



COMMUNITY HEALTH NEEDS ASSESSMENT AND COMMUNITY BENEFIT PLANNING PROJECT

Final Report

**Approved by the
Beth Israel Deaconess Medical Center
Board of Directors**

September 18, 2013

ACKNOWLEDGEMENTS

This Community Health Needs Assessment (CHNA) and Community Benefit Planning Project were conducted on behalf of the Beth Israel Deaconess Medical Center's (BIDMC) Board of Directors. It was overseen by Nancy Kasen, BIDMC's Director of Community Benefits, in close collaboration with the Community Health Needs Assessment Steering Committee (CHNA Steering Committee) and the BIDMC Board of Directors' Community Benefit Committee (BIDMC's CBC).

BIDMC focuses its community benefits efforts on improving the health status of the low income, underserved populations living in Allston/Brighton, Chinatown, Dorchester, Fenway/Kenmore, Roxbury, and the South End. BIDMC also has historical ties to underserved communities in Quincy and to some of the most isolated, vulnerable areas of Cape Cod, specifically the Outer Cape (Harwich, Wellfleet, Truro, and Provincetown). These communities make up BIDMC's Community Benefits Service Area and includes the Community Care Alliance (CCA), the network of one licensed and five federally qualified health centers affiliated with BIDMC. Participants of the CCA were involved throughout the process and provided information that was vital to the outcome of the project.

Since the beginning of the project in November 2012, dozens of individuals were interviewed by the project team, including BIDMC administrative and clinical staff, members of BIDMC's CBC, CCA staff, Boston Public Health Commission (BPHC) staff, and other community stakeholders. The project team also conducted a community survey with assistance from CCA clinic sites and community-based organizations, and four focus groups with service providers and other community stakeholders. The information gathered during these efforts allowed BIDMC to engage the community and gain a better understanding of the health status, health care priorities, service gaps, and barriers to care of those living in BIDMC's Community Benefits Service Area. The interviewees and focus groups also informed the strategic planning process by allowing the project team to explore possible community responses and to engage possible community partners.

BIDMC's Board of Directors would like to thank everyone who was involved in this CHNA, particularly the community members and service providers who participated in interviews and focus groups or completed the consumer survey. While it was not possible for the BIDMC project team to involve all community residents and stakeholders, hundreds of Boston's residents and community health stakeholders were involved. It was truly inspiring to see how committed this group was to strengthening and improving the health of their communities.

The Board of Directors would like to give special thanks to Ms. Kasen and the CHNA Steering Committee for their work on this assessment but, more importantly, for their determined efforts to advocate for and improve the health some of Boston's most underserved communities. The CHNA Steering committee was led by Ms. Kasen and consisted of Matt Epstein, Chair of BIDMC's CBC, Adela Margules, Executive Director of Bowdoin Street Community Health Center and Chair of the CCA Board of Managers, Huy Nguyen, MD, Chief Medical Officer at BPHC, Shari Gold Gomez, Director of BIDMC's Interpreter Services, Alden Landry, MD, Attending Physician, BIDMC Emergency Department and Associate Director of BIDMC's Office of Multicultural Affairs, Paula Ivey Henry, PhD, Harvard School of Public Health, and Kerry Brown, Chief of Staff, BIDMC's Office of the President. This group met nearly monthly between November 2012 and August 2013 to oversee the CHNA process and develop BIDMC's Community Health Improvement Plan (CHIP).

Additionally, the Board of Directors would like to thank Helen Chin Schlichte and Alvaro de Castro e Lima, both members of the BIDMC Community Benefits Committee. Mrs. Chin Schlichte, who is also a member of the BIDMC Board of Directors, assisted in mobilizing the Asian community which resulted in

a noteworthy response to the BIDMC CHNA community survey. Mr. Lima, the Boston Redevelopment Authority's Director of Research, provided significant assistance with culling neighborhood demographic data. The Board of Directors would also like to thank the Boston Public Health Commission, in particular, Snehal Shah, Phyllis Sims and Jun Zhao, for providing health indicator data at the neighborhood level; as well as Boston University School Public Health and/or Social Work students Kate Jankovsky, Rachel Bernier, Ashley Levine, and Mengfan Cheng for data collection, analysis and surveying. Lastly, the staff at John Snow, Inc. (JSI) provided invaluable technical assistance, identifying evidence-based and best practices, conducting the focus groups, creating maps, and drafting the final report and community health improvement plan. The BIDMC Board of Directors would like to thank JSI for their expertise, efforts, and guidance.

BIDMC's mission is to serve its patients compassionately and effectively and to create a healthy future for them and their families. This mission is supported by the Medical Center's commitment to providing personalized, excellent care for its patients and to developing a workforce committed to individual accountability, mutual respect, and collaboration. The CHNA exemplified this commitment and BIDMC's Board of Directors is extremely appreciative of the efforts of everyone who was involved.

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TABLE OF CONTENTS

Executive Summary	2
I. Purpose and Background	8
II. Approach and Methods	9
III. BIDMC's Community Benefits Service Area	11
IV. Community characteristics, Determinants of Health, and Health Equity	13
V. Key Health Indicators	23
VI. Priority Target Populations and Community Health Priorities	32
VII. Summary Community Health Improvement Plan (CHIP)	34
VIII. On-going Planning, Community Engagement, and Implementation	37

EXECUTIVE SUMMARY

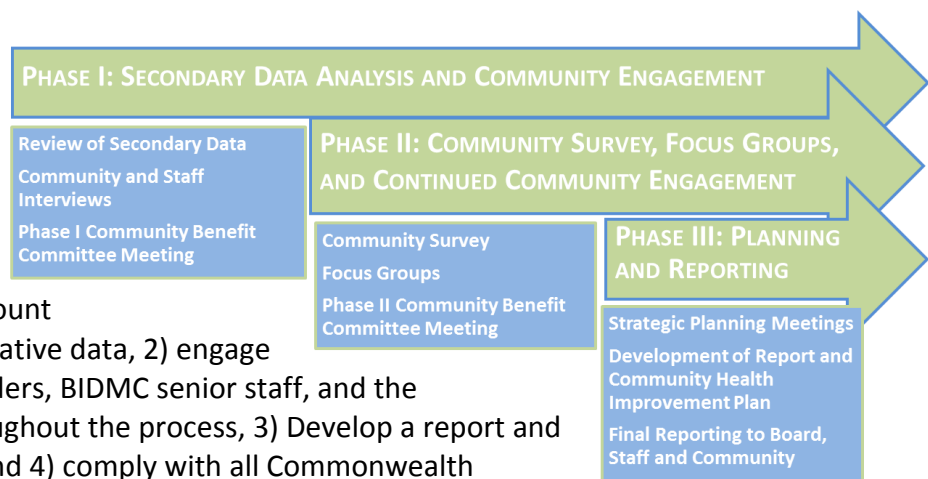
Purpose and Background

Beth Israel Deaconess Medical Center (BIDMC) is one of the nation's preeminent academic medical centers and is nationally recognized for its world-class clinical expertise, education and research. In addition, BIDMC is committed to being active in its community and works to address disparities in health care access and outcomes across the communities and population segments it serves. BIDMC focuses its community benefits efforts on improving the health status of the low income, underserved populations living in Allston/Brighton, Chinatown, Dorchester, Fenway/Kenmore, Roxbury, and the South End. BIDMC also has historical ties to underserved communities in Quincy and to some of the most isolated, vulnerable areas of Cape Cod, specifically the Outer Cape (Harwich, Wellfleet, Truro, and Provincetown). These communities make up BIDMC's Community Benefits Service Area and include the Community Care Alliance (CCA), the network of one licensed and five federally qualified health centers affiliated with BIDMC. Participants of the CCA were involved throughout the process and provided information that was vital to the outcome of the project.

This Community Health Needs Assessment (CHNA) report along with the associated Community Health Improvement Plan (CHIP) is the culmination of nine months of work and was borne largely out of BIDMC's commitment to better understand and address the health-related needs of those living in its Community Benefits Service Area with an emphasis on those who are most disadvantaged. The project also fulfills Commonwealth Attorney General's Office and Federal Internal Revenue Service (IRS) regulations that require that BIDMC assess community health needs, engage the community, identify priority health issues, and create a community health strategy that describes how the Medical Center, in collaboration with the community and local health department, will address the needs and the priorities identified by the assessment.

Approach and Methods

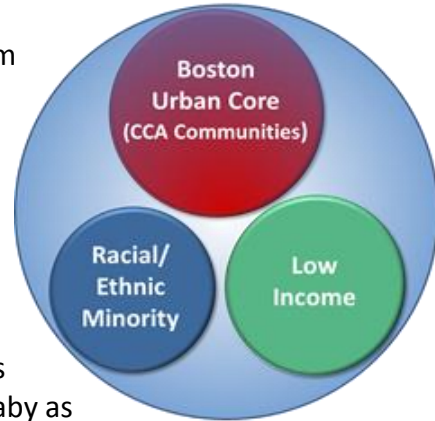
The CHNA was conducted by the BIDMC Community Benefits Department in three phases, which allowed BIDMC to: 1) compile an extensive amount of quantitative and qualitative data, 2) engage and involve key stakeholders, BIDMC senior staff, and the community at-large throughout the process, 3) Develop a report and detailed strategic plan, and 4) comply with all Commonwealth Attorney General and Federal IRS Community Benefit requirements.



Key Health-related Findings

- **Limited Access and Barriers to Community-Based Care for Many residents in Boston.** According to the Boston Public Health Commission, nearly one in five (17% (2008)) Boston residents did not have a personal health care provider; and nearly one in four (23%) of Boston residents had not had a medical visit in more than a year (2010). Despite the overall success of the Commonwealth's health reform efforts, segments of the population, particularly low income and racial/ethnic minority populations, face significant barriers to care and struggle to access services due to lack of insurance, cost, transportation, cultural/linguistic barriers, and shortages of community-based primary care providers.
- **High Rates of Obesity, Limited Physical Exercise, and Poor Nutrition.** Nearly two-thirds of Boston adults (18+) are either obese or overweight. According to the CHNA survey, rates for specific demographic, socio-economic and geographic population segments living in neighborhoods within BIDMC's Community Benefits Service Area are even higher. High proportions of residents in Boston's urban core do not exercise and have poor nutrition, which are the leading factors associated with obesity and chronic diseases, such as heart disease, hypertension, diabetes, cancer, and depression.
- **High Chronic Disease and Cancer Rates.** Rates of illness and death vary by condition, but overall racial/ethnic minority groups are more likely to have chronic health conditions and die from them than their non-Hispanic, white counterparts. This puts a disproportionate burden on communities with high proportions of racial/ethnic minorities, such as Roxbury, North and South Dorchester, and the South End which are neighborhoods within BIDMC's Community Benefits Service Area. Cardiovascular disease (heart disease), cancer, and cerebrovascular disease (stroke) are the three leading causes of death in the United States, Massachusetts, and Boston. In addition, diabetes is ranked in the top 10 across all three of these geographic areas. According to the Commonwealth's Hospital Discharge Database residents of North and South Dorchester, Roxbury, and Chinatown/South End were more likely to receive inpatient services for hypertension, heart failure, asthma, pneumonia, and chronic obstructive pulmonary disease than residents of Boston and Massachusetts overall. Service for these conditions are often considered preventable or avoidable with regular, primary care services and therefore are indicative of poor or limited access to primary care.
- **High Rates of Mental Health and Substance Abuse Issues:** According to MassCHIP (2010) and the Massachusetts Substance Abuse Bureau, Boston has statistically higher rates of substance abuse treatment admissions, including cocaine, heroin and other opioids, when compared to the Commonwealth. Rates are particularly high in South Dorchester and Roxbury. According to Behavioral Risk Factor Surveillance System data, 10% of Boston residents reported being poor mental health status for more than 15 days in a given month. According to data from the BIDMC CHNA survey, approximately 30% of respondents were deemed at risk for depression and needed additional mental health assessment because they screened positive for a short screening tool for depression.

- **Maternal and Child Health Needs.** According to the Massachusetts Behavioral Risk Factor Surveillance System and Boston Public Health Commission the infant death rate for Hispanics/Latinos in Boston is twice the rate of non-Hispanic, whites, and for African Americans/blacks the rate is three times the rate of non-Hispanic, whites. According to the Massachusetts Vital Records Natality Infant Deaths dataset, residents of North Dorchester and Roxbury have higher rates of infant mortality compared to Boston overall. Hispanic/Latino adolescents in Boston are three times more likely to give birth to a baby as compared to non-Hispanic, white adolescents.



