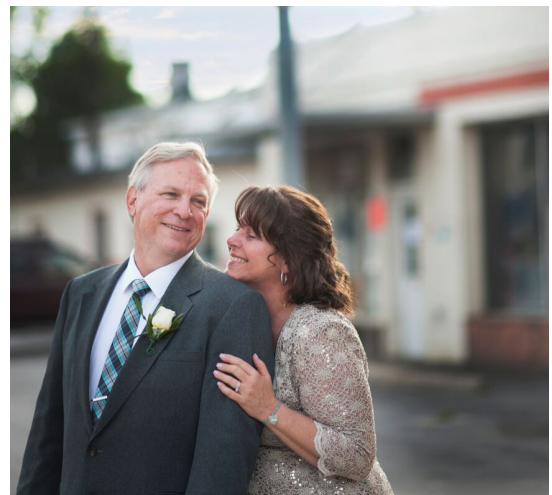


COMMUNITY HEALTH NEEDS ASSESSMENT



Beth Israel Lahey Health 
Beth Israel Deaconess Hospital
Milton



2019

Executive Summary

Background, Purpose, and Approach

Beth Israel Deaconess Hospital Milton (BID-Milton) is a 100-bed acute care hospital with a complete complement of inpatient and outpatient health services, 24-hour emergency services, and more than 450 physicians on staff. BID-Milton's mission is to improve the health of the community by providing exceptional, personalized health care with dignity, compassion and respect. In 2019, as part of a merger of two health systems in the greater Boston region, BID-Milton became part of Beth Israel Lahey Health (BILH) - a system of academic medical centers, teaching hospitals, community hospitals, and specialty hospitals that employ more than 4,000 physicians and 35,000 staff members combined.

In addition to its commitment to clinical excellence, BID-Milton is committed to being an active partner and collaborator with the communities it serves. This Community Health Needs Assessment (CHNA) and the associated Implementation Strategy (IS) were completed in close collaboration with BID-Milton's Community Benefits staff, the Hospital's leadership, and the community at-large. All together, the assessment involved hundreds of people from across the service area, including health and social service providers, community advocates, Commonwealth and local public officials, faith leaders, and community residents. The process that was applied to conduct the CHNA and develop the IS exemplifies the spirit of collaboration and community engagement that is such a vital part of BID-Milton's mission.

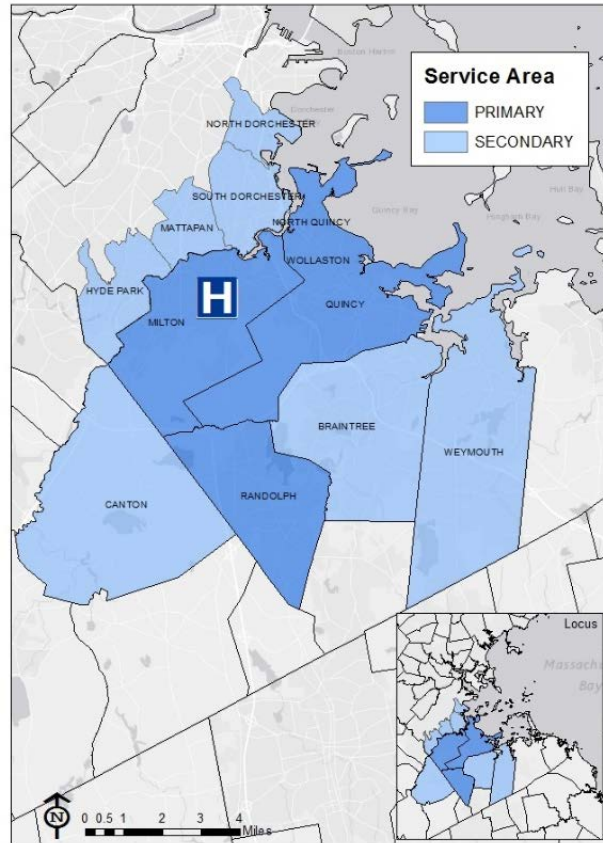
This community health needs assessment report is an integral part of BID-Milton's population health and community engagement efforts. It supplies vital information that is applied to make sure that the services and programs that BID-Milton provides are appropriately focused, delivered in ways that are responsive to those in its service area, and address unmet community needs. This assessment and the associated prioritization and planning processes also provide a critical opportunity for BID-Milton to engage the community and to strengthen the community partnerships that are essential to BID-Milton's success now and in the future. Finally, this report allows BID-Milton to meet its Commonwealth and Federal Community Benefits requirements per the Massachusetts Attorney General's Office and the Federal Internal Revenue Service (IRS) as part of the Affordable Care Act.

Community Benefits Service Area & Community Benefits Priorities

BID-Milton's primary service area includes the communities of Milton, Quincy, and Randolph. The Hospital's secondary service area includes the surrounding communities of Braintree, Canton, and Weymouth as well as a number of urban neighborhoods in the southern portion of the City of Boston (i.e., Hyde Park, Mattapan, North Dorchester, and South Dorchester). BID-Milton defines its community benefits service area (CBSA) as the cities and towns that make up its primary service area. This assessment focused on identifying the leading community health needs and priority populations within its Community Benefits Service Area (CBSA).

BID-Milton’s community benefits activities support all of the people who live in its CBSA, across all geographic, demographic, and socio-economic segments. However, in recognition of the considerable health disparities that exist in some segments of the population in the CBSA, BID-Milton focuses the bulk of its community benefits resources on improving the health status of low income, underserved, vulnerable populations living in the more underserved communities of its CBSA. By prioritizing these population segments, BID-Milton is able to maximize the impact of its community benefits resources. BID-Milton currently supports and collaborates on many educational, outreach, screening, care management, care coordination, and other community-strengthening initiatives aimed at improving community health for those who live in its CBSA. In the course of these efforts, BID-Milton collaborates with many of the area’s leading healthcare, public health, and social service organizations.

BID-Milton Community Benefits Service Area and Primary and Secondary Service Area



Approach and Methods

The assessment began with the creation of a Steering Committee comprised of representatives from BID-Milton, Beth Israel Deaconess Medical Center (BIDMC) in Boston, and the other BID affiliate hospitals (BID-Needham and BID-Plymouth). These organizations worked together to ensure that a collaborative, transparent, and robust process was applied across the BID hospital system. In October 2018, the Steering Committee hired John Snow, Inc. (JSI), a public health research and consulting firm based in Boston, to support their efforts and to work with them to complete the CHNA and IS. Next, BID-Milton engaged its long-time, standing Community Benefits Advisory Committee (CBAC), made up of hospital leadership and clinical staff, local service providers, and key community stakeholders. This group met four times over the course of the assessment; they provided input on the assessment approach, vetted preliminary findings, and helped to prioritize the community health issues and the priority populations, most vulnerable. The Hospital also formed a Community Benefits Senior Leadership Team (CBSLT) made up of key hospital leadership and representatives from the Board of Directors. The Steering Committee, the CBAC, and the CBSLT reviewed this CHNA report and the subsequent Implementation Strategy before it was submitted to the Board of Directors for approval.

Substantial efforts were taken to ensure that the assessment activities implemented included efforts to engage community residents, local public health officials, and other community stakeholders. The assessment was completed in three phases. Below is a summary of the activities that were associated

with each Phase of the assessment and planning process. A detailed description of BID-Milton's approach to community engagement is included in Appendix A.

Phase One involved preliminary assessment and engagement activities, including:

- Collection and analysis of quantitative data to characterize community characteristics and disease burden
- Key informant interviews with hospital leadership, local service providers, and community stakeholders
- An evaluation of BID-Milton's current portfolio of Community Benefits activities

Phase Two involved targeted engagement activities, including:

- Additional Interviews with hospital leadership, clinical providers, and community stakeholders
- Dissemination and analysis of a Community Health Survey to capture residents' perceptions of barriers to good health, leading health issues, vulnerable populations, accessibility of health services, and opportunities for the hospital to improve the services they offer to the community
- Focus groups with identified underserved populations

Phase III involved a series of strategic planning and reporting activities, including:

- Meetings with the CBAC and BID-Milton's Community Benefits Community Benefits Leadership Team (including members of the Board of Directors) to present CHNA findings, prioritize community health issues, identify vulnerable populations, and discuss potential responses
- Creation of a Resource Inventory to catalogue local organizations, service providers, and community assets that have the potential to address identified needs
- Literature review of evidence-based strategies to respond to identified health priorities
- Development of final a Community Health Needs Assessment report and Implementation Strategy

Key Health-Related Findings

The following are brief summaries of some of the assessment's key findings. A full review of the quantitative and qualitative information that was collected for this assessment and that led the CBAC and the CBSLT to identify the issues that were prioritized by the assessment, is included in the full body of the report below.

- **Social Determinants of Health Continue to Have a Substantial Impact on Many Segments of the Population.** One of the dominant themes from the assessment's findings was the impact that the underlying social determinants of health are having on those living in the CBSA. The segments of the population most challenged by these issues are older adults, low income individuals/families, racial/ethnic minorities, non-English speakers, and those with disabilities or with chronic / complex conditions. More specifically, these segments struggle with financial insecurity, safe/affordable housing, transportation, access to healthy/affordable food, lack of social support, social isolation, and language access /cultural humility. These issues impact many people's and families' ability to

access or pay for the services, housing, food, or other essential items they need and/or to live a happy, fulfilling, productive life.

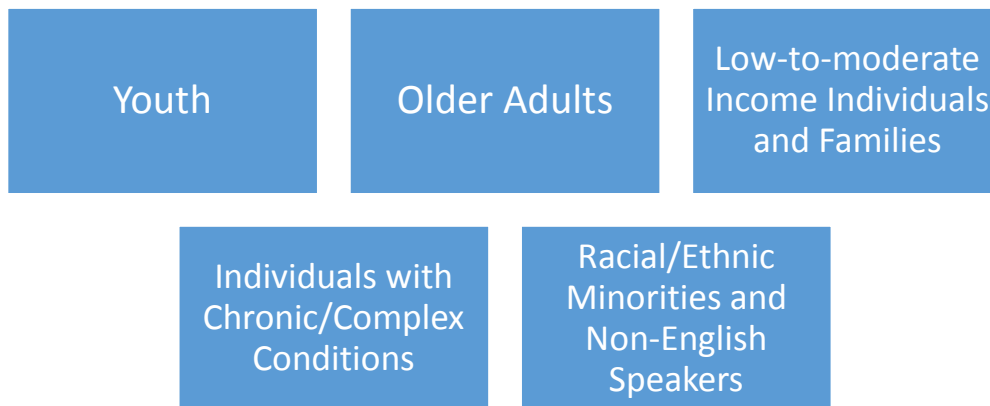
- **The Burden of Substance Use and Mental Health Issues.** Mental health and substance use issues continue to be one of the region's most prevalent and challenging issues and are having a profound impact on individuals, families, and communities throughout the CBSA. These issues are also a major burden on the health and social service system. Health and social service providers, public health agencies, first-responders, and community-based organizations are confronted on a daily basis with people struggling with acute or chronic conditions and struggle to provide or link them to the care they need. With respect to mental health issues, depression/anxiety, stress, social isolation, and the impacts of trauma are the leading issues. With respect to substance use, the opioid crisis continues to have a tremendous impact on the region, along with alcohol use, marijuana use, and vaping in youth. The fact that physical, mental health, and substance issues are so intertwined compounds the impact of these issues. Of particular concern are the increasing rates of opioid use and the impacts of trauma.
- **Limited Access to Behavioral Health (mental health and substance use) Services.** Despite the prevalence of mental health and substance use issues and the impact that these issues are having on individuals, families, and communities, the behavioral health service system in the region is extremely limited. There are major shortages of specialized providers - such as psychiatrists, therapists, addiction specialists, and case managers - who are capable of providing the full breadth of preventive, screening, assessment, treatment, and recovery support services that the community needs. This is particularly true for those who have limited English skills or different cultural perspectives that require more specialized care, such as recent immigrants, racial/ethnic minorities, and LGBTQ individuals. Uninsured individuals, those covered by Medicaid, and those in low to moderate income brackets also struggle to access or pay for the services they need or to find providers who are able to take their coverage or insurance.
- **High Rates of Chronic and Acute Physical Health Conditions.** Another major finding from the assessment is the high rates of chronic and complex conditions that exist for many of the leading physical health conditions (e.g., heart disease, hypertension, cancer, and asthma) in the CBSA. In many communities, the rates of illness and death are statistically higher than the rates for the Commonwealth, indicating a particularly significant problem. Even in the communities where the rates are lower than the Commonwealth average, chronic physical health conditions, such as heart disease, cancer, stroke, diabetes, and respiratory disease, are still by far the leading causes of death.
- **High Rates of the Leading Health Risk Factors (e.g., Lack of Nutritional Food and Physical Activity, Alcohol/Illicit Drug Use, and Tobacco Use).** Based on information gathered from focus groups, interviews, community meetings, the community health survey, and quantitative sources, the assessment found that there were substantial concerns related to the leading health risk factors, such as healthy eating, physical activity, obesity, tobacco use/vaping, alcohol use, and stress. Many of those who were involved in the assessment believed that there was a need for more health education and a greater emphasis on health promotion and illness prevention.

- Challenges Navigating the System and Coordinating Needed Services.** Another major theme from the interviews, focus groups, and community meetings conducted for the assessment was the challenges that many people in the CBSA face navigating the health and social service system. There was a general sense that there was a broad range of health and social services available in the region but that many did not know where to go for services or struggled to access the services even if they knew where to go. Once again, the population segment who struggle most to navigate the system are older adults, low income individuals/families, racial/ethnic minorities, non-English speakers, and those with chronic / complex conditions. Many people said that if there was a resource inventory that would help residents access services, along with counselors or case managers who could further assist people to obtain and access the services they needed.

Priority Populations

BID-Milton is committed to improving the health status and well-being of all residents living throughout its service area. Certainly all geographic, demographic, and socioeconomic segments of the population face challenges of some kind that can hinder their ability to access care or maintain good health. With this in mind, BID-Milton’s Implementation Strategy includes activities that will support residents throughout its service area, across all segments of the population. However, based on the assessment’s quantitative and qualitative findings, there was broad agreement that BID-Milton’s IS should prioritize certain demographic and socio-economic segments of the population that have complex needs or face especially significant barriers to care, service gaps, or adverse social determinants of health that put them at greater risk. The assessment identified 1) Youth, 2) Older adults, 3) Low to moderate income individuals and families, 4) Individuals with chronic and complex conditions, and 5) Racial/Ethnic Minorities and Non-English Speakers as priority populations to be included in the Implementation Strategy

BID-Milton Priority Populations 2020-2022



Community Health Priorities

BID-Milton’s CHNA was conducted as a population-based assessment. The goal was to engage the community and compile quantitative and qualitative information to identify the leading health-related issues affecting individuals in the CBSA, including social determinants of health, service gaps, and

barriers to care. The priorities that have been identified have been framed broadly to ensure that the full breadth of unmet needs and community health issues are recognized. These priorities were identified through an integrated and thorough review of all of the quantitative and qualitative information captured for the assessment. The priorities have been identified to maximize impact, reduce disparities, and promote collaboration and cross-sector partnership.

During the later stages of the CHNA process, significant efforts were made to vet the priority issues with leadership and the community-at large, through meetings with the CBAC, and the CBSLT.. BID-Milton is confident that these priorities reflect the sentiments of those who were involved in the assessment and community engagement processes. Based on the findings from the breadth of BID-Milton’s CHNA activities, the CBAC and the CBSLT voted to prioritize 1) Mental health and substance use, 2) Chronic / complex conditions, and their risk factors, and 3) Social Determinants of Health and Access to Care.

BID-Milton CHNA Priority Areas 2020-2022



The community health priorities that have been prioritized by the CHNA in the Figure above are described in detail in the next section of this report, along with a listing of the goals related to these priority areas that BID-Milton’s Community Benefits staff, the CBAC, and CBSLT believe will drive achievement. The objectives and strategic initiatives, by priority area, that will be part of BID-Milton’s Implementation Strategy are included in BID-Milton’s Summary Implementation Strategy, included in Appendix D.

Community Health Needs not Prioritized by BID-Milton’s CBAC

It is important to note that there are community health needs that were identified by BID-Milton’s assessment that, due to the limited burden that these issues present and/or the feasibility of having an impact in the short- or long-term on these issues, were not prioritized for investment. Namely, workforce development and education were identified as community needs but these issues were

deemed by the CBAC and the CBSLT to be outside of BID-Milton’s primary sphere of influence and have opted to allow others in its CBSA and the Commonwealth to focus on these issues. This is not to say that BID-Milton will not support efforts in these areas. BID-Milton remains open and willing to work with hospitals across Beth Israel Lahey Health’s network and other public and private partners to address these issues, particularly as part of a broad, strong collaborative.

Summary Implementation Strategy

The following outlines BID-Milton’s goals for addressing the priority populations and community health priorities identified above.

Priority Area 1: Mental Health and Substance Use
Goal 1: Address Stigma Associated with Mental Health and Substance Use Issues
Goal 2: Enhance Access to Mental Health and Substance Use Screening, Assessment, and Treatment Services
Priority Area 2: Chronic/Complex Conditions and their Risk Factors
Goal 1: Enhance Access to Health Education, Screening, Referral, and Chronic Disease Management Services in Clinical and Non-Clinical Settings
Goal 2: Reduce the Prevalence of Tobacco/Vaping Use
Priority Area 3: Social Determinants of Health and Access to Care
Goal 1: Enhance Access to Care and Reduce the Impact of Social Determinants
Goal 2: Promote Independence and “Aging in Place”

Acknowledgements

This report is the culmination of nearly a year of work, involving hundreds of community residents, service providers, community advocates, Commonwealth and local public officials, and staff throughout Beth Israel Deaconess Hospital – Milton (BID-Milton) and many of its community partners. While it was not possible for the assessment to involve all residents and community stakeholders, there were substantial efforts made to ensure that all segments of the community had the opportunity to participate. BID-Milton’s Community Benefits staff, the Community Benefits Advisory Committee (CBAC), and the BID-Milton Community Benefits Senior Leadership Team (CBSLT) would like to extend its sincere appreciation to everyone who invested their time, effort, and expertise to ensure the development of BID-Milton’s Community Health Needs Assessment (CHNA) and its associated Community Health Implementation Strategy (IS).

This assessment was overseen by a Steering Committee, comprised of Community Benefits staff at BID-Milton, Beth Israel Deaconess Medical Center, and other BID-affiliate hospitals, as well as the CBAC, and the CBSLT. The CBAC is a long-time, standing committee which assisted in guiding and overseeing all of BID-Milton’s Community Benefits efforts moving forward, with respect to the Hospital’s periodic community health assessment, ongoing program implementation activities, and its monitoring, evaluation, and performance improvement efforts. The CBAC is comprised of Community Benefits staff, administrative and clinical staff, local social service providers, community health advocates, and other community leaders. BID-Milton would like to extend special thanks to the CBAC membership for their commitment to the Hospital, the community, and to a comprehensive assessment and planning process.

The Community Benefits Senior Leadership Team (CBSLT) was newly established in October 2018 to ensure that BID-Milton’s leadership was full apprised of the Hospital’s community benefits activities and was given the opportunity to provide their feedback regarding all aspects of the Hospital’s program. BID-Milton’s CBSLT is comprised of Community Benefits Department staff, selected senior administrators at the Hospital, and representatives from both the Board of Trustees. The Steering Committee, CBAC, and CBSLT met periodically to inform the approach, oversee progress, and provide critical feedback on preliminary and final results. BID-Milton would like to thank all individuals that served, and will continue to serve, on these vital committees.

BID-Milton was supported in this work by John Snow, Inc. (JSI), a public health consulting and research organization dedicated to improving the health of individuals and communities in the United States and around the world. BID-Milton appreciates the contributions that JSI has made in collecting and analyzing data, engaging the community, and conducting research throughout CHNA and IS development process. Finally, BID-Milton would like to express immense gratitude to community residents who contributed to this process. Since the beginning of the assessment in September of 2018, hundreds of individuals shared their needs, experiences, and expertise via interviews, focus groups, surveys, and community listening sessions and these proved to be tremendous contributions towards the creation of the CHNA and IS.

Beth Israel Deaconess Hospitals Community Benefits Steering Committee 2019

Andrea Holleran, Vice President of Strategic Planning and External Affairs, BID-Plymouth
Nancy Kasen, Community Benefits Director, Community Care Alliance Director, Beth Israel Lahey Health
Alyssa Kence, Community Benefits Director, BID-Needham
Laureane Marquez, Senior Associate, Public Relations, BID-Milton
Kelly McCarthy, Program Manager, Beth Israel Deaconess Medical Center
Robert McCrystal, Director of Communications, BID-Milton
Deborah Schopperle, Manager, Marketing and Communications, BID-Plymouth
Ryan Stanton, Marketing and Communications Representative, BID-Plymouth

Beth Israel Deaconess Hospital–Milton Community Benefits Advisory Committee 2019

Lisa Braude, Executive Director of Strategy, Aspire Health Alliance, Chair, CHNA 20
Timothy Carey, Director of Program Development, South Shore Elder Services
Daurice Cox, CEO, Bay State Community Services
Richard Doane, Executive Director, Interfaith Social Services
Melissa Drohan, Social Worker, Beth Israel Deaconess Hospital-Milton
Kory Eng, Chief Operating Officer, Quincy Community Action Programs
Ruth Jones, BSN, MPH, Commissioner of Public Health, City of Quincy
Caroline Kinsella, MSN, RN, Health Director/Public Health Nurse, Town of Milton
Vicki McCarthy, BID-Milton Patient Family Advisory Council, Youth Councilor Emeritus, Town of Milton
Jean McGinty, BSN, RN, Public Health Nurse, Town of Randolph
Rev. Baffour Nkrumah-Appiah, Pastor, First Baptist Church, Randolph
Cynthia Sierra, Executive Director, Manet Community Health Centers
Marian Girouard Spino, Chief System Integration and Quality Officer, Aspire Health Alliance
Mary Ann Sullivan, Director, Milton Council on Aging
Katelyn Szafir, Director of Medical Wellness, South Shore YMCA, Quincy
Sara Tan, Director, Enhance Asian Community on Health
Christine Tangishaka, Family and Community Engagement Coordinator, Randolph Public Schools

Beth Israel Deaconess Hospital–Milton Community Benefits Senior Leadership Team 2019

Alexandra Alexopoulos, BID-Milton Board of Trustees
Michael Conklin, Chief Financial Officer, BID-Milton
Jon Cronin, MD, Primary Care/Cardiology, South Shore Internal Medicine, BID-Milton Board of Trustees
Lynn Cronin, Chief Nursing Officer, BID-Milton
Maura Doherty, BID-Milton Board of Trustees
Richard Fernandez, President, BID-Milton
David Hyman, Chief Philanthropy and Communications Officer, BID-Milton
Marlene Lemieux, Director of Case Management and Social Work, BID-Milton
Laureane Marquez, Senior Associate, Public Relations
Robert McCrystal, Director of Marketing and Communications
Daniel Nadworny, Director of Emergency Services and Critical Care, BID-Milton
Heidi O'Connor, MD, Pulmonologist, BID-Milton Board of Trustees

Acronyms

ACA	Affordable Care Act
BID-Milton	Beth Israel Deaconess Hospital- Milton
CBAC	Community Benefits Advisory Committee
CBSLT	Community Benefits Senior Leadership Team
CBSA	Community benefits service area
CHIA	Center for Health Information and Analysis
CHNA	Community Health Needs Assessment
HMOs	Health maintenance organizations
IS	Implementation Strategy
JSI	John Snow, Inc.
LEP	Limited English proficiency
MassCHIP	Massachusetts Community Health Information Profile
MDPH	Massachusetts Department of Public Health
MHPC	Massachusetts Health Policy Commission
PHIT	Population Health Information Tool

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Introduction and Purpose

Introduction

Beth Israel Deaconess Hospital Milton (BID-Milton) is a 100-bed acute care hospital with a complete complement of inpatient and outpatient health services, 24-hour emergency services, and more than 450 physicians on staff. BID-Milton's mission is to improve the health of the community by providing exceptional, personalized health care with dignity, compassion and respect. In 2019, as part of a merger of two health systems in the greater Boston region, BID-Milton became part of Beth Israel Lahey Health (BILH) - a system of academic medical centers, teaching hospitals, community hospitals, and specialty hospitals that employ more than 4,000 physicians and 35,000 staff members combined.

