COMMUNITY BENEFITS PLAN
2013 – 2015
FOR UMASS MEMORIAL MEDICAL CENTER
AN AFFILIATE OF
UMASS MEMORIAL HEALTH CARE, INC.

UMass Memorial Community Benefits Plan 2013-2015

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I. Executive Summary

UMass Memorial Health Care (UMMHC) 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, as well as nonmedical conditions that negatively impact the health and wellness of our community.

Community Benefits Program

Target populations for UMass Memorial's Community Benefits initiatives are identified through a community input and planning process, collaborative efforts, and a CHA which is conducted every three years. The 2012 Community Health Assessment (CHA) and subsequent Community Health Improvement Plan (CHIP) focus on the City of Worcester and the outlying communities of Shrewsbury, Millbury, West Boylston, Leicester, and Holden, a sub-section of its primary service area. 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 Federally Qualified Health Centers, and several community-based organizations.

Our target populations focus on medically-underserved and vulnerable groups of all ages in Worcester, as follows:

- Children
- Elders Living in Public Housing
- Ethnic and Linguistic Minorities
- Individuals Who are Obese/Overweight
- Populations Living in Poverty
- Targeted Low Income Neighborhoods
- Underinsured/Uninsured
- Youth at Risk

UMMHC's Community Benefits Program strives to meet and exceed the Schedule H/Form 990 IRS mandate to "promote health for a class of persons sufficiently large so the community as a whole benefits." 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."

The Community Benefit Strategic Implementation Plan

The focus areas of this Community Benefit Strategic Implementation Plan align well with the priorities identified by the CHA-CHIP processes, as noted below:

CHA/CHIP Priority 1: Obesity (Healthy Eating/Active Living) - (Relates to Community Benefit Priority 2: Healthy Weight)
Concerns regarding obesity and behaviors associated with obesity, such as nutrition and physical activity, are important health concerns cited by respondents in all communities in the greater Worcester area. 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 was limited access to healthy foods and environments supporting active living for vulnerable populations and immigrant communities.

CHA/CHIP Priority 2: Mental/Behavioral Health and Substance Abuse (Relates to Community Benefit Priority 4: Promote Positive Youth Development)
Substance use and abuse, including drugs and alcohol, was noted as a concern across communities in the greater Worcester area. Respondents cited youth substance use, particularly related to opioids, prescription drugs and alcohol, as particular concerns. Several respondents cited a need for more substance abuse treatment services and greater wrap-around substance abuse care with a holistic approach.

Mental health emerged as a dominant concern among key informants and participants of elder focus groups, and continuity of care for chronic mental illness was cited as a particular need.

CHA/CHIP Priority 3: Primary Care / Wellness (Relates to Community Benefit Priority 1: Access to Healthcare, and Community Benefit Priority 3: Promote Health Equity by Addressing Health Disparities)
Many interview participants cited chronic disease, including heart (cardiovascular) disease and diabetes, and oral health as major health concerns for the greater Worcester area. Other participants noted that asthma and chronic lung disease were other health concerns. Of concern among respondents was the disproportionate concentration of these conditions among low-income residents, racial/ethnic minorities, and immigrant communities.

Interviews with respondents indicated a perception that health care services in the area are of excellent quality and high in number. However, several challenges related to access for more vulnerable populations emerged as a key theme.

CHA/CHIP Priority 4: Violence and Public Safety (Relates to Community Benefit Priority 4: Promote Positive Youth Development)
Worcester interviewees expressed concerns regarding safety in their neighborhoods. Several respondents cited gang violence, drug dealing and slow responses by law enforcement to emergency calls as major concerns. Participants explained that violence can affect health by causing stress and by preventing residents from accessing and utilizing health-promoting resources

such as healthy food outlets or public parks or green spaces due to concerns about violence. While concerns regarding crime emerged as a key theme, crime data show that Worcester has low crime rates for a community of its size.

CHA/CHIP Priority 5: Health Equity/Health Disparities (Relates to Community Benefit Priority 3: Promote Health Equity by Addressing Health Disparities)
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 may 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 interview participants. 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 spaces to engage in physical activity, behaviors they described as linked to these health disparities.

All areas highlighted by the CHIP are being addressed by this 2013-2015 Community Benefits Plan. The issues addressed may be framed from a different perspective or may appear at a different hierarchical level of the plan, but the two plans are thematically consistent and intended to be implemented collaboratively and synergistically:

Community Benefit Priority Areas	Goal
Priority Area 1: **Increase Access to Health Care**	**Goal 1:** Support programs and develop collaborative efforts that will improve access to care for the medically underserved/uninsured in Worcester.
Priority Area 2: **Promote Healthy Weight**	**Goal 2:** Reduce overweight/obesity among youth and adults and support efforts that promote Healthy Weight.
Priority Area 3: **Promote Health Equity by Addressing Health Disparities**	**Goal 3:** Support programs and policies that promote health equity and reduce health disparities.
Priority Area 4: **Promote Positive Youth Development**	**Goal 4:** Support at-risk youth programs that promote positive youth development (e.g., substance abuse, tobacco, mental health and violence prevention).
Other: **Enhance the Public Health Infrastructure of the Community**	Community-Wide Public Health Strategy: Develop and support strategies and systems that enhance the public health infrastructure of the Greater Worcester community.