- **HIV/AIDS and Other Infectious Diseases Still a Major Burden on Small But High Need Segments of Population.** Rates of HIV/AIDS illness, death, and transmission have declined dramatically over the past decade. However, HIV/AIDS and other sexually transmitted Infections still have a major impact on the lesbian, gay, bisexual and transgender (LGBT) community, disconnected, at-risk youth, certain Boston neighborhoods (Fenway/Kenmore, Roxbury, North Dorchester), and the communities on the Outer Cape (Wellfleet, Truro, and Provincetown). Additionally, the Asian community is still affected by Hepatitis B infections.

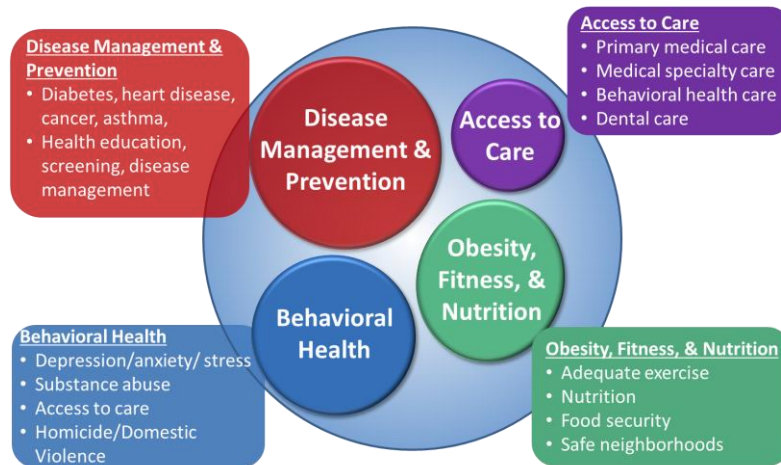
Large proportions of individuals residing within Boston and BIDMC's Community Benefits Service Area live in poverty, have limited formal education, are unemployed, and struggle to afford food and other essential household items. These populations are disproportionately from racial/ethnic minority groups and, partly as a result of their poverty, face disparities in health and access to care outcomes. It is critical to note that there is a multitude of individual, community and societal factors that work together to create these inequities. It is insufficient to talk solely about race/ethnicity, foreign born status, or language; as the underlying and correlative issues related to health and well-being involve economic opportunity, education, crime, and community cohesion.

Priority Target Populations

BIDMC is committed to improving the health status and well-being of those living throughout its Community Benefits Service Area. However, the assessment's findings clearly show that low income and racial/ethnic minority populations living in Boston's urban core neighborhoods of Allston/Brighton, Chinatown, Dorchester, Fenway/Kenmore, Roxbury, and the South End, as well as the adjacent City of Quincy and the isolated areas on the Outer Cape portion of Cape Cod are the most at-risk. As a result, BIDMC focuses its community health/community benefits efforts primarily on these geographic, demographic, and socio-economic segments of the population. In addition, the assessment identified two smaller but high need segments of the population that are also underserved, at-risk, and face disparities, namely disconnected youth and the LGBT community. Collectively, these population segments are BIDMC's priority target populations.

Community Health Priorities

The CHNA's approach and process provided ample opportunity to vet the quantitative and qualitative data compiled during the assessment. Ultimately, there was little debate that the most significant health-related issues facing the communities that are part of BIDMC's



Community Benefits Service Area were the broader social and economic determinants of health (e.g., poverty, unemployment, food scarcity, violence, health/disease literacy, etc.), which prevent many residents, particularly low income, racial/ethnic minority, and older adult residents from maintaining a healthy lifestyle and/or accessing the regular preventive and acute health services they need. BIDMC has

been at the heart of the policy and programmatic dialogues in Boston and the Commonwealth regarding the impacts of race/ethnicity, culture, and racism on health disparities. BIDMC is committed to addressing these factors and every priority and goal area in BIDMC's CHIP is structured to address health disparities and inequities in some way.

In addition to this underlying priority, the BIDMC Community Benefit Committee identified: 1) Obesity, physical exercise, and nutrition, 2) Disease management and prevention, 3) Access to care, and 4) Behavioral health as the leading community health priorities. Focusing its efforts on these areas of common need, will allow BIDMC to ensure that it has the greatest possible impact on those most at-risk. It should be noted that BIDMC will also invest in and support a handful of other issues that fall outside of these priority areas as special opportunities and health issues/crises arise or based on historical commitments. BIDMC's community benefits efforts will always be focused where there is need and opportunity for impact.

The following is a summary of the goals for each of these priority areas.

Summary Community Health Improvement Plan (CHIP) (Priority Areas and Major Goals)

Priority Area 1: Obesity, Fitness, and Nutrition
<ul style="list-style-type: none"> • Increase the number of children, youth, and adults who are physically active • Develop BIDMC / Bowdoin Street Wellness Center • Increase access to healthy and affordable foods in communities • Improve nutritional quality of the food supply • Decrease the number of individuals and families who suffer from food insecurity • Increase the number of children and youth who are screened for BMI and provided counseling
Priority Area 2: Disease Management and Prevention
<ul style="list-style-type: none"> • Increase the number of adults with diabetes, hypertension, and asthma who receive services • Increase the number of adults whose diabetes, hypertension, and persistent asthma is under control • Increase the number of low income and racial/ethnic minority adults educated/screened for cancer • Increase the number of adults who screen positive for cancer who are referred for counseling/treatment • Increase the number of adults who screen positive for cancer who are linked to a cancer navigator • Increase the number of CCA clinic sites who meet NCQA or CMS PCMH certification requirements • Improve care coordination and continuity of care
Priority Area 3: Access to Primary and Specialty Care
<ul style="list-style-type: none"> • Maintain and increase the number of patients who receive primary medical care services • Maintain and increase the number of patients who receive specialty care medical services • Screen and enroll those who qualify in health insurance coverage offered through the ACA • Ensure access to services for those on the Outer Cape • Ensure access to appropriate trauma care services • Maintain or increase support for HSN Trust Fund; advocate for legislation and public policies that support resources and programs in/for public health, mental health and substance abuse, community health centers, and other anti-poverty funding. • Maintain and increase the number of patients who receive primary dental care services at CCA Clinic sites • Maintain and increase the number of patients who receive primary behavioral health care services • Increase patient satisfaction • Increase clinic efficiency and productivity
Priority Area 4: Mental Health and Substance Abuse
<ul style="list-style-type: none"> • Maintain and increase the number of patients who receive mental health and substance abuse services • Increase the number of adults with mental health/substance abuse issues who are served through integrated behavioral health – primary care service delivery approaches • Increase the number of adults with opioid addiction who receive evidence-based services
Priority Area 5: Youth Violence Prevention
<ul style="list-style-type: none"> • Increase access to mental health services at Bowdoin Street Health Center for affected victims • Increase participation in the Advocate Education and Support Project • Provide counseling and other medical services to rape victims • Provide grieving support activities • Conduct neighborhood campaigns to engage community and create greater community cohesion

On-going Planning, Community Engagement, and Implementation

This Community Health Needs Assessment (CHNA) and the associated Community Health Improvement Plan (CHIP) was completed in close collaboration with BIDMC's staff, a broad range of community partners, including BIDMC's CCA partners, and the community. Historically, BIDMC has relied heavily on its Community Care Alliance partners as well as a number of other key community health partners to implement its community benefits initiatives. In this regard, BIDMC has leveraged CCA's expertise and the vital connections that these organizations have with residents and organizations in the communities they serve.

BIDMC's Board of Directors along with its clinical and administrative staff is committed to improving the health and well-being of residents throughout its service area and beyond. World-class clinical expertise, education and research along with an underlying commitment to health equity are the primary tenets of its mission. BIDMC's Community Benefits Department, under the direct oversight of BIDMC's Board of Directors, is dedicated to collaborating with community partners and residents and will continue to do so in order to meet its community benefits obligations.

I. PURPOSE AND BACKGROUND

Beth Israel Deaconess Medical Center (BIDMC) is one of the nation's preeminent academic medical centers and is nationally recognized for its world-class clinical expertise, education and research. BIDMC prides itself on its ability to combine exceptional, compassionate patient care with advanced medical knowledge, research, and technology in ways that allow it to achieve the best outcomes for its patients. In addition to its commitment to clinical excellence, BIDMC is committed to being active in its community. Community service is at the core of the religious traditions of both of its founding hospitals and is still an important part of its mission today. The Medical Center has a covenant to care for the underserved and works to address disparities in health care access and outcomes across the communities and population segments it serves.

The Medical Center recognizes its role as a tertiary/academic resource in a larger health system and knows that to be successful it needs to collaborate with its community partners and those it serves. This Community Health Needs Assessment (CHNA) and the associated Community Health Improvement Plan (CHIP) was completed in close collaboration with BIDMC's staff, its health and social service partners, and the community at-large. This assessment, including the process that was applied to develop the CHIP, exemplifies the spirit of collaboration that is such a vital part of BIDMC's mission.

BIDMC serves and collaborates with all segments of the population. However, in recognition of its long-standing ties to Boston's urban core and the health disparities that exist for these communities, BIDMC focuses its community benefits efforts on improving the health status of the low income, underserved populations living in Allston/Brighton, Chinatown, Dorchester, Fenway/Kenmore, Roxbury, and the South End. BIDMC also has historical ties to underserved communities in Quincy and to some of the most isolated, vulnerable areas of Cape Cod, specifically the Outer Cape (Harwich, Wellfleet, Truro, and Provincetown). These communities make up BIDMC's Community Benefits Service Area.

BIDMC currently supports numerous educational, outreach, and community-strengthening initiatives targeting those living in its Community Benefits Service Area. In the course of these efforts BIDMC collaborates with many of Boston's leading healthcare, public health, and social service organizations. BIDMC has particularly strong relationships with many of the primary care clinics that operate in its Community Benefits Service Area, many of whom are affiliated with BIDMC's Community Care Alliance (CCA). These health centers are ideal community benefits partners as they are rooted in their communities and, as federally qualified health centers, mandated to serve low income, underserved populations. These clinic partners have been a vital part of BIDMC's community health improvement strategy since 1968, when Beth Israel Hospital first joined forces with The Dimock Center to address maternal and child health issues. Over the past year, BIDMC has contributed more than \$10.3M in in-kind and grant funding to support these and other organizations and their effort to serve some of Boston's most underserved, vulnerable communities. Additionally, BIDMC has leveraged \$3.3M in grant and other funds to address health disparities and health inequities, and provided more than \$19.3M in charity care to low-income individuals who were unable to pay for care and services at BIDMC.

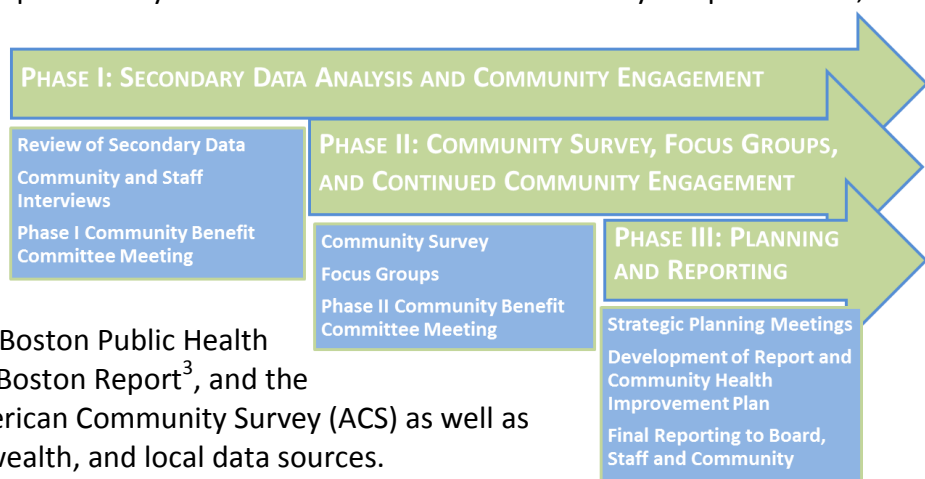
This report along with the associated Community Health Improvement Plan (CHIP) is the culmination of nine months of work. This project was borne largely out of BIDMC's commitment to better understand and address the health-related needs of those living in its Community Benefits Service Area. However, the project also fulfills long-standing requirements of the Massachusetts Attorney General's Office and a new Federal Internal Revenue Service (IRS) requirements, which mandate that all nonprofit hospitals conduct a community health needs assessment (CHNA) and strategic planning process at least every three years.¹ More specifically, the Commonwealth and IRS regulations require that BIDMC assess community health need, engage the community, identify priority health issues, and create a community health strategy that describes how the Medical Center, in collaboration with the community and the local health department, will address the needs and the priorities identified by the assessment.

This report summarizes the findings from BIDMC's CHNA and provides the core elements of BIDMC's CHIP, including the major goals, objectives, community health strategies, key action steps, and evaluation metrics that will guide the plan. BIDMC's Community Benefits Department, with the full support of BIDMC's Board of Directors, looks forward to working with the CCA and other community partners, the Boston Public Health Commission (BPHC), and with Boston's residents to address the issues that arose from the CHNA and to implement the CHIP.