In addition to its commitment to clinical excellence, BID-Milton is committed to being an active partner and collaborator with the communities it serves. This Community Health Needs Assessment (CHNA) and the associated Implementation Strategy (IS) were completed in close collaboration with BID-Milton's staff, numerous, regional health and social service partners, and the community at-large. The assessment efforts that took place over the past year engaged hundreds of community residents, as well as a wide range of other community stakeholders, including service providers, community advocates, Commonwealth and local public officials, faith leaders, and representatives from community-based organizations. The process that was applied to conduct the CHNA and develop the IS exemplifies the spirit of collaboration and community engagement that is such a vital part of BID-Milton's mission.

Purpose

This Community Health Needs Assessment report is an integral part of BID-Milton's population health and community engagement efforts. It supplies vital information that is applied to make sure that the services and programs that BID-Milton provides are appropriately focused, delivered in ways that are responsive to those in its service area, and address unmet community needs. This assessment and the associated prioritization and strategic planning processes also provide a critical opportunity for BID-Milton to engage the community and to strengthen the community partnerships that are essential to BID-Milton's success now and in the future. Finally, this report allows BID-Milton to meet its Commonwealth and Federal Community Benefits requirements per the Massachusetts Attorney General's Office and the Federal Internal Revenue Service (IRS) as part of the Affordable Care Act. The primary goals for the CHNA and this report are to:

- Assess community health need, defined broadly to include health status, social determinants, environmental factors, and service system strengths and weaknesses;
- Engage the community, including local health departments, service providers across sectors and community residents, as well as BID-Milton leadership and staff; and
- Identify the leading health issues and the population segments most at-risk based on a review of the quantitative and qualitative information gathered by the assessment

This CHNA is also a vital source of information and guidance to:

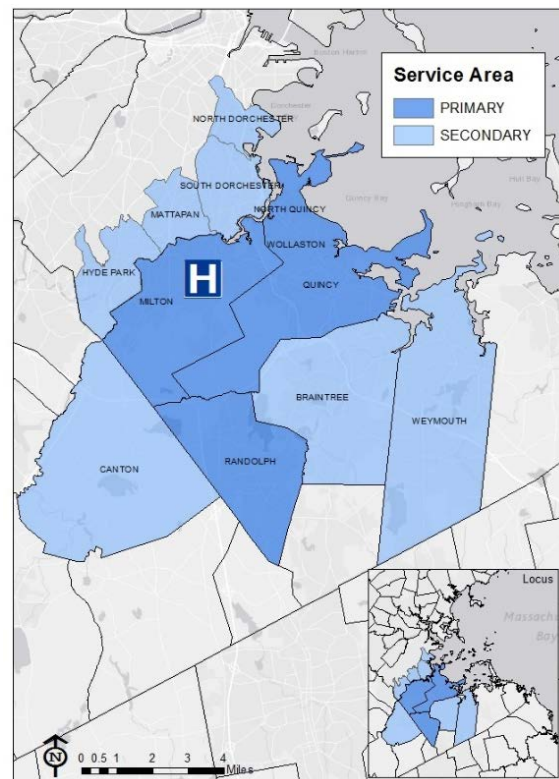
- Clarify issues related to community characteristics, barriers to care, existing service gaps, unmet community need and other health-related factors;
- Prioritize and promote community health investment;
- Inform and guide a comprehensive, collaborative community health improvement planning process; and
- Facilitate discussion within and across and sectors regarding community need, community health improvement, and health equity.

Community Benefits Service Area & Community Benefits Priorities

BID-Milton’s primary service area includes the communities of Milton, Quincy, and Randolph. (See Figure 1). The Hospital’s secondary service area includes the surrounding communities of Braintree, Canton, and Weymouth as well as a number of urban neighborhoods in the southern portion of the City of Boston (i.e., Hyde Park, Mattapan, North Dorchester, and South Dorchester). This assessment focused on identifying the leading community health needs and priority populations within BID-Milton’s primary service area, which is how the Hospital defines its Community Benefits Service Area (CBSA).

BID-Milton’s community benefits activities support all of the people who live in its CBSA, across all geographic, demographic, and socio-economic segments. However, in recognition of the considerable health disparities that exist in some segments of the CBSA, BID-Milton focuses the bulk of its community benefits resources on improving the health status of low income and underserved populations living in the more underserved communities of its CBSA. By prioritizing these population segments, BID-Milton is able to maximize the impact of its community benefits resources. BID-Milton currently supports and collaborates on many educational, outreach, and community-strengthening initiatives aimed at reaching those who live in its CBSA. In the course of these efforts, BID-Milton collaborates with many of the area’s leading healthcare, public health, and social service organizations.

Figure 1: BID–Milton Community Benefits Primary and Secondary Service Areas



Approach and Methods

Approach

The assessment began with the creation of a Steering Committee comprised of representatives from BID-Milton, Beth Israel Deaconess Medical Center (BIDMC) in Boston, and the other BID affiliate hospitals (BID-Needham and BID-Plymouth), which worked together to ensure a collaborative, transparent, and robust process, across the BID hospital network. In October 2018, the Steering Committee hired John Snow, Inc. (JSI), a public health research and consulting firm based in Boston, to support their efforts and to work with them to complete the CHNA and IS. This Steering Committee provided vital oversight of the CHNA approach and methods. This Committee met monthly, in-person and via conference call, to review project activities, vet preliminary findings, address challenges, and to ensure alignment in the CHNA approach and methods across the BID system.

BID-Milton engaged its long-standing Community Benefits Advisory Committee (CBAC), made up of hospital leadership and clinical staff, local service providers, and key community stakeholders. This group met three times over the course of the assessment; they provided input on the assessment approach, vetted preliminary findings, and helped to prioritize community health issues and most vulnerable priority populations. The hospital also formed a Community Benefits Senior Leadership Team (CSBLT) made up of key hospital leadership and representatives from the Board of Directors. The Steering Committee, the CBAC, and the CSBLT reviewed this CHNA report and the subsequent Implementation Strategy before it was submitted to the Board of Directors for approval.

Community engagement is integral to BID-Milton's mission towards providing exceptional, personalized care with dignity, compassion, and respect. Substantial efforts were taken to ensure that the assessment activities implemented included efforts to engage community residents, local public health officials, and other community stakeholders. These engagement efforts spanned all phases of the assessment from assessment planning, to data collection and assessment, to prioritization and planning, to reporting, and finally to ongoing monitoring and evaluation.

BID-Milton recognizes the importance of collaborating with residents, advocates, service providers, Commonwealth and local public officials, representatives from community-based organizations, and other stakeholders when conducting assessment and planning projects of this kind.

The assessment was completed in three phases. Below is a summary of the activities that were associated with each Phase of the assessment and planning process. A detailed description of BID-Milton's approach to community engagement is included in Appendix A.

Phase One involved preliminary assessment and engagement activities, including:

- Collection and analysis of quantitative data to characterize community characteristics and disease burden
- Key informant interviews with hospital leadership, local service providers, and community stakeholders

- An evaluation of BID-Milton’s current portfolio of Community Benefits activities

Phase Two involved targeted engagement activities, including:

- Additional interviews with hospital leadership, clinical providers, and community stakeholders
- Dissemination and analysis of a Community Health Survey to capture residents’ perceptions of barriers to good health, leading health issues, vulnerable populations, accessibility of health services, and opportunities for the hospital to improve the services they offer to the community
- Focus groups with identified underserved populations

Phase III involved a series of strategic planning and reporting activities, including:

- Meetings with the CBAC and CBSLT (including members of the Board of Trustees) to present CHNA findings, prioritize community health issues, identify vulnerable populations, and discuss potential responses
- Creation of a Resource Inventory to catalogue local organizations, service providers, and community assets that have the potential to address identified needs
- Literature review of evidence-based strategies to respond to identified health priorities
- Development of final a Community Health Needs Assessment report and Implementation Strategy

Methods

Quantitative Data Collection and Analysis

Quantitative data from a broad range of sources was collected and analyzed to characterize communities in BID-Milton’s CBSA, measure health status, and inform a comprehensive understanding of the health-related issues. Sources included:

- U.S. Census Bureau, American Community Survey 5-Year Estimates (2013-2017)
- Massachusetts Department of Elementary and Secondary Education: School and District Profiles (2017, and 2018-2019)
- FBI Uniform Crime Reports (2017)
- Massachusetts Department of Public Health, Registry of Vital Records and Statistics (2015)
- Massachusetts Department of Public Health, Bureau of Substance Abuse Services (2017)
- Massachusetts Department of Public Health, Annual Reports on Births (2016)
- Massachusetts Bureau of Infectious Disease and Laboratory Sciences (2017)
- Massachusetts Center for Health Information Analysis (CHIA) Hospital Profiles (FY 2013-2017)
- Massachusetts Healthy Aging Collaborative, Community Profiles (2018)

To augment the quantitative data that was compiled from MDPH, JSI worked with the Massachusetts Health Data Consortium (MHDC) and the Massachusetts Center for Health Information and Analysis (CHIA) to obtain 2018 inpatient hospital discharge data for all of the municipalities in BID-Milton’s service area. CHIA aggregates detailed hospital inpatient data from all hospitals in Massachusetts and makes it available to hospitals and other researchers to understand morbidity, mortality, and health services utilization trends. These data are made available on an annual basis and allow for both hospital specific analyses based on where the patient was hospitalized as well as patient origin analyses based on

the patient's address of residents. Related to the CHNA activities, these data were used to identify the leading causes of illness for adults (18+) by municipality based on a review of selected diagnostic categories.

Whenever possible, confidence intervals were analyzed to test for statistically significant differences between municipal and Commonwealth data points. A comprehensive Data Book is included in Appendix B. In this Data Book, data points are color-coded to visualize which municipal-level data points were significantly higher or lower compared to the Commonwealth overall. Data from the Massachusetts Department of Elementary and Secondary Education, the Bureau of Substance Abuse Services, the Annual Report on Births, and the Bureau of Infectious Disease and Laboratory Sciences did not include confidence intervals and could not be tested for statistical significance.

Quantitative Data Limitations

Relative to most states, Massachusetts does an exemplary job at making comprehensive data available at the Commonwealth, county, and municipal levels through various reports and mechanisms provided by the Massachusetts Department of Public Health (MDPH). Historically, these data have been made available through the Massachusetts Community Health Information Profile (MassCHIP) data system, an automated and interactive resource provided by MDPH; MassCHIP is no longer updated. To replace this system, MDPH is creating the Population Health Information Tool (PHIT), which will include municipal level data stratified by demographic and socioeconomic variables (e.g. gender, age, race/ethnicity, poverty level). At the time this report was produced, community profiles were not available via the PHIT. The most significant limitation this caused was the availability of timely data related to morbidity, mortality, and service utilization. The data sets used in this report are the most up-to-date provided by MDPH. This data was still valuable and allowed for identification of health needs relative to the Commonwealth and specific communities, however, these data sets may not reflect recent trends in health statistics.

Additionally, quantitative data was not stratified by age, race/ethnicity, income, or other characteristics, which limited the ability to identify health disparities in an objective way. Qualitative activities allowed for exploration of these issues, but the lack of objective quantitative data constrained this effort.

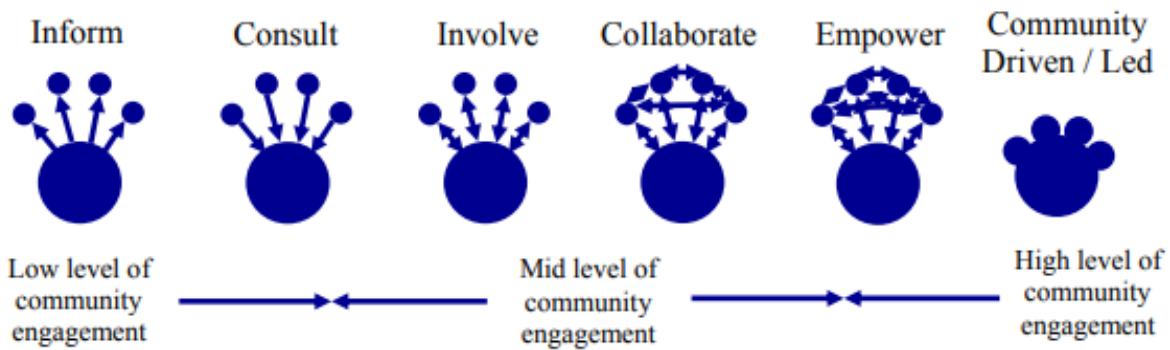
Qualitative Data Collection and Analysis

BID-Milton recognizes that authentic community engagement is critical to assessing community need, identifying health priorities and priority populations, and crafting a robust Implementation Strategy. BID-Milton was committed to engaging the community throughout this process.

In collaboration with its assessment and community engagement partners, BID-Milton applied MDPH's Community Engagement Standards for Community Health Planning as a guide.¹ As a result, BID-Milton employed a variety of strategies to ensure that community members were informed, consulted, involved, and empowered throughout the assessment process.

¹ <https://www.mass.gov/files/documents/2017/01/vr/guidelines-community-engagement.pdf>

Figure 2: Community Engagement Continuum



Source: Adapted from International Association for Public Participation, 2014

Informed: BID-Milton informed the community of assessment activities (e.g. Community Health Survey, focus groups) and provided summary quantitative and qualitative data findings in public meetings.

Consulted: BID-Milton consulted the community by posting its current CHNA for public comment, holding focus groups with service providers; hospital leadership; community stakeholders; and community residents, including underserved populations, completing key informant interviews, and disseminating a Community Health Survey.

Involved: BID-Milton formed advisory bodies, including the CBAC and CBSLT, to provide input and feedback on the assessment approach and to vet preliminary findings. These bodies included hospital leadership, clinical staff, representatives from community organizations, social service providers, community advocates, and community residents.

Collaborated: The CBAC, which included many community residents and service providers, collaborated with one another and with staff and leadership at BID-Milton to prioritize health needs and vulnerable populations. This advisory body was also consulted in the drafting of the Implementation Strategy.

Below are descriptions of the approach to community engagement activities. Associated tools, lists of participants, and other materials are included in the Detailed Community Engagement Summary in Appendix A.

Key Informant Interviews (17 completed) – JSI conducted key informant interviews with community stakeholders. Interviewees included representatives from hospital leadership, municipal leadership, the business community, public health departments, social service providers, schools, faith-based communities, and community health coalitions. Key informant interviews were done to confirm and refine findings from secondary data, to provide community context, and to clarify needs and priorities of the community. JSI worked with BID-Milton to identify a representative group of interviewees. Interviews were 30-60 minutes long and were conducted by-phone using a structured interview guide created by JSI. Detailed notes were taken for each interview. For a list of interviewees and interview dates, sectors represented, and a key informant interview guide, please see Appendix A: Detailed Community Engagement Approach.

Focus Groups (4 completed) – JSI conducted facilitated focus groups with community coalitions, including representatives from local health departments and health/social service organizations (Community Health Network Area 20 (Blue Hills), demographic segments of the community (Enhance Asian Community on Health in Quincy), and representatives from the faith-based community (First Baptist Church in Randolph). BID-Milton also collaborated with the Milton Substance Abuse Prevention Coalition (Milton SAPC) in numerous focus groups of high school student athletes. The Milton SAPC facilitated a focus group of male and female team sports captains, mostly 11th and 12th grade students, as well as three classrooms. They incorporated BID-Milton’s focus group questions into their facilitation guide. Milton SAPC and then shared their notes and results of the focus group with BID-Milton to include in this CHNA.

These focus groups allowed for the collection of information to augment findings from secondary data and key informant interviews, and exploration of strategic and programmatic options to address identified health issues, service gaps, and/or barriers to care. Participants were recruited by BID-Milton, representatives from host organizations, and facilitators. Focus groups were approximately 60 minutes and were conducted in-person using a structured guide created by JSI. Detailed notes were taken at each session. Appendix A includes session dates, a description of participants, and a focus group guide.

Community Health Survey (234 responses) – The Community Health Survey allowed JSI to capture information directly from community residents. Respondents were asked for their opinion on leading social determinants of health, clinical health issues, vulnerable populations, access to care, and opportunities for the hospital to improve community health programming. JSI worked with BID-Milton and the CHNA Steering Committee to develop this survey. Surveys were available online, through the SurveyMonkey platform, in English. Hard-copies of the survey were made available in English, Haitian Creole, Vietnamese, and Chinese. BID-Milton worked with local community organizations, businesses, and stakeholders to distribute the survey to community residents, including those who are typically hard-to-reach (e.g. non-English speakers). Findings from online and hard-copy surveys were integrated for a full analysis. Appendix A contains a copy of the Community Health Survey and a list of survey distribution channels.

Community Benefits Evaluation

JSI reviewed the Fiscal Year 2017 Community Benefits Report to the Attorney General (AG Report) submitted by BID-Milton to evaluate the intensity of BID-Milton’s portfolio of Community Benefit activities. Activities reported in the AG Report, defined as “actions undertaken in accordance to the community benefits which contributed to achieving the strategic objective of supporting community health”, were abstracted from this report and individually scored by an evaluator at JSI. An activity was scored if it:

- Occurred at least once during FY 2017
- Was defined as a media, event/program, or a policy, systems, or environmental change
- Targeted the hospital’s CBSA’s

An activity was not scored if it was in the planning phase. JSI determined the intensity of each activity by coding three specific attributes, according to methodology reported in previous research:

- Behavioral intention: providing information; enhancing skills, services, or support; modifying access, barriers, and opportunities; modifying policies and broader conditions
- Duration: one-time, occurring more than once, or ongoing
- Reach: proportion-high, medium, low of the total priority population involved in or touched through the activity

Two evaluation team members rated each activity attribute on a scale of 0.1 (minimum) to 1 (maximum) and calculated a single intensity score using the protocol outlined in Table 1. A second trained evaluation team member coded a randomly selected number of activities to ensure inter-rater reliability. Two factors were considered in scoring both the duration and reach. A score of 0.1 – 0.5 was given dependent upon how many times and/or how long the activity was implemented during FY2017. If the duration or reach was unclear, the evaluators scored the attribute the lowest possible score (0.1). The formula used to calculate an intensity score for each activity was:

Table 1: Community Benefits Evaluation Scoring Protocol

Dimension	Rubric for Scoring Intensity (0=low;1=high)
Behavioral Intervention Strategy	High (1.0): Modifying policies, systems and access Med (0.55): Enhancing services and support Low (0.1): Providing information; enhancing skills
Duration (Yearly)	High (0.5): Ongoing, throughout the year Med (0.275): More than once per year Low (0.1): One time event
Duration (Sustainability)	High (0.5): Ongoing, institutional practice Med (0.275): Ongoing, demonstrated commitment (e.g., partnership, MOU, multi-organizational involvement) Low (0.1): Would end without community-benefits dollars
Reach (Community)	High (0.5): >20% or more of the total population* Med (0.275): 5-20% of the population Low (0.1): 0-<5% of the population
Reach (Priority Population)	High (0.5): >20% or more of the total priority population^ Med (0.275): 5-20% of the population Low (0.1): 0-<5% of the population

*total population was based on the number of people living in the hospital's primary service area or the community within which the activity was implemented

^priority populations were based on the strategy's targeted population and may have been a calculation based on the prevalence of a condition across the U.S. or Massachusetts

$$\Sigma \text{behavioral value} + \text{duration value} + \text{reach value.}$$

Scores could range from 0.3 (lowest intensity and least likely to impact long-term outcomes) to 3.0 (highest intensity and most likely to impact long-term outcomes). A total composite score for all activities was then summed across all activities. This information was used by BID-Milton and JSI in developing the Implementation Strategy. A full summary of findings can be found in Appendix E.

Resource Inventory

Federal and Commonwealth requirements indicate that a Resource Inventory should be created to inform the extent to which there are gaps in health-related services. To meet this obligation, JSI compiled a list of resources across the broad continuum of services, including clinical health care services, community health and social services, and public health resources. This was done primarily by

compiling information from existing resource inventories and partner lists from BID-Milton. Information was also compiled from membership lists of the existing community health coalitions and from CHNA interviews and focus groups. JSI reviewed the hospital’s prior annual report of community benefits activities to the Massachusetts Attorney General, which included a listing of partners, as well as publicly available lists of local resources. The goal of this process was to identify key partners who may or may not be already partnering with the hospital. The resource inventory can be found in Appendix C.

Prioritization and Reporting

During Phase II, JSI held a prioritization meeting with the Community Benefits Advisory Committee. During this meeting, JSI presented quantitative and qualitative data findings, including key themes from key informant interviews, focus groups, and the Community Health Survey. After the presentation of key findings, the CBAC broke into small groups to discuss findings and were asked to prioritize, within their small groups:

- Leading barriers to care (i.e. social determinants of health and issues related to access to care)
- Leading clinical health issues
- Vulnerable populations

JSI aggregated priorities chosen within small groups and presented full lists to the entire group. CBAC members were then asked to choose their top three priorities within each category. Final prioritization results from the CBAC meeting are included in Table 2.

Table 2: BID-Milton Community Benefits Advisory Committee Prioritization Results

Leading Barriers	Leading Health Issues	Target Populations
Cost & Financial Barriers (20%)	Mental health (anxiety, depression, etc.) (33%)	Working poor (24%)
Navigating health system (20%)	Substance use (vaping, opioids, alcohol, etc.) (24%)	Immigrants & non-English speakers (21%)
Transportation (20%)	Chronic/Complex conditions & risk factors (24%)	Isolated older adults (18%)
Stigma for those with mental health issues & low-income populations (17%)	Violence (domestic, interpersonal, elder abuse) (15%)	Youth & adolescents (15%)

JSI then presented full assessment results, including key findings from quantitative and qualitative data analysis and results of the CBAC prioritization meeting, to the CBSLT. Using the fully integrated analysis and prioritization from the CBAC, JSI drafted a set of priority and sub-priorities presented these to the CBSLT for review and approval.

Finally, using the priority areas and populations as a guide, JSI worked with BID-Milton, the CBAC, and the CBSLT to draft and finalize an Implementation Strategy. These documents were presented to the Board of Directors for approval in September of 2019. BID-Milton will be responsible for reporting on,

and if necessary, updating and resubmitting their Implementation Strategy to the Massachusetts Attorney General's Office on an annual basis until the next assessment cycle in 2022.

As required by Federal and Commonwealth guidelines, this CHNA will be posted on BID-Milton's website and is available in hardcopy by request, free of charge. Community members and service providers were encouraged to share their thoughts, concerns, or questions throughout the CHNA process; they are encouraged to continue to share their thoughts and ideas moving forward.

There was no written feedback on BID-Milton's previous CHNA or Implementation Strategy since its posting in 2016. There was also no feedback on the Massachusetts Attorney General's website, which publishes the hospital's community benefits reports and provides an opportunity for public comment. BID-Milton received one request to provide additional clarification on what Community Benefits and other monetary support the hospital contributes to the town of Milton. BID-Milton responded to these questions and no further information was requested. Any future feedback received will be taken into account when updates and changes are made to the Implementation Strategy or to inform future CHNA processes.

Questions regarding the CHNA or any requests for copies can be made by contacting:

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199 Reedsdale Road, Milton, MA 02186
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E-mail: [Laureane Marquez@bidmilton.org](mailto:Laureane_Marquez@bidmilton.org)

Key Findings: Demographics

To understand community needs and health status for BID-Milton’s service area, we begin with a description of the population’s geographic and demographic characteristics, as well as the underlying social, economic and environmental factors that affect health status and equity. This information is critical to recognizing inequities, identifying target populations and health related disparities, and targeting strategic responses.

The CHNA captured a range of quantitative and qualitative data related to age, race/ethnicity, income and poverty, employment, education, and other determinants of health. The following is a summary of key findings related to community characteristics and the social, economic and environmental determinants of health for BID-Milton’s CBSA. Conclusions were drawn from quantitative data and qualitative information collected through interviews, focus groups, and the Community Health Survey. Summary data is included below; more expansive data tables are included in the BID-Milton Data Book (Appendix B).

Age

Age is a fundamental factor to consider when assessing individual and community health status. Older individuals typically have more physical and mental health vulnerabilities and are more likely to rely on immediate community resources for support compared to young people.

- Randolph had a significantly higher median age (41.8) compared to the Commonwealth overall (39). The median age in Milton (38.7) and Quincy (39.3) were similar to the Commonwealth.
- The percentage of the population under 18 was significantly high in Milton (25.5) compared to the Commonwealth overall (20.4), and significantly low in Quincy (15.5).

Table 3: Age distribution

	Massachusetts	Milton	Quincy	Randolph
Median age (years)	39	38.7	39.3	41.8
Age under 18 (%)	20.4	25.5	15.5	19.3
Age over 65 (%)	15.5	15.7	15.3	16.2

Source: US Census Bureau, American Community Survey, 2013-2017
 Shading represents statistical significance compared to the Commonwealth. Figures highlighted in orange are statistically higher compared to the Commonwealth overall, while figures highlighted in blue are significantly lower.