Detailed action plans will be developed annually and tracked throughout the course of the year to monitor and evaluate progress and determine priorities for the next year. This plan is meant to be reviewed annually and adjusted to accommodate revisions that merit attention.

II. Community Benefits Mission

Mission Statement

UMass Memorial Health Care 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 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." The UMass Memorial Health Care (UMMHC) Community Benefits Mission was developed and recommended by the Community Benefits Advisory Committee and approved by the UMass Memorial Health Care Board of Trustees.

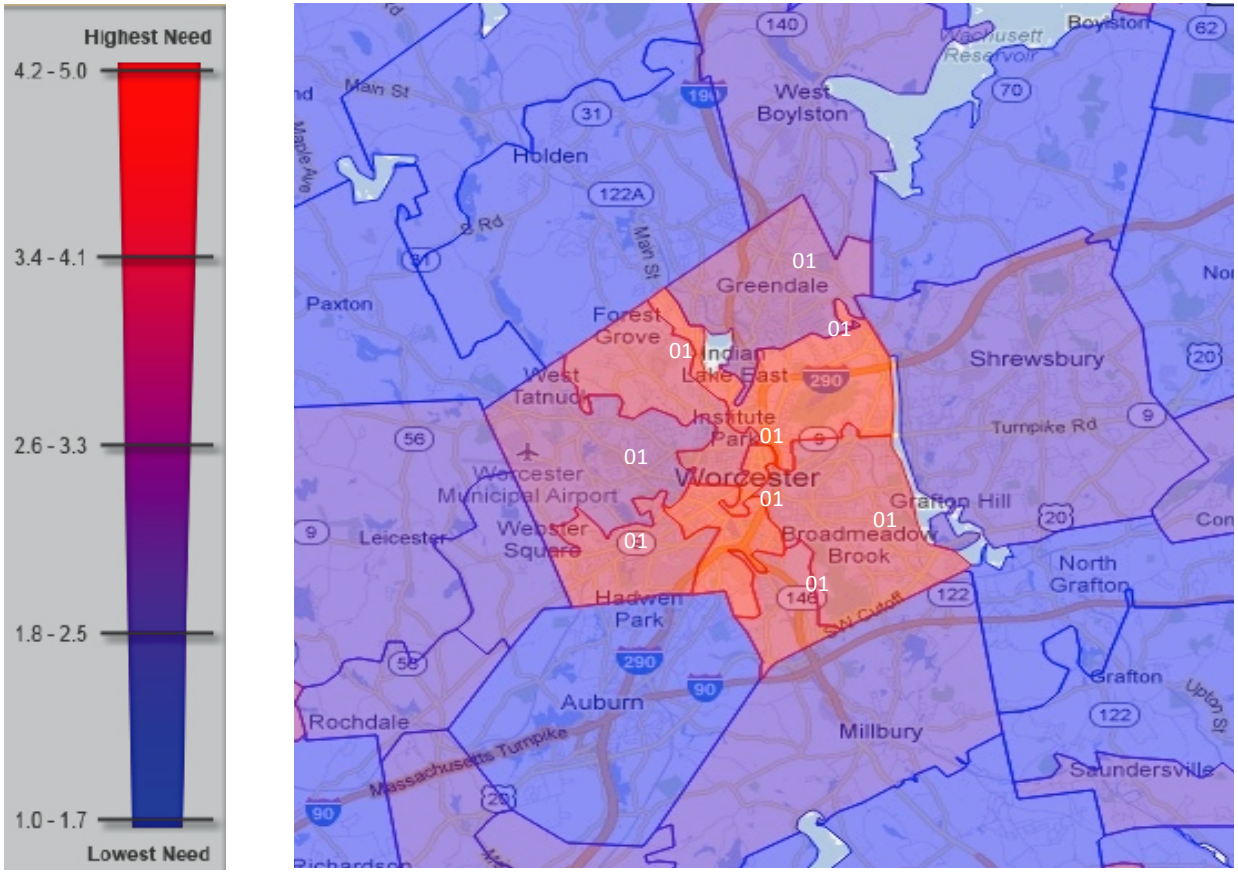
III. Targeted Geography and Vulnerable Populations

UMass Memorial aims to address both the letter and the spirit of the IRS Community Health Needs Assessment (CHNA) 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 CHNA. 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 more vulnerable groups such as the underserved, low income, or minority populations.

Geography

The 2012 Community Health Assessment (CHA) and subsequent Community Health Improvement Plan (CHIP) focuses on the City of Worcester and the outlying communities of Shrewsbury, Millbury, West Boylston, Leicester, and Holden, a sub-section of its primary service area. This specific geographic area is the focus for the City of Worcester Division of Public Health in its regionalization initiative, and overlaps with the service area 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 Federally Qualified Health Centers, and several community-based organizations. This focus also facilitates collaboration with the Advisory Committee that will be implementing key strategies of the CHIP so that future initiatives can be developed in a more coordinated approach.