II. PROJECT APPROACH AND METHODS

The CHNA was conducted in three distinct phases. In Phase I, the BIDMC community benefits project team conducted a preliminary needs assessment that relied heavily on quantitative, secondary health-related

data drawn from the Massachusetts Department of Public Health's, Massachusetts Community Health Information Profile (MassCHIP) system², the Boston Public Health Commission's, Health of Boston Report³, and the US Census Bureau's, American Community Survey (ACS) as well as other Federal, Commonwealth, and local data sources.



¹ Massachusetts Community Benefit Guidelines: <http://www.mass.gov/ago/docs/healthcare/hospital-guidelines.pdf> and IRS Federal Guidelines as summarized by George Washington University with funds from the Robert Wood Johnson Foundation <http://www.healthreformgps.org/resources/update-treasuryirs-proposed-rule-on-community-benefit-obligations-of-nonprofit-hospitals/>

² <http://www.mass.gov/eohhs/researcher/community-health/masschip/>

³ <http://www.bphc.org/about/research/Pages/HOB2012-2013.aspx>

These data also allowed the community benefits project team to better understand the leading causes of morbidity and mortality and the associated health-related risk factors. Data was compiled from these sources at the Boston neighborhood-, city-, and town-level whenever possible, which was an essential aspect of the assessment's approach. This targeted approach allowed the project team to highlight areas at greatest risk, understand the unique differences that exist across neighborhoods/towns/cities, and identify common themes that could be part of a broad, collaborative, effective strategy. In Phase I, the project team also conducted a series of interviews with BIDMC staff and a number of leading community health stakeholders. These interviews allowed the project team to engage the community and capture qualitative data related to community health needs, community priorities, determinants of health, service gaps, barriers to care, and the population groups most at-risk. These interviews were also critical to the development of BIDMC's CHIP as they provided important information related to BIDMC's strategic response and explored possible partnerships. The culmination of Phase I was a series of meetings with the CHNA Steering Committee, BIDMC's Community Benefits Committee (BIDMC's CBC), CCA's Board of Managers and Medical Directors, and other key stakeholders, which allowed BIDMC to vet its initial findings and refine the methods and tools that it would implement in Phase II.

In Phase II, the primary focus was on collecting primary data directly from residents through a community survey and from service providers and community health experts through a series of focus groups. The Community survey captured health-related information from residents living in BIDMC's Community Benefits Service Area. The survey included 62 questions (approximately 10-pages depending on the language) and captured information related to health status, social determinants of health, health risk factors, prevalence of disease, access and care seeking behaviors, and barriers to care from 742 residents living in the communities that are part of BIDMC's Community Benefits Service Area. The focus groups captured information from service providers and community health experts, specifically in the areas of chronic disease and mental health. Based on a review of Phase I findings and confirmed by preliminary results from Phase II, chronic disease and mental health were identified as key priority areas. The focus groups were geared to identifying the strategies and programs that would promote care coordination and service integration as well as more effective chronic disease management. The culmination of Phase II was a series of summary data tables and a summary presentation of key findings, which facilitated a comprehensive, integrated analysis and guided the strategic planning activities in Phase III.

In Phase III, Nancy Kasen, BIDMC's Director of Community Benefits, worked with the CHNA Steering Committee, BIDMC's CBC, and BIDMC's senior leadership to: 1) review all of the data compiled, 2) clarify the Medical Center's community health priorities, and 3) identify the strategic ideas that would ultimately be included in BIDMC's community health strategy. In Phase III, the project team also developed this report, BIDMC's CHIP as well as a series of neighborhood snapshots that rudimentarily summarized the CHNA's key findings for the neighborhoods that are part of BIDMC's Community Benefit Service Area. These snapshots were shared with CCA clinics. The CHNA Report and the CHIP were approved by the Board's CBC on September 10, 2013, which recommended acceptance of both to BIDMC's Board of

Directors. BIDMC's Board of Directors reviewed and approved both documents on September 18, 2013. These documents were also disseminated to CCA clinics and other key stakeholders.

III. BIDMC'S COMMUNITY BENEFITS SERVICE AREA

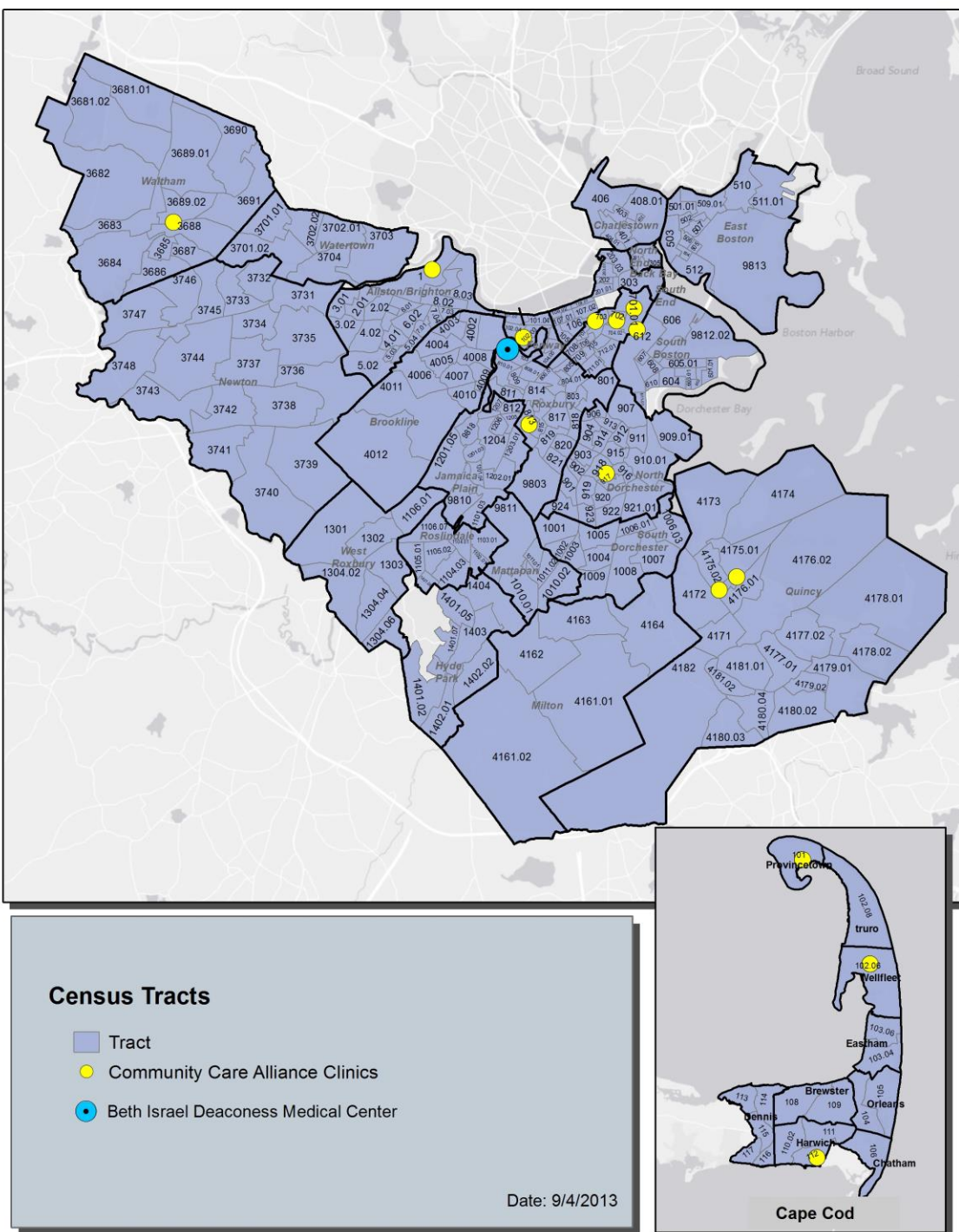
BIDMC focuses its community benefits efforts on improving the health status of the low income, underserved populations living in Boston's urban core neighborhoods as well as the city of Quincy adjacent to Boston. In addition, BIDMC supports the four isolated towns that make up the Outer Cape portion of Cape Cod: Harwich, Wellfleet, Truro, and Provincetown. These neighborhoods, cities, and towns have large proportions of low income, racial/ethnic minority, foreign born immigrant, and/or geographically isolated residents. The disparities that these population segments face with respect to social determinants of health, access to care, sexual orientation, gender identity, and health outcomes are dramatic and drive the poor health outcomes that are seen for these communities.

BIDMC's support of these neighborhoods, cities, and towns is largely funneled through the network of independent primary care clinics that are part of the Community Care Alliance (CCA). The seven clinics are all rooted in their communities and are dedicated to serving underserved, vulnerable populations, primarily from the neighborhoods in which they are located.⁴ Six of these clinics are federally qualified health centers (FQHCs) and are mandated to serve the low income, underserved populations in their communities.

Community Care Alliance Clinics by Neighborhood, City, or Town	
Allston/Brighton	Joseph M. Smith Community Health Center
Fenway	Fenway Community Health
North Dorchester	Bowdoin Street Health Center
Outer Cape Cod	Outer Cape Health Services
Quincy	South Cove Community Health Center
Roxbury	Dimock Community Health Center
South End/Chinatown	South Cove Community Health Center

⁴ Fenway Community Health and South Cove Community Health Center serve low income, underserved residents from the communities adjacent to their service sites but because of their unique ability to serve certain population segments well (i.e., Asian populations for South Cove and the LGBT community for Fenway Community Health) draw patients from throughout the Greater Boston Area.

A map showing the locations of the CCA clinics and the specific neighborhoods, cities, and towns that are part of BIDMC's Community Benefit Service Area is included below.



IV. SUMMARY OF COMMUNITY CHARACTERISTICS, DETERMINANTS OF HEALTH, AND FACTORS RELATED TO HEALTH EQUITY

An understanding of community need and health status in BIDMC's Community Benefits Service Area begins with knowledge of the population's characteristics as well as the underlying social, economic, and environmental factors that impact health. This information is critical to: 1) recognizing disease burden, health disparities and health inequities; 2) identifying target populations and health-related priorities; and 3) targeting strategic responses. This assessment captured a wide range of quantitative and qualitative data related to age, gender, sexual orientation, race/ethnicity, income, poverty, family composition, education, violence, crime, unemployment, access to food and recreational facilities, and other determinants of health. These data provided valuable information that characterized the population as well as provided insights into the leading determinants of health and health inequities.

The following is a summary of key findings related to community characteristics and the social, economic, and environmental determinants of health for BIDMC's Community Benefits Service Area. Summary data tables are included below and more expansive data tables are included in the BIDMC CHNA Databook that is available upon request⁵.

- **Age:** Age is one of the most fundamental factors in determining scope of need. Cities tend to have more families with young children, college-aged adults, and young adult professionals than suburban or rural areas, and Boston is no exception. With respect to age, Boston's population is considerably younger than the Commonwealth's population with a median age of 30.8 compared to 39.1 for the Commonwealth. The City overall has higher proportions of children/youth (0-19 years old) and young adults (20-44 years old), and lower proportions of middle-aged adults (45-64 years old) and older adults (65+) than the Commonwealth overall. Quincy's and the Outer Cape's age distributions are more similar to the Commonwealth's and these communities have larger middle-aged and older adult populations.

	Massachusetts	Boston	Allston- Brighton	Fenway/ Kenmore	North Dorchester	South Dorchester	Roxbury	South End/ Chinatown
Total Population, 2010 U.S. Census Data	6,547,629	617,594	74,997	40,898	28,384	59,949	59,790	39,113
Age Distribution and Median Age								
0-19 years old	24.8	21.9	13.3	28.5	23.2	27.7	31.2	18.7
20 to 24 years old	7.3	14.3	29.2	40.8	12.3	7.8	8.8	13.0
25 to 44 years old	26.5	33.2	38.1	20.8	34.3	30.0	27.1	32.8
45 to 64 years old	27.8	20.4	11.4	5.6	21.9	24.2	23.6	22.0
65 years old and over	13.7	10.1	8.1	4.5	8.2	10.3	9.5	13.4
Median Age (years)	39.1	30.8	26.8	22.6	31.7	34.5	31.7	34.2

⁵ To obtain the BIDMC CHNA Databook, please contact Nancy Kasen, Director of Community Benefits at BIDMC at nikasen@bidmc.harvard.edu.

