PARTNERS HEALTHCARE SYSTEM, INC.
DON APPLICATION # PHS-19072212-RE

ATTACHMENTS

DON-REQUIRED EQUIPMENT
BRIGHAM AND WOMEN'S HOSPITAL
BRIGHAM AND WOMEN'S/MASS GENERAL HEALTH CARE CENTER

JULY 25, 2019

BY

PARTNERS HEALTHCARE SYSTEM, INC.
800 BOYLSTON STREET, SUITE 1150
BOSTON, MA 02199

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DON APPLICATION # PHS-19072212-RE

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Attachments

Massachusetts Department of Public Health
Determination of Need
Application Form

Version: 11-8-17

Application Type: DoN-Required Equipment

Application Date: 07/25/2019 4:52 pm

Applicant Name: Partners HealthCare System, Inc.

Mailing Address: 800 Boylston Street, Suite 1150

City: Boston State: Massachusetts Zip Code: 02199

Contact Person: Daria Niewenhous Title: Attorney

Mailing Address: One Financial Center

City: Boston State: Massachusetts Zip Code: 02111

Phone: 6173484865 Ext: E-mail: dniewenhous@mintz.com

Facility Information

List each facility affected and or included in Proposed Project

1 Facility Name: Brigham and Women's/Mass General Health Care Center

Facility Address: 20 Patriot Place

City: Foxborough State: Massachusetts Zip Code: 02035

Facility type: Hospital CMS Number: 220110

Add additional Facility Delete this Facility

1. About the Applicant

1.1 Type of organization (of the Applicant): nonprofit

1.2 Applicant's Business Type: (•) Corporation ( ) Limited Partnership ( ) Partnership ( ) Trust ( ) LLC ( ) Other

1.3 What is the acronym used by the Applicant's Organization? PHS

1.4 Is Applicant a registered provider organization as the term is used in the HPC/CHIA RPO program? (•) Yes ( ) No

1.5 Is Applicant or any affiliated entity an HPC-certified ACO? (•) Yes ( ) No

1.5.a If yes, what is the legal name of that entity? Partners HealthCare System, Inc. inclusive of Partners HealthCare Accountable Care Organization, LLC

1.6 Is Applicant or any affiliate thereof subject to M.G.L. c. 6D, § 13 and 958 CMR 7.00 (filing of Notice of Material Change to the Health Policy Commission)? (•) Yes ( ) No

1.7 Does the Proposed Project also require the filing of a MCN with the HPC? ○ Yes ◉ No

1.8 Has the Applicant or any subsidiary thereof been notified pursuant to M.G.L. c. 12C, § 16 that it is exceeding the health care cost growth benchmark established under M.G.L. c. 6D, § 9 and is thus, pursuant to M.G.L. c. 6D, §10 required to file a performance improvement plan with CHIA? ○ Yes ◉ No

1.9 Complete the Affiliated Parties Form

2. Project Description

2.1 Provide a brief description of the scope of the project.

Partners HealthCare System, Inc. ("Applicant" or "Partners HealthCare"), located at 800 Boylston Street, Suite 1150, Boston, MA 02199 is filing an application for Notice of Determination of Need ("Application") with the Massachusetts Department of Public Health ("Department") for DoN-Required Equipment to be located at the Applicant's Brigham and Women's Hospital, Inc. ("BWH") outpatient satellite in the Brigham and Women's/Mass General Health Care Center, at 20 Patriot Place, Foxborough, Massachusetts (the "Foxborough Center"). The proposed project is for the expansion of imaging services at the Foxborough Center through the acquisition of one magnetic resonance imaging ("MRI") unit and one computed tomography ("CT") unit (the "Proposed Project"). Specifically, the Applicant plans to add one Siemens Somatom Definition Edge 128-slice CT and one Siemens Magnetom Sola 1.5T MRI scanner.