Race, Ethnicity, and Foreign Born

An extensive body of research illustrates the health disparities and differences in health care access and utilization that exist for racial/ethnic minorities and foreign-born populations. According to the CDC, non-Hispanic Blacks have higher rates of premature death, infant mortality and preventable hospitalization than non-Hispanic Whites.² Hispanic/Latinos have the highest uninsured rates of any

² Centers for Disease Control and Prevention, “CDC Health Disparities and Inequalities Report (CHDIR),” Centers for Disease Control and Prevention Web Site, <https://www.cdc.gov/minorityhealth/chdireport.html>, September 10, 2015

racial or ethnic group in the United States.³ Asians are at a higher risk for developing diabetes than those of European ancestry, despite a lower average BMI.⁴ These disparities show the disproportionate and often avoidable inequities that exist within communities and reinforce the importance of understanding the demographic makeup of a community to identify populations more likely to experience adverse health outcomes.

Many key informants and focus group/forum participants reported that foreign-born residents experience extreme stress and anxiety related to immigration status, especially in the context of current political debate. Fear of detainment and deportation prevents individuals from seeking vital community services and health care—and from engaging in their communities. These barriers allow health inequities to persist, creating undue burden on health care institutions and impeding prevention efforts.

BID-Milton’s CBSA is diverse (Table 4).

- The percentage of residents that identified White alone was significantly low across all three municipalities compared to the Commonwealth overall (78.9).
 - The percentage of residents who identified as Black or African American was significantly high in Milton (15.0) and Randolph (39.2) compared to the Commonwealth overall (7.4).
 - The percentage of residents who identified as Asian was significantly high in Quincy (29.0) and Randolph (12.4) compared to the Commonwealth overall (6.3).
 - The percentage of the population that was foreign born was significantly high in Quincy (31.3) and Randolph (31.6) compared to the Commonwealth overall (16.2).

Table 4: Race/ethnicity and Foreign Born

	Massachusetts	Milton	Quincy	Randolph
White alone (%)	78.9	74.2	62.4	40.7
Black or African American alone (%)	7.4	15.0	5.3	39.2
Asian alone (%)	6.3	6.6	29.0	12.4
Hispanic or Latino of Any Race (%)	11.2	4.0	3.1	7.9
Foreign Born (%)	16.2	13.9	31.3	31.6

Source: US Census Bureau, American Community Survey, 2013-2017

Shading represents statistical significance compared to the Commonwealth. Figures highlighted in orange are statistically higher compared to the Commonwealth overall, while figures highlighted in blue are significantly lower.

Language

Language barriers pose significant challenges to providing effective and high-quality community services and health care. While many larger health care institutions, including BID-Milton, have medical interpreter services available at their facilities, research has found that the health care providers’ cultural competency is key to reducing racial and ethnic health disparities. While most residents of BID-Milton’s CBSA speak English, a significant percentage of residents speak languages other than English,

³ US Department of Health and Human Services: Office of Minority Health. Hispanic/Latino profile. <https://minorityhealth.hhs.gov/omh/browse.aspx?lvl=3&lvlid=64>

⁴ <https://asiandiabetesprevention.org/what-is-diabetes/why-are-asians-higher-risk> Why are Asians at a Higher Risk?

and have limited English proficiency. Focus group and key informant interviewees identified language and cultural issues as barriers to accessing health care services, especially for Asian residents who have limited English proficiency. In a focus group with Chinese-speakers, participants reported that while translation and interpretation was available during medical appointments, language issues often affected their ability to make and change appointments, follow-up on referrals, and comprehend care plans.

- The percentage of residents who spoke a language other than English in their home was significantly high in Quincy (37.2) and Randolph (37.7) compared to the Commonwealth overall (23.1). The percentage of those residents who speak English less than very well, or have limited English proficiency (LEP), was also significantly high in both communities.
- The percentage of the population that speaks Indo-European languages was significantly high in Randolph (18.5) compared to the Commonwealth overall (8.8). The percentage of those residents who have LEP was also significantly high in Randolph (7.3) compared to the Commonwealth (3.1).
- The percentage of the population who speak Asian and Pacific Islander languages was significantly high in Quincy (24.7) and Randolph (10.3) compared to the Commonwealth (2.0). The percentage of those residents who speak Asian and Pacific Islander languages who have LEP was also significantly high in Quincy (16.1) and Randolph (6.6) compared to the Commonwealth (2.0).

Key Findings: Social Determinants of Health

The social determinants of health (SDOH) are the conditions in which people live, work, learn and play.⁵ These conditions influence and define quality of life for many segments of the population in the CHNA service area.

It is important to note that there is limited data to characterize the social determinants of health at the community level. To augment the lack of quantitative data, the key informant interviews, focus groups, and Community Health Survey specifically solicited feedback on SDOH and barriers to care. A dominant theme from key informant interviews and community forums was the tremendous impact that the underlying social determinants, particularly housing, transportation, and income/employment have on residents in the service area.

⁵ Centers for Disease Control and Prevention, "Social Determinants of Health: Know What Affects Health," Centers for Disease Control and Prevention Web Site, <https://www.cdc.gov/socialdeterminants/>, January 29, 2018.

Socioeconomic Characteristics

Socioeconomic status (SES), as measured by income, employment status, occupation, education and the extent to which one lives in areas of economic disadvantage, is closely linked to morbidity, mortality and overall well-being. Lower than average life expectancy is highly correlated with low income status.⁶

Education

Higher education is associated with improved health outcomes and social development at the individual and community levels.⁷ Compared to individuals with more education, people with less education are more likely to experience health issues, such as obesity, substance use and injury.⁸ The health benefits of higher education typically include better access to resources, safer and more stable housing and better engagement with providers. Proximate factors associated with low education that affect health outcomes include the inability to navigate the health care system, educational disparities in personal health behaviors and exposure to chronic stress.⁹ It is important to note that, while education affects health, poor health status may also be a barrier to education.

- The percentage of the population with a high school degree or higher was significantly low in Quincy (88.7) and Randolph (85.5) compared to the Commonwealth (90.3).
- The percentage of the population with a Bachelor’s degree or higher was significantly high in Milton (61.8) and significantly low in Randolph (28.9) compared to the Commonwealth overall (42.1).

Table 5: Educational Attainment

	Massachusetts	Milton	Quincy	Randolph
High school degree or higher (%)	90.3	95.6	88.7	85.5
Bachelor’s degree or higher (%)	42.1	61.8	43.7	28.9

Source: US Census Bureau, American Community Survey, 2013-2017

Shading represents statistical significance compared to the Commonwealth. Figures highlighted in orange are statistically higher compared to the Commonwealth overall, while figures highlighted in blue are significantly lower.

The Massachusetts Department of Elementary and Secondary Education provides data on public school enrollment, attendance, retention and student characteristics (Table 6). In all communities in BID-Milton’s CBSA, the dropout rate was lower than the Commonwealth overall.

- In Quincy and Randolph, the percentages of English language learners, students with disabilities, and economically disadvantaged students were higher than the Commonwealth overall.

⁶ Raj Chetty, Michael Stepner, Sarah Abraham, Shelby Lin, Benjamin Scuderi, Nicholas Turner, Augustin Bergeron, and David Cutler, “The Association Between Income and Life Expectancy in the United States, 2001-2014,” *Journal of the American Medical Association* 315, no. 16 (April 26, 2016): 1750-1766.

⁷ Emily B. Zimmerman, Steven H. Woolf, and Amber Haley, “Population Health: Behavioral and Social Science Insights – Understanding the Relationship Between Education and Health,” Agency for Healthcare Research and Quality Web Site, <https://www.ahrq.gov/professionals/education/curriculum-tools/population-health/zimmerman.html>, September 2015

⁸ Centers for Disease Control and Prevention, “Adolescent and School Health: Health Disparities,” Centers for Disease Control and Prevention Web Site, <https://www.cdc.gov/healthyyouth/disparities/index.htm>, August 17, 2018

⁹ Zimmerman, *Population Health*

Table 6: School Enrollment Statistics

	Massachusetts	Milton	Quincy	Randolph
Dropout rate (%), 2017	4.9	1.2	2.7	4.4
English language learners (%), 2018-19	10.5	1.8	15.5	15.3
Students with disabilities (%), 2018-19	18.1	14.5	18.5	23.5
Economically disadvantaged (%), 2018-19	31.2	8.9	34.5	44.6

Source: Massachusetts Department of Elementary and Secondary Education School and District Profiles

Employment, Income, and Poverty

Lack of gainful and reliable employment is linked to several barriers to care, including lack of health insurance, inability to pay for health care services and copays, and inability to pay for transportation that enables individuals to receive services. In key informant interviews and focus groups, participants stressed that while unemployment may be low across the service area, many live on fixed incomes or are “underemployed.” Certain populations struggle to find and retain employment for a variety of reasons—ranging from mental and physical health issues, to lack of childcare, to transportation issues and other factors.

Like education, income impacts all aspects of an individual’s life, including the ability to secure housing, needed goods (e.g. food, clothing), and services (e.g. transportation, healthcare, childcare). It may also affects one’s ability to maintain good health.

- The percentage of the population living below the federal poverty line was significantly low in Milton (4.1) compared to the Commonwealth overall (11.1). Percentages were similar to the Commonwealth in Quincy (10.5) and Randolph (11.3).
- The percentage of older adults (65+) living below the poverty line was significantly high in Quincy (12.7) compared to the Commonwealth (9.0).
- The percentage of the population living below 200% of the federal poverty level was similar to the Commonwealth (23.7) in Quincy (24.6) and Randolph (23.7) and low in Milton (9.5).

Housing

Lack of affordable housing and poor housing conditions contribute to a wide range of health issues, including respiratory diseases, lead poisoning, infectious disease and poor mental health.¹⁰ At the extreme are those without housing, including those who are homeless or living in unstable or transient housing situations. They are more likely to delay medical care and have mortality rates four times higher than those who have secure housing.¹¹

¹⁰ James Krieger and Donna L. Higgins, “Housing and Health: Time Again for Public Health Action,” *American Journal of Public Health* 92, no. 5 (2002): 758-768.

¹¹ Thomas Kottke, Andriana Abariotes, and Joel B. Spoonheim, “Access to Affordable Housing Promotes Health and Well-Being and Reduces Hospital Visits,” *The Permanente Journal* 22, (2018): 17-079.

According to a 2013 study of America’s 25 largest cities, lack of affordable housing was the leading cause of homelessness. Adults who are homeless or living in unstable situations are more likely to experience mental health issues, substance use, intimate partner violence and trauma; children in similar situations have difficulty in school and are more likely to exhibit antisocial behavior.¹² Many key informants and focus group/forum participants expressed concern over the limited options for affordable housing throughout the service area. This was particularly an issue for older adults, who often bear the burden of household costs (e.g. taxes, maintenance, adaptabilities) while living on fixed incomes. Lack of access to affordable assisted living facilities and transitional housing was also identified as an issue.

- The percentage of owner occupied housing units was significantly high in Milton (82.5) and Randolph (68.3) compared to the Commonwealth (62.4). The percentage of residents whose monthly owner costs exceed 30% of total household income was significantly higher than the Commonwealth (31.5) in Quincy (39.2) and Randolph (39.2).
- The percentage of renter occupied housing units was significantly high in Quincy (52.4) and significantly low in Milton (17.5) and Randolph (31.7) compared to the Commonwealth overall (37.6). The percentage of residents whose monthly rent exceeds 30% of total household income was similar to the Commonwealth (50.1) in Milton (52.4) and Randolph (54.7) and significantly lower in Quincy (46.0).

Table 7: Housing

	Massachusetts	Milton	Quincy	Randolph
Vacant housing units (%)	9.7	4.3	6.3	5.4
Owner-occupied (%)	62.4	82.5	47.6	68.3
Monthly owner costs exceed 30% of household income (%)	31.5	26.9	39.2	39.2
Renter-occupied (%)	37.6	17.5	52.4	31.7
Gross rent exceeds 30% of household income (%)	50.1	52.4	46.0	54.7

Source: US Census Bureau, American Community Survey, 2013-2017

Shading represents statistical significance compared to the Commonwealth. Figures highlighted in orange are statistically higher compared to the Commonwealth overall, while figures highlighted in blue are significantly lower.

Transportation

Lack of transportation has a significant impact on access to health care services and is a determinant of whether an individual or family has the ability to access the basic resources that allow them to live productive and fulfilling lives. Access to affordable and reliable transportation widens opportunity and is essential to addressing poverty and unemployment; it allows access to work, school, healthy foods, recreational facilities and a myriad of other community resources.

There is very limited quantitative data to characterize issues related to transportation. Interviewees, focus group participants, and survey respondents felt that transportation was a critical barrier to health and access to care, especially for who lack access to a personal vehicle or are without caregivers, family,

¹² Kottke, *Access to Affordable*

and/or friends. While there were public transportation options available in Quincy and Milton, key informants and focus group participants felt it was unreliable and unaffordable for some.

- The mean commute time to work and the percentage of residents who worked outside their county of residents was significantly high in all communities compared to the Commonwealth (Table 8).

Table 8: Transportation

	Massachusetts	Milton	Quincy	Randolph
Takes car, truck, van (alone) to work (%)	70.7	65.8	57.0	75.7
Mean commute time (minutes) to work	29.3	33	36	36
Worked outside county of residence (%)	30.8	58.2	59.0	57.4

Source: US Census Bureau, American Community Survey, 2013-2017

Shading represents statistical significance compared to the Commonwealth. Figures highlighted in orange are statistically higher compared to the Commonwealth overall, while figures highlighted in blue are significantly lower.

Food Access

Issues related to food insecurity, food scarcity and access to affordable nutritious foods were discussed as risk factors to poor physical and mental health for both children and adults. While it is important to have grocery stores placed throughout a community to promote access, research shows that there are a number of factors that influence healthy eating, including quality and price of fruits and vegetables, marketing of unhealthy food, and cultural appropriateness of food offerings.¹³ Food pantries are often used as long-term strategies to supplement monthly shortfalls in food. Pantries and community meal programs have evolved from providing temporary or emergency food assistance to providing ongoing support for individuals, families, seniors living on fixed income, people with disabilities and adults working multiple low-wage jobs to make ends meet. Key informant interviewees and focus group participants mentioned local efforts to combat food insecurity and provide education on healthy choices, and felt there was a strong network of organizations working in this realm.

- The percentage of residents who had received food stamp/SNAP benefits in the past 12 months was significantly high in Randolph (17.3) and significantly low in Milton (4.3) and Quincy (10.5) compared to the Commonwealth (12.3).

Crime/Violence

Crime and violence are public health issues that influence health status on many levels, from death and injury, to emotional trauma, anxiety, isolation and absence of community cohesion. Some key informants and focus group participants identified interpersonal violence, including domestic violence and elder abuse, as issues in BID-Milton’s CBSA.

¹³ The Food Trust, “Access to Healthy Food and Why It Matters: A Review of the Research,” http://thefoodtrust.org/uploads/media_items/executive-summary-access-to-healthy-food-and-why-it-matters.original.pdf

- The violent crime was high in Quincy (408) and Randolph (358) compared to the Commonwealth (353).
- The property crime rate was high in Quincy (1,664) and Randolph (1,427) compared to the Commonwealth (1,398).

Table 9: Crime Rates

	Massachusetts	Milton	Quincy	Randolph
Violent crime rate (per 100,000)	353	55	408	358
Murder/non-negligent manslaughter	3	0	0	3
Forcible rape	30	4	26	30
Robbery	70	26	69	59
Aggravated assault	250	26	313	266
Property crime rate (per 100,000)	1,398	784	1664	1427
Burglary	247	212	343	275
Larceny-theft	1,041	532	1228	1037
Motor vehicle theft	110	40	94	115
Arson	6	0	6	0

Source: FBI Uniform Crime Statistics, 2017

Key Findings: Behavioral Risk Factors and Health Status

At the core of the CHNA process is understanding access-to-care issues, leading causes of morbidity and mortality, and of the extent to which populations and communities participate in certain risky behaviors. This information is critical to assessing health status, clarifying health-related disparities and identifying health priorities. This assessment captures a wide range of quantitative data from federal and municipal data sources. Qualitative information gathered from key informant interviews, focus groups, and the community health survey informed this section of the report by providing perspective on the confounding and contributing factors of illness, health priorities, barriers to care, service gaps and possible strategic responses to the issues identified. This data augmented the quantitative data and allowed for the identification of vulnerable population cohorts.

Health Insurance and Access to Care

Whether an individual has health insurance—and the extent to which it helps to pay for needed acute services and access to a full continuum of high-quality, timely and accessible preventive and disease management or follow-up services—has been shown to be critical to overall health and well-being.¹⁴ Access to a usual source of primary care is particularly important, since it greatly affects the individual's ability to receive regular preventive, routine and urgent care and to manage chronic diseases.

While Massachusetts has one of the highest health insurance coverage rates in the U.S., there are still pockets of individuals without coverage, including young people, immigrants and refugees, and those who are unemployed. Many key informants and focus group/forum participants identified issues around navigating the health system, including health insurance, as a critical issue. This was especially an issue for older adults attempting to navigate Medicaid eligibility, costs, and coverage, low-to-moderate income populations—those who do not meet eligibility requirements for public insurance and/or public assistance programs and struggle to afford the rising costs of health care premiums, and non-English speakers who may face language and cultural barriers.

- The percentage of the population with public health insurance was significantly high in Randolph (42.1) compared to the Commonwealth (35.5).
- The percentage of the population with private health insurance was significantly low in Quincy (71.9) and Randolph (67.7) compared to the Commonwealth (74.2).

¹⁴ National Center for Health Statistics, "Health Insurance and Access to Care." February 2017. Retrieved from https://www.cdc.gov/nchs/data/factsheets/factsheet_hiac.pdf

Table 10: Health Insurance Coverage

	Massachusetts	Milton	Quincy	Randolph
Uninsured (%)	3.0	1.1	3.6	3.5
Public health insurance (%)	35.5	21.4	35.6	42.1
Private health insurance (%)	74.2	90.1	71.9	67.7

Source: US Census Bureau, American Community Survey, 2013-2017

Shading represents statistical significance compared to the Commonwealth. Figures highlighted in orange are statistically higher compared to the Commonwealth overall, while figures highlighted in blue are significantly lower.

Physical Activity, Nutrition, and Weight

Lack of physical fitness and poor nutrition are among the leading risk factors associated with obesity and chronic health issues. Adequate nutrition helps prevent disease and is essential for the healthy growth and development of children and adolescents, while overall fitness and the extent to which people are physically active reduce the risk for many chronic conditions and are linked to good emotional health. In Massachusetts, adult obesity rates increased from 20.9% in 2007 to 25.9% in 2017.¹⁵ Overall, these trends have carried across most segments of the population, regardless of age, sex, race/ethnicity, or geographic region.

In key informant interviews and focus groups, lack of physical activity, poor nutrition, and obesity were identified as key risk factors for chronic and complex conditions. Physical inactivity/sedentary lifestyle was identified as the second leading barrier to good health amongst those who took the Community Health Survey.

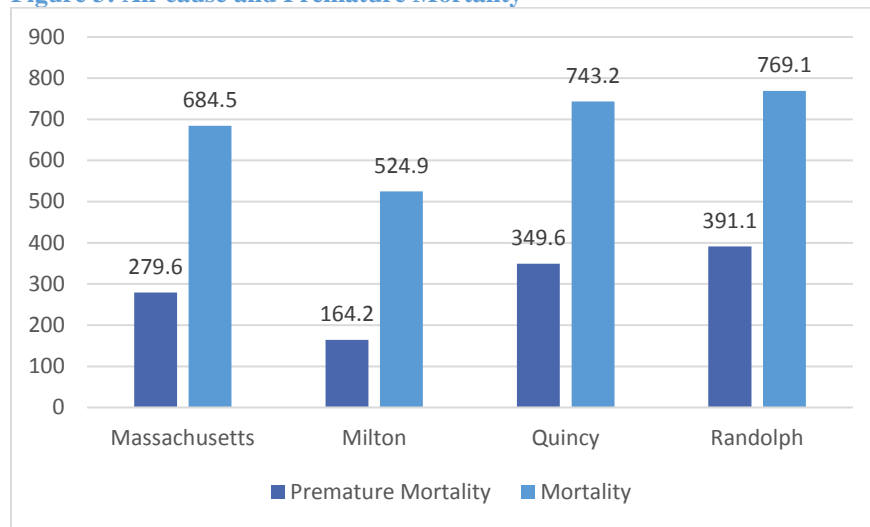
All-Cause Hospitalizations, Emergency Discharge, and Mortality

Certain populations face barriers to care that drive inappropriate hospital utilization and high rates of chronic disease. For example, individuals without regular primary care providers often utilize the emergency department more often than those with access to primary care. All-cause hospitalization, emergency discharge, and mortality rates do not indicate that all residents of a municipality have equal or similar access to care simply based on proximity to services. For example, not all residents in Milton have better access to health services than those in other municipalities, simply because they live closer to the hospital.

- The all-cause mortality rate was significantly low in Milton (524.9) and significantly high in Quincy (743.2) compared to the Commonwealth (684.5).
- The premature mortality rate was significantly low in Milton (164.2) and significantly high in Quincy (349.6) and Randolph (391.1) compared to the Commonwealth (279.6).

¹⁵ The State of Obesity, "The State of Obesity in Massachusetts," Retrieved from <https://www.stateofobesity.org/states/ma/>

Figure 3: All-cause and Premature Mortality



Source: MDPH Registry of Vital Records and Statistics, 2015

Chronic and Complex Conditions

Chronic conditions such as heart disease, cancer, stroke, Alzheimer’s disease, and diabetes are the leading causes of death and disability in the United States, and are the leading drivers of the nation’s \$3.3 trillion annual healthcare costs.¹⁶ Over half of American adults have at least one chronic condition, while 40% have two or more.¹⁷ Perhaps most significantly, chronic diseases are largely preventable despite their high prevalence and dramatic impact on individuals and society. This underscores the need to focus on health risk factors, primary care engagement and evidence-based chronic disease management. There was broad, if not universal, acknowledgement and awareness of these pervasive health issues among interviewees and forum participants.

Cardiovascular and Cerebrovascular Diseases

Cardiovascular and cerebrovascular diseases, such as heart disease and stroke, are affected by a number of health and behavioral risk factors, including obesity and physical inactivity, tobacco use, and alcohol use. Hypertension, or high blood pressure, increases the risk of more serious health issues including heart failure, stroke and other forms of major cardiovascular disease. Racial disparities in heart disease and hypertension are well-documented; black/African Americans are two to three times as likely as whites to die of preventable heart disease and stroke.¹⁸ The age of onset for stroke is earlier for African Americans and Hispanic/Latinos compared to non-Hispanic whites.¹⁹

- Heart disease mortality rates in Quincy (149.1) and Randolph (151.7) were higher than the Commonwealth (138.7), though not significantly.

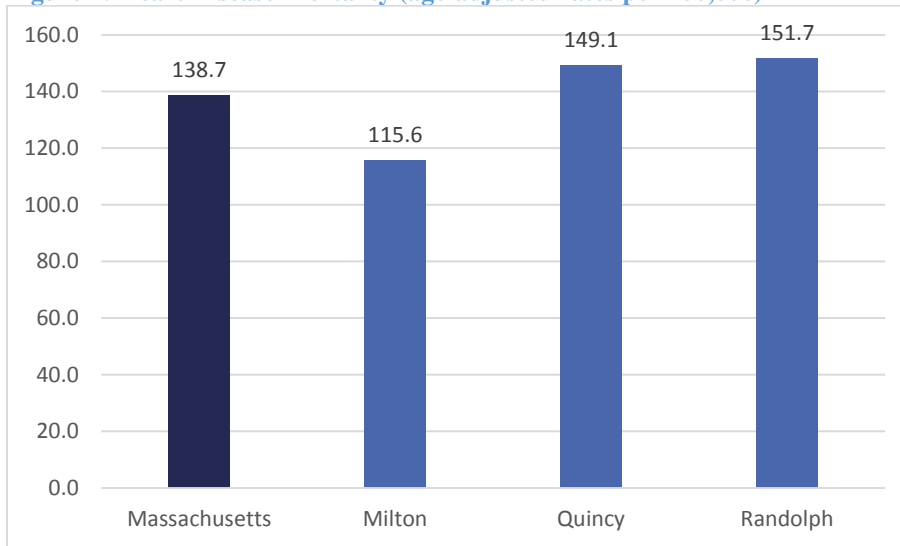
¹⁶ Centers for Disease Control and Prevention, “Chronic Diseases in America,” US Census Bureau, 2013-2017 ACS 5-Year Estimates, last updated April 15, 2019.