	Massachusetts	Quincy	Waltham	Provincetown	Wellfleet	Harwich	Truro
Total Population, 2010 U.S. Census Data	6,547,629	92,271	60,632	2,642	2,750	12,243	2,003
Age Distribution and Median Age							
0-19 years old	24.8	18.4	20.5	7.1	14.4	17.6	14.6
20 to 24 years old	7.3	6.8	12.5	2.4	3.6	3.6	3.1
25 to 44 years old	26.5	32.8	31.6	20.8	17.7	17.1	15.9
45 to 64 years old	27.8	27.0	23.1	48.6	37.7	32.2	42.0
65 years old and over	13.7	15.1	12.3	21.1	26.8	29.5	24.2
Median Age (years)	39.1	39.2	33.9	51.3	53.5	53.0	53.7

With respect to age, low income or otherwise vulnerable children/youth (0-17 years old) and older adults (65+ years old) across all socio-economic strata are inherently more at-risk. This was a significant theme from the assessments interviews and was also strongly conveyed by the assessments quantitative data findings. Interviewees discussed the challenges faced by children in Boston's low income families. Interviewees also alluded to the relatively small but high need population of disconnected, frequently homeless, youth that struggle with the impacts of poverty, are often not fully engaged in routine primary care, and have higher rates of illness. Interviewees also discussed the challenges faced by frail older adults and older adult immigrants who are often isolated and struggle with chronic disease, low health/disease literacy, and cultural/linguistic barriers, all with limited support networks. Care for these older adults is often fragmented and poorly coordinated. In the urban communities, many of these older adults are also caring for young children, which is often a substantial burden and tends to lead to the children being less active and more house bound.

- Roxbury and Dorchester are predominantly residential neighborhoods and have larger proportions of families with young children. Roxbury and Dorchester also have the highest proportions of single parent families and the largest proportion of households with older adults living in them compared to Boston overall and other neighborhoods.
- Allston/Brighton and Fenway/Kenmore have large numbers and proportions of young adults (20 - 24 years old), many of whom attend the colleges and universities in or near these neighborhoods. The proportions of young adults living in these neighborhoods are two to three times larger than the City's proportion and four to six times larger than the Commonwealth's.
- Chinatown/South End's age distribution mirrors Boston's age distribution; and compared to Roxbury and Dorchester has fewer young children, more adolescent youth, and older adults.
- Quincy's age distribution mirrors the Commonwealth's and compared to Boston's neighborhoods is relatively older with fewer children and young adults and more middle-aged and older adults. The older adult population is made up primarily of non-Hispanic, whites who have lived in Quincy for decades. The child and young- to middle-aged adult populations are more diverse and are made up of large

- proportions of Asian immigrant and other racial/ethnic minority families. Quincy's median age is 39, compared to 31 for the City of Boston's overall.
- Outer Cape: Outer Cape's age distribution is very different from the City's and the Commonwealth's with much larger middle-aged and older adult segments and smaller child and young adult segments. The median age for the four towns that make up the Outer Cape ranges from 51 to 54 years.
 - **Race/Ethnicity, Foreign Born Status, and Language:** One of the most crucial and actionable findings from this assessment is the fact that throughout Boston, and particularly in the communities that make up BIDMC's Community Benefits Service Area, there are large numbers and proportions of racial/ethnic minority, foreign born, and non-English speaking residents. There is an extensive body of research and evidence that clearly illustrates the health disparities that exist for racial/ethnic minority, foreign born, and non-English speaking populations.

The Health of Boston Report prepared by the Boston Public Health Commission in 2012-13⁶ speaks about the systematic, avoidable, unfair, and unjust disparities that exist among these ethnic racial groups. It is important to clarify these disparities as this knowledge helps to ensure that programs, strategic interventions, and services are targeted and refined based on race/ethnicity and culture. However, it is critical to note that there is a multitude of individual, community and societal factors that work together to create these inequities. The underlying issue is not race/ethnicity, foreign born status, or language but rather issues related to economic opportunity, education, crime, and community cohesion, as well as racism, health literacy, cultural competence, and linguistic barriers which are the major determinants of health for large proportions of Boston's residents.

Many of Boston's major academic and health care institutions, including BIDMC, have been at the heart of the dialogue in this country regarding the impacts of race/ethnicity, culture, and racism on health disparities. BIDMC is committed to addressing these factors and every priority and goal area in BIDMC's CHIP is structured to address health disparities and inequities in some way.

According to the 2010 American Community Survey, if one combines all racial/ethnic minority groups into one category, Boston now has a majority, racial/ethnic minority population with 53% of Boston's residents being part of a racial/ethnic minority group. In addition, 27% of Boston's population was foreign born and 36% speak a language other than English at home. The largest single ethnic/minority group in Boston is African American/black with 22% of the population falling in this group. The largest single foreign born ancestry group is Haitian, and the most common language spoken in the home other than English is Spanish (including Spanish Creole).

⁶ <http://www.bphc.org/about/research/Pages/HOB2012-2013.aspx>

On a neighborhood basis, the dominant ethnic/minority, foreign born, or language group varies dramatically, which is strategically significant as many of the key health indicators vary considerably by race/ethnicity and ancestry.

	Massachusetts	Boston	Allston- Brighton	Fenway/ Kenmore	North Dorchester	South Dorchester	Roxbury	South End/ Chinatown
Race/Ethnicity Distribution								
Asian	5.3	8.9	15.4	17.7	13.2	11.3	1.2	49.9
Black or African American	6.0	22.4	4.6	5.5	22.9	41.4	55.6	4.1
Latino or Hispanic	9.6	17.5	9.9	8.0	16.6	13.2	29.8	4.1
White	76.1	47.0	66.1	65.5	34.7	26.1	6.5	46.4
Other	3.1	4.2	4.0	3.2	12.5	8.0	6.7	4.1
Foreign Born Status	14.5	27.2	34.2	21.6	33.0	NA	26.2	22.1 (SE)
Languages Spoken at Home (%)								
Total Population 5 and over	6,108,770	571,519	66,161	41,359	25,265	55,652	58,849	9,868
English Speaking	79.0	64.5	64.0	73.0	54.0	70.0	63.0	63.0
Other than English Speaking	21.0	35.6	26.4	20.2	35.9	25.3	14.4	45.8

	Massachusetts	Quincy	Waltham	Provincetown	Wellfleet	Harwich	Truro
Race/Ethnicity Distribution							
Asian	5.3	29.4	10.6	0.8	0.8	1.0	0.7
Black or African American	6.0	5.4	6.8	4.8	1.1	2.4	2.5
Latino or Hispanic	9.6	3.3	13.7	4.6	1.5	1.4	2.0
White	76.1	68.9	77.4	92.7	97.9	95.1	96.9
Foreign Born Status	14.5	27.3	26.6	7.7	1.8	6.3	3.4
Languages Spoken at Home (%)							
Total Population 5 and over	6,108,770	86,665	56,753	2,851	2,946	11,596	1,831
English Speaking	79.0	68.1	66.0	89.4	97.4	93.9	95.2
Other than English Speaking	21.0	31.9	34.0	10.6	2.6	6.1	4.8

- In Roxbury (56%) and South Dorchester (41%), African American/black is the largest racial/ethnic group. In Roxbury, Hispanic/Latino (30%) is the second largest racial/ethnic group. In South Dorchester, non-Hispanic, white (26%) is the second largest racial ethnic group.
- In Allston/Brighton (66%), Fenway/Kenmore (66%), and North Dorchester (35%), non-Hispanic, white is the largest racial/ethnic group. In Fenway/Kenmore (18%) and Allston/Brighton (15%), Asian is the second largest racial/ethnic group. In North Dorchester (23%), African American/black is the second largest racial/ethnic group.
- In Chinatown/South End (50%), Asian is the largest racial/ethnic group. Non-Hispanic, white is the second largest racial/ethnic group (46%).
- In Quincy and the Outer Cape, non-Hispanic, white is the largest racial/ethnic group. In Quincy, 69% of Quincy's population is non-Hispanic, white and on the Outer cape

- the percentage of the population that is non-Hispanic, white ranges from 93% to 98%. In Quincy (29%), Asian is the second largest racial/ethnic group.
- Allston/Brighton and North Dorchester have the highest proportion of foreign born residents with 34% reporting as foreign born in Allston/Brighton and 33% reporting as foreign born in North Dorchester. In the other neighborhoods in Boston this percentage ranges from 21% to 27%.
 - Chinatown/South End has the largest percentage of residents who speak a language other than English at home with nearly half (46%) of residents falling in this category. North Dorchester (36%) and Allston/Brighton (26%) have the second and third largest percentages of residents who speak a language other than English at home.
- **Income/Poverty, Employment, and Education:** Socio-economic status has long been recognized as a critical determinant of health. Higher socio-economic status as measured by income, employment status, occupation, education, and the extent to which one lives in areas of economic disadvantage are closely linked to health status, overall well-being, and premature death. Research shows that communities with lower socio-economic status bear a higher disease burden and have lower life expectancy.⁷ Residents of these communities are also less likely to be insured, less likely to have a usual source of primary care, more likely to use the emergency room for emergent and non-emergent care, and less likely to access health services of all kinds, particularly routine and preventive services. Moreover, research shows that children born to low income families are, as they move into adulthood, less likely to be formally educated, less likely to have job security, more likely to have poor health status, and less likely to rise and move up to higher socio-economic levels.⁸

While Boston has numerous extremely affluent neighborhoods, large proportions of the City's population live in poverty, have limited formal education, are unemployed, and struggle to afford food and other essential household items. In Boston overall, 21% of the population is living in poverty, which is more than twice the Commonwealth's rate overall. With respect to education, 15% of Boston residents have less than a high school diploma or GED equivalency, which is 40% higher than the Massachusetts rate of 11%. Unemployment rates are also considerably higher in Boston compared to the Commonwealth overall where residents have higher education rates on average and more employment opportunities.

Socio-economic status is strongly associated with race/ethnicity with those in racial/ethnic minority groups, particularly African American/black and Hispanic/Latino groups, being much more likely to have low socio-economic status. There is significant variation in the rates of these socio-economic measures across Boston's neighborhoods but not surprisingly

⁷ <http://www.cdc.gov/minorityhealth/reports/CHDIR11/FactSheets/EducationIncome.pdf>

⁸ <http://www.healthypeople.gov/2010/hp2020/advisory/societaledeterminantsofhealth.htm>

the rates in the communities are part of BIDMC's Community Benefit Service Area, are much higher.

- Thirty-nine percent (39%) of residents in Roxbury, 29% of residents in North Dorchester, and 27% of residents in the South End live in poverty. These communities have large proportions of disproportionately poor, racial/ethnic minority residents who, partly as a result of their poverty, have poorer health outcomes and are less likely to access care.

	Massachusetts	Boston	Allston- Brighton	Fenway/ Kenmore	North Dorchester	South Dorchester	Roxbury	South End/ Chinatown
Income								
Median Household Income	\$64,509	\$50,684	\$50,684	NA	NA	NA	NA	NA
Percent Population Living Below Poverty Level	10.5	21.2	22.0	40.5	28.7	16.0	39.2	27.2 (SE)
Food Stamp Cases Jan 2010	737,061	65,793	3,585	2,415	10,755	10,771	7,841	6,930
Percent of students eligible for free/reduced meals	35.2	69.5	NA	NA	NA	NA	NA	NA
Educational Attainment (%)								
Less than a High School diploma	11.3	15.0	10.0	NA	26.0	19.0	24.0	17.0
Cumulative four-year dropout rate for Class of 2011	2.7	6.4	NA	NA	NA	NA	NA	NA
Percent of students that are minority race/ethnicity	32.9	87.3	NA	NA	NA	NA	NA	NA

	Massachusetts	Quincy	Waltham	Provincetown	Wellfleet	Harwich	Truro
Income							
Median Household Income	\$64,509	\$61,391	\$69,717	\$45,631	\$66,109	\$54,615	\$80,425
Percent Population Living Below Poverty Level	10.5	10.4	10.4	9.4	4.2	7.9 (7.43-8.40)	8.4
Educational Attainment (%)							
Less than a High School diploma	35.2	13.1	11.0	5.2	0.7	4.2	3.8
Cumulative four-year dropout rate for Class of 2011	NA	2.3	13.2	12.5	NA	9.8	NA
Percent of students that are minority race/ethnicity	11.3	47.1	50.0	39.1	8.6	15.8	17.3

- Forty-one percent (41%) of the residents in the Fenway/Kenmore neighborhood are reported as living in poverty. However, this figure is likely skewed to some extent by the large numbers of young, college aged-adults that live and go to school in the

area and tend to have additional support that is obscured by this assessment. Certainly, there are pockets of the population living in real poverty, who struggle with homelessness, chronic illness, poor access to services, and other issues, however, this area is likely not as disadvantaged as the socio-economic data suggests.