The Foxborough Center and the Brigham and Women's Physicians Organization ("BWPO") physician practices in the Foxborough Center together provide comprehensive care for the residents of Foxborough and surrounding towns, including primary and specialty services, psychiatric services, ambulatory surgery (provided by BWPO and Massachusetts General Physicians Organization physicians), urgent care, and on-site laboratory and imaging services, including one CT unit and one MRI unit. These single MRI and CT units currently support the needs of patients seen for health care services at the Foxborough Center and provide access to local diagnostic imaging for residents of Southeastern Massachusetts who receive specialty care at Partners HealthCare's Boston locations. The need for the additional MRI and CT capacity at the Foxborough Center is based on several factors. First, the current MRI and CT units are already operating at capacity serving current patient needs. Second, the planned expansion of primary and specialty care physician office services at the Foxborough Center will increase the need for co-located imaging. Third, the Applicant hopes to provide additional local imaging capacity in Southeastern Massachusetts to better serve residents who receive specialty care in Boston. Fourth, statistics indicate that an aging population requires more diagnostic imaging.

In terms of quality and access, the Applicant anticipates that the Proposed Project will facilitate access to, and the provision of, high-quality imaging services and improve health outcomes for patients residing in Southeastern Massachusetts. Siting these additional units in the same location as the other services offered at the Foxborough Center, including Primary Care, Orthopedics, Women's Health, and Cardiology, will give patients easy, convenient access to imaging services in the same location where they see physicians and other providers. This will, in turn, foster care coordination, improve the overall quality of services at the Foxborough Center and promote better health outcomes.

Finally, the Proposed Project will meaningfully contribute to the Commonwealth's cost containment goals by providing cost-effective, high quality imaging services and creating care efficiencies for patients. The imaging services provided by the additional units will be reimbursed at the same rates as the services provided by the current units at the Foxborough Center. By siting these units at the Foxborough Center, the Applicant's patients and providers will experience the efficiencies of co-located services, avoiding unnecessary travel, and improving overall health outcomes to reduce healthcare expenditures. Accordingly, the Proposed Project will contribute positively to the Commonwealth's goals of containing the rate of growth of total medical expenses ("TME") and total healthcare expenditures ("THCE").

As the information in this Application will demonstrate, the Proposed Project meets the factors of review for Determination of Need approval.

2.2 and 2.3 Complete the Change in Service Form

3. Delegated Review

3.1 Do you assert that this Application is eligible for Delegated Review? ◉ Yes ○ No

3.1.a If yes, under what section? Certified ACO/DoN-Required Service or Equipment

4. Conservation Project

4.1 Are you submitting this Application as a Conservation Project? ○ Yes ◉ No

5. DoN-Required Services and DoN-Required Equipment

5.1 Is this an application filed pursuant to 105 CMR 100.725: DoN-Required Equipment and DoN-Required Service? ◉ Yes ○ No

5.2 If yes, is Applicant or any affiliated entity thereof a HPC-certified ACO? ◉ Yes ○ No

5.2.a If yes, Please provide the date of approval and attach the approval letter: 12/29/2019

5.3 **See section on DoN-Required Services and DoN-Required Equipment in the Application Instructions**

6. Transfer of Ownership

6.1 Is this an application filed pursuant to 105 CMR 100.735? ○ Yes ◉ No

7. Ambulatory Surgery

7.1 Is this an application filed pursuant to 105 CMR 100.740(A) for Ambulatory Surgery? ○ Yes ◉ No

8. Transfer of Site

8.1 Is this an application filed pursuant to 105 CMR 100.745? ○ Yes ◉ No

9. Research Exemption

9.1 Is this an application for a Research Exemption? ○ Yes ◉ No

10. Amendment

10.1 Is this an application for a Amendment? ○ Yes ◉ No

11. Emergency Application

11.1 Is this an application filed pursuant to 105 CMR 100.740(B)? ○ Yes ◉ No

12. Total Value and Filing Fee

Enter all currency in numbers only. No dollar signs or commas. Grayed fields will auto calculate depending upon answers above.

Your project application is for: DoN-Required Equipment

12.1 Total Value of this project:	$9,476,208.00
12.2 Total CHI commitment expressed in dollars: (calculated)	$473,810.40
12.3 Filing Fee: (calculated)	$18,952.42
12.4 Maximum Incremental Operating Expense resulting from the Proposed Project:	$748,000.00
12.5 Total proposed Construction costs, specifically related to the Proposed Project, If any, which will be contracted out to local or minority, women, or veteran-owned businesses expressed in estimated total dollars.	

13. Factors

Required Information and supporting documentation consistent with 105 CMR 100.210

Some Factors will not appear depending upon the type of license you are applying for.

Text fields will expand to fit your response.