¹⁷ CDC, *Chronic Diseases in America*

¹⁸ <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5638710/>

¹⁹ <https://www.stroke.org/understand-stroke/impact-of-stroke/minorities-and-stroke/>

Figure 4: Heart Disease Mortality (age-adjusted rates per 100,000)



Source: MDPH Registry of Vital Records and Statistics, 2015

Diabetes

Over the course of a lifetime, approximately 40% of adults in the U.S. are expected to develop type 2 diabetes—this number increases to over 50% for Hispanic/Latino men and women.²⁰ Several factors increase the risk of developing type 2 diabetes, including being overweight, physical inactivity, age, and family history. Having diabetes increases the risk of cardiovascular comorbidities (e.g. hypertension, atherosclerosis), may limit ability to engage in physical activity, and may have negative impacts on metabolism.²¹ Key informants and focus group participants identified diabetes as a health issue in the service area, especially for those who are unable to manage the condition or who struggle with other chronic health issues.

Cancer

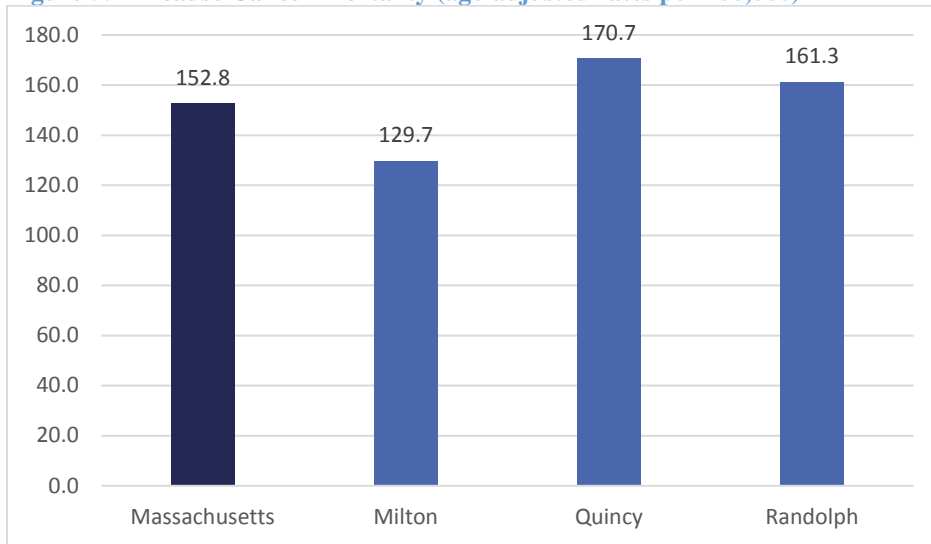
The most common risk factors are well known: age, family history of cancer, alcohol and tobacco use, diet, exposure to cancer causing substances, chronic inflammation, and hormones. Chronic and complex conditions, including cancer, and their risk factors were prioritized by BID-Milton’s CBAC, key informants, and focus group participants.

- The all-cause cancer mortality rate was high in Quincy (170.7) and Randolph (161.3) compared to the Commonwealth overall (152.8), though not significantly higher.

²⁰ Centers for Disease Control and Prevention, “Hispanic Health: Prevention Type 2 Diabetes,” Centers for Disease Control and Prevention Web Site, <https://www.cdc.gov/features/hispanichealth/index.html>, September 18, 2017

²¹ <http://outpatient.aace.com/type-2-diabetes/management-of-common-comorbidities-of-diabetes>

Figure 5: All-cause Cancer Mortality (age-adjusted rates per 100,000)



Source: MDPH Registry of Vital Records and Statistics, 2015

Respiratory Diseases

Respiratory diseases such as asthma and chronic obstructive pulmonary disorder (COPD) are exacerbated by behavioral, environmental and location-based risk factors, including smoking, diet and nutrition, substandard housing and environmental exposures (e.g., air pollution, secondhand smoke). They are the third leading cause of death in the United States. In many scenarios, quality of life for those with respiratory diseases can improve with proper care and management.²²

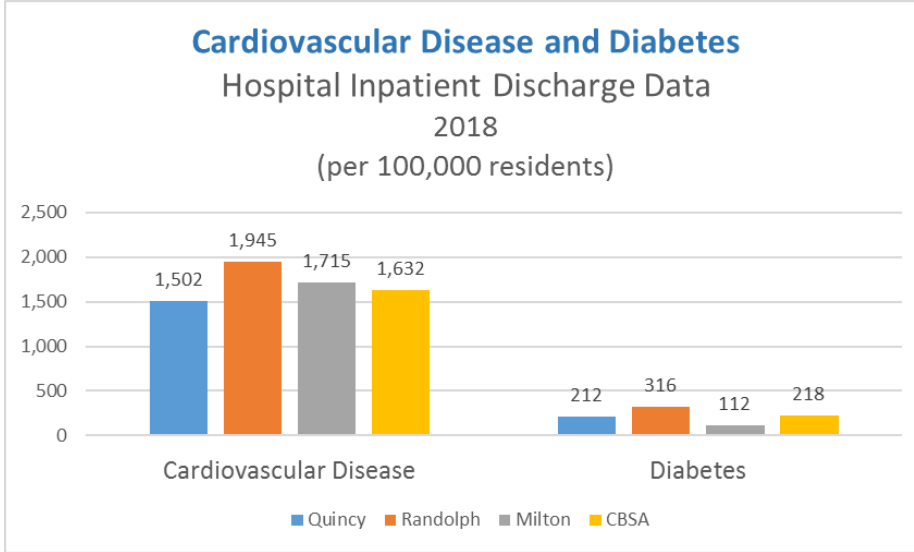
Inpatient Hospital Discharge Data Analysis

Based on a review of hospital inpatient discharge rates per 100,000 adults (18+) for cardiovascular disease, diabetes, cancer, and respiratory diseases by the municipalities in BID-Milton's CBSA, there is substantial variation in rates by condition and municipality when comparing the municipality rates to each other and the CBSA average.

- Cardiovascular Disease and Diabetes. Relative to the CBSA average, Randolph has the highest rate of discharge per 100,000 adults for cardiovascular disease and diabetes compared to Quincy and Milton, and not surprisingly this rate is substantially higher than the CBSA average. The rates for Milton and Quincy are substantially lower and closer to the CBSA average.

²² Office of Disease Prevention and Health Promotion, "Respiratory Diseases," Retrieved from <https://www.healthypeople.gov/2020/topics-objectives/topic/respiratory-diseases>

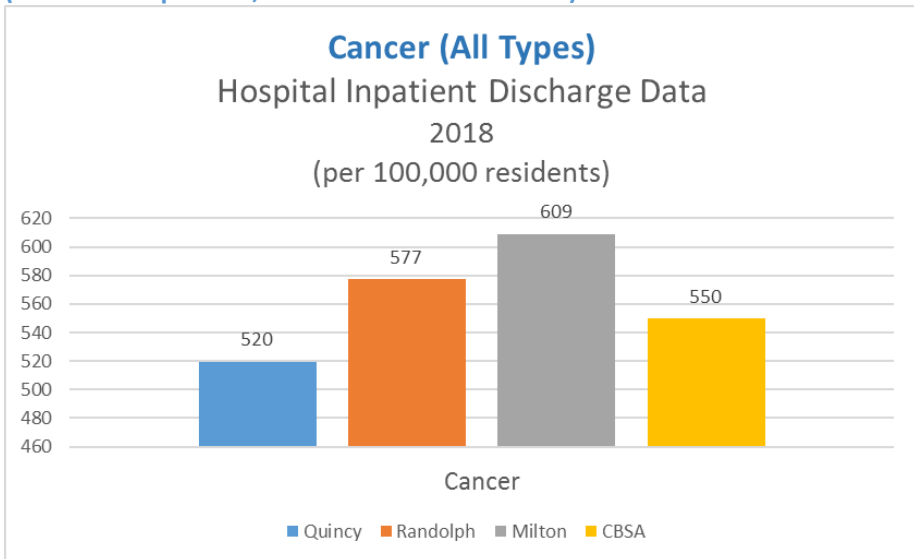
Figure 6: Cardiovascular Disease and Diabetes, Inpatient Hospital Discharge Rates (Crude rates per 100,000 Adult residents – 18+)



Source: Massachusetts Center for Health Information and Analysis, Case Mix Data. Hospital Inpatient Discharge Data. 2018

- Cancer.** With respect to cancer (All types), there is substantial variation across municipalities in the CBSA. The hospital inpatient discharge rates in Milton are considerably higher than the rates in Randolph and Quincy. In this case, Quincy’s rate is the smallest in the CBSA and Randolph’s rate is in the middle and closer to the CBSA average.

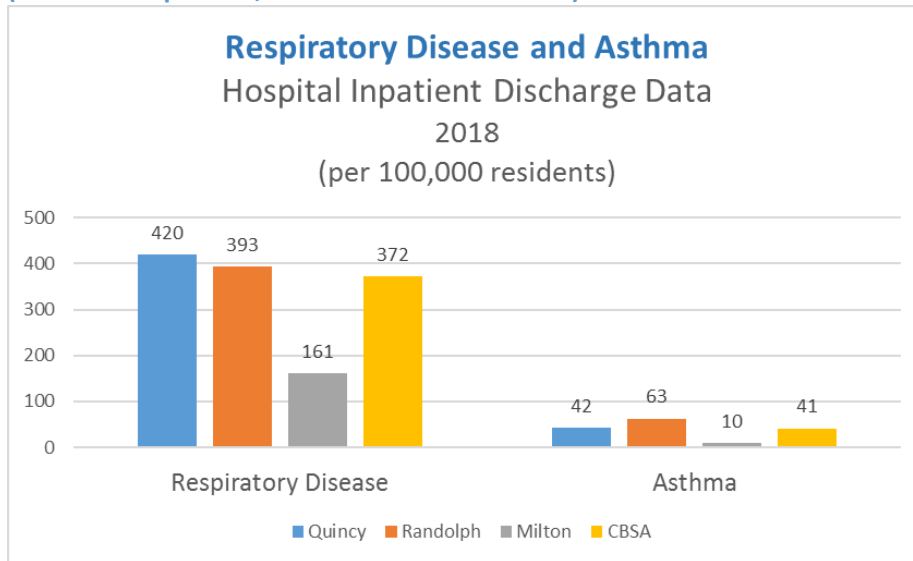
Figure 7: Cancer, Inpatient Hospital Discharge Rates (Crude rates per 100,000 Adult residents – 18+)



Source: Massachusetts Center for Health Information and Analysis, Case Mix Data. Hospital Inpatient Discharge Data. 2018

- **Respiratory Diseases.** With respect to chronic lower respiratory disease and asthma, Milton’s rate of hospital inpatient discharge for adults is substantially smaller than the other towns in the CBSA and smaller than the CBSA average. Randolph’s and Quincy’s rates are similar to each other and similar to the CBSA average.

Figure 8: Respiratory Disease and Asthma, Inpatient Hospital Discharge Rates (Crude rates per 100,000 Adult residents – 18+)



Source: Massachusetts Center for Health Information and Analysis, Case Mix Data. Hospital Inpatient Discharge Data. 2018

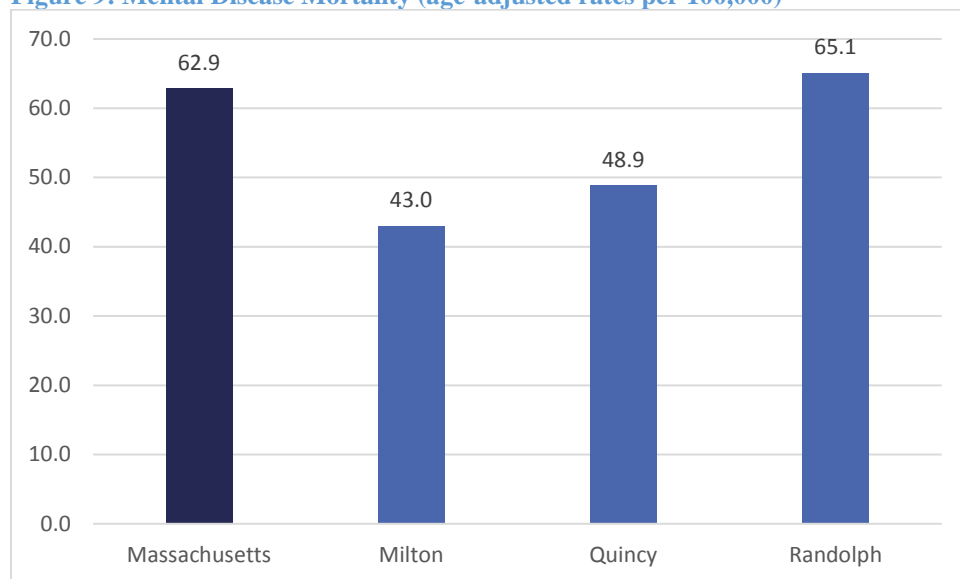
Mental Health

Mental health—including depression, anxiety, stress, serious mental illness and other conditions—was overwhelmingly identified as a leading health issue for residents of BID-Milton’s service area. Among those who took the Community Health Survey, mental health was the health issue that respondents felt people struggled with the most in their community. BID-Milton’s CBAC also identified mental health as the leading health issue in the service area.

Individuals from across the health service spectrum discussed the burden of mental health issues for all segment of the population, specifically the prevalence of mild to moderate depression and anxiety. Key informants and focus group participants also identified issues of chronic stress and anxiety amongst youth, theorizing that the impact of social media, interpersonal relationships, and the pressure to succeed in school and activities were the main contributors to this issue.

- The mental disorder mortality rate was significantly low in Quincy (48.9) compared to the Commonwealth overall (62.9) (Figure 9). Note that this data set is limited to only one year of data and that these rates may not be true reflections of the burden of mental health issues in the CBSA; while mental health disorders underlie many other medical conditions, including substance misuse, they are often not the primary cause of death.

Figure 9: Mental Disease Mortality (age-adjusted rates per 100,000)



A focus group with high school students confirmed the burden of stress and anxiety on youth and adolescents. Students shared that pressure to succeed academically and sports were factors that contributed to unhealthy levels of stress.

Key informants and focus group participants were also concerned about social isolation and depression amongst older adults, especially frail elders living alone or who did not have a regular caregiver.

According to community profiles put together by the Massachusetts Healthy Aging Collaborative:

- The percentage of older adults with depression was significantly low in Milton (29.1) and Randolph (29.0) compared to the Commonwealth (31.5).
- The percentage of older adults with anxiety disorders was significantly low in Milton (22.5) and Randolph (23.5) compared to the Commonwealth overall.

Table 11: Mental health of older adults

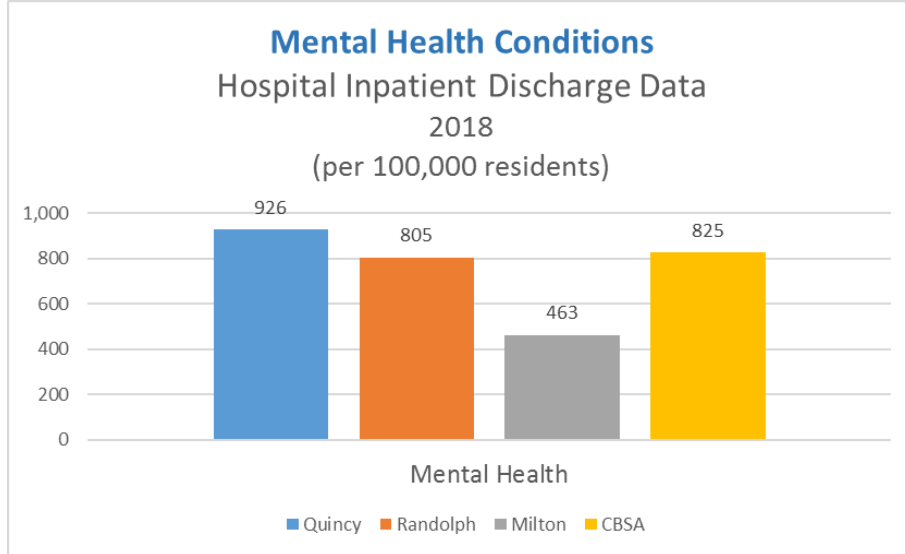
	Massachusetts	Milton	Quincy	Randolph
% 65+ with depression	31.5	29.1	31.0	29.0
% 65+ with anxiety disorders	25.4	22.5	26.4	23.5

Source: Massachusetts Healthy Aging Collaborative, Massachusetts Healthy Aging Community Profiles, 2018

Beyond the concern around specific conditions and vulnerable segments of the population, key informants and focus group/forum participants were concerned about barriers to mental health care, including stigma, lack of services across the spectrum (inpatient, outpatient, and psychiatry), and lack of support services (counselors, licensed social workers, case managers).

Based on a review of hospital inpatient discharge rates per 100,000 adults (18+) for the leading mental health diagnoses by the municipalities in BID-Milton’s CBSA, Quincy has a substantially higher rate of discharge than the other towns in its service area. Milton has the lowest rate, which is nearly half the CBSA average. Randolph’s rate is closer to Quincy’s rate than Milton’s rate, roughly mirroring the CBSA average.

Figure 10: Mental Health Conditions, Inpatient Hospital Discharge Rates (Crude rates per 100,000 Adult residents – 18+)



Source: Massachusetts Center for Health Information and Analysis, Case Mix Data. Hospital Inpatient Discharge Data. 2018

Substance Use

Along with mental health, substance use was named as a leading health issue among key informants and focus group and survey participants. Behavioral health providers reported that individuals continue to struggle to access care services, including rehabilitation and detox, outpatient treatment and medication-assisted treatment. As with mental health services, there are a number of community partners working to fill service gaps and address the needs of both individuals and the at-large community, although some individuals may face delays or barriers to care due to limited providers and specialists, limited treatment beds and social determinants that impede access (e.g., insurance coverage, transportation, employment, health literacy). Key informants and focus group participants felt that there were more resources needed at every level of care – more screening, education and prevention efforts, streamlined referral processes, inpatient and outpatient treatment services, and post-discharge planning and navigation.

Key informants and focus group participants were concerned about the opioid epidemic and the effects it has not only on those struggling with addiction, but on families, communities, and society. Several participants offered that while alcohol misuse is not as “acute” an issue as opioids, it is more prevalent and is a major contributor to rates of chronic disease (e.g. cancer, liver disease, cardiovascular disease). Among those from the service area treated in facilities licensed by the Massachusetts Bureau of Substance Abuse Services (BSAS), heroin was the primary substance of use in Quincy and Randolph, and alcohol was the primary substance of use in Milton (Table 12).

Table 12: Substance Use

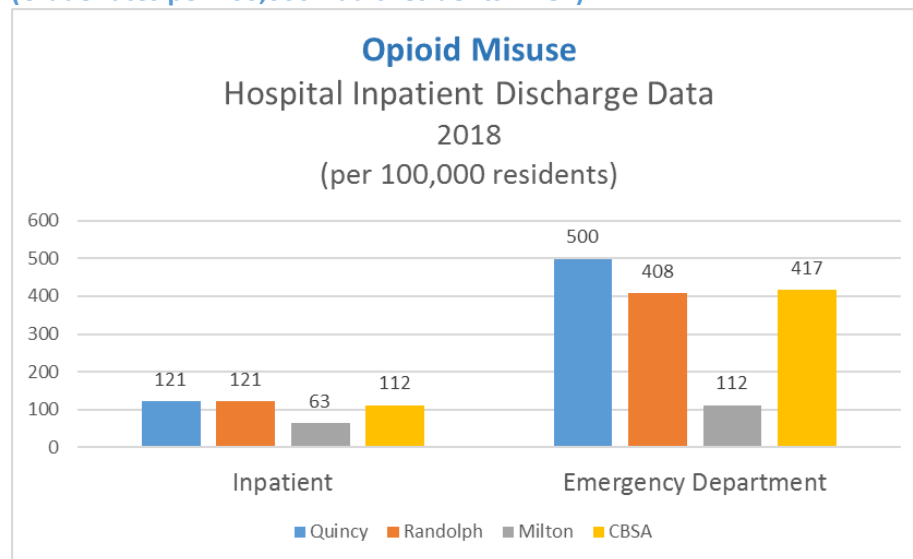
	Massachusetts	Milton	Quincy	Randolph
Opioid death count (by city/town of residence), 2017	8,188	12	196	41
Opioid death count (by city/town of occurrence), 2017	8,349	15	180	24
BSAS admissions (#), 2017	80,896	112	1,405	299
Primary substance of use (%)	Heroin (53.1)	Alcohol (56.0)	Heroin (54.4)	Heroin (52.6)

Source: Massachusetts Bureau of Substance Abuse Services, 2017

Vaping, or e-cigarette use, was a primary concern for youth. Key informants referred to e-cigarette use as an epidemic and were concerned not only with education and prevention efforts, but treating those who had developed nicotine addictions. Changing community norms around marijuana, especially in light of legalizing in Massachusetts, was also a concern amongst key informants and focus group participants, especially for young people.

Based on a review of hospital inpatient and emergency department discharge rates per 100,000 adults (18+) for opioid misuse, Milton’s rates are considerably smaller than the rates for Quincy and Randolph, in both the inpatient and emergency department settings. Randolph’s and Quincy’s rates are similar to each other and drive the CBSA average up considerably. The rates for Randolph and Quincy in the inpatient and emergency department setting are twice and four times higher, respectively.

Figure 11: Opioid Misuse, Inpatient Hospital Discharge Rates (Crude rates per 100,000 Adult residents – 18+)



Source: Massachusetts Center for Health Information and Analysis, Case Mix Data. Hospital Inpatient Discharge Data. 2018

Infectious Disease

Though great strides have been made to control the spread of infectious diseases in the U.S., they remain a major cause of illness, disability and even death. STIs, diseases transmitted through drug use,

vector-borne illnesses, tuberculosis, pneumonia and influenza are among the infectious diseases that have the greatest impact on modern American populations. Though not named as a major health concern by interviewees or participants of forums and focus groups, disease burden is tracked to prevent outbreaks and identify patterns in morbidity and mortality. Young children, older adults, individuals with compromised immune systems, injection drug users and those having unprotected sex are most at risk for contracting infectious diseases.

While there is no Commonwealth data to confirm these findings, key informants and focus group participants reported that infectious disease, specifically tuberculosis and Hepatitis B, were substantial health issues for some immigrant populations within BID-Milton’s service area.

Table 13: Infectious Disease

	Massachusetts	Milton	Quincy	Randolph
Chlamydia cases (lab confirmed), 2017	29203	84	336	203
Gonorrhea cases (lab confirmed), 2017	7307	16	91	52
Syphilis cases (probable and confirmed), 2017	1091	<5	20	<5
Hepatitis A cases (confirmed), 2017	53	0	0	0
Chronic Hepatitis B (confirmed and probable), 2017	2023	5	250	16
Hepatitis C cases (confirmed and probable), 2017	7765	13	114	27
Pneumonia/influenza mortality (age-adjusted per 100,000)*	17.1	22.6	25.9	17.2

Source: MDPH Bureau of Infectious Disease and Laboratory Services, 2017 || *MDPH Registry of Vital Records and Statistics, 2015

Community Health Priorities and Priority Population Segments

Between October 2018 and April 2019, BID-Milton conducted a comprehensive CHNA that included an extensive review of quantitative data and qualitative information gathered through interviews, focus groups, a community forum, and a Community Health Survey. A resource inventory was also completed to identify existing health-related assets and service gaps. A detailed review of the CHNA approach, data collection methods, and key findings are included in the body and Appendices of this report.

Once BID-Milton’s CHNA activities were completed, BID-Milton’s Community Benefits staff convened the BID-Milton CBAC and CBSLT and conducted a series of strategic planning meetings. These meetings allowed Hospital staff and a representative group of external community health stakeholders to review the quantitative and qualitative findings from the CHNA, prioritize the leading community health issues, identify segments of the population most at-risk, review existing community benefits programming, and begin to develop BID-Milton’s the 2020–2022 Implementation Strategy (IS). After these strategic planning meetings, BID-Milton’s Community Benefits staff continued to work with the CBAC, CBSLT, and other community partners to develop draft and final versions of BID-Milton’s IS.

The full implementation strategy, with goals, priority populations, objectives, strategies, metrics, and partners may be found in Appendix D.