Figure 1: Community Needs Index, Greater Worcester Region, 2010



Data Source: Dignity Health Community Needs Index

Vulnerable Populations

Target populations for UMass Memorial's Community Benefits initiatives are identified through a community input and planning process, collaborative efforts, and a 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 living in public housing sites, ethnic and linguistic minorities and those living in poverty. These populations often become isolated and disenfranchised due to negligence, misperceptions and even fear. Ten targeted subpopulations have been defined as follows:

Elders Living in Public Housing: Seniors account for the fastest growing sector of the population, comprising 11.6% of Worcester residents (Census, 2010). Seniors experience barriers to accessing medical and dental care, including a lack of transportation, mobility problems, insurance status and enrollment.

Ethnic and Linguistic Minorities: The City of Worcester is very ethnically-diverse, considerably more so than the nation and state overall, and that diversity continues to expand. The number of Hispanics living in the city 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. To help address nationally-recognized **racial and health care disparities,** UMass Memorial supports: a) the Hector Reyes House, a residential substance abuse treatment model for Hispanic men; and b) outreach programs that connect the medically-underserved to on-going care. Infant mortality, inadequate prenatal care and teenage pregnancy among vulnerable populations, particularly populations of color, emerged as concerns pertaining to reproductive and maternal health.

Individuals Who are Obese/Overweight: 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). Worcester children are overweight at twice the national rate: 20.25% obesity for youth entering first grade in the City of Worcester compared to the nationwide average of 10%. 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: 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, 64% are eligible for the free school lunch program.

Targeted Low Income Neighborhoods: UMass Memorial conducts focused outreach in Worcester's Bell Hill and Plumley Village neighborhoods and brings programs directly to where people live, such as: a satellite medical clinic, environmental remediation, and community gardens.

Underinsured/Uninsured: Access to affordable health care is vital to the health of individuals and the community. While Massachusetts has made great strides in making health insurance attainable for nearly all residents, nearly 4% remain uninsured and there remains a churning of enrollments with many dropping off. Additionally, those who are insured experience difficulty accessing primary care.

Youth at Risk: Nearly 30% of children under the age of 18 in the city of Worcester are living below the poverty level (Census, 2010), nearly double the state average. 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.

IV. Background

UMMHC's Community Benefits Program strives to meet and exceed the Schedule H/Form 990 IRS mandate to "promote health for a class of persons sufficiently large so the community as a whole benefits." 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 new Affordable Care Act requirements to conduct community health needs assessments and create community health improvement plans. UMass Memorial and the City of Worcester Division of Public Health (WDPH) are leading 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.

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; schools and other community-based organizations. In 2011, the Community Benefits Program supported initiatives in such areas as: youth physical activity; healthy eating; health literacy; youth employment; positive youth development; safe driving for teens; mobile health and dental care; community-based oral health; culturally sensitive healthcare for African and Southeast Asian immigrants; residential substance abuse treatment for Latino men; youth mental health services; healthy behaviors; satellite health clinics in public housing and medical services for elders living in public housing.

These focus areas align well with the priorities identified by the CHA-CHIP processes. All areas highlighted by the CHIP are being addressed by this 2013-2015 Community Benefits Plan. The issues addressed may be framed from a different perspective or may appear at a different hierarchical level of the plan, but the two plans are thematically consistent and intended to be implemented collaboratively and synergistically.

V. Methods

The recently completed Community Health Improvement Planning process for the greater Worcester area included two major components:

1. A Community Health Assessment (CHA) to identify the health-related needs and strengths of greater Worcester area, and
2. A 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 in Worcester and five surrounding towns.

The assessment and planning (CHA-CHIP) process for greater Worcester aimed to serve multiple purposes, including to: 1) serve as the community health needs assessment for the hospital's Schedule H/Form 990 IRS mandate; 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 CHA-CHIP process focused on the partner's primary service area as defined as the City of Worcester and the surrounding towns of Shrewsbury, Millbury, West Boylston, Leicester, and Holden (differing from UMMMC's primary catchment area).

Given the synergy in geography and processes, findings of the recent CHA informed both the CHIP and this UMass Memorial Community Benefit Plan. The CHA- CHIP processes utilized a participatory, 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:

a) In June 2012, UMass Memorial and the City of Worcester Division of Public Health partnered to form the primary decision-making leadership body for the CHIP. In May 2012, they hired Health Resources in Action (HRiA), a non-profit public health organization located in Boston as a research partner to provide strategic guidance and facilitation of the CHA-CHIP process, to collect and analyze data, and to develop the report deliverables.

b) The CHIP **Advisory Committee** (See Appendix A for a full listing of members) was established in May, 2012 to guide and offer feedback on the CHA and CHIP processes. Working in partnership, UMass Memorial, the WDPH, and Common Pathways, a local coalition, convened and facilitated the community dialogues during the assessment process and provided leadership and guidance to the Advisory Committee throughout the process from assessment to planning. This 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.