- Quincy, South Dorchester, Allston/Brighton, and the communities on the Outer Cape all have percentages of residents living in poverty that are comparable to or lower than the percentage of residents in Boston overall and the Commonwealth. However, there are still significant pockets of the population living in poverty in these communities ranging from 16% to 22%. It should be noted that key informants from Joseph M. Smith Health Center in Allston/Brighton spoke of the very high numbers of undocumented residents who typically live in poverty and are largely obscured from this analysis.
- **Sexual Orientation and Gender Identity:** Research has shown that there are significant health disparities for lesbian, gay, bisexual, and transgender (LGBT) populations when compared to the heterosexual majority. More specifically, according to a study conducted in 2009 by the Massachusetts Department of Public Health in Partnership with MassEquity, Massachusetts' largest LGBT advocacy organization, LGBT populations face disparities with respect to access to health care services, overall health status, cancer screening, chronic health conditions, mental health, substance use, sexual health, and violence victimization. While gay and lesbian adults reported poorer health and greater risk than heterosexuals across several health domains, poorer health was observed most often for bisexuals and transgender individuals. The health profile of bisexual and transgender respondents was poorer than that of heterosexual residents in terms of access to medical providers, disability status, and 12-month suicidal ideation. For transgender persons, there were also worse outcomes with respect to anxious and depressed moods and lifetime violence victimization. The health profile of gay and lesbian residents was poorer than that of heterosexual residents in the following domains: lifetime sexual assault victimization; 30-day binge drinking and substance use; asthma; and type 2 diabetes.

Within this population, youth are particularly at risk and are often disconnected from their families and live independently. The Fenway/Kenmore and Chinatown/South End neighborhoods have particularly high proportions of youth and, according to the assessments interviews, a large number of these youth are homeless.

- **Unstable Housing, Community Cohesion, and Homelessness:** An increasing body of evidence has associated housing quality with poor overall health status and illness due to infectious diseases, chronic illnesses, injuries, poor nutrition, and even mental disorders. These health issues are inherent to low income residents but there are also clear links between poor housing conditions and the illnesses listed above, which confound and exacerbate these health issues. At its extreme those without housing either living on the street or in some transient housing situation have dramatically higher rates of illness and

shorter life expectancy.⁹ Lack of affordable housing also has an impact on poverty and the ability of individuals and families to pay for food and other essential household items. According to the US Census Bureau American Community Survey (2010), residents living in rental units throughout BIDMC's Community Benefits Service Area, spend approximately 50% of their income on housing, which is 10 percentage points higher than Boston residents overall and 20 percentage points higher than Massachusetts residents. Finally, a high percentage of housing units in Boston are vacant, particularly in Dorchester and Roxbury where nearly one in ten (10%) housing units are vacant. Vacant lots are associated with poor community cohesion and a lack of pride in one's neighborhood, which is associated with high crime/violence rates, isolation, limited community engagement, and generally poorer community health status.¹⁰

There are 64 low income public housing facilities in Boston that house nearly 30,000 low income residents. Approximately 50% of these facilities and residents are located within BIDMC's Community Benefits Service Area. These facilities present great strategic opportunities for BIDMC and its partners to target low income, at-risk populations with community health interventions, but they also demonstrate the high need that exists in the service area and present problems in their own right. While there have been great improvements over the last decade in Boston's public housing stock, many of those living in Boston's public housing facilities struggle with unhealthy living environments due to poor air quality, ineffective waste disposal, overcrowding, pest infestations, and many other factors. These issues are not ones on which BIDMC can have a great impact if working on its own; however, they have a substantial impact on the health status of a large proportion of the residents living in BIDMC Community Benefits Service Area. BIDMC continues to work with community and faith based organizations as well as legislators to advocate for stable housing and anti-poverty policies and programs.

- **Food Insecurity and Hunger:**

“Food is one of our most basic needs. Along with oxygen, water, and regulated body temperature, it is a basic necessity for human survival. But food is much more than just nutrients. Food is at the core of humans' cultural and social beliefs about what it means to nurture and be nurtured.”¹¹

Issues related to food insecurity, food scarcity, hunger and the prevalence and impact of obesity are at the heart of the public health discourse in urban and rural communities across the United States. These issues were certainly among the dominant themes from the assessment's interviews, surveys, and focus groups. Interviewees and large proportions of community survey respondents reported that they were unable to buy fresh vegetables and

⁹ <http://www.nationalhomeless.org/factsheets/health.html>

¹⁰ <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC1447157/>

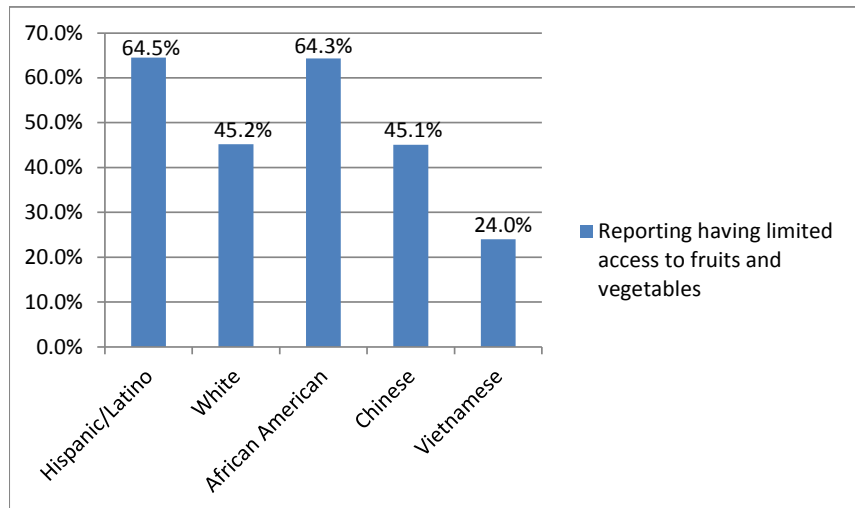
¹¹ <http://feedingamerica.org/SiteFiles/child-economy-study.pdf>

other nutritional foods. Substantial percentages of survey respondents also reported hunger in the past three months because they or their families had been forced to reduce the size of their meals and/or to skip meals altogether due to economic reasons. The percentages of respondents who reported having limited access to fresh foods or going hungry were higher in certain communities. Focus group participants referred to food insecurity or food scarcity and its association to obesity and chronic disease as a major factor that needed to be addressed to improve health status and reduce the high rates of obesity and chronic disease. These issues are of heightened concern in Boston's poorest communities, such as Roxbury and Dorchester, where according to community survey results, nearly half of residents report having limited access to healthy foods.

According to the community survey, only 50% of respondents overall had access to fresh fruits and vegetables at all the times, 25% reported that they had access to fruits and vegetables most of the time, and 25% reported that they had limited access to these items. Sixteen percent (16%) of survey respondents overall reported that they had skipped or cut the size of meals and 13% of respondents reported said that they had gone hungry in the past three months due to inability to buy food. These rates vary considerably by race/ethnicity and neighborhood.

- African Americans/Blacks and Hispanics/Latinos living in Boston's urban core were considerably more likely to report having limited access to fresh fruits and vegetables compared to non-Hispanic, white populations. Sixty-five percent (65%) of Hispanics/Latinos and 64% of African Americans/blacks reported having limited access to fresh fruits and vegetables compared to only 45% of non-Hispanic, whites. On a neighborhood level, 68% of respondents from Roxbury and 69% of respondents from North Dorchester reported limited access.
- African Americans/Blacks who responded to the survey were considerably more

Percent of Survey Respondents Reporting Having Limited Access to Fruits and Vegetables by Race/Ethnicity

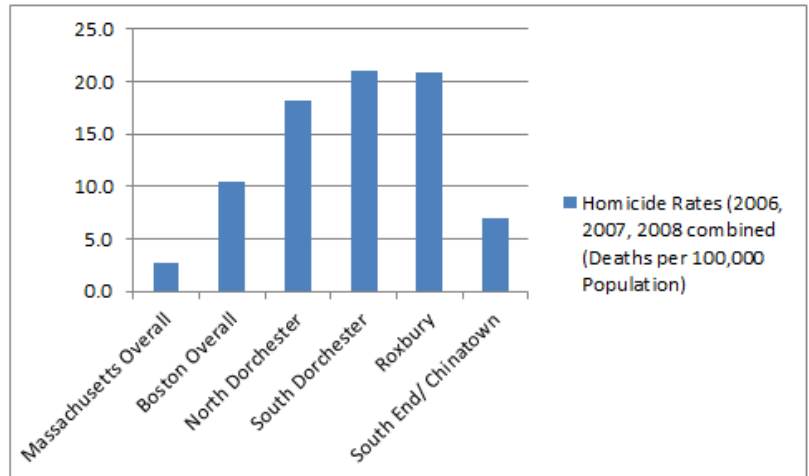


Source: BIDMC Community Survey, 2013

likely to report skipping or cutting the size of meals (30% vs. 19%) and more likely to report going hungry due to lack of money (26% vs. 15%) compared to non-Hispanic, white residents.

- **Access to Playgrounds, Parks, and Recreational Facilities:** As the body of research related to obesity and chronic disease has grown so has the appreciation for the impact that having readily accessible recreation areas or facilities may have on communities. When people have access to safe local playgrounds, pools, and trails, they are more likely to choose physical activity and less likely to be overweight or obese. In Boston, many of the recreational sites, particularly in the communities that make up BIDMC's Community Benefits Service Area, are perceived to be unsafe and are not used. Increasingly, health and public health strategies targeted at decreasing obesity are working to support opening or improving accessibility to recreational sites (e.g., parks, playgrounds, trails) as a way of increasing the rates of adequate physical activity. For example, opening elementary school playgrounds after school hours, developing bike or walking trails, cleaning up or better maintaining playgrounds, and developing/supporting community recreational centers are common city-wide strategic initiatives.
 - According to the assessment's community survey, a majority of people across all of the surveyed communities report using their community's parks, ranging from as low as 51% in North Dorchester to as high as 80% in Allston/Brighton and the South End/Chinatown. However, respondents (ranging from 27% in Allston/Brighton to 47% in North Dorchester) thought the parks were unsafe or were unsure of their safety.
 - A substantial majority of people in Boston's neighborhoods reported using neighborhood walking paths, ranging from as low as 65% in Roxbury to as high as 94% in the Chinatown/South End.
 - Respondents to the community survey were slightly less likely to use recreational facilities than parks but still large proportions of respondents said that they used these facilities. Similar to above, significant proportions of respondents felt that the facilities were unsafe.
- **Crime/Violence:** Crime and violence are major issues in neighborhoods that are part of BIDMC's Community Benefits Service Area and their impacts are intense and far reaching. These impacts include death and injury, emotional trauma, anxiety, and other mental health issues, isolation, and lack of trust and/or community cohesion. Several key informant interviewees discussed the impacts of crime and violence and its associated trauma, particularly on the area's youth and their families.
 - Rates of homicide and non-fatal gunshot wounds seen in the City's hospital emergency departments are considerably higher in Roxbury and Dorchester, than in Boston overall. Roxbury and Dorchester both had a rate of 21 homicide deaths per

Homicide Rates for Selected Boston Neighborhoods: 2006-2008 (deaths per 100,000)



Source: Massachusetts Department of Public Health, MassCHIP System

- 100,000 in 2008 compared to a rate of 9 for the City of Boston overall and a rate of 3 for the Commonwealth.¹²
- According to data drawn from the Health of Boston Report, African Americans/blacks (2.2 per 100,000) are twice as likely as Hispanics/Latinos (.9 per 100,000) to have an emergency department visit for a non-fatal gunshot wound or stabbing and more than 10 times more likely as non-Hispanic, whites (.2 per 100,000)
- According to the community survey, 29% of respondents from Roxbury, and North Dorchester, and 30% of residents in South Dorchester reported that they did not feel safe in their neighborhood. These statistics compare to 15% for City residents overall, 10% for Quincy, 11% for Chinatown/South End, and 17% for Allston/Brighton.

V. KEY HEALTH-RELATED FINDINGS

At the core of the CHNA process is an understanding of access to care issues, the leading causes of illness and death, and the extent that population segments and communities participate in certain risky behaviors. This information is critical to assessing health status, clarifying health-related disparities, and identifying community health priorities. The assessment captured a wide range of quantitative data from Federal, Commonwealth, and local data sources, including from the US Census Bureau, the Massachusetts Department of Public Health, and the Boston Health Commission. The assessment also compiled information through a community survey that was completed in partnership with the CCA clinics, the Boston Chinese Evangelical Church, Tai Tung Village, and the Chinese Consolidated Benevolent Association of New England. Specifically, quantitative data was captured related to access to primary care (e.g., usual source of primary care, routine check-up, and cost as a barrier to primary care), health risk factors (e.g., tobacco use, physical exercise, poor nutrition, and alcohol abuse), chronic disease (e.g., heart disease, diabetes, asthma, and stroke), mental health and substance abuse, maternal and child health (e.g., adolescent birth rate, low birth weight, and infant deaths), and infectious disease, (e.g., pneumonia, Hepatitis B and sexually transmitted disease). Again, qualitative information gathered from the assessments interviews and focus groups greatly informed this

¹² Health of Boston Report, 2012-13 as drawn from Massachusetts Department of Public resident mortality data.

section by providing community perceptions on the confounding and contributing factors of illness, health priorities, and strategic responses to the issues identified.