Core IS Planning Principles and State Priorities

In developing the IS, care was taken to ensure that BID-Milton’s community health priorities were aligned with the Commonwealth of Massachusetts priorities set by the MDPH and the MA AGO (Table 14). Care was also taken to ensure that the IS was aligned with broader principals drawn from the Commonwealth’s Community Benefit Guidelines and the literature on how to best promote community health improvement and prevention efforts.

Table 14: Massachusetts Community Health Priorities

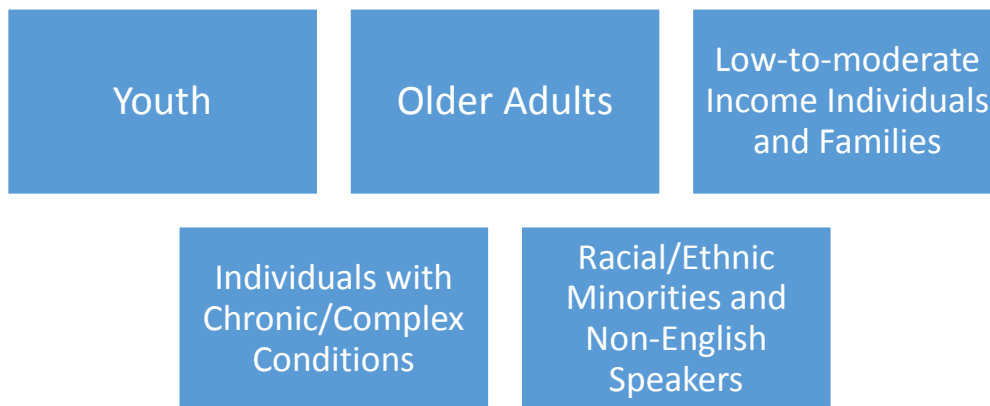
<i>Community Benefits Priorities</i>	<i>Determination of Need Priorities</i>
<ul style="list-style-type: none"> • Housing stability and homelessness • Mental illness and mental health • Substance Use Disorders • Chronic disease, with a focus on cancer, heart disease, and diabetes 	<ul style="list-style-type: none"> • Built environments • Social environments • Housing • Violence • Education • Employment

Priority Populations

BID-Milton is committed to improving the health status and well-being of all residents living throughout its service area. Certainly all geographic, demographic, and socioeconomic segments of the population face challenges of some kind that may hinder their ability to access care or maintain good health.

Regardless of age, race/ethnicity, income, family history, or other characteristics, everyone is impacted in some way by health-related disparities. With this in mind, BID-Milton's Implementation Strategy includes activities that will support residents throughout its CBSA, across all segments of the population. However, based on the assessment's quantitative and qualitative findings, there was broad agreement that BID-Milton's IS should prioritize certain demographic and socio-economic segments of the population that have complex needs or face especially significant barriers to care, service gaps, or adverse social determinants of health that put them at greater risk. The assessment identified 1) Youth, 2) Older adults, 3) Low to moderate income individuals and families, 4) Individuals with chronic and complex conditions, and 5) Racial/ethnic minorities and non-English speakers as priority populations to be included in the Implementation Strategy. Following is a description of these priority populations.

Figure 12: BID-Milton Priority Populations 2020-2022



Youth

Youth and adolescents were identified as among the most vulnerable and at-risk populations in the region. Participants' reasons for believing this group should be prioritized varied, but centered on the impacts of mental health and substance use. Adolescence is a critical transitional period that includes biological and developmental milestones that are important to establishing long-term identity and independence, but can lead to conflict, isolation and tension between adolescents and parents or caregivers. During this time, young people may struggle to access health education and information, social services, or may be seen by providers that misunderstand the needs of those in this age group. Although adolescents are generally healthy, they do struggle with health and social issues, such as obesity (e.g., poor nutrition and lack of physical activity), mental health (e.g., depression, anxiety, stress), substance use (e.g., cigarettes/vaping, marijuana, alcohol, opiates), sexually transmitted infectious, and injuries due to accidents.

Older Adults

The challenges faced by older adults came up in nearly every interview and focus group. Chronic disease, social isolation/lack of family support, living on fixed incomes, affordable housing, and transportation were identified as significant issues. In the U.S. and the Commonwealth, older adults are

among the fastest growing age groups. The first “baby boomers” (adults born between 1946 and 1964) turned 65 in 2011. Over the next 20 years, these baby boomers will gradually enter the older adult cohort.

Chronic/complex conditions are the leading cause of death among older adults, and older adults are more likely to develop chronic illnesses such as hypertension, diabetes, COPD, congestive heart failure, depression, anxiety, Alzheimer’s disease, Parkinson’s disease and dementia than younger adult cohorts. By 2030, the CDC and the Healthy People 2020 Initiative estimate that 37 million people nationwide, 60% of the older adult population ages 65 and over, will need to manage more than one chronic medical condition. Significant proportions of this group experience hospitalizations, are admitted to nursing homes, and receive home health services and other social supports in home and community settings. Addressing these concerns demands a service system that is robust, diverse, and responsive.

Low-to-Moderate Income Individuals and Families

Key informants, focus group participants, and hospital leadership discussed the challenges that individuals and families face when they are forced to decide between housing, food, heat, health care services, childcare, transportation or other essentials. These choices often lead to missed care or delays in care, due to either the direct costs of care (co-pays and deductibles) or the indirect costs of transportation, childcare, or missed wages. There was near consensus that lack of affordable housing was a leading issue in the region. Participants also spoke of the intense challenges that many moderate income individuals and families face due to the high cost of living, combined with the fact that most of those in the middle-income group are not eligible for public programs like Medicaid, food stamps, Healthy Start, and other subsidized services.

Individuals with Chronic and Complex Conditions

Though substance use and mental health were the focus for many key informants, providers, and residents, one cannot ignore that heart disease, stroke and cancer are the leading causes of death in the nation and the Commonwealth. Along with other conditions, including asthma and diabetes, these conditions are considered to be chronic and complex and can strike early in one’s life, possibly ending in premature death. It is also important to note that the risk and protective factors for many chronic/complex conditions are the same, including tobacco use, lack of physical activity, poor nutrition, obesity, and alcohol use. Individuals with chronic/complex conditions often face significant barriers to care (e.g., transportation, lack of health literacy, fragmented care). These issues are exacerbated for older adults and those that are disabled. Many key informants cited a need for care management, navigation, and care coordination for these populations. Several residents also suggested needs for caregiver support and resource programs.

Racial/Ethnic Minorities and Non-English Speakers

Within BID-Milton’s CBSA, key informants and focus group participants reported that many racial/ethnic minorities and non-English speakers experiences disparities with respect to the social determinants (e.g. housing, income and employment, access to transportation), health care access (e.g. navigation of health system, access to primary care), and overall health status. Information gathered from the assessment, supported by findings from academic literature, highlight the disparities that these segments face. These segments may also struggle with the tremendous impact of discrimination and

racism. Some of those who were interviewed or participated in the needs assessment’s focus groups spoke of the inherent social injustices and inequities that remain in our society today.

Community Health Priority Areas

BID-Milton’s CHNA was conducted as a population-based assessment. The goal was to engage the community and compile quantitative and qualitative information to identify the leading health-related issues affecting individuals in the CBSA, including social determinants of health, service gaps, and barriers to care. The priorities that have been identified have been framed broadly to ensure that the full breadth of unmet needs and community health issues are recognized. These priorities were identified through an integrated and thorough review of all of the quantitative and qualitative information captured for the assessment. The priorities have been identified to maximize impact, reduce disparities, and promote collaboration and cross-sector partnership.

During the later stages of the CHNA process, significant efforts were made to vet the priority issues with leadership and the community-at large, through meetings with the CBAC and the CBSLT. BID-Milton is confident that these priorities reflect the sentiments of those who were involved in the assessment and community engagement processes. Based on the findings from the breadth of BID-Milton’s CHNA activities, the CBAC and the CBSLT voted to prioritize 1) Mental health and substance use, 2) Chronic/complex conditions and their risk factors, and 3) Social Determinants of Health and Access to care.

Figure 13: BID-Milton Priority Areas 2020-2022



The community health priorities that have been prioritized by the CHNA in Figure 13 above are described in detail in the next section of this report, along with a listing of the goals related to these priority areas that BID-Milton’s Community Benefits staff, the CBAC, and CBSLT believe will drive achievement. The objectives and strategic initiatives, by priority area, that will be part of BID-Milton’s

Implementation Strategy are included in BID-Milton's Summary Implementation Strategy, included in Appendix D.

Community Health Needs not Prioritized by BID-Milton's CBAC

It is important to note that there are community health needs that were identified by BID-Milton's assessment that, due to the limited burden that these issues present and/or the feasibility of having an impact in the short- or long-term on these issues, were not prioritized for investment. Namely, workforce development and education were identified as community needs but these issues were deemed by the CBAC and the CBSLT to be outside of BID-Milton's primary sphere of influence and have opted to allow others in its CBSA and the Commonwealth to focus on these issues. This is not to say that BID-Milton will not support efforts in these areas or other areas that are not prioritized. BID-Milton remains open and willing to work with hospitals across Beth Israel Lahey Health's network and other public and private partners to address these issues, particularly as part of a broad, strong collaborative.

BID-Milton Implementation Strategy & Community Benefits

Resources

BID-Milton's current 2017-2019 Implementation Strategy was developed in 2016 and addresses all of the priority areas identified by this CHNA. Certainly, this CHNA has provided new guidance and invaluable insight on the characteristics of the population, social determinants of health, barriers to care, and leading health issues that has informed and allowed BID-Milton to update its current Implementation Strategy.

Included below, organized by priority area, are the core elements of BID-Milton's 2020 – 2022 Implementation Strategy. The content of the strategy is designed to address the underlying social determinants of health, barriers to care, and promote health equity. The content is also designed to address the leading community health priorities, including activities geared to health education and wellness (primary prevention), identification, screening, and referral (secondary prevention), and disease management and treatment (tertiary prevention (e.g. access to care, self-management support, harm reduction, treatment of acute illness, and recovery).

Below is a brief discussion of the resources that BID-Milton will invest to address the priorities identified by the CBAC and CBSLT. Following the discussion of resources are summaries of each of the selected priority areas and a listing of the goals that have been established for each priority area.

Community Benefit Resources

BID-Milton expends substantial resources on its community benefits program to drive achievement on the goals and objectives in its current Implementation Strategy. These resources are expended, according to its current IS, through direct and in-kind investments in programs or services operated by BID-Milton or its partners to improve the health of those living in its CBSA. Additionally, BID-Milton works on its own or with its partners to leverage funds through public or private grants and other funding sources. Finally, BID-Milton supports residents in its CBSA by providing "charity" care to low income individuals who are deemed unable to pay for care and services provided at its service sites. Moving forward, BID-Milton will commit resources in amounts comparable to if not more than what has

historically been expended through the same array of direct, in-kind, leveraged, or “charity” care expenditures.

BID-Milton and its leadership is committed to Community Benefits budget planning which ensures the funds and resources available to carry out its community benefits mission and to implement activities to address the needs identified by this CHNA. Recognizing that community benefits planning is ongoing and will change with continued community input, BID-Milton’s Implementation Strategy will evolve. Circumstances may change with new opportunities, requests from the community, community and public health emergencies, and other issues may arise, which may require a change in the IS or the strategies documented within it. The CBAC, the CBSLT, and BID-Milton’s Board of Trustees are committed to assessing information and updating the plan as needed.

Following are brief descriptions of each priority area, along with the goals that were established by BID-Milton to respond to the CHNA findings and the planning process. Please refer to the Implementation Strategy (IS) for more details.

PRIORITY AREA 1: MENTAL HEALTH AND SUBSTANCE USE

As it is throughout the Commonwealth and the nation, the burden of mental and substance use on individuals, families, communities and service providers in BID-Milton’s service area is overwhelming. Nearly every key informant interview, focus group and community forum included discussions on these topics. From a review of the quantitative and qualitative information, depression, anxiety/stress, social isolation, opioids, alcohol, and e-cigarette/vaping were the leading issues in this domain. There were particular concerns regarding the impact of depression, anxiety, and e-cigarette/vaping for youth, social isolation amongst older adults, prevalence of alcohol use, and the continued impact of the opioid epidemic.

Despite increased community awareness and sensitivity about the underlying issues and origins of mental health and substance use issues, there is still a great deal of stigma related to these conditions. There is a general lack of appreciation for the fact that these issues are often rooted in genetics, physiology and environment, rather than an inherent, controllable character flaw. There is, however, a deep appreciation and a growing understanding for the role that trauma plays for many of those with mental and/or substance use issues, with many people using illicit or controlled substances to self-medicate and cope with loss, stress, abuse, and other unresolved traumatic events.

The following goals were established by BID-Milton to respond to the CHNA and the strategic planning process. Please refer to the IS in Appendix D for more details.

Priority Area 1: Mental Health and Substance Use
Goal 1: Address Stigma Associated with Mental Health and Substance Use Issues
Goal 2: Enhance Access to Mental Health and Substance Use Screening, Assessment, and Treatment Services

PRIORITY AREA 2: CHRONIC/COMPLEX CONDITIONS AND THEIR RISK FACTORS

While mental health and substance use were perceived to be the leading issues in BID-Milton’s service area, one cannot forget that heart disease, stroke, and cancer are the leading causes of death in the nation and the Commonwealth. Roughly 6 in 10 deaths may be attributed to these three conditions combined. If you include respiratory disease (e.g., asthma, COPD) and diabetes, which are in the top 10 leading causes across all geographies, then one can account for the vast majority of causes of death.

All of these conditions are considered to be chronic and complex and can often strike early in one’s life, often ending in premature death. Within this priority area, according to those who participated in interviews, focus groups, forums, and the Community Health Survey, cardiovascular disease, cancer, diabetes, asthma, Alzheimer’s disease and other dementias were thought to be of the highest priority. It is also important to note that the risk and protective factors for nearly all chronic/complex conditions are much the same, including lack of physical activity, poor nutrition, obesity, and tobacco and alcohol use.

The following goals were established by BID-Milton to respond to the CHNA and the strategic planning process. Please refer to the IS in Appendix D for more details.

Priority Area 2: Chronic/Complex Conditions and their Risk Factors
Goal 1: Enhance Access to Health Education, Screening, Referral, and Chronic Disease Management Services in Clinical and Non-Clinical Settings
Goal 2: Reduce the Prevalence of Tobacco/Vaping Use

PRIORITY AREA 3: SOCIAL DETERMINANTS OF HEALTH AND ACCESS TO CARE

A dominant theme from the assessment was the tremendous impact that underlying social determinants of health, particularly access to affordable housing, navigation of the health system, poverty/employment, transportation, and food insecurity have on the entire population. The social determinants of health are often the drivers or underlying factors that create or exacerbate mental health issues, substance misuse, and chronic/complex conditions. These social determinants of health, particular poverty, underlie the access to care issues that were prioritized in the assessment: navigating the health system (including health insurance), chronic disease management, and access to culturally and linguistically competent care.

The following goals were established by BID-Milton to respond to the CHNA and the strategic planning process. Please refer to the IS in Appendix D for more details.

Priority Area 3: Social Determinants of Health and Access to Care
Goal 1: Enhance Access to Care and Reduce the Impact of Social Determinants
Goal 2: Promote Independence and “Aging in Place”

Appendices

[Appendix A: Detailed Community Engagement Summary](#)

[Appendix B: Data Book](#)

[Appendix C: Resource Inventory](#)

[Appendix D: Implementation Strategy](#)

[Appendix E: Community Benefits Evaluation](#)

Appendix A: Detailed Community Engagement Summary

KEY INFORMANT INTERVIEWS

Name	Title/Affiliation	Sector(s) Represented/Population Served
Tim Carey	Director of Program Development, South Shore Elder Services	Older adult health/healthy aging
Dr. Daurice Cox	CEO, Baystate Community Services	Behavioral health
Rick Doane	Executive Director, Interfaith Social Services	Community organization; homeless/housing; food insecurity
Melissa Drohan	Social Worker, BID-Milton	Hospital staff; Behavioral health
Kory Eng	COO, Quincy Community Action Programs	Community organization; Youth and families/housing
Ruth Jones	Director of Nursing, City of Quincy	Public health and clinical care; Municipal representative
Caroline Kinsella	Public Health Nurse, Town Milton	Public health and clinical care; Municipal representative
Jean McGinty	Public Health Nurse, Town of Randolph	Public health and clinical care; Municipal representative
Dr. Danny Siao	Chief of Hospitalist Services, BID-Milton	Hospital staff; Clinical care
Marian Girouard Spino	Director of System Integration and Quality, Aspire Health Alliance (formerly South Shore Mental Health)	Behavioral health
Christine Tangishaka	Family and Community Engagement Coordinator, Randolph Public Schools	Schools; Youth
Sara Tan	President/Executive Director; Enhance Asian Communities on Health	Community advocacy; Racial/ethnic minorities (Asian populations); Non-English speakers
Nancy Stuart	Outreach Coordinator, Town Milton Council on Aging	Older adult health/healthy aging
Vicki McCarthy	Youth Counselor Emeritus, Town of Milton	Youth; Behavioral health
Rev. Baffour Nkrumah-Appiah	Pastor, First Baptist Church	Faith-based community
Cynthia Sierra	CEO, Manet Community Health Center	Clinical care
Katelyn Szafir	Director of Medical Wellness, South Shore YMCA	Youth and families; Healthy communities

Key Informant Interview Guide

Introduction: As you may know, the Hospital is conducting a Community Health Needs Assessment (CHNA) to better understand the health needs of those living in its service area. This assessment, and a subsequent Implementation Strategy, is required of all non-profit hospitals to meet state Attorney General and Federal IRS requirements. The Implementation Strategy will outline how the hospital will work to address health needs and factors leading to poor health, as well as ways in which it will build on the community's strengths. It is therefore extremely important that the Hospital hear from a broad range of people living, working, and learning in the community. JSI has been contracted by the Hospital to conduct the assessment, which will include interviews, a Community Health Survey, and focus groups. This interview is part of the data collection and should take between 30-60 minutes. To ensure our data reflect your community or the community you serve, it is important that you

Speak openly and honestly. We'll be taking notes during the conversation, but will not link your name or personal information to your quotes without your permission. Do you have any questions before I get started?

- Question 1: Could you tell me more about yourself? How long have you worked at [name of organization]? Are you also a resident of a community within the service area? *Probe for information on programs/services offered through their organization, populations they work with, etc.*
- Question 2: The assessment is looking at health defined broadly – beyond clinical health issues, we're also looking at the root causes most commonly associated with ill-health (e.g. housing, transportation, employment/workforce, etc.) What do you see as the major contributors to poor health for those in the service area? *Try to identify top 2-3*
- Question 3: What clinical health issues (e.g. substance use, mental health, cancer, overweight/obesity, etc.) do you think are having the biggest impact on those in the service area? *Try to identify top 2-3*
- Question 4: What segments of the population have the most significant health needs or are most vulnerable? (e.g. young children, low-income, non-English speakers, older adults, etc.) *Do you see this changing in the future? Improving? Getting worse?*
- Question 5: How effectively do you think [Hospital] is currently meeting the needs of the community? Are there specific programs offered by [Hospital] that stand out to you as working well to address the needs of the community?
- Question 6: Where do you see opportunities for [Hospital] to implement programs/services to address community health needs?
- Question 7: Are there programs or services offered by other community organizations that you think are working well to address the needs of the community? *Mention that we will be compiling a list of community organizations/resources for the Resource Inventory*
- Question 8: As we explained at the beginning of this interview, we will be making an effort to gather input from community residents as part of this assessment. Can you recommend any strategies to engage hard-to-reach populations? *Any coalitions or advocacy groups that work with hard-to-reach populations? Any existing meeting groups you think it would be appropriate to reach out to?*
- Question 9: Finally, we are working to gather quantitative data to characterize health status – this includes demographic and socioeconomic data, and disease-specific incidence, hospitalization, emergency department, and mortality data wherever it is available. Do you know of, or use, any local data sources (e.g. reports, other needs assessments, etc.)?

FOCUS GROUPS

Name of group	Population/Sector Represented	Date	Location	Number of attendees (approx.)
Blue Hills Community Health Alliance (Community Health Network 20) - Milton	The Blue Hills Community Health Alliance is a coalition of public, non-profit, and private sector representatives working to build healthier communities through community-based planning and health promotion. This is a partnership of 13 communities, including Milton, Quincy, and Randolph. Participants represented a wide range of provider-types and community organizations working within the following sectors: mental health, substance use, clinical providers, healthy communities, primary care, planning and development, municipal leadership, cultural advocacy, and youth/family health.	January 18, 2019	Beth Israel Deaconess-Milton	20
Enhance Asian Community on Health (EACH) - Quincy	EACH is a non-profit educational and advocacy organization dedicated to enhancing health and wellness of families and individuals in the Asian community by providing information on healthcare options and social services. JSI worked with the Executive Director of EACH, Sara Tan, to organize and facilitate a focus group of approximately 10 Asian women – most of whom were Chinese and non-English speakers. Participants included older adults, low-income individuals, young adults with children, and individuals with chronic and complex conditions. Ms. Tan assisted in translating and interpreting questions and answers during this session.	March 18, 2019	Enhance Asian Community on Health (Quincy)	10
First Baptist Church - Randolph	JSI worked with Pastor Baffour Nkrumah-Appiah to organize and facilitate a focus group with parishioners at the First Baptist Church in Randolph. Participants included a diverse group of residents by race/ethnicity and age. Most of the participants from Randolph and Milton. The majority of participants were African Americans/Black but there were also Haitians and West Indians.	March 18, 2019	First Baptist Church (Randolph)	30
Milton High School Student Athletes (facilitated by	JSI worked with the Milton Substance Abuse Prevention Coalition (MSAPC) to gather information from 11 th and 12 th grade students at Milton High School. JSI	April 9, 2019	Milton High School	19

Milton Substance Abuse Prevention Coalition)	submitted focus group questions to MSAPC, who integrated these questions with a focus group they were scheduled to conduct. Participating students included sports team captains, mostly 11 th and 12 th grade students, both male and female. After the focus group, MSAPC shared the results with JSI to inform BID-Milton’s CHNA.			
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Focus Group Guide (General)

Introduction & Purpose of Focus Group: Beth Israel Deaconess Milton is conducting a Community Health Needs Assessment (CHNA) to better understand the health needs of those living in its service area. This assessment and a subsequent Implementation Strategy is required of all non-profit hospitals to meet state Attorney General and Federal IRS requirements.

The IS will outline how the hospital will work to address health needs and factors leading to poor health, as well as ways in which it will build on the community’s strengths. It is therefore extremely important that the Hospital hear from a broad range of people living, working, and learning in the community. To ensure our data reflect your community or the community you serve, it is important that you speak openly and honestly. We’ll be taking notes during the conversation, but will not link your name or personal information to your quotes without your permission.

- Question 1: The assessment is looking at health defined broadly – beyond clinical health issues, we’re also looking at the root causes of ill-health (e.g. housing, transportation, employment/workforce, poverty), also called the “social determinants of health.” What social determinants do people struggle with the most in your community? *Try to identify top 2-3*
- Question 2: What clinical health issues (e.g. substance use, mental health, cancer, overweight/obesity) are having the biggest impact on those in your community? *Try to identify top 2-3*
- Question 3: What segments of the population have the most significant health needs or are most vulnerable for poor health? (e.g. young children, low-income, non-English speakers, older adults, racial/ethnic minorities) *Do you see this changing in the future? Improving? Getting worse?*
- Question 4: How effectively do you think the Hospital is currently meeting the needs of your community?
- Question 5: Where do you see opportunities for the Hospital to implement programs/services to address community health needs?
- Question 6: Are there programs or services offered by other community organizations that you think are working well to address the needs of the community?
- Question 7: We will be making an effort to gather input from community residents as part of this assessment. Can you recommend any strategies to engage hard-to-reach populations?

Youth Focus Group Questions

- What sorts of physical and mental health issues do people your age struggle with the most?
 - Physical health issues might include things like healthy eating, sedentary lifestyle, smoking, sexual health, substance use (e.g. tobacco use/vaping, alcohol, Rx drugs, etc.)
 - Mental health issues might include things like depression, anxiety, stress
- If you have questions about your health, where do you get answers?
- If you have health education in school - what subjects do you wish were covered that aren't?

- What steps should community leaders (e.g. school board, principal, police, elected officials, health care providers) take to make sure that youth health needs are identified and made a priority?