During the assessment process, community members were engaged in Key Informant Interviews, Focus Groups, and Community Dialogues, which allowed for community members to review and discuss a preliminary profile of the region and

[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 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/

provide their feedback on community health-related strengths, needs, and a vision for the future. Ten community dialogue sessions were held: five sessions in Worcester, and five in the outlying communities (one each in Shrewsbury, Millbury, West Boylston, Leicester, and Holden). (See Appendix C) Over 1,300 community members also responded to a community-wide survey.

HRiA reviewed the existing secondary data available for Worcester, Shrewsbury, Millbury, West Boylston, Leicester, and Holden focusing on all the social, economic, health, and health care-related data currently provided by the City of Worcester Division of Public Health and UMass Memorial Medical Center. HRiA also gathered additional data on these five communities to fill any gaps as well as ensure the data reflect the information needed to discuss these issues within a social determinants of health framework and with a health equity lens (e.g., ensuring data comprise a range of social and economic indicators as well as are presented for specific population groups). The results of the assessment were synthesized in the CHA report and shared via presentation and discussion to over 80 community stakeholders to provide a comprehensive portrait of the region and set the foundation for the CHIP.

The UMass Medical Center Community Benefits Plan was developed by a team comprised of UMass Memorial Health Care CEO and Senior Vice President, Vice President of UMass Memorial Community Relations and Community Benefits staff, a Community Benefits Advisory Committee representative, the Director of the Worcester Department of Public Health and HRiA. The group reviewed progress towards goals and objectives of the prior three year period, as well as the current data collected through the CHA, to help envision and define priority areas for the future. Based on this foundation, priority areas were identified and goals were defined. HRiA worked with the Community Benefits team to create objectives for each goal and drafted strategies to operationalize these objectives and ensure alignment with the CHIP. Outcome indicators and a timeline were established for each priority area.

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 Community Benefit Plan.

CHA/CHIP Priority 1: Obesity (Healthy Eating/Active Living) - (Relates to Community Benefit Priority 2: Healthy Weight)
Concerns regarding obesity and behaviors associated with obesity, such as nutrition and physical activity, are important health concerns cited by respondents in all communities in the greater Worcester area. 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 was limited access to healthy foods and environments supporting active living for vulnerable populations and immigrant communities. Concerns in relation to access and high cost of healthy foods, inadequate public transportation, fees for recreational facilities and activities, neighborhood safety in parks and outdoor spaces, accessible, walkable spaces, time constraints, and the stress of living on the edge were raised during the CHA and CHIP process as challenges related to healthy eating and active living. Therefore, ensuring equitable resources for active living and healthy eating requires a comprehensive

approach, given that multiple sectors – including health care, education, public works, transportation, local government, and the business community – need to collaborate to improve current conditions.

Similar to patterns nationwide, issues around obesity – including healthy eating and physical activity – were confirmed as important health concerns in the region associated with prevalent chronic diseases such as heart disease and diabetes. And, the obesity epidemic is getting worse. According to Behavioral Risk Factor Surveillance System (BRFSS) self reported data, 2008 estimates, approximately 63.1% of adults in Worcester were overweight or obese, compared to 58.1% of Massachusetts adults.[3] (See Appendix D on page 37 for further description of BRFSS data and its limitations) In 2010, there is a clear trend where the lowest income residents in Worcester County have the highest prevalence of overweight (72%) and obesity (33%).[4] Non-Hispanic Blacks in Worcester County (77.2%) have a higher prevalence of obesity and overweight than Non-Hispanic Blacks in the State (66.4%) and Non-Hispanic Whites in Worcester County (61.2%) in 2010.[5] In 2011, Hispanic youth had the highest prevalence of obesity (27%).[6]

CHA/CHIP Priority 2: Mental/Behavioral Health and Substance Abuse (Relates to Community Benefit Priority 4: Promote Positive Youth Development)

Substance use and abuse, including drugs and alcohol, was noted as a concern across communities in the greater Worcester area. Respondents cited youth substance use, particularly related to opioids, prescription drugs and alcohol, as particular concerns. Quantitative data show that use of opioids and prescription drugs among high school students is prevalent. In 2011, opioid use ranged from 4.9% among 9th grade students to 7.8% among 12th grade students and lifetime prescription drug use (used one or more times during their life) ranged from 10.5% among 9th grade students to 18.6% among 12th grade students.[7] Statistics also confirm concerns regarding the prevalence of substance use among adults in the greater Worcester area. In 2010, binge drinking among adults in Worcester County (21%) exceeded the rate for the State (18%), according to the BRFSS.[8] Several interview participants mentioned tobacco use as a health concern for residents of the greater Worcester area. Smoking rates for adults in Worcester County are higher than that for the State.[9] In Worcester, 23.7% of adults reported smoking, as compared to 16.1% for the State.[10] In 2010, the majority of substance abuse admissions were for alcohol abuse (4,363 admissions) and heroin use (4,230 admissions).[11] Several respondents cited a need for more substance abuse treatment services and greater wrap-around substance abuse care with a holistic approach.