Factor 1: Applicant Patient Panel Need, Public Health Values and Operational Objectives

F1.a.i **Patient Panel:**

Describe your existing Patient Panel, including incidence or prevalence of disease or behavioral risk factors, acuity mix, noted health disparities, geographic breakdown expressed in zip codes or other appropriate measure, demographics including age, gender and sexual identity, race, ethnicity, socioeconomic status and other priority populations relevant to the Applicant's existing patient panel and payer mix.

Please see attached Narrative.

F1.a.ii **Need by Patient Panel:**

Provide supporting data to demonstrate the need for the Proposed Project. Such data should demonstrate the disease burden, behavioral risk factors, acuity mix, health disparities, or other objective Patient Panel measures as noted in your response to Question F1.a.i that demonstrates the need that the Proposed Project is attempting to address. If an inequity or disparity is not identified as relating to the Proposed Project, provide information justifying the need. In your description of Need, consider the principles underlying Public Health Value (see instructions) and ensure that Need is addressed in that context as well.

Please see attached Narrative.

F1.a.iii **Competition:**

Provide evidence that the Proposed Project will compete on the basis of price, total medical expenses, provider costs, and other recognized measures of health care spending. When responding to this question, please consider Factor 4, Financial Feasibility and Reasonableness of Costs.

Please see attached Narrative.

F1.b.i **Public Health Value /Evidence-Based:**

Provide information on the evidence-base for the Proposed Project. That is, how does the Proposed Project address the Need that Applicant has identified.

Please see attached Narrative.

F1.b.ii **Public Health Value /Outcome-Oriented:**

Describe the impact of the Proposed Project and how the Applicant will assess such impact. Provide projections demonstrating how the Proposed Project will improve health outcomes, quality of life, or health equity. Only measures that can be tracked and reported over time should be utilized.

Please see attached Narrative.

F1.b.iii **Public Health Value /Health Equity-Focused:**

For Proposed Projects addressing health inequities identified within the Applicant's description of the Proposed Project's need-base, please justify how the Proposed Project will reduce the health inequity, including the operational components (e.g. culturally competent staffing). For Proposed Projects not specifically addressing a health disparity or inequity, please provide information about specific actions the Applicant is and will take to ensure equal access to the health benefits created by the Proposed Project and how these actions will promote health equity.

Please see attached Narrative.

F1.b.iv Provide additional information to demonstrate that the Proposed Project will result in improved health outcomes and quality of life of the Applicant's existing Patient Panel, while providing reasonable assurances of health equity.

Please see attached Narrative.

F1.c Provide evidence that the Proposed Project will operate efficiently and effectively by furthering and improving continuity and coordination of care for the Applicant's Patient Panel, including, how the Proposed Project will create or ensure appropriate linkages to patients' primary care services.

Please see attached Narrative.

F1.d Provide evidence of consultation, both prior to and after the Filing Date, with all Government Agencies with relevant licensure, certification, or other regulatory oversight of the Applicant or the Proposed Project.

Please see attached Narrative.

F1.e.i Process for Determining Need/Evidence of Community Engagement: For assistance in responding to this portion of the Application, Applicant is encouraged to review *Community Engagement Standards for Community Health Planning Guideline.* With respect to the existing Patient Panel, please describe the process through which Applicant determined the need for the Proposed Project.

Please see attached Narrative.

F1.e.ii Please provide evidence of sound Community Engagement and consultation throughout the development of the Proposed Project. A successful Applicant will, at a minimum, describe the process whereby the "Public Health Value" of the Proposed Project was considered, and will describe the Community Engagement process as it occurred and is occurring currently in, at least, the following contexts: Identification of Patient Panel Need; Design/selection of DoN Project in response to "Patient Panel" need; and Linking the Proposed Project to "Public Health Value".

Please see attached Narrative.

Factor 2: Health Priorities

Addresses the impact of the Proposed Project on health more broadly (that is, beyond the Patient Panel) requiring that the Applicant demonstrate that the Proposed Project will meaningfully contribute to the Commonwealth's goals for cost containment, improved public health outcomes, and delivery system transformation.

F2.a **Cost Containment:**

Using objective data, please describe, for each new or expanded service, how the Proposed Project will meaningfully contribute to the Commonwealth's goals for cost containment.

Please see attached Narrative.