The following are key findings related to health insurance coverage and access to primary care, health risk factors, chronic disease, mental health and substance abuse, maternal and child health, and infectious disease. Summary data tables/graphs are included below and more expansive data tables are included in the BIDMC CHNA Databook that is available upon request.¹³

- **Health Insurance Coverage and Access to Primary Care Medical Services:** The extent to which a person has insurance that helps to pay for medical services as well as access to a full continuum of high quality, timely, accessible health care services has shown to be critical to overall health and well-being. Access to a usual source of primary care is particularly important as it greatly impacts one's ability to receive regular preventive, routine, and urgent care, as well as chronic disease management services for those in need.¹⁴ Nationally, low income, racial ethnic minority populations are less likely to have a usual source of primary care, less likely to have a routine check-up, and less likely to be screened for illnesses, such as breast cancer, prostate cancer, or colon cancer. Data also suggests that low income, racial/ethnic minority populations are more likely to use hospital emergency department and inpatient services for care that could be avoided or prevented altogether with better more accessible primary care services.

Greater Boston has one of the strongest and most comprehensive healthcare systems in the world. This system is expansive and spans the full healthcare continuum from outreach and screening services, to primary care medical, medical specialty care, hospital emergency and trauma services, and hospital inpatient care as well as outpatient surgical and long-term care services. Access to dental and behavioral health services are more problematic but still, relative to other geographies, Boston is better situated. There are no absolute gaps in services across any of these service categories, even for low income and racial/ethnic minority populations that often struggle with access to health care services. Boston has a strong safety net system, anchored by a network of federally qualified health centers (FQHCs), including the CCA clinic sites, which has few rivals across the country. Massachusetts also leads the nation with the lowest Commonwealth/State uninsured rates in the nation. In 2012, only approximately 3% of the Commonwealth's population lacked medical health insurance, with the largest single group of uninsured being undocumented immigrants, followed by those struggling with administrative and policy barriers related to retaining coverage.

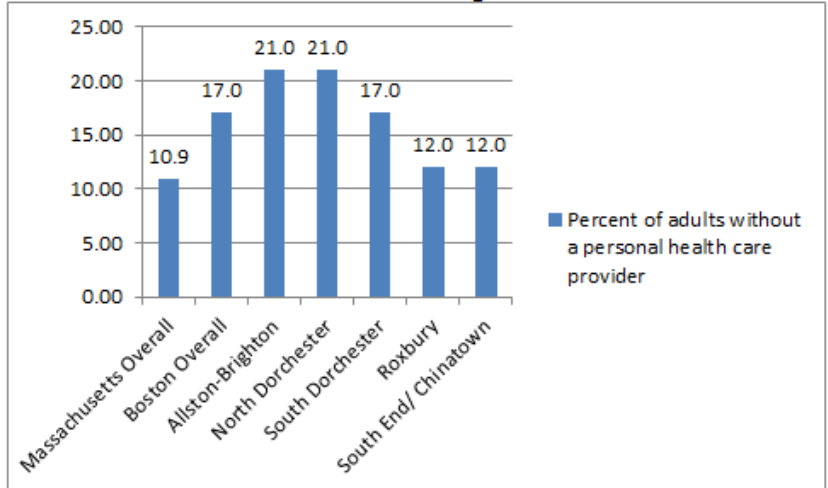
¹³ To obtain the BIDMC CHNA Databook, please contact Nancy Kasen, Director of Community Benefits at BIDMC at nikasen@bidmc.harvard.edu.

¹⁴ <http://iom.edu/~media/Files/Report%20Files/2003/Coverage-Matters-Insurance-and-Health-Care/Uninsurance8pagerFinal.pdf>

This does not mean, however, that everyone in Greater Boston receives the highest quality services when they want them and where they want them. In fact, despite the overall success of the Commonwealth's health reform efforts, data captured for this assessment shows that large segments of the population, particularly low income and racial/ethnic minority populations, face significant barriers to care and struggle to access services due to lack of insurance, cost, transportation, cultural/linguistic barriers, and shortages of providers willing to serve Medicaid insured or low income, uninsured patients.

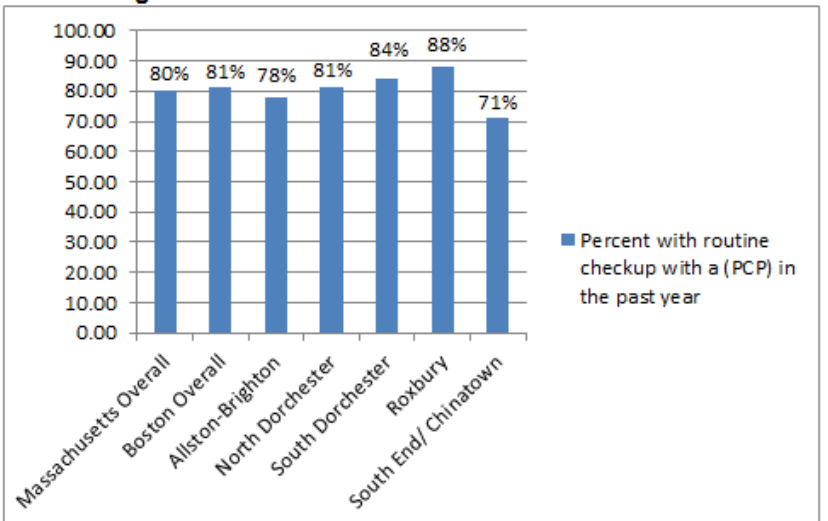
- Among the CCA clinics, the uninsured rate ranges from 17% at Fenway Community Health to 48% at Joseph M. Smith Community Health Center.
- According to Massachusetts BRFSS data, approximately one in five (21%) residents living in North Dorchester and Allston/Brighton do not have a personal health care provider or primary care provider compared to one in six (17%) for Boston residents overall. Residents in Roxbury (12%), Chinatown/South End (12%), and South Dorchester (17%) were all as likely as or more likely than Boston residents to have a regular primary care provider.
- According to Massachusetts BRFSS data, approximately 20% of residents did not have a routine check-up or physical in the past 12 months. This figure was highest for Allston/Brighton (29%) and South End/Chinatown (29%), likely due to the large proportions of young adults. Interestingly, residents of

Percent of Adults Without a Personal Health Care Provider for Massachusetts and Selected Boston Neighborhoods



Source: MA BRFSS and Boston Public Health Commission's, Health of Boston Report 2012-2013

Percent of People who Had a Routine Checkup with a Primary Care Provider (PCP) in the Past Year for Massachusetts and Selected Boston Neighborhoods

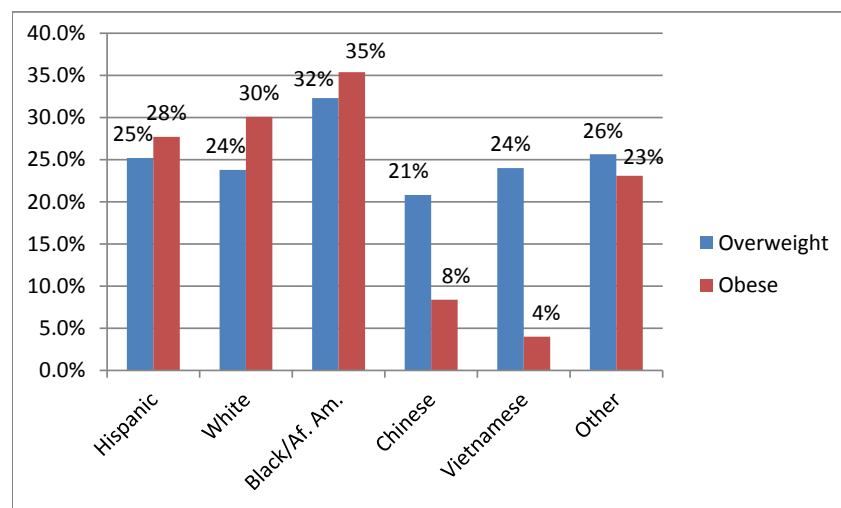


Source: MA BRFSS and Boston Public Health Commission's, Health of Boston Report 2012-2013

Dorchester and Roxbury were more likely to have a routine check-up or physical in the past 12 months than residents of Boston overall, a testament to the impact of Boston's strong network of health centers.

- According to data captured from the Commonwealth's Inpatient Hospital Discharge Database¹⁵ residents of North and South Dorchester, Roxbury, and Chinatown/South End were more likely to receive inpatient services for hypertension, heart failure, asthma, pneumonia, and chronic obstructive pulmonary disease than residents of Boston and Massachusetts overall. Based on a standard analysis developed by the Federal Agency for Healthcare Research and Quality (AHRQ), these services are considered preventable or avoidable with regular, primary care services and therefore are indicative of poor or limited access to primary care. In some cases residents of these communities were two and three times more likely to receive hospital services for these conditions compared to other residents.
- **Health Risk Factors:** There is a growing appreciation for the effects that certain health risk factors, such as obesity, lack of physical exercise, poor nutrition, and tobacco use have on health status and the burden of chronic disease. Over the past two decades, obesity rates in the United States have doubled for adults and tripled for children. These trends have spanned all segments of the population, regardless of age, sex, race, ethnicity, education, income, or geographic region. There are certainly segments that have struggled more than others but no segment has been unaffected. According to data from the Massachusetts Behavioral Risk Factor Survey System (BRFSS), nearly two-thirds of Boston adults (18+) (60%) are either obese or overweight. Rates for specific demographic, socio-economic and geographic population segments living in BIDMC's Community Benefits Service Area are even higher.

Percent of Survey Respondents Reporting as Overweight or Obese by Race Ethnicity



Source: BIDMC Community Survey, 2013

¹⁵ Inpatient hospital discharge database, outpatient emergency department database, and Outpatient hospital observation database, MA Center for Health Information and Analysis

Lack of physical fitness and poor nutrition are the leading factors associated with obesity and the leading risk factors associated with chronic diseases, such as heart disease, hypertension, diabetes, cancer, and depression. Good nutrition helps prevent disease, and is essential for healthy growth and development of children and adolescents. Overall fitness and the extent to which people are physically active reduce the risk for many chronic diseases, are linked to good emotional health, and help to prevent disease. Once again, according to Massachusetts BRFSS data, only one in four adults (18+) (26%) ate the recommended five servings of fruits and vegetables per day, and roughly the same percentage (25%) reported getting no physical activity in the past 30 days.

Tobacco use is the single most preventable cause of death and disease in the United States. Each year, approximately 443,000 Americans die from tobacco-related illnesses. For every person who dies from tobacco use, 20 more people suffer with at least one serious tobacco-related illness, such as chronic airway obstruction, heart disease, stroke, or cancer.¹⁶ Massachusetts and Boston have lower rates of tobacco use than many geographic areas throughout the United States but given that tobacco use is still the leading cause of illness and disease in the United States, it is important that work be done to lower these rates even further. According to Massachusetts BRFSS data, 16% of Boston residents are current tobacco smokers.

When looking across all of these health risk factors (obesity, lack of physical exercise, poor nutrition, and tobacco use), the quantitative data compiled for this assessment confirms the trends seen nationally; African Americans/blacks and Hispanics/Latinos are more at-risk and fare worse than their non-Hispanic, white counterparts. Given the distribution of the population by race/ethnicity, this means that the populations living in Roxbury, Dorchester, and the South End are particularly at-risk with respect to these health risk factors. Qualitative information from the assessment interviews and focus groups corroborated these findings and nearly all discussion participants cited obesity, poor nutrition, and lack of physical exercise as leading health issues.

- According to the community survey, which captured the height and weight of residents, rates of obesity and overweightness were even higher than the Boston rates overall. Sixty-eight percent (68%) of African American/black respondents reported being overweight or obese, compared to 53% of Hispanic/Latino respondents and 54% of non-Hispanic, white respondents.
- The percentages of residents who report that they engage in regular physical exercise is substantially lower in Roxbury (51%), North Dorchester (51%), and South Dorchester (47%) compared to Allston/Brighton (65%), Fenway/Kenmore (62%), and Chinatown/South End (62%).
- The percentage of Residents who report that they currently smoke cigarettes is only slightly higher in Roxbury (20%), Fenway/Kenmore (18%), and South Dorchester

¹⁶ <http://www.healthypeople.gov/2020/topicsobjectives2020/overview.aspx?topicid=41#five>

(17%) as compared to the percentage of residents in Boston overall (16%). However, given the burden of disease related to tobacco use, it is still an issue. Rates are considerably lower in Chinatown/South End and Allston/Brighton,

- **Chronic Disease and Cancer:** Cardiovascular disease (heart disease), cancer, and cerebrovascular disease (stroke) are the three leading causes of death in the United States, Massachusetts, and Boston. In addition, diabetes is ranked in the top 10 across all three of these geographic areas, and asthma and other respiratory diseases have a huge impact on large portions of adults and children. Mental health issues, discussed in more detail below, are chronic conditions for many and are often coupled with other medical conditions. All of these conditions, individually and collectively, have a major impact on people living in Boston. All of the chronic conditions cited above share the health risk factors cited above (tobacco use, lack of physical exercise, poor nutrition and obesity/overweightness) as leading factors.