COMMUNITY HEALTH SURVEY

Distribution channels: Surveys were available online, through the SurveyMonkey platform, in English. Hard-copies of the survey were made available in English, Haitian Creole, Vietnamese, and Chinese. BID-Milton worked with local community organizations, businesses, and stakeholders to distribute the survey to community residents, including those who are typically hard-to-reach (e.g. non-English speakers).

BID-Milton shared and posted the survey on its website and social media pages. Paper surveys were also distributed at the Milton Council on Aging, throughout the hospital and physician offices. The survey was distributed and shared by the following organizations:

- Town of Milton Public Health Department and Website
- South Shore YMCA
- Aspire Health Alliance
- Quincy Family Resource Center
- Interfaith Social Services
- Randolph Public Schools
- Milton Public Schools
- E.A.C.H

Community Health Survey Questions

Beth Israel Deaconess Hospital Milton is conducting a Community Health Needs Assessment to better understand the most pressing health-related issues for residents in the communities they serve. It is important that the hospital gathers input from people living, working, and learning in the community. The information gathered will help the hospital to improve its services.

Please take about 10 minutes to complete this survey. Your responses will be anonymous.

This survey has been shared widely. **Please complete this survey only once.**

Please email Madison MacLean (madison_maclean@jsi.com) with questions.

Question 1: Do you live, work, and/or learn in Milton, Braintree, Canton, Dorchester (Boston), Hyde Park (Boston), North Quincy, Mattapan (Boston), Quincy, Randolph, or Weymouth?

- | | |
|---------------------------------------------------------------------------------------|------------------------------------------------------------------------|
| <input type="checkbox"/> YES, I live, work, and/or learn in MILTON | <input type="checkbox"/> YES, I live, work, and/or learn in BRAINTREE |
| <input type="checkbox"/> YES, I live, work, and/or learn in CANTON | <input type="checkbox"/> YES, I live, work, and/or learn in DORCHESTER |
| <input type="checkbox"/> YES, I live, work, and/or learn in QUINCY | <input type="checkbox"/> YES, I live, work, and/or learn in HYDE PARK |
| <input type="checkbox"/> YES, I live, work, and/or learn in N. QUINCY | <input type="checkbox"/> YES, I live, work, and/or learn in MATTAPAN |
| <input type="checkbox"/> YES, I live, work, and/or learn in RANDOLPH | <input type="checkbox"/> YES, I live, work, and/or learn in WEYMOUTH |
| <input type="checkbox"/> NO, I do not live, work, and/or learn in any of those towns. | |

Question 2: What is your age?

- Under 18 18 to 24 23 to 34 35 to 44
 45 to 54 55 to 64 65 to 74 75 or older

Question 3: Are you Hispanic, Latino/a, or of Spanish origin? Yes No

Question 4: What race best describes you? Select all that apply.

- White Black or African American Asian
 Native Hawaiian or Pacific Islander American Indian or Alaska Native Other

Please answer Questions 5-7 with your community and/or the population(s) you serve in mind.

Question 5A: Choose the top three (3) challenges that prevent people in your community from achieving and maintaining good health. Rank your top three (3) answers, with 1 being the greatest challenge.

- Lack of affordable/safe housing Lack of access to transportation
 Long commute to and from work or school Crime or violence
 Limited or no education Lack of social support / social isolation
 Physical inactivity or sedentary lifestyles No or limited health insurance
 High cost of health care Food insecurity / unable to acquire healthy foods
 Co-payments for medication
 Social attitudes (e.g. discrimination, racism, distrust of providers)
 Socioeconomic conditions (e.g. poverty, low wages, limited job opportunities)
 Lack of health care providers that meet cultural, language, and/or social needs of patients
 Limited access to health care (lack of providers or availability of appointments)
 Inability to walk/ride a bike due to bad road conditions and/or no sidewalks

Question 5B: Are there other things that prevent people in your community from achieving and maintain good health? Please specify.

Question 6A: Choose the three (3) health conditions that have the greatest impact on your community. Rank your top three answers, with 1 being the condition that has the most impact.

- Cancer
 Cardiovascular conditions (e.g. hypertension/high blood pressure, heart disease, stroke)
 Respiratory diseases (e.g. asthma, chronic obstructive pulmonary disease [COPD], emphysema)

- Mental health (e.g. depression, anxiety, stress, trauma)
- Substance use (e.g. alcohol, opioids, tobacco, e-cigarettes/vaping, marijuana)
- Physical inactivity, nutrition, and/or obesity
- Infectious disease (e.g. influenza, HIV/AIDS, sexually transmitted infections, hepatitis C)
- Maternal and child health issues (e.g. prenatal care, teen pregnancy, infant mortality)
- Diabetes
- Oral health
- Neurological disorders (e.g. Alzheimer's, Parkinson's, dementia)
- Mobility impairments (e.g. falls, arthritis, fibromyalgia)

Question 6B: Are there other health conditions that impact your community? Please specify.

Question 7A: Choose the top three (3) populations that you think have the most significant health-related needs. Rank your top three (3), with 1 being the group with the most significant needs.

- Young children (0-5 years of age)
- School age children (6-11 years of age)
- Adolescents (12-17 years of age)
- Young Adults (18-24 years of age)
- Older Adults (older than 65 years of age)
- Immigrants/Refugees
- Racial/Ethnic Minorities
- Non-English Speakers
- Homeless/Unstably housed
- Low-income populations
- Those with disabilities (physical, cognitive, development, emotional)
- Lesbian, Gay, Bisexual, Transgender, Queer/Questioning (LGBTQ)

Question 7B: Are there other populations that have significant health-related needs?

Question 8: Which (if any) programs or services offered by Beth Israel Deaconess Milton have you attended? Check all that apply.

- Diabetes Fair
- Cancer screenings
- Cholesterol/blood pressure screenings
- Community education lectures
- CPR courses
- Support groups

Question 9: Which (if any) of these programs do you think works well to address the needs of your community? Check all that apply.

- Diabetes Fair
- Cancer screenings
- Cholesterol/blood pressure screenings
- Community education lectures
- CPR courses
- Support groups
- None

Question 10: Which health services in your community are hard to access? Check all that apply.

- Primary care (e.g. family, general practice, internal medicine physicians)
- Emergency care
- Urgent care (e.g. immediate care centers, Minute Clinics)
- Oral health care (e.g. dentists, oral surgeons)
- Specialty care (e.g. cardiology, dermatology, oncology, endocrinology)
- OB/GYN (e.g. female reproductive system, maternity care)
- Pharmacies
- Inpatient or residential drug and alcohol treatment (e.g. rehabilitation and detoxification)
- Outpatient drug and alcohol treatment (e.g. medication-assisted treatment, outpatient clinics)
- Inpatient mental health treatment (e.g. residential treatment, psychiatric hospitals, hospital inpatient units)
- Outpatient mental health treatment (e.g. community mental health centers, mental health counseling)
- Long term care (e.g. assisted living, skilled nursing facilities/nursing homes, convalescent homes)

Question 11: Are there other health services in your community that are hard to access? Please specify.

Question 12: What programs or services should Beth Israel Deaconess Milton offer or support to improve community health? Please specify.

Question 13: How did you hear about this survey?

- Beth Israel Deaconess Milton
- Blue Hills Community Health Alliance (CHNA 20)
- Council on Aging or Senior Center
- Other (Please specify):

Question 14: Please provide any additional thoughts on how Beth Israel Deaconess Milton could improve health in your community.

Thank you for your input. Please contact Madison MacLean (Madison_Maclean@jsi.com) with questions.

Appendix B: Beth Israel Deaconess Hospital–Milton Data Book

Key

Statistically higher than statewide rate
 Statistically lower than statewide rate

Demographics	Primary Service Area					Source
	MA	Norfolk County	Milton	Quincy	Randolph	
Population	6,789,319	694,389	27,527	93,824	33,704	US Census Bureau, 2013-2017 ACS 5-Year Estimates
Median age (years)	39	41.0	38.7	39.3	41.8	US Census Bureau, 2013-2017 ACS 5-Year Estimates
Age under 18 (%)	20.4	21.5	21.5	15.5	19.3	US Census Bureau, 2013-2017 ACS 5-Year Estimates
Age over 65 (%)	15.5	16.0	15.7	15.3	16.2	US Census Bureau, 2013-2017 ACS 5-Year Estimates
Race / Ethnicity / Culture						US Census Bureau, 2013-2017 ACS 5-Year Estimates
White alone (%)	78.9	79.4	74.2	62.4	40.7	US Census Bureau, 2013-2017 ACS 5-Year Estimates
Black or African American alone (%)	7.4	6.6	15.0	5.3	39.2	US Census Bureau, 2013-2017 ACS 5-Year Estimates
Asian alone (%)	6.3	10.4	6.6	29.0	12.4	US Census Bureau, 2013-2017 ACS 5-Year Estimates
Native Hawaiian and Other Pacific Islander (%)	0	0.0	0.0	0.1	0.1	US Census Bureau, 2013-2017 ACS 5-Year Estimates
American Indian and Alaska Native (%)	0.2	0.1	0.0	0.1	0.1	US Census Bureau, 2013-2017 ACS 5-Year Estimates
Some Other Race (%)	4.1	1.3	1.1	1.0	4.2	US Census Bureau, 2013-2017 ACS 5-Year Estimates
Two or More Races (%)	3.1	2.2	3.1	2.0	3.3	US Census Bureau, 2013-2017 ACS 5-Year Estimates
Hispanic or Latino of Any Race (%)	11.2	4.2	4.0	3.1	7.9	US Census Bureau, 2013-2017 ACS 5-Year Estimates
Foreign Born (%)	16.2	17.2	13.9	31.3	31.6	US Census Bureau, 2013-2017 ACS 5-Year Estimates
Language Spoken at Home by Population 5 Years and Older (detailed language data on separate tab)						
Language other than English	23.1	20.9	18.2	37.2	37.7	US Census Bureau, 2013-2017 ACS 5-Year Estimates
speak English less than "very well" (%)	9.1	7.5	3.5	20.3	15.8	US Census Bureau, 2013-2017 ACS 5-Year Estimates
Speak Spanish at home (%)	8.8	3.0	4.0	2.1	4.9	US Census Bureau, 2013-2017 ACS 5-Year Estimates
speak English less than "very well" (%)	3.6	0.7	0.3	0.6	1.1	US Census Bureau, 2013-2017 ACS 5-Year Estimates
Other Indo-European languages (%)	8.8	8.5	8.1	8.8	18.5	US Census Bureau, 2013-2017 ACS 5-Year Estimates
speak English less than "very well" (%)	3.1	2.4	1.0	3.0	7.3	US Census Bureau, 2013-2017 ACS 5-Year Estimates
Asian and Pacific Islander Languages (%)	4.2	7.7	5.0	24.7	10.3	US Census Bureau, 2013-2017 ACS 5-Year Estimates
speak English less than "very well" (%)	2.0	4.0	1.9	16.1	6.6	US Census Bureau, 2013-2017 ACS 5-Year Estimates
Household						
Total households	2,585,715	262324	8970	40167	12192	US Census Bureau, 2013-2017 ACS 5-Year Estimates
Family households (families) (%)	63.7	66.2	77.3	53.4	69.8	US Census Bureau, 2013-2017 ACS 5-Year Estimates
In married couple family (%)	47.2	53.3	62.2	39.3	42.6	US Census Bureau, 2013-2017 ACS 5-Year Estimates
Average family size	3.1	3.2	3.3	3.1	3.3	US Census Bureau, 2013-2017 ACS 5-Year Estimates
Unemployment Rate among Civilian Labor Force (%)	6.0	5.5	3.9	5.8	10.6	US Census Bureau, 2013-2017 ACS 5-Year Estimates
Median household income (dollars)	74,167	95,668	126,000	71,808	69,969	US Census Bureau, 2013-2017 ACS 5-Year Estimates
Below federal poverty line - all residents (%)	11.1	6.5	4.1	10.5	11.3	US Census Bureau, 2013-2017 ACS 5-Year Estimates
Below federal poverty line - families (%)	7.8	4.3	3.0	7.0	9.3	US Census Bureau, 2013-2017 ACS 5-Year Estimates
Below federal poverty line - under 18 years (%)	14.6	6.7	2.0	11.6	22.6	US Census Bureau, 2013-2017 ACS 5-Year Estimates
Below federal poverty line - age 65+ (%)	9.0	7.0	9.2	12.7	9.3	US Census Bureau, 2013-2017 ACS 5-Year Estimates
Below federal poverty line - female head of household, no husband present (%)	24.4	17.0	10.3	20.4	21.5	US Census Bureau, 2013-2017 ACS 5-Year Estimates
Below 200% of poverty level	23.7	14.8	9.5	24.6	23.7	US Census Bureau, 2013-2017 ACS 5-Year Estimates
Below 300% of poverty level	36.4	25.0	18.8	37.9	36.9	US Census Bureau, 2013-2017 ACS 5-Year Estimates
Below 400% of poverty level	48.6	36.0	27.4	51.4	57.7	US Census Bureau, 2013-2017 ACS 5-Year Estimates
With cash public assistance income (%)	2.8	1.9	0.5	3.0	4.4	US Census Bureau, 2013-2017 ACS 5-Year Estimates
With Food Stamp/SNAP benefits in the past 12 months (%)	12.3	6.9	4.3	10.5	17.3	US Census Bureau, 2013-2017 ACS 5-Year Estimates
Educational Attainment (Population 25 Years and Older)						
High school degree or higher (%)	90.3	93.9	95.6	88.7	85.5	US Census Bureau, 2013-2017 ACS 5-Year Estimates
Bachelor's degree or higher (%)	42.1	52.5	61.8	43.7	28.9	US Census Bureau, 2013-2017 ACS 5-Year Estimates
Housing						
Vacant housing units (%)	9.7	4.9	4.3	6.3	5.4	US Census Bureau, 2013-2017 ACS 5-Year Estimates
Owner-occupied (%)	62.4	69.3	82.5	47.6	68.3	US Census Bureau, 2013-2017 ACS 5-Year Estimates
Avg household size of owner occupied	2.7	2.8	3.1	2.7	2.9	US Census Bureau, 2013-2017 ACS 5-Year Estimates
Monthly owner costs exceed 30% of household income (%)	31.5	30.2	26.9	39.2	39.2	US Census Bureau, 2013-2017 ACS 5-Year Estimates
Renter-occupied (%)	37.6	30.7	17.5	52.4	31.7	US Census Bureau, 2013-2017 ACS 5-Year Estimates
Avg household size of renter occupied	2.3	2.1	2.0	2.0	2.4	US Census Bureau, 2013-2017 ACS 5-Year Estimates
Gross rent exceeds 30% of household income (%)	50.1	48.7	52.4	46.0	54.7	US Census Bureau, 2013-2017 ACS 5-Year Estimates
Transportation						
Takes car, truck, van (alone) to work (%)	70.7	68.5	65.8	57.0	75.7	US Census Bureau, 2013-2017 ACS 5-Year Estimates
Takes car, truck, van (carpool) to work (%)	7.5	7.1	9.9	9.0	11.4	US Census Bureau, 2013-2017 ACS 5-Year Estimates
Takes public transportation (excluding cab) to work (%)	10.2	14.4	12.2	28.1	9.6	US Census Bureau, 2013-2017 ACS 5-Year Estimates
Mean commute time (minutes)	29.3	34	33	36	36	US Census Bureau, 2013-2017 ACS 5-Year Estimates
Worked outside county of residence (%)	30.8	53.3	58.2	59.0	57.4	US Census Bureau, 2013-2017 ACS 5-Year Estimates
School Enrollment						
Graduation rate(%), 2017	88.3		95.2	92.7	76.7	Massachusetts Department of Elementary and Secondary Education School and District Profiles
Drop out rate(%), 2017	4.9		1.2	2.7	4.4	Massachusetts Department of Elementary and Secondary Education School and District Profiles

	Primary Service Area					Source
	MA	Norfolk County	Milton	Quincy	Randolph	
Demographics						
First language not English, 2018-19	21.9		8.9	40.9	37	Massachusetts Department of Elementary and Secondary Education School and District Profiles
English language learners(%), 2018-19	10.5		1.8	15.5	15.3	Massachusetts Department of Elementary and Secondary Education School and District Profiles
Students with Disabilities(%), 2018-19	18.1		14.5	18.5	23.5	Massachusetts Department of Elementary and Secondary Education School and District Profiles
High Needs, 2018-19	47.6		23.5	58.9	68.3	Massachusetts Department of Elementary and Secondary Education School and District Profiles
Economically disadvantaged(%), 2018-19	31.2		8.9	34.5	44.6	Massachusetts Department of Elementary and Secondary Education School and District Profiles
Total Expenditures per Pupil, 2017	\$15,911.38		\$14,854.75	\$16,795.48	\$17,380.88	Massachusetts Department of Elementary and Secondary Education School and District Profiles
Crime						
Population in 2017	6,624,327		27420	93966	33837	FBI Uniform Crime Reports 2017
Violent crime counts	23,393		15	383	121	FBI Uniform Crime Reports 2017
Murder/non-negligent manslaughter	171		0	0	1	FBI Uniform Crime Reports 2017
Forcible rape	2,012		1	24	10	FBI Uniform Crime Reports 2017
Robbery	4,643		7	65	20	FBI Uniform Crime Reports 2017
Aggravated assault	16,567		7	294	90	FBI Uniform Crime Reports 2017
Property crime counts	92,614		215	1564	483	FBI Uniform Crime Reports 2017
Burglary	16,371		58	322	93	FBI Uniform Crime Reports 2017
Larceny-theft	68,955		146	1154	351	FBI Uniform Crime Reports 2017
Motor vehicle theft	7,288		11	88	39	FBI Uniform Crime Reports 2017
Arson	373		0	6	0	FBI Uniform Crime Reports 2017
Violent crime rate (per 100,000)	353		55	408	358	FBI Uniform Crime Reports 2017
Murder/non-negligent manslaughter	3		0	0	3	FBI Uniform Crime Reports 2017
Forcible rape	30		4	26	30	FBI Uniform Crime Reports 2017
Robbery	70		26	69	59	FBI Uniform Crime Reports 2017
Aggravated assault	250		26	313	266	FBI Uniform Crime Reports 2017
Property crime rate (per 100,000)	1,398		784	1664	1427	FBI Uniform Crime Reports 2017
Burglary	247		212	343	275	FBI Uniform Crime Reports 2017
Larceny-theft	1,041		532	1228	1037	FBI Uniform Crime Reports 2017
Motor vehicle theft	110		40	94	115	FBI Uniform Crime Reports 2017
Arson	6		0	6	0	FBI Uniform Crime Reports 2017

TABLE C16001: LANGUAGE SPOKEN AT HOME BY ABILITY TO SPEAK ENGLISH FOR THE POPULATION 5 YEARS AND OLDER, 2013-2017 AMERICAN COMMUNITY SURVEY 5-YEAR ESTIMATES

	MILTON			QUINCY			RANDOLPH		
	Estimate	Margin of Error (+/-)	% of Total Pop 5+	Estimate	Margin of Error (+/-)	% of Total Pop 5+	Estimate	Margin of Error (+/-)	% of Total Pop 5+
Population 5 years and over	25,770	272		88,471	422		31,864	384	
Speak only English at home	21,087	747	81.83	55,564	1636	62.80	19,844	1199	62.28
SPANISH or SPANISH CREOLE	1031	280	4.00	1,834	420	2.07	1,562	498	4.90
Speak English less than "very well"	90	81	0.35	565	258	0.64	335	184	1.05
FRENCH (Incl. Haitian, Cajun)	1580	561	6.13	995	307	1.12	4,356	789	13.67
Speak English less than "very well"	179	95	0.69	319	193	0.36	1889	393	5.93
GERMAN or WEST GERMANIC	40	34	0.16	277	165	0.31	60	53	0.19
Speak English less than "very well"	0	23	0.00	38	44	0.04	0	26	0.00
RUSSIAN, POLISH, OTHER SLAVIC LANGUAGES	73	46	0.28	833	311	0.94	306	158	0.96
Speak English less than "very well"	11	16	0.04	283	156	0.32	159	93	0.50
OTHER INDO-EUROPEAN LANGUAGES	400	169	1.55	5673	1005	6.41	1157	453	3.63
Speak English less than "very well"	60	52	0.23	2056	488	2.32	293	178	0.92
KOREAN	64	77	0.25	249	170	0.28	17	27	0.05
Speak English less than "very well"	0	23	0.00	130	107	0.15	0	26	0.00
CHINESE (Incl. Mandarin, Cantonese)	998	321	3.87	15567	1058	17.60	981	364	3.08
Speak English less than "very well"	373	137	1.45	11005	921	12.44	691	308	2.17
VIETNAMESE	121	97	0.47	3010	757	3.40	1970	650	6.18
Speak English less than "very well"	89	77	0.35	1726	480	1.95	1293	410	4.06
TAGALOG (Incl. Filipino)	14	23	0.05	607	301	0.69	67	69	0.21
Speak English less than "very well"	14	23	0.05	209	164	0.24	17	26	0.05
OTHER ASIAN LANGUAGES	95	84	0.37	2398	693	2.71	233	200	0.73
Speak English less than "very well"	22	37	0.09	1192	543	1.35	89	88	0.28
ARABIC	117	95	0.45	990	315	1.12	54	51	0.17
Speak English less than "very well"	10	16	0.04	314	152	0.35	0	26	0.00
OTHER AND UNSPECIFIED LANGUAGES	150	148	0.58	474	226	0.54	1257	591	3.94
Speak English less than "very well"	50	64	0.19	150	109	0.17	272	151	0.85

All data from US Census Bureau
 American Community Survey,
 2013-2017 5-Year Estimates;
 B04006: People Reporting
 Ancestry

**MAH SERVICE AREA: TOP 5
 ANCESTRIES BY TOWN**

MILTON	Estimate	MOE	%
Total Pop	27,527	47	
Irish	9,520	887	34.58
Italian	3,457	598	12.56
English	2,595	457	9.43
West Indian (except Hispanic gro	1,679	367	6.10
German	1,612	394	5.86

QUINCY	Estimate	MOE	%
Total Pop	93,824	30	
Irish	23,736	1,580	25.30
Italian	9,746	827	10.39
English	5,365	677	5.72
German	4,400	710	4.69
American	2,701	451	2.88

RANDOLPH	Estimate	MOE	%
Total Pop	33,704	64	
West Indian (except Hispanic gro	5,827	884	17.29
Haitian	4,097	838	12.16
Irish	3,580	574	10.62
Subsaharan African	2,969	1,007	8.81
Italian	1,897	492	5.63

MASSACHUSETTS	Estimate	MOE	%
Total Pop	6,789,319		
Irish	1,403,567	11,116	20.67
Italian	871,822	8,323	12.84
English	647,855	6,278	9.54
French (except Basque)	437,190	5,490	6.44
German	400,519	4,838	5.90