F2.b **Public Health Outcomes:**

Describe, as relevant, for each new or expanded service, how the Proposed Project will improve public health outcomes.

Please see attached Narrative.

F2.c **Delivery System Transformation:**

Because the integration of social services and community-based expertise is central to goal of delivery system transformation, discuss how the needs of their patient panel have been assessed and linkages to social services organizations have been created and how the social determinants of health have been incorporated into care planning.

Please see attached Narrative.

Factor 3: Compliance

Applicant certifies, by virtue of submitting this Application that it is in compliance and good standing with federal, state, and local laws and regulations, including, but not limited to M.G.L. c. 30, §§ 61 through 62H and the applicable regulations thereunder, and in compliance with all previously issued notices of Determination of Need and the terms and conditions attached therein .

F3.a Please list all previously issued Notices of Determination of Need

Add/Del Rows	Project Number	Date Approved	Type of Notification	Facility Name
+ -	PHS-17071716-TO	02/14/2018	Transfer of Ownership	Massachusetts Eye and Ear Infirmary
+ -	PHS-17111513-HE	03/06/2018		Brigham and Women's Hospital
+ -	PHS-18022210-HE	06/13/2018		Massachusetts General - Waltham
+ -	PHS-18090711-HS	01/03/2019	Hospital/Clinic Substantial Change in Service	Massachusetts General Physicians Organization-Waltham

Factor 4: Financial Feasibility and Reasonableness of Expenditures and Costs

Applicant has provided (as an attachment) a certification, by an independent certified public accountant (CPA) as to the availability of sufficient funds for capital and ongoing operating costs necessary to support the Proposed Project without negative impacts or consequences to the Applicant's existing Patient Panel.

F4.a.i **Capital Costs Chart:**
For each Functional Area document the square footage and costs for New Construction and/or Renovations.

		Present Square Footage		Square Footage Involved in Project				Resulting Square Footage		Total Cost		Cost/Square Footage	
				New Construction		Renovation							
Add/Del Rows	Functional Areas	Net	Gross	Net	Gross	Net	Gross	Net	Gross	New Construction	Renovation	New Construction	Renovation
[+] [-]	See attached F.4.a.i Capital Costs												
[+] [-]													
[+] [-]													
[+] [-]													
[+] [-]													
[+] [-]													
[+] [-]													
[+] [-]													
[+] [-]													
	Total: (calculated)												

F4.a.ii For each Category of Expenditure document New Construction and/or Renovation Costs.

	Category of Expenditure	New Construction	Renovation	Total (calculated)
	Land Costs			
	Land Acquisition Cost			
	Site Survey and Soil Investigation			
	Other Non-Depreciable Land Development			
	Total Land Costs			
	Construction Contract (including bonding cost)			
	Depreciable Land Development Cost			
	Building Acquisition Cost			
	Construction Contract (including bonding cost)			
	Fixed Equipment Not in Contract			
	Architectural Cost (Including fee, Printing, supervision etc.) and Engineering Cost			
	Pre-filing Planning and Development Costs			
	Post-filing Planning and Development Costs			
Add/Del Rows	Other (specify)			
+ -				
	Net Interest Expensed During Construction			
	Major Movable Equipment			
	Total Construction Costs			
	Financing Costs:			
	Cost of Securing Financing (legal, administrative, feasibility studies, mortgage insurance, printing, etc			
	Bond Discount			
Add/Del Rows	Other (specify			
+ -				
	Total Financing Costs			
	Estimated Total Capital Expenditure			

Factor 5: Relative Merit

F5.a.i Describe the process of analysis and the conclusion that the Proposed Project, on balance, is superior to alternative and substitute methods for meeting the existing Patient Panel needs as those have been identified by the Applicant pursuant to 105 CMR 100.210 (A)(1). When conducting this evaluation and articulating the relative merit determination, Applicant shall take into account, at a minimum, the quality, efficiency, and capital and operating costs of the Proposed Project relative to potential alternatives or substitutes, including alternative evidence-based strategies and public health interventions.

Proposal:

Please see attached Narrative.

Quality:

Please see attached Narrative.

Efficiency:

Please see attached Narrative.

Capital Expense:

Please see attached Narrative.

Operating Costs:

Please see attached Narrative.

List alternative options for the Proposed Project:

Alternative Proposal:

Please see attached Narrative.