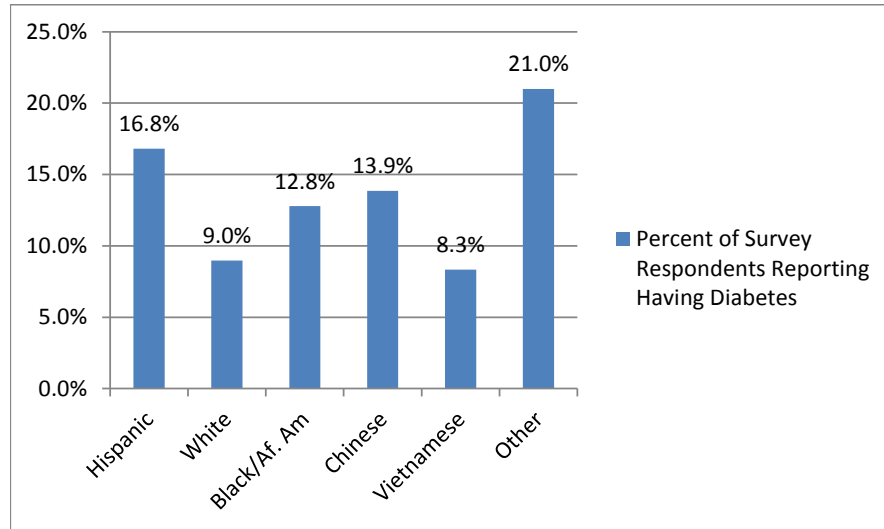
Once again, there are major health disparities across all of these conditions among racial/ethnic minority groups. Rates of illness and death vary by condition, but overall non-Hispanic, white populations are less likely to have chronic health conditions than their racial/ethnic counterparts. This puts a disproportionate burden on communities with high proportions of these population segments, including many of the communities in BIDMC's Community Benefits Service Area such as Roxbury, North and South Dorchester, and the South End.

Chronic Disease and Cancer

- According to the Health of Boston Report, 2012-13, Boston's African American/black and Hispanic/Latino residents had higher rates of diabetes, heart disease and cerebrovascular disease hospitalizations, and cancer death rates than non-Hispanic, white residents.
- According to data from the Massachusetts Hospital Inpatient Discharge dataset (Available through MassCHIP), residents from Boston's urban core of Dorchester, Roxbury, and the South End were more likely to be hospitalized for chronic diseases and cancer than residents of Boston and Massachusetts overall. In some cases hospitalization rates were two to three times higher.
- While there was considerable variation across the neighborhoods, cities and towns that are part of BIDMC's Community Benefits Service Area, residents from these communities are generally more likely to have high cholesterol, diabetes, and hypertension.
 - High Cholesterol: Residents of Allston/Brighton, Chinatown/South End, Dorchester (North/South), Fenway/Kenmore, Outer Cape, and Roxbury were all more likely to have high cholesterol than residents from Boston overall.

- **Diabetes:** Allston/Brighton, Chinatown/South End, Dorchester (North/South), and Roxbury were all more likely to have diabetes than residents of Boston overall.

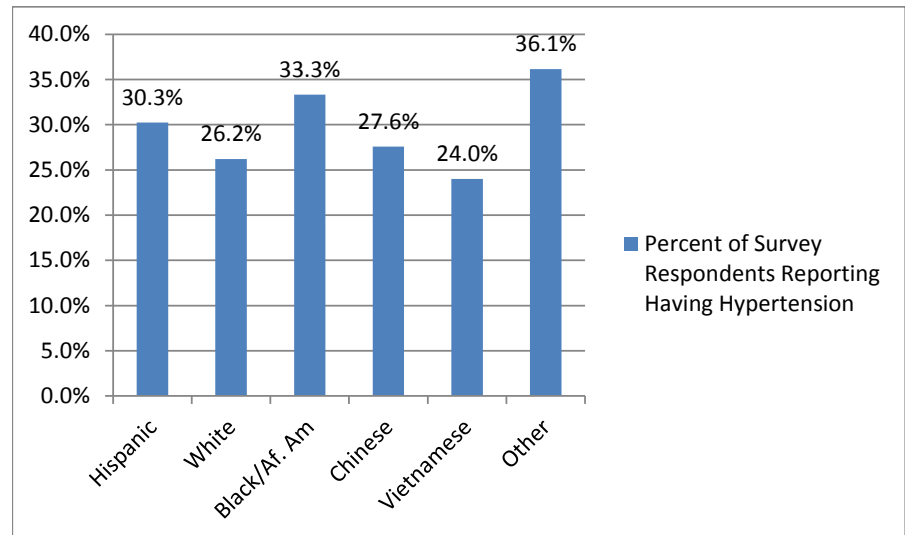
Percent of Survey Respondents Reporting Having Diabetes by Race/Ethnicity



Source: BIDMC Community Survey, 2013

- **Hypertension:** Residents from Allston/Brighton, Chinatown/South End, Dorchester (North/South), Outer Cape, Roxbury, and Quincy were all more likely to have hypertension than residents of Boston overall.

Percent of Survey Respondents Reporting Having Hypertension by Race/Ethnicity



Source: BIDMC Community Survey, 2013

- **Mental Health and Substance Abuse:** Mental illness and substance abuse have a profound impact on the health of people living throughout the United States. Data from the Centers for Disease Control and Prevention suggests that approximately one in four (25%) adults in the United States has a mental health disorder¹⁷ and an estimated 22 million Americans struggle with drug or alcohol problems.¹⁸ Depression, anxiety, and alcohol abuse are directly associated with chronic disease, and a high proportion of those living with these issues also have a chronic medical condition.

Mental health and substance abuse hospitalization and death rates are higher for a number of Boston's neighborhoods, in particular in Roxbury and parts of Dorchester. According to MassCHIP (2010) and the Massachusetts Substance Abuse Bureau, Boston has statistically higher rates of substance abuse treatment admissions (32.4/1,000), including cocaine (0.81/1,000) and heroin (15.86/1,000) when compared to the Commonwealth (15.9, 0.41 and 6.34, respectively). Rates are particularly high in South Dorchester (44.2/1,000) and Roxbury (41.1/1,000).

According to data from the assessments community survey, high proportions of the population struggle with persistent sadness and/or were at risk for depression.

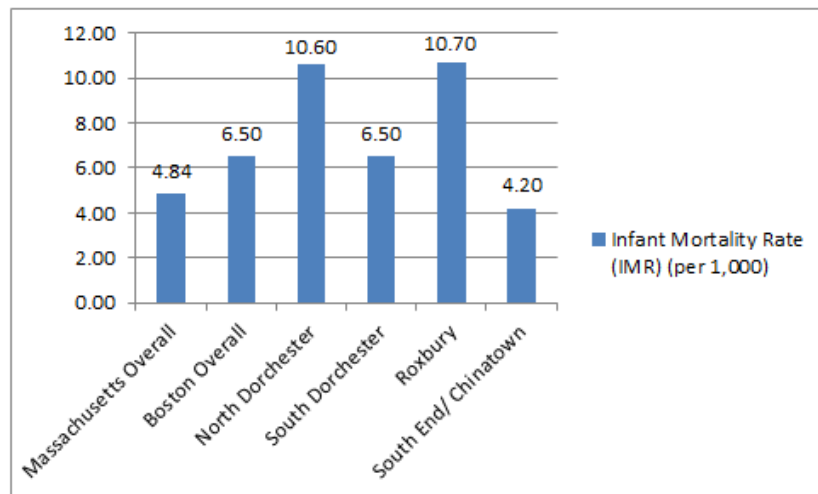
- According to data from the Massachusetts Department of Public health's, MassCHIP, the percentage of residents reporting poor mental health more than 15 days in the past 30 days was not substantially higher for those living in BIDMC's Community Benefits Service Area compared to the percentage for Boston residents overall. In Boston 10% of residents reported being poor mental health status for more than 15 days in a given month compared to 8% in Allston/Brighton and Dorchester (North and South), and 7% in South End/Chinatown. In Roxbury, the percentage rose to 13%.
 - According to data from the assessment community survey, approximately 30% of respondents were deemed at risk for depression and needed additional mental health assessment because they screened positive for a short screening tool for depression.
- **Maternal and Child Health:** Maternal and child issues are of critical importance to the overall health and well-being of a community and at the core of what it means to have a healthy, vibrant community. Infant mortality, childhood immunization, rates of teen pregnancy, rates of low birth weight, and rates of early, appropriate prenatal care for pregnant women are among the most critical indicators of maternal and child health.

¹⁷ <http://www.nimh.nih.gov/health/publications/the-numbers-count-mental-disorders-in-america/index.shtml>

¹⁸ <http://www.healthypeople.gov/2020/topicsobjectives2020/overview.aspx?topicid=40>

The health disparities with respect to the leading maternal and child health indicators (e.g., infant mortality, prenatal care, adolescent births, and low birth weight) for racial/ethnic minority populations in the nation's urban areas are well known. Boston is not immune to these issues and while the disparities have lessened over

Infant Mortality Rate per 1,000 for Massachusetts and Selected Boston Neighborhoods



Source: MA BRFSS and Boston Public Health Commission's, Health of Boston Report 2012-2013

the years, there are still significant disparities in outcomes, particularly for African Americans/blacks and Hispanics/Latinos. The infant death rate for Hispanics/Latinos in Boston overall is twice the rate of non-Hispanic, whites, and for African Americans/blacks the rate is three times the rate of non-Hispanic, whites. Hispanic/Latino adolescents in Boston overall are three times more likely to give birth to a baby as non-Hispanic, white adolescents.

- According to data from the Massachusetts Vital Records Natality Infant Deaths dataset, residents of North Dorchester (10.6 deaths/1,000) and Roxbury (10.7 deaths/1,000) have higher rates of infant mortality than residents of Boston overall (6.5 deaths/1,000).
- According to the same dataset, Roxbury also has higher rates of preterm births and low birth weight babies than residents of Boston Overall. In Roxbury, 13% of births are preterm, compared to 10% of births in Boston overall. Twelve percent (12%) of babies born to mothers from Roxbury are at low birth weight, compared to 9% for babies born to mothers in Boston overall. With respect to both these indicators, the other neighborhoods in Boston are more similar to Boston's percentage overall.
- **Infectious Disease:** Increases in life expectancy during the 20th and 21st centuries are largely due to reductions in infectious disease mortality, as a result of immunization. However, infectious diseases remain a major cause of illness, disability, and even death. Sexually transmitted diseases and pneumonia, particularly in older adults, are among the infectious diseases that have the greatest impact on the population. The assessment captured data on a number of sexually transmitted diseases chlamydia, gonorrhea, syphilis, and HIV/AIDS as well as Hepatitis B and C, and pneumonia/influenza.

Sexually transmitted diseases are a major community health issue for large numbers of residents in BIDMC's Community Benefits Service Area, particularly in many of Boston's neighborhoods and some of the communities on the Outer Cape. Chlamydia, hepatitis, gonorrhea, and syphilis are the most common sexually transmitted diseases and the rates for these conditions in most cases are dramatically higher in Boston, particularly in many of the communities in BIDMC's Community Benefits Service Area, than in Massachusetts overall.