[3] Massachusetts Behavioral Risk Factor Surveillance System (BRFSS), 2008.
[4] MDPH, MassCHIP, BRFSS 2010.
[5] MDPH, MassCHIP, BRFSS 2010.
[6] MDPH, Essential School Health Service (ESHS) data Reports for Worcester and Massachusetts.
[7] Worcester Regional Youth Survey/YRBS, 2011.
[8] MDPH, "A Profile of Health Among Massachusetts Adults", 2010 – BRFSS.
[9] MDPH, MassCHIP Smoking Report for Worcester County.
[10] Massachusetts BRFSS, 2008.
[11] MDPH, MassCHIP Custom Reports, 2010.

Mental health emerged as a dominant concern among key informants and participants of elder focus groups, and continuity of care for chronic mental illness was cited as a particular need.

Concerns about stigma regarding seeking help for mental health issues also emerged as another concern. While some respondents described mental health as an issue that affected all segments of the greater Worcester area, other respondents noted particular populations that were vulnerable to mental health issues, including youth and immigrant populations. Indicators of poorer mental health are disproportionately concentrated among residents of lower socioeconomic status. In Worcester County, 17% of residents with a high school degree reported at least 15 poor mental health days in the past month, followed by 12% of persons with some college education and 8% of residents with a college education or more, according to the BRFSS.[12] The prevalence of poor mental health days among residents with a high school degree in Worcester County (17%) exceeds that for the State (11%).[13] Further, the number of emergency mental health visits has increased from 2002 (5,620) to 2010 (6,662).[14]

CHA/CHIP Priority 3: Primary Care / Wellness (Relates to Community Benefit Priority 1: Access to Healthcare, and Community Benefit Priority 3: Promote Health Equity by Addressing Health Disparities)

Many interview participants cited chronic disease, including heart (cardiovascular) disease and diabetes, and oral health as major health concerns for the greater Worcester area. Other participants noted that asthma and chronic lung disease were other health concerns. Of concern among respondents was the disproportionate concentration of these conditions among low-income residents, racial/ethnic minorities, and immigrant communities.

Quantitative data indicate that the chronic diseases cited by respondents are prevalent in the greater Worcester area. According to the Behavioral Risk Surveillance Survey, in 2009 36% of persons aged 18 and older in Worcester County have been diagnosed with high cholesterol in their lifetime and 25% have been diagnosed with hypertension in their lifetime.[15] Approximately 11% of persons aged 18 and older have asthma and 8% have diabetes.[16] Over the period of 2008 to 2010, cardiovascular disease was the leading cause of death in Worcester County, accounting for 32% of deaths during this period.[17] In Central Massachusetts and Massachusetts overall, heart disease is patterned by socioeconomic position. Approximately 11% of residents in Central Massachusetts with incomes below $50,000 have heart disease, almost four times the prevalence of heart disease for those with incomes above $50,000 (3%).[18] Asthma is also a prevalent health issue in the greater Worcester area. In Worcester County, Hispanics (23%) have the highest prevalence of asthma, followed by non-Hispanic Whites (14%) and non-Hispanic Blacks (11%), according to the BRFSS.[19] The prevalence of asthma for Hispanics in Worcester County is greater than

[12] MDPH, "A Profile of Health Among Massachusetts Adults", 2010" – BRFSS.
[13] MDPH, "A Profile of Health Among Massachusetts Adults", 2010" – BRFSS.
[14] Emergency Mental Health Services, UMMMC.
[15] MDPH, BRFSS, 2009.
[16] MDPH, BRFSS, 2009.
[17] MDPH, "A Profile of Health Among Massachusetts Adults" 2010.
[18] MDPH MassCHIP Massachusetts Community Health Information Profile – BRFSS.
[19] Asthma Reports for Worcester County, BRFSS 2003-2008.

that for Hispanics in the State (17%).[20] Infant mortality, inadequate prenatal care and teenage pregnancy among vulnerable populations, particularly populations of color, emerged as concerns pertaining to reproductive and maternal health. Chlamydia and gonorrhea were the two most common communicable diseases among residents of Worcester County from 2008 to 2010.[21] Respondents to the Community Health Assessment Survey expressed mixed satisfaction for birth control and sexual health services for youth. Approximately 22.4% of respondents indicated that they are very satisfied with services, but 28.6% expressed that they are not at all satisfied with the availability of these services for youth.

Oral health and access to oral health services emerged as a concern among respondents, particularly because several participants noted that the water in the greater Worcester region is not fluoridated. The proportion of persons in Worcester County who have seen a dentist in the past year and who have lost 6 or more teeth due to tooth decay is patterned by socioeconomic status. Only 57% of residents of Worcester County who have less than a high school education have seen a dentist in the past year, followed by 69% of residents with a high school education, 81% of persons with some college education, and 86% of residents with a college education or higher.[22] Approximately 46% of Worcester County residents with less than a high school education have lost 6 or more teeth due to tooth decay, followed by residents with a high school education (21%), those with some college education (15%), and residents with a college education or higher (5%).[23] The proportion of children in Worcester County with tooth caries exceeds that for the State. Approximately 39% of children in kindergarten in Worcester County have tooth caries, while only 28% of children in the Massachusetts have tooth carries.[24]

Interviews with respondents indicated a perception that health care services in the area are of excellent quality and high in number. However, several challenges related to access for more vulnerable populations emerged as a key theme. Challenges discussed include transportation limitations, long waiting lists to get an appointment, long wait times when at the health facility, complexities navigating the health system, cultural competency of providers and office staff, and a lack of coordination of care for low-income residents.

