the 2021 CHA

For this report, data was gathered from a broad range of sources to characterize the community, better understand health status in the region, and to inform a comprehensive understanding of the many factors associated with poor health status. Whenever possible, data was collected at the municipal or zip code level. The primary sources of data include US Census Bureau American Community Survey 5-Year Estimates (2015-2019), the CDC's 500 Places Project, data gathered by the Worcester Regional Research Bureau for the 2020 Worcester Almanac, and others. Note that the US Census Bureau will release a new data set in December of 2021. Efforts will be made to update data in this report upon that release.

The Massachusetts Department of Public Health (MDPH) created the Population Health Information Tool (PHIT), which is meant to present data stratified by demographic and socioeconomic variables (e.g., gender identity, age, race, ethnicity, disability status, poverty level) for counties, states, and municipalities. At the time this report was produced, data available via the PHIT was extremely limited. The most significant issue this limitation caused was the availability of timely data related to morbidity, mortality, health behaviors, and service utilization. Additionally, not all quantitative data was available in ways that stratified by demographic characteristics, which limited the ability to identify health disparities in an objective way. Qualitative activities allowed for exploration of these issues, but the lack of objective quantitative data constrained the effort.

Appendix D:

UMass Memorial Medical Center Community Partners
Access to Care:

- Ascentria Care Alliance, Quinsigamond Community College Dental Program, Mass College of Pharmacy, Massachusetts Department of Health, Worcester Public Schools, Edward M. Kennedy Community Health Center, Elder medical services at Worcester Housing and Centro Las Americas, Family Health Center of Worcester, Hector Reyes House, Worcester Adult Learning Center, Healthy Baby Collaborative, UMass Memorial Medical School, Oral Health Task Force, Community Legal Aid, St. John's Church, Queen Street Shelter, MLK Shelter, Vernon Street Shelter, AIDS Project Worcester, LIFT

UMass Memorial Ronald McDonald Care Mobile:

- Autumn Woods Apartments, Becker College, Green Island Neighborhood Center, Lakeside Community Center, Nueva Vida/Star of Jacob Church, Our Lady of Loretto Church, Plumley Village public housing, South Worcester Neighborhood Center, Friendly House, and the Family Health Center of Worcester

Care Mobile Worcester School sites:

- Abby Kelley Foster School, Belmont Community School, Canterbury Street School, Chandler Street School, City View School, Clark Street School, Columbus Park School, Elm Park School, Flagg Street School, Grafton Street School, Jacob Hiatt School, May Street School, Nativity School, Nelson Place School, New Citizens School, Quinsigamond School, Rice Square School, Seven Hills School, Worcester Arts Magnet School

Address Food Insecurity/Hunger and Healthy Eating:

- City of Worcester, Division of Public Health, Worcester Adult Learning Center, Worcester Food Policy Council/Coalition, Harvard Law School, Center for Health Law and Policy Innovation; Statewide Food is Medicine Planning Committee, Worcester Public Schools, Worcester Regional Environmental Council, Fresh Connect, Worcester County Food Bank

Promoting Positive Youth Development:

- City of Worcester Youth Opportunities Office, City of Worcester, Division of Public Health, Clark University, Worcester Youth Center, YouthConnect, YWCA of Central Massachusetts, Worcester Police Department, Police Departments in 16 surrounding towns, Pernet Family Health, United Way of Central Massachusetts