Alternative Quality:

Please see attached Narrative.

Alternative Efficiency:

Please see attached Narrative.

Alternative Capital Expense:

Please see attached Narrative.

Alternative Operating Costs:

Please see attached Narrative.

Add additional Alternative Project | Delete this Alternative Project

F5.a.ii Describe the process of analysis and the conclusion that the Proposed Project, on balance, is superior to alternative and substitute methods for meeting the existing Patient Panel needs as those have been identified by the Applicant pursuant to 105 CMR 100.210(A)(1). When conducting this evaluation and articulating the relative merit determination, Applicant shall take into account, at a minimum, the quality, efficiency, and capital and operating costs of the Proposed Project relative to potential alternatives or substitutes, including alternative evidence-based strategies and public health interventions.

Please see attached Narrative.

Documentation Check List

The Check List below will assist you in keeping track of additional documentation needed for your application.

Once you have completed this Application Form the additional documents needed for your application will be on this list. E-mail the documents as an attachment to: DPH.DON@state.ma.us

- [x] Copy of Notice of Intent
- [x] Affidavit of Truthfulness Form
- [x] Scanned copy of Application Fee Check
- [x] Affiliated Parties Table Question 1.9
- [x] Change in Service Tables Questions 2.2 and 2.3
- [x] Certification from an independent Certified Public Accountant
- [ ] Notification of Material Change
- [x] Articles of Organization / Trust Agreement
- [x] Current IRS Form, 990 Schedule H CHNA/CHIP and/or Current CHNA/CHIP submitted to Massachusetts AGO's Office
- [x] Community Engagement Stakeholder Assessment form
- [x] Community Engagement-Self Assessment form

Document Ready for Filing

When document is complete click on "document is ready to file". This will lock in the responses and date and time stamp the form. To make changes to the document un-check the "document is ready to file" box. Edit document then lock file and submit Keep a copy for your records. Click on the "Save" button at the bottom of the page.

To submit the application electronically, click on the"E-mail submission to Determination of Need" button.

This document is ready to file: ☒ Date/time Stamp: 07/25/2019 4:52 pm

E-mail submission to Determination of Need

Application Number: PHS-19072212-RE

Use this number on all communications regarding this application.

☐ Community Engagement-Self Assessment form

DETERMINATION OF NEED NARRATIVE

2. Project Description

Partners HealthCare System, Inc. ("Applicant" or "Partners HealthCare"), located at 800 Boylston Street, Suite 1150, Boston, MA 02199 is filing an application for Notice of Determination of Need ("Application") with the Massachusetts Department of Public Health ("Department") for DoN-Required Equipment to be located at the Applicant's Brigham and Women's Hospital, Inc. ("BWH") outpatient satellite in the Brigham and Women's/Mass General Health Care Center, at 20 Patriot Place, Foxborough, Massachusetts (the "Foxborough Center"). The proposed project is for the expansion of imaging services at the Foxborough Center through the acquisition of one magnetic resonance imaging ("MRI") unit and one computed tomography ("CT") unit (the "Proposed Project"). Specifically, the Applicant plans to add one Siemens Somatom Definition Edge 128-slice CT and one Siemens Magnetom Sola 1.5T MRI scanner.

The Foxborough Center and the Brigham and Women's Physicians Organization ("BWPO") physician practices in the Foxborough Center together provide comprehensive care for the residents of Foxborough and surrounding towns, including primary and specialty services, psychiatric services, ambulatory surgery (provided by BWPO and Massachusetts General Physicians Organization physicians), urgent care, and on-site laboratory and imaging services, including one CT unit and one MRI unit. These single MRI and CT units currently support the needs of patients seen for health care services at the Foxborough Center and provide access to local diagnostic imaging for residents of Southeastern Massachusetts who receive specialty care at Partners HealthCare's Boston locations. The need for the additional MRI and CT capacity at the Foxborough Center is based on several factors. First, the current MRI and CT units are already operating at capacity serving current patient needs. Second, the planned expansion of primary and specialty care physician office services at the Foxborough Center will increase the need for co-located imaging. Third, the Applicant hopes to provide additional local imaging capacity in Southeastern Massachusetts to better serve residents who receive specialty care in Boston. Fourth, statistics indicate that an aging population requires more diagnostic imaging.