Respondents described several structural factors that contributed to these challenges in accessing health care services. A lack of providers practicing primary care, conflicts between business hours during which health facilities are open and the work schedules of vulnerable populations seeking care, and inadequate public transportation were described by respondents as barriers to obtaining and attending an appointment for low-income residents. In addition, several respondents noted a need for assistance in navigating complex and fragmented health systems. An indicator of barriers to accessing health care is the use of hospital emergency rooms (ER) for non-emergent issues. One of the leading causes of visiting the emergency department in Worcester was due to diseases of the respiratory system.[25] Rates for this condition were particularly high among children in

[20] Asthma Reports for Worcester County, BRFSS 2003-2008.
[21] MDPH, Health Status Indicators Report for Worcester County, 2008-2010.
[22] MDPH, "A Profile of Health Among Massachusetts Adults", 2010 – BRFSS.
[23] MDPH, "A Profile of Health Among Massachusetts Adults", 2010 – BRFSS.
[24] The Catalyst Institute, "The Oral Health of Massachusetts' Children" January 2008 report.
[25] UMass Memorial Inpatient data, 2011

Worcester City (58.0 per 1000).[26] A few participants explained that limited access to necessary health care contributed to use of ERs for management of chronic illnesses.

CHA/CHIP Priority 4: Violence and Public Safety (Relates to Community Benefit Priority 4: Promote Positive Youth Development)

Worcester interviewees expressed concerns regarding safety in their neighborhoods. Several respondents cited gang violence, drug dealing and slow responses by law enforcement to emergency calls as major concerns. Participants explained that violence can affect health by causing stress and by preventing residents from accessing and utilizing health-promoting resources such as healthy food outlets or public parks or green spaces due to concerns about violence. While concerns regarding crime emerged as a key theme, crime data show that Worcester has low crime rates for a community of its size. Over the period of 2008 to 2010, there were 9 homicides in Worcester County, as reported by the MDPH Health Status Indicators Report for Worcester County.[27] However, in 2011, 11.9% of Worcester area high school students reported that they carried a gun to school, according to the Worcester Youth Survey.[28] Unemployment among youth adults (16-24) has more than doubled since 2000. Youth today face many challenges in entering the job market. A correlation exists between youth unemployment and gang involvement. According to a recent report by the Annie E. Casey Foundation, approximately 1 in 7 youth in the state are unemployed. There is a strong tie between low socio-economic status and poor health outcomes. Providing low-income, minority and inner-city youth with job opportunities and leadership development is critical to providing them with the building blocks needed for a healthier and more economically successful future.

CHA/CHIP Priority 5: Health Equity/Health Disparities (Relates to Community Benefit Priority 3: Promote Health Equity by Addressing Health Disparities)

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 may 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 interview participants. 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 spaces to engage in physical activity, behaviors they described as linked to these health disparities.

Several participants cited unequal treatment of African American, Hispanic, and immigrant patients at health care facilities and linguistic and cultural dissonance as factors that contributed to poorer quality care for patients of color. While the percentage of non-White respondents to the survey was low, Community Health Assessment Survey respondents' perceptions of their personal experiences with discrimination when trying to access medical care varied by race/ethnicity. While 28.7% of survey respondents

[26] UMASS data for Worcester Community Health Assessment, Emergency Department data, 2011.
[27] MDPH Health Status Indicators Report for Worcester County, 2008-2010.
[28] Worcester Youth Survey 2011.

indicated that they had had a negative experience with medical staff when trying to receive care, over 38% of Hispanics reported this issue, followed by nearly three in ten Black (30.8%) and Asian respondents (31.3%). When asked about whether respondents felt discriminated against when getting medical care because of their race, ethnicity, or language, nearly one-third of Black survey respondents (32.0%) and one-quarter of Hispanic respondents (25.6%) said “true” to this statement. Income was also considered a source of discrimination when seeking medical care, particularly felt among non-White respondents.

The Community Benefit Plan

The summary of UMass Memorial Priority Areas and Goals will be carried out through a detailed Community Benefit Action Plan. Please note that UMass Memorial is supporting the Worcester Department of Public of Health as a strategy to enhance their infrastructure capability in order to improve the health of the community through their leadership role. Detailed action plans will be developed annually and tracked throughout the course of the year to monitor and evaluate progress and determine priorities for the next year. This plan is meant to be reviewed annually and adjusted to accommodate revisions that merit attention.