Key

Statistically higher than statewide rate
Statistically lower than statewide rate

	Primary Service Area					Source
	MA	Norfolk County	Milton	Quincy	Randolph	
All-Cause; Injuries; Assaults (Age-adjusted per 100,000)						
All cause						
Deaths, 2015	684.5	640.8	524.9	743.2	769.1	MDPH Registry of Vital Records and Statistics
Premature mortality for <75 yr population, 2015	279.6	246.9	164.2	349.6	391.3	MDPH Registry of Vital Records and Statistics
Hospitalizations						
ED discharges						
Injuries and Poisonings	45.0					
Hospitalizations						
ED discharges						
Deaths, 2015	58.0	55.1	21.5	80.7	80.5	MDPH Registry of Vital Records and Statistics
Motor Vehicle Related						
Hospitalizations						
ED discharges						
Deaths, 2015	5.4	5.9	0	6.7	20	MDPH Registry of Vital Records and Statistics
Assault						
Deaths, 2015	2.0	1.0	0	-1	-1	MDPH Registry of Vital Records and Statistics
Behavioral Health						
Alcohol/substance use (age adjusted per 100,000)						
Hospitalizations						
ED discharges						
Mental Disorders (age adjusted per 100,000)						
Hospitalizations						
ED discharges						
Deaths, 2015	62.9	58.9	43	48.9	65.1	MDPH Registry of Vital Records and Statistics
Suicide Deaths, 2015	9.0	8.0	-1	11.5	-1	MDPH Registry of Vital Records and Statistics
Opioids (age adjusted per 100,000)						
Hospitalizations						
ED discharges						
Fatal Overdoses, 2015	24.6	22.6	-1	43.6	37.3	MDPH Registry of Vital Records and Statistics
Opioid-related overdose death count by city/town of residence for the decedent, 2013-2017	8,188		12	196	41	MDPH Bureau of Substance Abuse Services
Opioid-related overdose death count by city/town of death occurrence, 2013-2017	8,349		15	180	24	MDPH Bureau of Substance Abuse Services
Admissions to BSAS Contracted/Licensed Programs FY17						
Number of admissions	80,896	5,116	112	1,405	299	MDPH Bureau of Substance Abuse Services
% White	77.1	87.9	80.3	88.1	65.7	MDPH Bureau of Substance Abuse Services
% Black of African American	7.3	5.3	10.3	5.1	22.1	MDPH Bureau of Substance Abuse Services
% Multi-Racial or other	15.6	6.8	6.8	6.9	12.1	MDPH Bureau of Substance Abuse Services
% Hispanic	14	3.0	0	2.6	5.5	MDPH Bureau of Substance Abuse Services
% Less Than High School Education	25.6	18.0	12.8	16.6	21.8	MDPH Bureau of Substance Abuse Services
% Less Than 18	1.3	1.2	0	Missing/Unknown	Missing/Unknown	MDPH Bureau of Substance Abuse Services
% 18 to 25	14.7	15.7	24.4	11.4	14.8	MDPH Bureau of Substance Abuse Services
% 26 to 30	21.7	23.7	15.1	24	20	MDPH Bureau of Substance Abuse Services
% 31 to 40	30.9	30.2	29.4	32.9	28.9	MDPH Bureau of Substance Abuse Services
% 40 to 50	17.6	14.5	15.1	15.5	16	MDPH Bureau of Substance Abuse Services
% 51 and older	13.9	14.7	16	16	19.7	MDPH Bureau of Substance Abuse Services
% Employed at Enrollment	44.9	51.0	52.9	46.6	51.7	MDPH Bureau of Substance Abuse Services
% Homeless at Enrollment	30.1	23.4	11.4	32.9	15.9	MDPH Bureau of Substance Abuse Services
% Had Prior Mental Health Treatment	46.2	43.7	43.2	43.8	40.4	MDPH Bureau of Substance Abuse Services
Primary Substance of Use						
% Alcohol	31.9	36.3	56	33.2	39.4	MDPH Bureau of Substance Abuse Services
% Heroin	53.1	50.5	39.7	54.4	42.6	MDPH Bureau of Substance Abuse Services
% All other opioids*	5.8	4.6	Missing/Unknown	4.6	7.1	MDPH Bureau of Substance Abuse Services
% Crack/Cocaine	4.1	2.8	Missing/Unknown	3.6	4.8	
% Marijuana	4	3.2	Missing/Unknown	2.2	3.2	MDPH Bureau of Substance Abuse Services
% Other sedatives/hypnotics, stimulants, or other	2.3	2.7	Missing/Unknown	1.9	Missing/Unknown	MDPH Bureau of Substance Abuse Services
Chronic Disease (age-adjusted rates per 100,000)						
Diabetes						

MDPH Registry of Vital Records and Statistics

MDPH Registry of Vital Records and Statistics

	Primary Service Area					Source
	MA	Norfolk County	Milton	Quincy	Randolph	
All-Cause; Injuries; Assaults (Age-adjusted per 100,000)						
Hospitalizations						
ED discharges						
Deaths, 2015	16.8	14.0	13.6	14.2		16.4 MDPH Registry of Vital Records and Statistics
Hypertension						
Hospitalizations						
ED discharges						
Deaths, 2015	6.9	6.2	-1	4.8		-1 MDPH Registry of Vital Records and Statistics
Major cardiovascular disease						
Hospitalizations						
ED discharges						
Deaths, 2015	180.8	170.1	148.5	195.9		207.3 MDPH Registry of Vital Records and Statistics
Heart Disease						
Hospitalizations						
ED discharges						
Deaths, 2015	138.7	133.3	115.6	149.1		151.7 MDPH Registry of Vital Records and Statistics
Coronary Heart Disease						
Hospitalizations						
ED discharges						
Deaths, 2015	82.3	82.2	67.2	103.3		81.8 MDPH Registry of Vital Records and Statistics
Heart Failure						
Hospitalizations						
ED discharges						
Cerebrovascular						
Hospitalizations						
Deaths, 2015	28.4	23.2	24.1	35		35.4 MDPH Registry of Vital Records and Statistics
Chronic lower respiratory diseases						
Hospitalizations						
Deaths, 2015	33.0	30.0	-1	46.6		36.7 MDPH Registry of Vital Records and Statistics
Asthma						
Hospitalizations						
ED discharges						
Deaths, 2015	1.0	0.7	0	-1	0	MDPH Registry of Vital Records and Statistics
Chronic Liver Disease						
Hospitalizations						
Deaths, 2015	8.1	7.6	-1	7.4		-1 MDPH Registry of Vital Records and Statistics
Cancer (age-adjusted rates per 100,000)						
All-cause						
Hospitalizations						
ED discharges						
Deaths, 2015	152.8	145.1	129.7	170.7		161.3 MDPH Registry of Vital Records and Statistics
Breast (invasive, female)						
Hospitalizations						
ED discharges						
Deaths, 2015	9.8	16.6	-1	15.2		-1 MDPH Registry of Vital Records and Statistics
Colorectal						
Hospitalizations						
ED discharges						
Deaths, 2015	12	12.6	17.2	8.7		22.8 MDPH Registry of Vital Records and Statistics
Lung						
Hospitalizations						
ED discharges						
Deaths, 2015	39	39.2	36.2	56.1		48 MDPH Registry of Vital Records and Statistics
Prostate						
Hospitalizations						
ED discharges						
Deaths, 2015	7	17.7	-1	31.5		-1 MDPH Registry of Vital Records and Statistics
Maternal and Child Health						
Infant Mortality, 2015 (rate per 1,000)	4.3	4.2	0	4.1		16.7 MDPH Registry of Vital Records and Statistics
Low Birth Weight (<2500 grams/5.5 lbs), 2014 (%)						
Adequate Prenatal Care*, 2015 (%)						
Number of resident births to mothers 15-19, 2015						

	Primary Service Area					Source
	MA	Norfolk County	Milton	Quincy	Randolph	
All-Cause; Injuries; Assaults (Age-adjusted per 100,000)						
Infectious Disease						
Chlamydia cases (lab confirmed), 2017	29203	1998	84	336	203	MDPH Bureau of Infectious Disease and Laboratory Services
Gonorrhea cases (lab confirmed), 2017	7307	415	16	91	52	MDPH Bureau of Infectious Disease and Laboratory Services
Syphilis cases (probable and confirmed), 2017	1091	64	<5	20	<5	MDPH Bureau of Infectious Disease and Laboratory Services
Hepatitis A cases (confirmed), 2017	53	4	0	0	0	MDPH Bureau of Infectious Disease and Laboratory Services
Chronic Hepatitis B (confirmed and probable), 2017	2023	393	5	250	16	MDPH Bureau of Infectious Disease and Laboratory Services
Hepatitis C cases (confirmed and probable), 2017	7765	574	13	114	27	MDPH Bureau of Infectious Disease and Laboratory Services
Pneumonia/Influenza						
Confirmed Influenza cases, 2017	24278	1932	90	260	127	MDPH Bureau of Infectious Disease and Laboratory Services
Hospitalizations						
Deaths, 2015	17.1	16	22.6	25.9	17.2	MDPH Registry of Vital Records and Statistics
HIV/AIDS (age-adjusted rate per 100,000)						
Incidence, 2017	1870	120	8	26	10	MDPH Bureau of Infectious Disease and Laboratory Services
Hospitalizations						
Deaths, 2015	1.1	0.7	-1	-1	0	MDPH Registry of Vital Records and Statistics
Infectious and Parasitic Disease (age-adjusted rate per 100,000)						
Hospitalizations						
Deaths, 2015	18.9	16	-1	18.2	18.1	MDPH Registry of Vital Records and Statistics
Elder Health (age-adjusted rate per 100,000)						
Falls						
Hospitalizations						
ED discharges						
Hip fracture hospitalizations						
Alzheimers deaths, 2015	20.2	18.5	18.5	19.1	14.1	MDPH Registry of Vital Records and Statistics
Parkinson's deaths, 2015	7.7	8.7	-1	8.6	-1	MDPH Registry of Vital Records and Statistics

Key

Statistically higher than statewide rate

Statistically lower than statewide rate

Source: Massachusetts Vital Statistics, 2015

	Primary Service Area					
	MA	Norfolk County	Suffolk County	Milton	Quincy	Randolph
Cancer Mortality (Age-adjusted per 100,000), 2015						
All Types (invasive)	152.8	145.1	153.8	129.7	170.7	161.3
Bladder	4.7	4.0	3.2	0.0	4.2	--1
Bone	0.3	--1	--1	0.0	0.0	0.0
Brain/Central Nervous System	4.7	4.7	4.0	--1	5.4	--1
Breast (female)	9.8	16.6	16.3	--1	15.2	--1
Cervical	0.6	1.3	2.1	0.0	--1	0.0
Colorectal	12.0	12.6	11.7	17.2	8.7	22.8
Esophageal	4.9	4.1	3.5	--1	5.0	0.0
Kaposi's Sarcoma	0.0	0.0	0.0	0.0	0.0	0.0
Kidney	3.5	3.1	4.5	--1	5.7	0.0
Larynx	0.8	0.8	--1	0.0	--1	0.0
Leukemia	5.7	4.8	5.5	--1	7.7	--1
Liver	6.0	5.5	8.1	--1	6.9	--1
Lung	39.0	39.2	36.6	36.2	56.1	48.0
Lymphoma (Hodgkin)	0.2	--1	--1	0.0	0.0	0.0
Lymphoma (Non-Hodgkin)	5.2	5.0	5.5	0.0	4.9	--1
Melanoma of Skin	2.3	2.0	1.4	--1	4.5	--1
Multiple Myeloma	3.1	3.4	3.5	--1	4.3	--1
Oral Cavity	2.4	1.3	2.9	--1	--1	0.0
Ovary	3.9	6.5	7.0	--1	--1	--1
Pancreatic	11.3	10.4	10.2	--1	5.6	--1
Prostate	7	17.7	23.5	--1	31.5	--1
Soft Tissue	1.5	1.1	1.7	0.0	0.0	0.0
Stomach	3.2	3.0	4.0	0.0	6.4	--1
Testis	0.1	0.0	--1	0.0	0.0	0.0
Thyroid	0.5	--1	0.0	0.0	--1	0.0
Uterine	2.7	4.7	7.1	--1	--1	0.0

Massachusetts Healthy Aging Community Profile

Key

Statistically higher than statewide rate

Statistically lower than statewide rate

	MA	Norfolk County	Primary Service Area		
			Milton	Quincy	Randolph
POPULATION CHARACTERISTICS					
Total population 65 years or older	1049751	110873	4320	14310	5450
Population 65 years or older (% of total population)	15.5	16	15.7	15.3	16.2
Population 65-74 years (% of total population)	8.7	8.6	7.8	8.5	8.6
Population 75-84 years (% of total population)	4.5	4.8	5.1	4.6	4.6
Population 85 years or older (% of total population)	2.3	2.5	2.8	2.2	2.9
% of 65+ population living alone	29.9	28.8	29.8	36.5	21.3
% of only English speakers 65 years or older	17.7	18.0	18.5	18.6	20.0
% Language other than English over 65 years or older	11.9	12.8	9.0	12.2	12.4
% of Spanish at home speakers 65 years or older	7.0	6.8	1.6	6.8	9.8
WELLNESS & PREVENTION					
% 60+ injured in a fall within last 12 months	10.6				
% 65+ had hip fracture	3.7				
%60+ with self-reported fair or poor health status	18.0				
% 60+ with physical exam/check-up in past year	89.3				
BEHAVIORAL HEALTH					
% 60+ with 15+ days poor mental health last month	7.0				
% 65+ with depression	31.5				
% 65+ with anxiety disorders	25.4				
% 65+ with substance use disorders (drug use +/- alcohol abuse)	6.6				
CHRONIC DISEASE					
% 65+ with Alzheimer's disease or related dementias	13.6				
LIVING WITH DISABILITY					
% 65+ with clinical diagnosis of deafness or hearing impairment	16.1				
% 65+ with clinical diagnosis of blindness or visual impairment	1.5				
% 65+ with clinical diagnosis of mobility impairments	3.9				
ACCESS TO CARE					
% Medicare managed care enrollees	23.1				
% dually eligible for Medicare and Medicaid	16.7				
% 60+ with a regular doctor	96.4				
% 60+ who did not see doctor when needed due to cost	4.1				
# of nursing homes within 5 miles	399				
# of home health agencies	299				
# of adult day health centers	131				
COMMUNITY VARIABLES & CIVIC ENGAGEMENT					
% of grandparents raising grandchildren	0.8				
# of assisted living sites	238				
Total of all crashes involving adult age 60+/town	132351				
# of medical transportation services for older people	268				
# of nonmedical transportation services for older people	252				

Boston

US Census Bureau, 2013-2017 ACS 5-Year Estimates
US Census Bureau, 2013-2017 ACS 5-Year Estimates
US Census Bureau, 2013-2017 ACS 5-Year Estimates
US Census Bureau, 2013-2017 ACS 5-Year Estimates
US Census Bureau, 2013-2017 ACS 5-Year Estimates
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2018 Massachusetts Healthy Aging Community Profile
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Notes:

1. Demographics: Each American Community Survey (ACS) estimate is accompanied by the upper and lower bounds of the 90 percent confidence interval. A 90 percent confidence interval can be interpreted roughly as providing 90 percent certainty that the true number falls between the upper and lower bounds.

2. Clinical indicators: All data provided by MassCHIP are estimates associated with some margin of error. Percentages are accompanied by 95% confidence intervals, meaning the true value of the measure falls within the range 95% of the time. The difference between two groups is statistically significant if the 95% confidence intervals surrounding these two estimates do not overlap

For CHIA data, confidence intervals for year over year reflect change within geography rather than difference from statewide benchmark

Appendix C: Resource Inventory

MULTI-SECTOR COLLABORATIVES AND COMMUNITY HEALTH PARTNERSHIPS

ORGANIZATION	CITY
Blue Hills Community Health Alliance (CHNA 20)	Milton
Milton Substance Abuse Prevention Coalition	Milton

LOCAL PUBLIC DEPARTMENTS

ORGANIZATION	CITY
Local Health Departments and Boards of Health	
Local Fire Departments	
Local Police Departments	
Local School Departments	

BUSINESS AND COMMUNITY DEVELOPMENT

ORGANIZATION	CITY
Local Chambers of Commerce	

ADULT EDUCATION

ORGANIZATION	CITY
Milton Adult Education	Milton

EARLY CHILDHOOD, YOUTH, AND ADOLESCENT SERVICES

Organizations	City
Departments of Youth Services	
Milton Early Childhood Alliance	Milton
Quincy Community Action Programs	Quincy
Quincy Family Resource Center	Quincy
Step Ahead Early Education	Randolph

FOOD SECURITY AND HEALTHY EATING

Organizations	City
Interfaith Social Services	Quincy
Friendly Food Pantry	Randolph
Milton Community Food Pantry	Milton
Concord Baptist Church	Milton
Quincy Crisis Center Food Delivery Program	Quincy
South Shore Elder Services Meals on Wheels	Braintree
BAMSI WIC	Quincy

SNAP	Quincy
Community Lunch Program	Quincy
Salvation Army	Quincy
Southwest Community Food Center	Quincy
Faith Covenant	Quincy
Quincy WIC Program	Quincy
Randolph Food Pantry	Randolph

HOUSING

Organizations	City
Milton Housing Authority	Milton
Milton Senior Housing/Unquity House	Milton
Winter Valley	Milton
Father Bill's & Mainspring	Quincy
Quincy Community Action	Quincy
Quincy Housing Authority	Quincy
Randolph Housing Authority	Randolph

DOMESTIC VIOLENCE SERVICES

Organizations	City
DOVE, Inc.	Quincy

MULTI SERVICE AGENCIES

Organizations	City
Milton Residents Fund	Milton
Quincy Community Action	Quincy
Bay State Community Services	Quincy
Boston Chinatown Neighborhood Center	Quincy
Quincy Family Resource Center	Quincy

CULTURAL ORGANIZATIONS

Organizations	City
Asian American Service Association	Quincy
Enhance Asian Community Health	Quincy
Quincy Asian Resources, Inc.	Quincy

DISABILITY SERVICES

Organizations	City
The Arc of South Shore	Quincy

SERVICES FOR OLDER ADULTS

Organizations	City
Milton Council on Aging	Milton
Department of Elder Affairs	Quincy
Hancock Park Adult Day Health	Quincy
Quincy Council on Aging	Quincy
Senior Resource Center, Inc.	Quincy
Randolph Council on Aging	Randolph
Randolph Intergenerational Center	Randolph

EMPLOYMENT AND CAREER SERVICES

Organizations	City
Quincy Career Center	Quincy

FAITH-BASED ORGANIZATIONS

Organizations	City
Interfaith Social Services	Quincy
My Brother's Keeper	Milton

HIGHER EDUCATION

Organizations	City
Curry College	Milton
Laboure College	Milton
Quincy College	Quincy
Eastern Nazarene College	Quincy

HEALTH CARE SERVICES

Organizations	City
South Cove Community Health Center	Quincy
Manet Community Health Center	Quincy
A New Way Recovery	Quincy
Bay State Community Services	Milton
Transformation Center	Quincy
Good Shepherd's Maria Droste Counseling	Quincy
South Shore Mental Health	Quincy
Adcare	Quincy
Gavin Foundation	Quincy
Lamour Counseling	Randolph

Mass Bay Counseling	Quincy
New Life Counseling & Wellness Center	Randolph
Old Colony Hospice	Randolph
Beth Israel Deaconess Milton	Milton

RECREATION AND COMMUNITY CENTERS

Organizations	City
Germantown Neighborhood Center	Quincy
Houghs Neck Community Center	Quincy
South Shore YMCA	Quincy
Randolph Intergenerational Center	Randolph
Randolph Recreation Department	Randolph

VETERANS SERVICES

ORGANIZATION	CITY
Operation Homefront	Quincy
James Hurley Senior and Veterans Center	Randolph

Appendix D: Summary Implementation Strategy

Beth Israel Deaconess–Milton Implementation Strategy 2020 - 2022

Between October 2018 and April 2019, Beth Israel Deaconess–Milton (BID–Milton) Hospital conducted a comprehensive Community Health Needs Assessment (CHNA) that included an extensive review of existing quantitative data as well as the collection of qualitative information through interviews, focus groups and community meetings. A resource inventory was also completed to identify existing health-related assets and service gaps. During this process, the Hospital made substantial efforts to engage administrative and clinical staff at the Hospital (including senior leadership) and community health stakeholders throughout the Hospital’s community benefits service area. A detailed review of the CHNA approach, data collection methods, and community engagement activities are included in Appendix A of BID–Milton’s 2019 CHNA Report.

Once BID–Milton’s CHNA activities were completed, the Hospital’s Community Benefits (CB) Program staff convened the BID–Milton Community Benefits Advisory Committee (CBAC) and the Hospital’s Community Benefits Senior Leadership Team (CBSLT) and conducted a series of strategic planning meetings. These meetings allowed Hospital staff and a representative group of external community health stakeholders to review the quantitative and qualitative findings from the CHNA, prioritize the leading community health issues, identify segments of the population most at-risk (Priority Populations), review existing community benefits programming, and begin to develop the Hospital’s 2020 – 2022 Implementation Strategy (IS). After these strategic planning meetings, the Hospital’s CB Staff continued to work with the CBAC, CBSLT, and other community partners to develop draft and final versions of BID–Milton’s 2020-2022 Implementation Strategy.

CORE IS PLANNING PRINCIPLES AND STATE PRIORITIES

In developing the IS, care was taken to ensure that BID–Milton’s community health priorities were aligned with the Commonwealth of Massachusetts priorities set by the Commonwealth’s Department of Public Health (MDPH). The table below outlines the four Community Benefit focus issues identified by MDPH and the Executive Office of Health and Human Services. In addition to the four focus issues, MDPH identified six health priorities to guide investments funded through the Determination of Need Process. The Massachusetts Attorney General’s Office encourages hospitals to consider these priorities in the Community Benefits planning process.

Also included below is a brief discussion of a series of guiding principles that informed the Hospital’s IS development process.

State Community Health Priorities

Community Benefits Priorities	Determination of Need Priority Areas
Chronic disease with a Focus on Cancer, Heart Disease, and Diabetes	Built Environment
Housing Stability/Homelessness	Social Environment
Mental Illness and Mental Health	Housing
Substance Use Disorders	Violence
	Education
	Employment

The following are a range of programmatic ideas and principles that are critical to community health improvement and have been applied in the development of the IS provided below.

- Social Determinants of Health:** With respect to community health improvement, especially for low income and disadvantaged populations, there is growing appreciation for the importance of addressing the underlying social determinants of health, “the conditions in which people are born, grow, live, work and age that may limit access, lead to poor health outcomes, and are at the heart of health inequities between and within communities.”¹ The leading social determinants of health include issues such as poverty, housing, food access, violence, racism/bigotry, and transportation. It is important that hospital implementation strategies include collaborative, cross-sector initiatives that address these issues.
- Health Education and Prevention:** Primary prevention aims to prevent disease or injury before it ever occurs by reducing risks, preventing exposures to hazards, or altering unhealthy behaviors that can lead to disease or injury. Secondary and tertiary prevention aims to reduce the impact of chronic disease or health conditions through early detection as well as behavior change and chronic disease management geared to

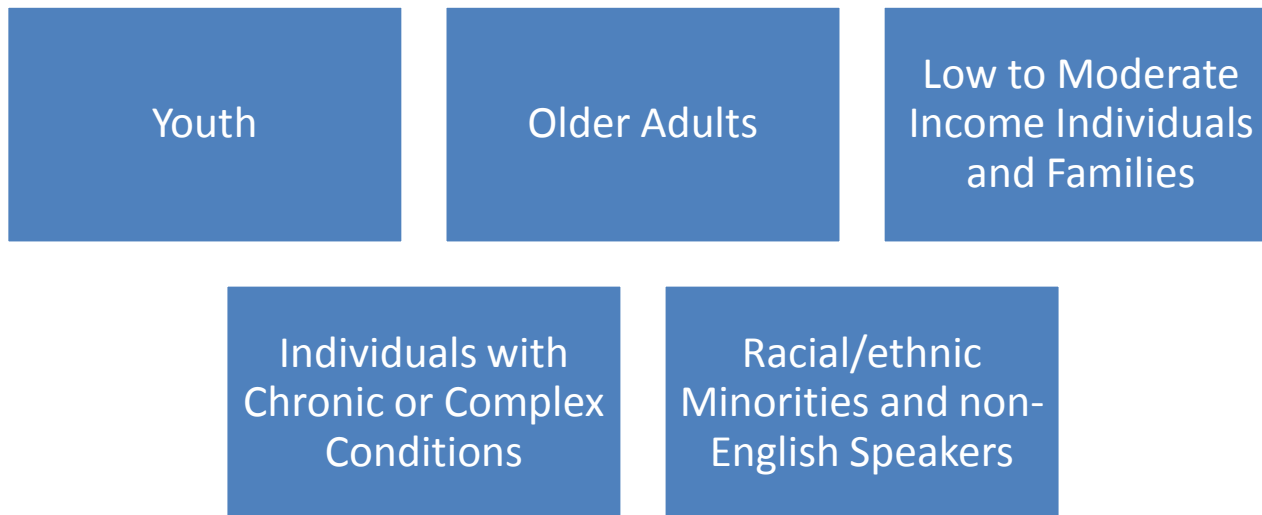
¹ O. Solar and A. Irwin, World Health Organization, “A Conceptual Framework for Action on the Social Determinants of Health,” Social Determinants of Health Discussion Paper 2 (Policy and Practice), 2010, available at http://www.who.int/social_determinants/corner/SDHDP2.pdf.

helping people to manage health conditions, lessen a condition’s impact, or slow its progress. Targeted efforts across the continuum to raise awareness about a particular condition, educate people about risk factors and protective factors, change unhealthy behaviors, and manage illness are critical to improving health status.