In terms of quality and access, the Applicant anticipates that the Proposed Project will facilitate access to, and the provision of, high-quality imaging services and improve health outcomes for patients residing in Southeastern Massachusetts. Siting these additional units in the same location as the other services offered at the Foxborough Center, including Primary Care, Orthopedics, Women's Health, and Cardiology, will give patients easy, convenient access to imaging services in the same location where they see physicians and other providers. This will, in turn, foster care coordination, improve the overall quality of services at the Foxborough Center and promote better health outcomes.

Finally, the Proposed Project will meaningfully contribute to the Commonwealth's cost containment goals by providing cost-effective, high quality imaging services and creating care efficiencies for patients. The imaging services provided by the additional units will be reimbursed at the same rates as the services provided by the current units at the Foxborough Center. By siting these units at the Foxborough Center, the Applicant's patients and providers will experience the efficiencies of co-located services, avoiding unnecessary travel, and improving overall health outcomes to reduce healthcare expenditures. Accordingly, the Proposed Project will contribute positively to the Commonwealth's goals of containing the rate of growth of total medical expenses ("TME") and total healthcare expenditures ("THCE").

As the information in this Application will demonstrate, the Proposed Project meets the factors of review for Determination of Need approval.

Factor 1: Applicant Patient Panel Need, Public Health Values and Operational Objectives

F1.a.i **Patient Panel:**
Describe your existing Patient Panel, including incidence or prevalence of disease or behavioral risk factors, acuity mix, noted health disparities, geographic breakdown expressed in zip codes or other appropriate measure, demographics including age, gender and sexual identity, race, ethnicity, socioeconomic status and other priority populations relevant to the Applicant's existing Patient Panel and payer mix.

A. Partners HealthCare Patient Panel

Partners HealthCare is a not-for-profit, integrated health care system that was formed in 1994 by an affiliation between The Brigham Medical Center, Inc. (now known as Brigham Health) and The Massachusetts General Hospital. Partners HealthCare currently operates: two tertiary hospitals, six community acute care hospitals, and one acute care specialty hospital in Massachusetts; one community acute care hospital in Southern New Hampshire; one facility providing inpatient and outpatient mental health services; and three facilities providing inpatient and outpatient services in rehabilitation medicine and long-term care. Partners HealthCare also operates a home health agency, nursing homes and a graduate level program for health professionals. Partners HealthCare is a non-university-based nonprofit private medical research enterprise and its academic medical centers are principal teaching affiliates of the medical and dental schools of Harvard University. Partners HealthCare provides its services to patients primarily from the Greater Boston area and eastern Massachusetts, as well as New England and beyond. Partners HealthCare's affiliated physician organizations, such as BWPO, provide clinical services to patients. Additionally, Partners HealthCare operates a licensed, not-for-profit managed care organization and a licensed, for-profit insurance company that collectively provide health insurance and administrative services products to the MassHealth Program (Medicaid), ConnectorCare (a series of health insurance plans for adults who meet income and other eligibility requirements), and commercial populations.

Partners HealthCare serves a large and diverse patient panel as demonstrated by the utilization data for the 36-month period covering Fiscal Year ("FY") 16-18 and the preliminary data available for FY19.[1] Attachment 2 provides this demographic profile for Partners HealthCare in table form. The number of patients utilizing Partners HealthCare's services has increased[2] since FY16, with

[1] Fiscal year October 1 — September 30. While preliminary data is available for FY19, annual comparisons are calculated using data for FY16-18 as the FY19 data is for the first seven months of the current fiscal year and will change over time.

[2] The methodology for aggregating Partners HealthCare's patient panel data has evolved into an automated process utilizing internal data resources. Initially, in 2017, when Partners HealthCare began developing its patient panel for Determination of Need applications, such as the Change of Ownership for Massachusetts Eye and Ear and the Substantial Capital Expansion for Brigham and Women's Hospital, staff manually aggregated the necessary data. However, since these submissions, Partners HealthCare staff have developed a new automated process that allows for the collection and amalgamation of system-wide data. This refined methodology allows staff to continuously monitor and improve the way that data are aggregated. Accordingly, between June 2018 and October 2018, staff further refined the data collection processes leading to a decrease of no more than 5% in overall patient counts for the system. Staff will continue to refresh and refine the process for aggregating data across the system, leading to more exact patient panel data.