VI. Priority Areas and Goals

Priority Areas	Goal		Pages
Priority Area 1: **Increase Access to Health Care**	**Goal 1:**	Support programs and develop collaborative efforts that will improve access to care for the medically underserved/uninsured in Worcester.	18-22
Priority Area 2: **Promote Healthy Weight**	**Goal 2:**	Reduce overweight/obesity among youth and adults and support efforts that promote Healthy Weight.	23-26
Priority Area 3: **Promote Health Equity by Addressing Health Disparities**	**Goal 3:**	Support programs and policies that promote health equity and reduce health disparities.	27-29
Priority Area 4: **Promote Positive Youth Development**	**Goal 4:**	Support at-risk youth programs that promote positive youth development (e.g., substance abuse, tobacco, mental health and violence prevention).	30-35
Other: Enhance the Public Health Infrastructure of the Community		Community-Wide Public Health Strategy: Develop and support strategies and systems that enhance the public health infrastructure of the Greater Worcester community.	36-38

Priority 1: Increase Access to Health Care

Priority 1: Increase Access to Health Care Support programs and develop collaborative efforts that will improve access to care for the medically underserved/uninsured/ ethnic and linguistic minorities in Worcester.	
Objective 1.1:	Coordination and capacity of medical and dental services that increase access to primary care and decrease unnecessary emergency room utilization.
Objective 1. 2:	Provide access to community-based medical and preventive services for vulnerable populations and ethnic/linguistic minorities.
Objective 1. 3:	Provide education and prevention programs/opportunities that support community-based literacy/health literacy as a way to improve health and increase access to care for vulnerable populations.
Objective 1.4: Conduct insurance enrollment for uninsured/underinsured individuals.	

Priority 2: Promote Healthy Weight

Priority 2: Promote Healthy Weight Reduce overweight/obesity among youth and adults and support efforts that promote Healthy Weight.	
Objective 2.1:	Address food insecurity by increasing the availability of and access to affordable fresh and local fruits and vegetables for low income residents.
Objective 2.2:	Identify, prioritize and implement opportunities for physical activity and active living.
Objective 2.3:	Support city-wide policy efforts to promote healthy weight and address food insecurity and hunger.

Priority 3: Promote Health Equity by Addressing Health Disparities

Priority 3: Promote Health Equity by Addressing Health Disparities Support programs and policies that promote health equity and reduce health disparities.	
Objective 3.1:	Support the modification and/or implementation of key, city-level public health policies that impact health disparities.

Objective 3.2:	**Enhance and sustain targeted population-based efforts including coalition building, resident engagement, and grassroots leadership development to improve community health for high risk and vulnerable populations.**
Objective 3.3:	**Enhance chronic disease prevention, management and treatment among high risk and vulnerable populations.**

Priority 4: Promote Positive Youth Development

Priority 4: Promote Positive Youth Development **Support at-risk youth programs that promote positive youth development (e.g., substance abuse, tobacco, mental health and violence prevention).**	
Objective 4.1:	**Provide and promote workforce development/job opportunities for youth.**
Objective 4.2:	**Reduce violence by supporting positive alternatives/opportunities and leadership development for youth.**
Objective 4.3:	**Develop awareness/education campaigns (e.g. social norms campaigns) and training for youth and adults on substance abuse, tobacco prevention/cessation, underage drinking, and prescription drugs.**
Objective 4.4:	**Advocate for/support changing local policies regarding the regulation of outdoor signage and advertising promoting tobacco use and alcohol.**
Objective 4.5:	**Provide access to supportive mental health services for low-income youth/youth of color.**
Objective 4.6:	**Build the capacity and quality of youth programming by supporting and credentialing youth workers (see 4.1).**

OTHER: Enhance the Public Health Infrastructure of the Community

OTHER: Enhance the Public Health Infrastructure of the Community **Develop and support strategies and systems that enhance the public health infrastructure of the Greater Worcester community.**	
Objective 5.1:	**Enhance the capacity of the City of Worcester Public Health Department.**
Objective 5.2:	**Build and sustain healthy community efforts in targeted communities (e.g., the Greater Bell Hill and Plumley Village neighborhoods) that include built environment and neighborhood revitalization efforts.**
Objective 5.3:	**Collaboratively work with key community stakeholders (e.g. UMass Medical School, Worcester Health Department, Common Pathways, Community Health Centers, United Way, other organizations, and neighborhood residents) to update the Community Health Assessment (CHA) and the Community Health Improvement Plan (CHIP).**

Appendix A: CHIP Advisory Committee Members

Community Health Improvement Plan (CHIP) Advisory Committee Members:

- Fran Anthes, CEO, Family Health Center of Worcester
- Derek Brindisi, Director, Worcester Department of Public Health
- Dr. Suzanne Cashman, Professor, University of Massachusetts Medical School, Department of Family Medicine & Community Health
- Liz Sheehan Castro, Coordinator, Food and Active Living Policy Council
- Linda Cavaioli, Executive Director, Worcester YWCA
- Kimberly Ciottone-Reckert, Special Projects Coordinator, UMass Memorial Medical Center
- Dr. Timothy Downs, Associate Professor of Environmental Science & Policy, Clark University
- Tim Garvin, President and CEO, United Way of Central Massachusetts
- Karin Valentine Goins, MPH, Coordinator, Worcester Mass in Motion
- Dr. Michael Hirsh, Commissioner, Worcester Department of Public Health
- Karyn Johnson, Substance Abuse Prevention Coordinator, Worcester Department of Public Health
- Dr. Stephanie Lemon, Associate Professor of Medicine, Division of Preventive and Behavioral Medicine, UMass Medical School
- Monica Lowell, Vice President, Community Relations, UMass Memorial Health Care, Inc.
- Toni McGuire, President and CEO, Edward M. Kennedy Family Health Center
- Cathy O'Connor, Director, Office of Healthy Communities, Massachusetts Department of Public Health
- Heidi Paluk, Vice President of External Affairs, United Way of Central Massachusetts
- Dr. Laurie Ross, Associate Professor of Community Development and Planning, Clark University and Coordinator, HOPE Coalition, UMass Memorial Community Benefits
- Clara Savage, EdD, Director, Common Pathways
- Paulette Seymour-Route, UMass Graduate School of Nursing
- Nicole Valentine, Public Relations Manager, Worcester Department of Public Health
- Carlton Watson, Executive Director, Henry Lee Willis Center
- Dr. Jan Yost, President and CEO, Health Foundation of Central Massachusetts