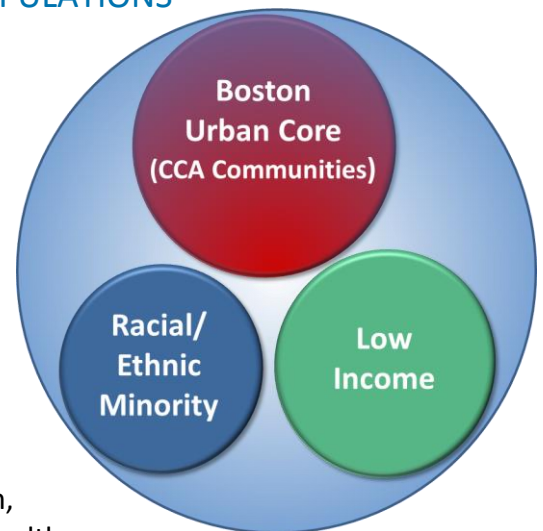
Great strides have been made with respect to HIV/AIDS, and for most it is considered to be more of a chronic condition that can be managed with medications than a terminal condition. Rates of illness, death, and HIV transmission have declined dramatically over the past decade. However, HIV/AIDS still has a major impact on the lesbian, gay, bisexual and transgender (LGBT) community, certain Boston neighborhoods (Fenway/Kenmore, Roxbury, North Dorchester), and the communities on the Outer Cape (Wellfleet, Truro, and Provincetown). Additionally, the Asian community is still affected by Hepatitis B infections. Pneumonia is also one of the leading causes of death, particularly for frail, older adults, and one of the leading causes of hospital readmission.¹⁹

Roxbury and North Dorchester have consistently higher rates of infectious disease than Boston overall and other neighborhoods, cities, and towns that are part of BIDMC's Community Benefits Service Area. Also of note, is the impact that infectious disease has on the at-risk youth population. While limited data is available to assess this population specifically, qualitative data captured from many key informant interviews highlighted the needs, disparities, and considerable health issues that impact this population, many of whom are disconnected with limited support networks.

VI. COMMUNITY HEALTH PRIORITIES AND TARGET POPULATIONS

Target Populations and Neighborhoods

BIDMC is committed to improving the health status and well-being of those living throughout its community benefits services area. BIDMC's Community Health Improvement Plan, provided in the next section, includes many activities that will impact all residents. However, the assessment's findings clearly showed that low income and racial/ethnic minority populations living in its Community Benefits Service Area are most at-risk and that there are major health disparities for these populations compared to their non-Hispanic, white counterparts and for those who are not living in poverty. More specifically as discussed above at length, African Americans/blacks and Hispanics/Latinos have poorer health outcomes and are more likely to struggle with health risk factors than their



non-

¹⁹ <http://www.rwif.org/content/dam/farm/reports/reports/2013/rwif404178>

Hispanic, white counterparts. The data also shows a strong link between poor health outcomes and income with those living in poverty much more likely to face disparities in health outcomes and access to care measures.

Community Health Priorities

The CHNA's approach and process provided ample opportunity to vet the quantitative and qualitative data compiled during the assessment. In addition, interview and focus group participants were asked what they perceived to be the leading community health priorities. Ultimately, there was little debate that the most significant health-related issue facing the communities surrounding BIDMC was the

broader social and economic determinants (e.g., poverty, uninsurance and under-insurance, unemployment, food insecurity, violence, health literacy/disease literacy), which prevent many residents, particularly low income, racial/ethnic minority, and older adult residents, from maintaining a healthy lifestyle and/or accessing the regular preventive and acute health services they need. In addition to this underlying priority, issues related to obesity, lack of physical exercise, poor nutrition, chronic disease, behavioral health, lack of access to care, and lack of health education, health/disease literacy, and other associated factors were identified as priorities. Finally, issues related to older adult health were also seen as a priority.



VII. SUMMARY COMMUNITY HEALTH IMPROVEMENT PLAN

Priority Area 1: Obesity, Fitness, and Nutrition

Healthy and safe eating is important throughout the lifespan. Regular physical activity combined with healthy eating are important for people of all ages. Physical activity helps prevent many diseases (e.g. heart disease, diabetes and some cancers), strengthens bones and muscles, reduces stress and depression, and makes it easier for people to maintain a healthy body weight. Eating a healthy diet can help lower people's risk for heart disease, high blood pressure, diabetes, and certain cancers, and also helps people maintain a healthy body weight.

According to data from the Massachusetts Behavioral Risk Factor Survey System (BRFSS), nearly two-thirds of Boston adults (18+) (60%) are either obese or overweight. Rates for specific demographic, socio-economic and geographic population segments living in many of Boston's neighborhoods are even higher. Massachusetts BRFSS data also shows that only one in four adults (18+) (26%) in Boston ate the recommended five servings of fruits and vegetables per day, and roughly the same percentage (25%) reported getting no physical activity in the past 30 days. Qualitative information from the assessment's interviews and focus groups corroborated these findings and nearly all discussion participants cited obesity, poor nutrition, and lack of physical exercise as leading health issues.

- Increase the number of children, youth, and adults who are physically active
- Develop BIDMC / Bowdoin Street Wellness Center
- Increase access to healthy and affordable foods in communities
- Improve nutritional quality of the food supply
- Decrease the number of individuals and families who suffer from food insecurity
- Increase the number of children and youth who are screened for BMI and provided counseling

Priority Area 2: Disease Management and Prevention

Cardiovascular disease (heart disease), cancer, and cerebrovascular disease (stroke) are the three leading causes of death in the United States, Massachusetts, and Boston. In addition, diabetes is ranked in the top 10 across all three of these geographic areas, and asthma and other respiratory diseases have a huge impact on large portions of adults and children. In addition to being the most common causes of death and illness, these conditions are among the most costly and preventable. All of these chronic conditions share the several health risk factors (tobacco use, lack of physical exercise, poor nutrition and obesity/overweightness).

According to data from the Massachusetts Hospital Inpatient Discharge dataset, residents from Boston's urban core of Dorchester, Roxbury, and the South End are more likely to be hospitalized for chronic diseases and cancer than residents of Boston and Massachusetts overall. In some cases, hospitalization rates were two to three times higher. According to the Health of Boston Report, 2012-13, Boston's African American/black and Hispanic/Latino residents had higher rates of diabetes, heart disease and cerebrovascular disease hospitalizations, and cancer death rates than non-Hispanic, white residents.

- Increase the number of adults with diabetes, hypertension, and asthma who receive services
- Increase the number of adults whose diabetes, hypertension, and persistent asthma is under control
- Increase the number of low income and racial/ethnic minority adults educated/screened for cancer
- Increase the number of adults who screen positive for cancer who are referred for

counseling/treatment

- Increase the number of adults who screen positive for cancer who are linked to a cancer navigator
- Increase the number of CCA clinic sites who meet NCQA or CMS PCMH certification requirements
- Improve care coordination and continuity of care

Priority Area 3: Access to Primary and Specialty Care

Greater Boston has one of the strongest and most comprehensive healthcare systems in the world. This system is expansive and spans the full healthcare continuum, including outreach and screening services, primary care medical and medical specialty care services. There are no absolute gaps in services across the continuum, even for low income and racial/ethnic minority populations that often struggle with access to health care services. This does not mean, however, that everyone in Greater Boston receives the highest quality services when they want it and where they want it. In fact, despite the overall success of the Commonwealth's health reform efforts, data captured for this assessment shows that segments of the population, particularly low income and racial/ethnic minority populations, face significant barriers to care and struggle to access services due to lack of insurance, cost, transportation, cultural/linguistic barriers, and shortages of providers willing to serve Medicaid insured or low income, uninsured patients.

Among some of Boston's most prominent safety net primary care clinics, the uninsured rates range from 17% to 48%. These clinics struggle to ensure access to care for their patients, particularly for medical specialty care services. Massachusetts BRFSS data also indicates that approximately one in five (21%) residents living in North Dorchester and Allston/Brighton do not have a personal health care provider or primary care provider compared to one in six (17%) for Boston residents overall.

- Maintain and increase the number of patients who receive primary medical care services
- Maintain and increase the number of patients who receive specialty care medical services
- Screen and enroll those who qualify in health insurance coverage offered through the ACA
- Ensure access to services for those on the Outer Cape
- Ensure access to appropriate trauma care services
- Maintain or increase support for HSN Trust Fund; advocate for legislation and public policies that support resources and programs in/for public health, mental health and substance abuse, community health centers, and other anti-poverty funding.
- Maintain and increase the number of patients who receive primary dental care services at CCA Clinic sites
- Maintain and increase the number of patients who receive primary behavioral health care services
- Increase patient satisfaction
- Increase clinic efficiency and productivity

Priority Area 4: Mental Health and Substance Abuse

Mental illness and substance abuse have a profound impact on the health of people living throughout the United States, including those living in Massachusetts and the Boston area. Mental health and substance abuse hospitalization and death rates are higher for a number of Boston's neighborhoods, particular Roxbury and parts of Dorchester. According to data from the assessment's community survey, high proportions of Boston residents struggle with persistent sadness and/or were at risk for depression. Nearly one-third (30%) of respondents qualified for additional mental health screening. Nearly one in six survey residents reported poor mental health status for more than 15 days in a given month, compared to one in ten residents in Boston overall. Qualitative information from the assessment's interviews and focus groups corroborated these findings and a majority of the discussion participants cited mental health and substance abuse issues as leading health issues.

- Maintain and increase the number of patients who receive mental health and substance abuse services
- Increase the number of adults with mental health/substance abuse issues who are served through integrated behavioral health – primary care service delivery approaches
- Increase the number of adults with opioid addiction who receive evidence-based services

Priority Area 5: Youth Violence Prevention

Crime and violence affect all of Boston's residents to some extent but have a major impact on two of Boston's inner city neighborhoods, Roxbury and Dorchester. These impacts include death and injury, emotional trauma, anxiety, and other mental health issues, isolation, and lack of trust and/or community cohesion. Several of the assessments key informant interviewees discussed the impacts of crime and violence and its associated trauma, particularly on the area's youth and their families.

Rates of homicide and non-fatal gunshot wounds seen in Boston's hospital emergency departments are considerably higher for Roxbury and Dorchester residents than for residents of Boston overall. Roxbury and Dorchester both had a rate of 21 homicide deaths per 100,000 in 2008 compared to a rate of 9 for the City of Boston overall and a rate of 3 for the Commonwealth. According to data drawn from the Health of Boston Report in 2012-13, African Americans/Blacks (2.2 per 100,000) are more than twice as likely as Hispanics/Latinos (.9 per 100,000) to have an emergency department visit for a non-fatal gunshot wound or stabbing, and more than 10 times more likely as Non-Hispanic, Whites (.2 per 100,000).

- Increase access to mental health services at Bowdoin Street Health Center for affected victims
- Increase participation in the Advocate Education and Support Project
- Provide counseling and other medical services to rape victims
- Provide grieving support activities
- Conduct neighborhood campaigns to engage community and create greater community cohesion

VIII. ON-GOING PLANNING, COMMUNITY ENGAGEMENT, AND IMPLEMENTATION

BIDMC is committed to being active in its community and knows that to be successful it needs to engage and collaborate with the Boston Public Health Commission and community partners as well community residents and patients. This Community Health Needs Assessment (CHNA) and the associated Community Health Improvement Plan (CHIP) was completed in close collaboration with BIDMC's staff, a broad range of community partners, and the community at-large.

Historically, BIDMC has relied heavily on its Community Care Alliance as well as a number of other key community health partners to implement its community benefits initiatives. In this regard, BIDMC has leveraged CCA's expertise and the vital connections that these organizations have with residents and organizations in the communities they serve. Since 1968, BIDMC has provided in-kind and financial support to a number of Boston's leading primary care safety net clinics. This support has allowed these clinics to expand access to essential primary care services, and to promote health education, outreach, health promotion, chronic disease management, and ultimately to improve overall health status. BIDMC's will maintain this core strategy moving forward.

This assessment was meant to assess need, identify priorities, and ensure that BIDMC's community health/community benefits program is carefully aligned with and responsive to the needs of those throughout its service area, particularly the communities and population segments most at-risk. All the activities discussed in BIDMC's Community Health Improvement Plan are aligned with key finding identified during the assessment.

The efforts that are part of BIDMC's Community Health Improvement Plan will be implemented and coordinated by Nancy Kasen, Director of Community Benefits at BIDMC, who will work closely with BIDMC's CBC and the CCA Board of Management to ensure that BIDMC's efforts are well conceived, targeted, and have the maximum possible impact on its target population. Ms. Kasen meets regularly with CCA's Board of Managers, Boston Public Health Commission Staff, and other key community health stakeholders. BIDMC's CBC will also continue to meet on a quarterly basis to assess the progress of the CHIP and explore how the CHIP can be augmented or redirected as BIDMC's initiatives evolve.

BIDMC's Board of Directors along with its clinical and administrative staff is committed to improving the health and well-being of residents throughout its service area and beyond. World-class clinical expertise, education and research along with an underlying commitment to health equity are the primary tenants of its mission. BIDMC's Community Benefit Department, under the direct oversight of BIDMC's Board of Directors, is dedicated to collaborating with community partners and residents and will continue to work in collaboration with the area's key community health stakeholders and residents to meet its community benefits obligations.

Beth Israel Deaconess Medical Center Community Health Needs Assessment Databook

Table of Contents

Section A: Secondary Data Tables

Section B: Survey Results and Survey

Section C: Key Informant Interviews

Section D: Focus Group Report

Section E: Maps

Section F: Neighborhood Fact Sheets

Section G: Detailed Description of Approach and Methodology

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