1,380,203 unique patients in FY16, 1,409,382 unique patients in FY17 and 1,504,478 unique patients in FY18.[3] Preliminary data indicate that for the first seven months of FY19 Partners HealthCare had 1,182,064 unique patients. Partners HealthCare's patient mix consists of approximately 42% males and 58% females. The Massachusetts Center for Health Information and Analysis ("CHIA") reports that Partners HealthCare's patient panel represents 19% of all discharges in the Commonwealth.[4] The system's case mix adjusted discharge rate is 23%.[5]

Between FY16 and FY18, Partners HealthCare saw an increase in the number of patients it serves across all age cohorts. Current age demographics show that the majority of the patients within Partners HealthCare's patient population are between the ages of 18-64 years of age (62% of the total patient population). Patients that are 65 and older also make up a significant portion of the total patient population (27% of the total patient population). Only 11% of Partners HealthCare's patients are between 0-17 years of age. Preliminary data for FY19 shows similar trends with regard to increases across age cohorts and cohort distribution.

Partners HealthCare's patient panel reflects a mix of races. Data based on patient self-reporting demonstrate that in FY18, 72.6% of the total patient population identified as White; 5.5% identified as African American or Black; 4.1% identified as Asian; 1.4% identified as Hispanic/Latino; 0.1% identified as American Indian or Alaska Native; and 0.1% identified as Native Hawaiian or Other Pacific Islander. Since patients were grouped into these categories based on how they self-identified,[6] there is a portion of the patient population (16.1% in FY18) that either chose not to report their race or identified as a race that did not align with the aforementioned categories. Therefore, it is important to note that the racial composition of Partners HealthCare's patient panel may be understated.

Partners HealthCare provides care to patients from a broad range of geographies including all fifty states. While Partners HealthCare's patient panel resides mainly in Eastern Massachusetts, there is a sizeable portion of the patient panel that resides outside of Massachusetts (10.5%, or 158,537 patients, in FY18). By applying the Department of Public Health's ("DPH") Health Service

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[3] Entities include: Brigham and Women's Hospital, Brigham and Women's Faulkner Hospital, Massachusetts General Hospital, Newton-Wellesley Hospital, and North Shore Medical Center; Cooley Dickinson Hospital, Martha's Vineyard Hospital, McLean Hospital, and Nantucket Cottage Hospital (post-Epic data only); Massachusetts Eye and Ear Infirmary (outpatient post-Epic data only); Spaulding Rehabilitation Hospital (Telehealth, Partners Mobile Observation Unit, Home Hospital programs for GH and BWH, Stay Connected with GH, Lifeline, and CareSage programs are not included); Brigham and Women's Physicians Organization, Massachusetts General Physicians Organization, Newton-Wellesley Medical Group, and North Shore Physicians Group; Cooley Dickinson PHO (post-Epic data only); and Partners Community Physicians Organization (pre-Epic non-risk patients not included).

[4] *Fiscal Year 2016: Partners HealthCare System*, MASSACHUSETTS CTR. FOR HEALTH INFORMATION ANALYSIS, http://www.chiamass.gov/assets/Uploads/mass-hospital-financials/2016-annual-report/system-profiles/Partners-HealthCare-System.pdf (last visited Jul. 17, 2019).

[5] *Id.*

[6] With the exception of the category "Hispanic/Latino," the race categories shown above are based on the 1997 Office of Management and Budget standards on race and ethnicity. Patients were grouped into these categories based on their responses as follows — White: "White"; African American or Black: "African American", "Black", "Black or African American"; American Indian or Alaska Native: "American Indian", "American Indian or Alaska Native"; Asian: "Asian"; Native Hawaiian or Other Pacific Islander: "Native Hawaiian or Other Pacific Islander", "Native Hawaiian/Other Pacific Islander", "Pacific Islander"; Hispanic/Latino: "Hispanic", "Hispanic or Latino", "Latino"; Other/Unknown: All other responses.

Area ("HSA") categories to FY18 data, 43.4% of Partners HealthCare's patients reside in HSA 4 (652,456 patients); 16.2% reside in HSA 6 (244,040 patients); 13.6% reside in HSA 5 (205,029 patients); 6.5% reside in HSA 3 (97,667 patients); 3.3% reside in HSA 2 (49,437 patients); 6.0% reside in HSA 1 (90,902 patients); 38 patients (less than 0.01%) reside in MA but outside of HSAs 1-6; and the origin of 6,372 patients or 0.4% of the patient panel is unknown.