Appendix B: Data Sources

Secondary Data Sources

The following is a list of Secondary Data Sources used in this report:

- Behavioral Risk Factor Surveillance System (BRFSS)
- Edward M. Kennedy Community Health Center
- Family Health Center of Worcester
- Massachusetts Department of Public Health (MDPH)
- MDPH MassCHIP
- Massachusetts Department of Elementary and Secondary Education
- Massachusetts Cancer Registry
- Massachusetts Office for Refugees & Immigrants
- The Catalyst Institute, "The Oral Health of Massachusetts' Children" January 2008 report
- U.S. Census
- U.S. Census 2010 American Community Survey
- U.S. Centers for Disease Control Prevention (CDC)
- UMass Memorial Medical Center (UMMMC)
- UMMMC Emergency Mental Health Services
- Worcester Department of Public Health (WDPH) – 2011 Youth Survey
- WDPH "Health of Worcester 2012" Report
- Worcester County Food Bank
- Worcester Public Schools
- Worcester Teen Housing Task Force, the Compass Project, and Clark University Youth and Young Adult Homelessness in Worcester, Massachusetts, Fall 2011 report

Primary Data Source

A listing of primary data sources is available in the Community Health Needs Assessment report.

Appendix C: Community Input, Key Informant Interviews, Focus Groups, and Community Dialogues

(Total participants = over 389 people):

Community Festival Feedback Forms

(A total of approximately 1,300 responses)

A brief survey tool was developed with four open-ended questions that were distributed at area summer festivals and events. A total of 184 individuals provided feedback on overall concerns and community health issues using this tool. Community cultural festivals where the feedback form was administered included the following:

In the City of Worcester:

- Worcester Centro Las Americas Latino Festival
- Haley Festival
- Big Dipper Ice Cream Festival
- Asian Festival
- Juneteenth Festival

In the five surrounding towns:

- Millbury Summer Concert
- Holden Concert on the Common
- West Boylston Arts Extravaganza
- Leicester Summer Concert
- Shrewsbury Summer Concert

Key Informant Interviews

A total of 33 individuals were engaged in key informant interviews representing leaders from all six communities. Interviews lasted approximately 30-60 minutes and were conducted using a semi-structured interview guide.

The interviews explored community leaders' perspectives of the health needs and strengths (including assets and resources), challenges and successes of working in these communities, and perceived opportunities to address these needs.

Key stakeholder interviewees were from a range of sectors and agencies: government, hospital, medical, health centers, secondary education, higher education, business, faith community, philanthropic and community organizations that focus on specific populations (e.g., youth, homeless, immigrant communities, ethnic/cultural groups, disabled community).

Focus Groups and Community Dialogues

Focus Groups and Community Dialogues were also held with the general public at the following locations:

- Worcester Boys & Girls Club
- Piedmont Street Latino Evangelical Church
- Saint Joan of Arc Church
- Elderly living in five public housing sites in the City of Worcester (88 total participants)
- UMass Memorial EMS Department staff
- City of Worcester Mayor's African Refugee Roundtable Discussion (20 total participants)

Appendix D: Behavioral Risk Factor Surveillance System (BRFSS)

Description and limitations of Behavioral Risk Factor Surveillance System (BRFSS) self reported data

Behavioral Risk Factor Surveillance System (BRFSS): The BRFSS is a continuous, random digit dial, landline-only telephone survey of adults ages 18 and older and is conducted in all states as a collaboration between the federal Centers for Disease Control Prevention (CDC) and state departments of health. The BRFSS collects self-reported data on a variety of health risk factors, preventive behaviors, chronic conditions and emerging public health issues. Self-reported health is a person's assessment of his or her own health. It is influenced by many factors including education, economic status and living conditions and is a significant predictor of mortality and morbidity.

BRFSS Limitations: There are some limitations that should be considered when interpreting results from the BRFSS:

- The health characteristics estimated form the BRFSS pertain to the adult population aged 18 years and older, who live in households and have a landline telephone.
- All data collected by the BRFSS are based on self-report from the respondents. By its nature, self-reported data may be subject to error.
- For more information on BRFSS and its methodology, please visit http://www.mass.gov/dph/hsp.