- **Screening and Referral:** Early identification of those with chronic and complex conditions following by efforts to ensure that those in need of education, further assessment, counseling, and treatment are critical to preventing illness before it takes hold or managing illness so as to lessen or slow its impacts. A critical component of screening and referral efforts is taking steps to ensure that people are fully engaged in treatment, including linkages to a primary care provider.
- **Chronic Disease Management:** Learning how to manage an illness or condition, change unhealthy behaviors, and make informed decisions about your health can help you live a healthier life. Evidence-based chronic disease management or self-management education (SME) programs, implemented in community-based setting by clinical and non-clinical organizations, can help people to learn skills to manage their health conditions, improve eating and sleeping habits, reduce stress, maintain a healthy lifestyle.
- **Care Coordination and Service Integration:** Efforts to coordinate care and integrate services across the health care continuum are critical to community health improvement. These efforts involve bringing together providers and information systems to coordinate health services, patient needs, and information to help better achieve the goals of treatment and care.
- **Patient Navigation and Access to Health Insurance:** One of the most significant challenges that people face in caring for themselves or their families across all communities is finding the services they need and navigating the health care system. Having health insurance that can help people to pay for needed services is a critical first step. The availability of Insurance enrollment support, patient navigation, and resource inventories are important aspects of community health improvement.
- **Cross-sector Collaboration and Partnership:** When it comes to complex social challenges, such as community health improvement, there is a clear consensus that success will only be achieved through partnership and collaboration across organizations and health-related sectors. No one organization or even type of organization can have a sustained impact on these types of issues on their own. Hospital implementation strategies need to be collaborative and include partnerships with service providers across multiple sectors (e.g., health, public health, education, public safety, and community health)

COMMUNITY HEALTH PRIORITY POPULATIONS AND NEEDS

BID–Milton is committed to improving the health status and well-being of all residents living throughout its service area. Certainly all geographic, demographic, and socioeconomic segments of the population face challenges of some kind that can hinder their ability to access care or maintain good health. Regardless of age, race/ethnicity, income, family history, or other characteristics, everyone is impacted in some way by health-related risks. With this in mind, BID–Milton’s IS includes activities that will support residents throughout its service area, across all segments of the population.



However, based on the assessment’s quantitative and qualitative findings there was broad agreement that BID–Milton’s IS should prioritize certain demographic and socio-economic segments of the population that have complex needs or face especially significant barriers to care, service gaps, or adverse social determinants of health that put them at greater risk. More specifically, the assessment identified youth, older adults, low to moderate income populations, individuals with chronic/complex conditions and immigrants non-English speakers as priority populations that deserve special attention.

BID-Milton’s CHNA approach and process provided many opportunities to vet the quantitative and qualitative data compiled during the assessment. Based on this process, the Hospital’s Community Benefit staff, along with the CBAC, CBSLT, and other stakeholders identified three community health priority areas, which together embody the leading health issues facing residents living in BID–Milton’s Community Benefit Service Area. These three strategic domains are: 1) Mental Health and Substance Use, 2) Chronic/Complex Conditions and Risk Factors, and 3) Social Determinants and Access to Care.



Community Health Needs not Prioritized by BID-Milton’s CBAC

It is important to note that there are community health needs that were identified by BID-Milton’s assessment that, due to the limited burden that these issues present and/or the feasibility of having an impact in the short- or long-term on these issues, were not prioritized for investment. Namely, workforce development and education were identified as community needs but these issues were deemed by the CBAC and the CBSLT to be outside of BID-Milton’s primary sphere of influence and have opted to allow others in its CBSA and the Commonwealth to focus on these issues. This is not to say that BID-Milton will not support efforts in these areas. BID-Milton remains open and willing to work with hospitals across Beth Israel Lahey Health’s network and other public and private partners to address these issues, particularly as part of a broad, strong collaborative.

The following is BID-Milton’s Implementation Strategy and provides details on BID-Milton’s goals, priority populations, objectives, strategic activities, and measures of performance by priority area. Also included, is a listing of the state priorities that align with the activities included in the IS as well as a listing of the core partners that BID-Milton has been and will continue to work with to implement these activities. With respect to the core community partners listed, this is certainly not a complete list but rather many of its core partners. BID-Milton collaborates and partners with dozens of public and private service providers, community-based organizations, and advocacy organizations spanning all sectors and CBSA communities. BID-Milton is extremely appreciative of the efforts of all of its partners and looks forward to expanding this list as it implements its community benefits and IS activities in the years to come.

I. Community Health Priorities

Priority Area 1: Mental Health and Substance Use

Brief Description: As it is throughout the Commonwealth and the nation, the burden of mental and substance use on individuals, families, communities and service providers in BID–Milton’s service area is overwhelming. Nearly every key informant interview, focus group and community meeting included discussions on these topics. From a review of the quantitative and qualitative information, depression, anxiety/stress, social isolation, opioids, alcohol, and e-cigarette/vaping were the leading issues in this domain. Despite increased community awareness and sensitivity about the underlying issues and origins of mental health and substance use issues, there is still a great deal of stigma related to these conditions. There is a general lack of appreciation for the fact that these issues are often rooted in genetics, physiology and environment, rather than an inherent, controllable character flaw. There is, however, a deep appreciation and a growing understanding for the role that trauma plays for many of those with mental and/or substance use issues, with many people using illicit or controlled substances to self-medicate and cope with loss, stress, abuse, pain, and other unresolved traumatic events.

Resources / Financial Investment: BID–Milton will commit direct, community health program investments, and in-kind resources of staff time and materials. BID–Milton will also generate leveraged funds through grants from public and private sources on behalf of its own programs or services as well as on behalf of its community partners.

Goal	Priority Populations	Programmatic Objectives	Community Activities / Strategies
<p>Address stigma associated with mental health and substance use issues</p>	<ul style="list-style-type: none"> • Youth • Older Adults • Low to Moderate Income Populations • Individuals with Chronic/ Complex Conditions • Immigrants and non-English speakers 	<ul style="list-style-type: none"> • Increase community education and awareness of substance use/misuse and healthy mental, emotional, and social health • Reduce the stigma associated with mental illness/ mental health and substance use/misuse, and addiction 	<ul style="list-style-type: none"> • Organize Mental Health First Aid trainings in targeted community-based settings to raise awareness, reduce stigma, and educate residents and service providers about mental health and substance use • Provide Community Health Grants to local departments of Health or other community-based partners to support evidence-based programs that promote mental health and substance use education and prevention • Organize Mental Health and Substance Use Support Groups for those with or recovering from mental health or substance use and their family/friends/caregivers to raise awareness, reduce stigma, educate, and promote coping/recovery • Support Community-based Health Education Events with community partners to raise awareness, and educate on risk/protective factors, and services available in the community
<p>Enhance access to mental health and substance use screening, assessment, and treatment services</p>	<ul style="list-style-type: none"> • Youth • Adults • Older Adults • Low to Moderate Income Populations • Individuals with Chronic/ Complex Conditions • Immigrants and non-English speakers 	<ul style="list-style-type: none"> • Promote cross-sector partnership, collaboration, and information sharing across the broad health system to address access to mental health and substance use services • Increase access to clinical and non-clinical support services for those with mental health and substance use issues, with an emphasis on priority populations • Increase access to Peer Support Groups for those with mental health and substance use and their family, friends, and caregivers 	<ul style="list-style-type: none"> • Participate in task forces and coalitions to promote collaboration, share knowledge, and coordinate community health improvement activities • Support the Interface Mental Health Hotline, which provides education and referral services for those seeking mental health counseling services • Support efforts to develop Integrated Behavioral Health Services (mental health and substance use) in Primary Care and Other Specialty Care Settings (Impact Model) for those with or at-risk of mental health issues, including screening, assessment, and treatment • Explore Partnerships with Elder Service Providers to Promote Care Coordination and Reduce Isolation that reach out to and serve isolated older adults not currently engaged in Council on Aging activities • Explore partnerships with Local Health Departments, substance use providers, and BID-Milton departments to implement Peer Recovery Coach Programs geared to linking those with substance use/misuse issues to peer recovery coaches who provide recovery, case management, and navigation support

Goal	Priority Populations	Programmatic Objectives	Community Activities / Strategies
		<ul style="list-style-type: none"> • Reduce inappropriate use of ED and other acute care services • Increase access to screening, education, referral, and patient engagement services for those identified with or at-risk of mental health and substance use issues in clinical and non-clinical settings, with an emphasis on priority populations • Increase access to insurance, patient navigation support, and other enabling/ supportive services for those with mental health and substance use issues, with an emphasis on priority populations • Increase access to peer recovery coaches for those with substance use/misuse issues • Reduce elder health isolation and depression • Provide support to ncrease the number of practice settings with integrated behavioral health and primary care/specialty care services 	<ul style="list-style-type: none"> • Support efforts to develop a BID-Milton Bridge Program for those suffering from substance use disorder that screens, identifies, assesses, initiates treatment, and links participants to long-term SUD services in the community

Priority Area 2: Chronic and Complex Conditions and Their Risk Factors

Brief Description: While mental health and substance use were perceived to be the leading issues in BID–Milton’s service area, one cannot lose sight of the fact that heart disease, stroke and cancer are the leading causes of death in the nation and the Commonwealth. Roughly, 6 in 10 deaths may be attributed to these three conditions combined. If you include respiratory disease (e.g., asthma, COPD) and diabetes, which are in the top 10 leading causes across all geographies, then one can account for the vast majority of causes of death. All of these conditions are typically considered to be chronic

and complex and can often strike early in one’s life, quite often ending in premature death. Within this priority area, according to those who participated in interviews, focus groups, the community meeting, and the Community Health Survey, cardiovascular disease, cancer, diabetes, and Alzheimer’s disease and other dementias were thought to be of the highest priority. It is also important to note that the risk factors for nearly all chronic/complex conditions are much the same, including lack of physical activity, poor nutrition, obesity, tobacco use, and alcohol use.

Resources / Financial Investment: BID–Milton will commit direct, community health program investments, and in-kind resources of staff time and materials. BID–Milton will also generate leveraged funds through grants from public and private sources on behalf of its own programs or services as well as on behalf of its community partners.

Goal	Priority Populations	Programmatic Objectives	Community Activities / Strategies
<p>Enhance Access to Health Education, Screening, Referral, and Chronic Disease Management Services in Clinical and Non-Clinical Settings</p>	<ul style="list-style-type: none"> • Youth • Older Adults • Low to Moderate Income Populations • Individuals with Chronic/ Complex Conditions • Immigrants and non-English speakers 	<ul style="list-style-type: none"> • Increase the number of people who are educated about chronic disease risk factors and protective behaviors • Increase the number of adults who are engaged in evidence-based screening, counseling, self-management support, chronic disease management, referral services, and/or specialty care services for diabetes, hypertension, asthma, cancer, and other chronic/ complex conditions • Increase the number of people with chronic/complex conditions whose conditions are under control 	<ul style="list-style-type: none"> • Participate in task forces and coalitions to promote collaboration, share knowledge, and coordinate community health improvement activities • Organize BID-Milton “Lecture Series” in community-based settings related to awareness, education, and the management of chronic and complex conditions • Provide Wellness, Fitness Education and Other events as part of comprehensive chronic disease management program • Provide evidence-based health education on risk/protective factors, and Self-Management Support Programs through partnerships with community-based organizations with an emphasis on Priority Population Segments • Support screening, education, and referral Programs in clinical and non-clinical settings that screen, educate, and refer patients in need of further assessment and chronic disease management supports • Provide Community Health Grants to community partners to support evidence-based programs that promote health education, screening, referral, and chronic disease management for priority populations
<p>Reduce the prevalence of vaping/tobacco use</p>	<ul style="list-style-type: none"> • Youth • Adults • Older Adults • Low to Moderate 	<ul style="list-style-type: none"> • Increase the number of people who quit smoking cigarettes, vaping, or using e-cigarettes • Increase access to tobacco, vaping/e-cigarette cessation programs 	<ul style="list-style-type: none"> • Organize, facilitate, or support Smoking Cessation Programs geared to reducing tobacco, vaping and e-cigarette use

Goal	Priority Populations	Programmatic Objectives	Community Activities / Strategies
	Income Populations • Individuals with Chronic/ Complex Conditions		

Priority Area 3: Social Determinants and Access to Care

Brief Description: A dominant theme from the assessment was the tremendous impact that underlying social determinants of health, particularly access to affordable housing, transportation, poverty/employment, and food insecurity have on the entire population. The social determinants of health are often the drivers or underlying factors that create or exacerbate mental health issues, substance misuse, and chronic/complex conditions. These social determinants of health, particular poverty, underlie the access to care issues that were prioritized in the assessment: navigating the health system (including health insurance), chronic disease management, and access to culturally and linguistically competent care.

Resources / Financial Investment: BID–Milton will commit direct, community health program investments, and in-kind resources of staff time and materials. BID–Milton will also generate leveraged funds through grants from public and private sources on behalf of its own programs or services as well as on behalf of its community partners.

Goal	Priority Populations	Programmatic Objectives	Community Activities / Strategies
Enhance access to care and reduce the impact of social determinants	<ul style="list-style-type: none"> Youth Older Adults Low to Moderate Income Populations Individuals with Chronic/ Complex Conditions 	<ul style="list-style-type: none"> Increase partnerships and collaboration with social service and other community-based organizations Increase educational opportunities related to the importance and impact of social determinants Decrease the number of people who struggle with financial insecurity/rent insecurity 	<ul style="list-style-type: none"> Community Benefit and other Hospital staff participate in coalition and Other Community Meetings to promote collaboration, share knowledge, and coordinate community health improvement activities Provide Community Health Grants to community partners to support evidence-based programs that address social determinants and access to care (e.g., Quincy Community Action Program) Organize Fresh Truck Outings Program to provide fresh, locally-grown produce to low to moderate income, underserved populations Support the Blessings in a Backpack Program in school-based settings to promote food access and nutrition exercise for low to moderate income families

Goal	Priority Populations	Programmatic Objectives	Community Activities / Strategies
	<ul style="list-style-type: none"> Immigrants and non-English speakers 	<ul style="list-style-type: none"> Increase access to low cost healthy foods with an emphasis on priority population segments Increase access to affordable, safe transportation options with an emphasis on priority population segments Increase the number of people assisted with insurance and other public program enrollment, and patient navigation Increase access to social experiences for those who are isolated and lack family/caregiver and other social supports 	<ul style="list-style-type: none"> Support the Grocery Shopping Tours Program to provide nutrition education and food access to low and moderate income populations living in public housing, Councils on Aging, and other community venues Organize Wellness and Nutrition Education events in partnership with community partners targeting older adults, low to moderate income individuals and families, and those at-risk of chronic disease Enhance access to healthy food for older adults and low to moderate income individuals and families Provide Enrollment Counseling/ Assistance and Patient Navigation Support Services to uninsured or underinsured residents to enhance access to care Provide Linguistically and Culturally Appropriate Health Education and Care Management Support through targeted community events for those with or identified as at-risk of chronic/ complex conditions with an emphasis on priority populations Explore Transportation Access Partnerships with regional transportation partners and other community partners to enhance access to affordable, safe, accessible transportation options
<p>Promote independence and “Aging in Place”</p>	<ul style="list-style-type: none"> Older Adults 	<ul style="list-style-type: none"> Reduce fear of falling Reduce Falls Increase activity levels Reduce preventable Emergency Department and inpatient visits Increase the number of older adults living independently in their homes 	<ul style="list-style-type: none"> Support Safety at Home Program for older adults to promote aging in place and reduce falls Organize Matter of Balance workshops for priority populations

Appendix E: Summary Community Benefits Evaluation

Evaluation Summary

Multi-component initiatives (MCIs) such as those implemented and supported by Beth Israel Deaconess Hospital – Milton’s Community Benefits Program (Milton CBP) are comprehensive in nature and show promise of being effective, equitable, and sustainable.^{1-8,9} Yet, the varying timelines, priorities, implementing departments and organizations, targeted populations, and available resources make evaluations challenging. Further complicating the assessment of an MCI is that population-level health behaviors and outcomes take time to achieve. While it may be hard to detect the impact of MCIs on the desired long-term outcomes, it is important to assess whether the initiative has the attributes known to support and sustain population health in due time.

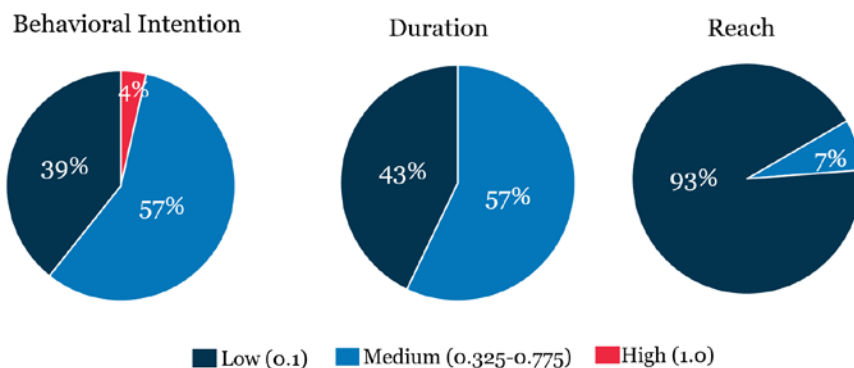
John Snow Inc. (JSI) employed an evidence-informed approach to evaluate the Milton CBP. Systematically, JSI scored three attributes found to be predictors of population health—the behavioral intervention, duration, and reach for each activity summarized in the *Fiscal Year 2017 Community Benefits Report to the Attorney General (AG Report)*. Intention is important because evidence suggests that when an activity improves access, reduces barriers, or changes broader conditions, there is a greater likelihood that individual behavior change will be sustainable (compared to simply enhancing their knowledge or skills).¹⁰⁻¹² Reach and duration are significant because research has found that when more people are exposed to a strategy, and for longer periods of time, there is a greater likelihood that the strategy will support the desired behaviors and outcomes.¹⁰⁻¹²

JSI abstracted and scored all activities defined as an action undertaken in accordance to the community benefits, and reported in the AG Report. An evaluation team member rated each activity attribute as low (0.1), medium (0.55), or high (1.0), and calculated an intensity score (\sum behavioral value + duration value + reach value). Scores could range from 0.3 (lowest intensity and least likely to impact long-term outcomes) to 3.0 (highest intensity and most likely to impact long-term outcomes). All activity scores were then summed to create a total composite score.

Findings

The majority of Milton’s activities (n=28) had a medium and low behavioral intention score (96%), a medium duration score (57%), and a low reach score (93%) (Figure 1).

Figure 1. Activity Intensity Scores by Attribute



There were four priority areas within which these 28 activities were implemented: 1) Promoting Wellness of Vulnerable Populations; 2) Physical Health and Chronic Disease Management and Prevention; and 3) Address Unmet Health Needs of the Uninsured. All but one of these activities addressed the statewide priority of Promoting Wellness of Vulnerable Populations; half were also implemented to address Physical Health and Chronic Disease Management and Prevention and the Unmet Health Needs of the Uninsured (Table 1). Although there were fewer “Unmet Health Needs of the Uninsured” strategies, there was a much higher score compared to the other categories (1.43 vs. 0.75 and 1.00).

Table 1. Summary of Activities by Priority Area

Goal/Priority Area	Number of Activities	Average Score	Total Score
Promoting Well of Vulnerable Populations	13	0.75	9.7
Physical Health and Chronic Disease Management and Prevention	14	1.00	14.0
Unmet Health Needs of the Uninsured	1	1.43	1.43

The composite intensity score of the 28 activities was 24.5; the lowest possible score for all activities was an 8.4 (if all 28 activities scored a 0.3) and the highest possible intensity score was an 84.0 (if all 28 activities scored a 3.0). Each individual activity score ranged from 0.3 to 1.65; with a 0.88 average intensity score (Figure 2). Over half (68%) of the activities had a low score (0.3 – 1.1) and 32% had a medium score (1.2 – 2.1). There were no activities with a high score (2.2 – 3.0) (Figure 3).

Figure 2. Individual Activity Intensity Score

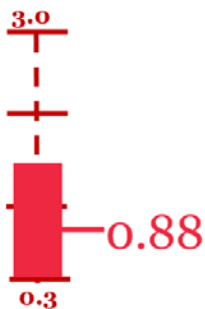
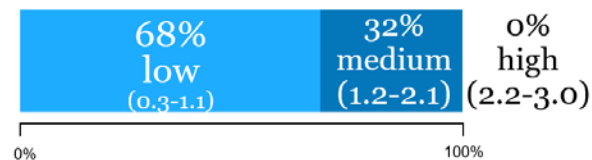


Figure 3. Percentage of Activities with a Low, Medium, High Intensity Score



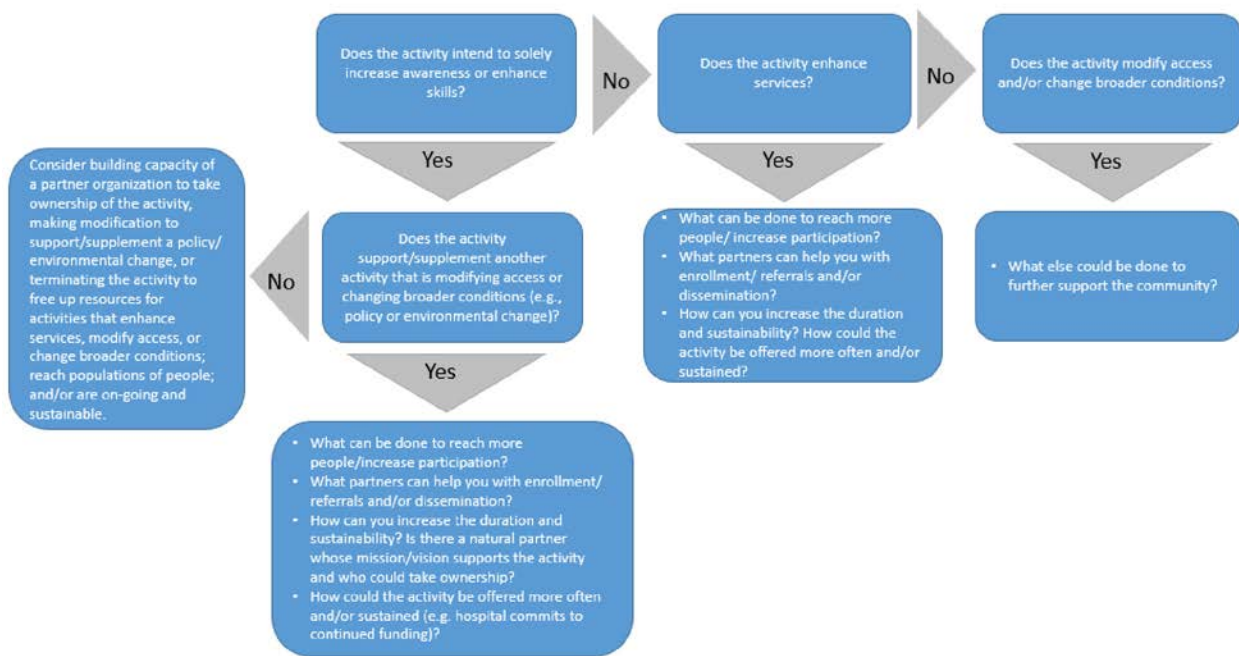
Recommendations

Per the requirements of the AG, Beth Israel Deaconess Hospital – Milton contracted with JSI to evaluate the FY17 CBP. The purpose of the evaluation was to understand the likely impact of each of the reported activities on long-term behaviors and outcomes related to the four priority areas, and to identify opportunities to ensure the CBP supports population health most effectively. Using intention, reach, and duration to score the various activities provides a systematic way of assessing the dynamic and evolving activities implemented as part of the Milton CBP. It also provides a platform for documenting progress toward the long-term goal of improved health, and differentiating between activities that may have more or less influence on long-term outcomes.

Intensity scores should inform how resources are used most effectively in the future, provide direction for strengthening efforts individually or collectively, and serve as a baseline for measuring change overtime. Activities that were implemented at a lower intensity included the various grants that were awarded to community organizations. To increase the intensity of Community Benefits dollars, and to

ensure activities result in improved population health behaviors and outcomes, future efforts should be made to ensure all grantees provide detailed information on the purpose, duration, and reach of grant funding. In the extent possible, activities should also prioritize the enhancement of services, modification of access, and/or change broader conditions that support the health and well-being of the community-at-large. Other lower-intensity activities included the semi-annual community newsletter, AARP Safe Driver Program, and the Lunchtime Educational Series at Milton Council on Aging. These activities received lower scores because they: 1) intended to increase awareness and/or educate/enhance the knowledge or skills of individuals, 2) were offered once or a few times (versus ongoing); and 3) reached a small percentage of the population. In general, it is recommended that each priority have multiple activities that work simultaneously to increase awareness and improve skills; enhance services; modify access; and change broader conditions for populations of people. CBP staff and partners should use Figure 4 to assess each activities' contribution to the overall priority area and for modifications to be made to increase the intensity within which all activities are implemented.

Figure 4. Flow chart for increasing the intensity of the community benefits program



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