B. The Foxborough Center's Patient Panel

The patients who receive their care at the Foxborough Center (the "Patient Panel"), as demonstrated by the utilization data for the 36-month period covering Fiscal Year ("FY") 16-18[7], reflect the communities served by the Foxborough Center. Although the Patient Panel is somewhat different from the patient panel of the full Partners HealthCare system, the Patient Panel, like Partners HealthCare's patient panel, consists of approximately 42% males and 58% females. Attachment 3 provides the demographic profile of the Patient Panel in table form.

During FY 16-18, 102,381 unique patients utilized the Foxborough Center's services.[8] Nearly three-quarters of the Foxborough Center's Patient Panel is made up of adults between the ages of 18-65 (68.33%). Within this age group, 36.86% of the Patient Panel is between the ages of 46-65. Older adults (ages 65+) also make up a large portion of the Patient Panel, with 22.85% of the patients falling into this age cohort. Only 8.82% of the Patient Panel is between 0-17 years of age.[9]

The Patient Panel reflects a mix of races distinct from the demographic make-up of Partners HealthCare as a whole, but similar to the demographics of the greater Foxborough area. Data based on patient self-reporting demonstrates that in FY 16-18: 89.07% of the Patient Panel identified as White; 2.44% identified as African American or Black; 2.07% identified as Asian; 0.53% identified as Hispanic/Latino; 0.1% identified as American Indian or Alaska Native; and 0.03% identified as Native Hawaiian or Other Pacific Islander. Since patients were grouped into these categories based on how they self-identified,[10] there is a portion of the Patient Panel (2.29%) that either chose not to report their race or identified as a race that did not align with the above categories. The racial mix of the Patient Panel is similar to the racial mix of Foxborough and surrounding communities. Demographic data on the top five zip codes from which the Foxborough Center draws,[11] representing more than 25% of its Patient Panel are included at Attachment 4. As shown at Attachment 4, these surrounding communities have populations that

[7] Fiscal year October 1 – September 30.
[8] Due to the nature of how patient and demographic information is collected at the Foxborough Center, these data are drawn from scheduling and patient software tied to BWH and do not include patients of MGH who may be scheduled at the Foxborough Center through a MGH patient scheduling system.
[9] The Foxborough Center does not currently offer pediatric primary care. Pediatric patients are seen by specialists and in the urgent care center at the Foxborough Center.
[10] With the exception of the category "Hispanic/Latino," the race categories shown above are based on the 1997 Office of Management and Budget standards on race and ethnicity. Patients were grouped into these categories based on their responses as follows – White: "White"; African American or Black: "African American", "Black", "Black or African American"; American Indian or Alaska Native: "American Indian", "American Indian or Alaska Native"; Asian: "Asian"; Native Hawaiian or Other Pacific Islander: "Native Hawaiian or Other Pacific Islander", "Native Hawaiian/Other Pacific Islander", "Pacific Islander"; Hispanic/Latino: "Hispanic"," Hispanic or Latino"," Latino"; Other/Unknown: All other responses.
[11] These zip codes represent the towns of Foxborough, Walpole, Mansfield, Franklin, and North Attleboro. Each town has only a single zip code.

are 90% White, between 1-6% Black or African American, between 2 – 6% Asian, and between 2 – 4% Hispanic or Latino.[12]

The Patient Panel for the Foxborough Center resides mainly in Foxborough and surrounding towns. Attachment 5 lists the top 50 zip codes from which the Foxborough Center draws patients. Patients from these zip codes make up more than 70% of the total Patient Panel. As indicated at Attachment 5, 50% of the Patient Panel comes from the Massachusetts municipalities of Foxborough, Mansfield, Franklin, Walpole, North Attleboro, Wrentham, Sharon, Norfolk, Attleboro, Norton, Norwood, Plainville, Canton, and Taunton. With the exception of Taunton,[13] these towns are all within 10 miles of the Foxborough Center, with most being contiguous to Foxborough.[14]

C. The Foxborough Center's Imaging Services Patient Panel.

During FY 16-18, 18,491 unique patients utilized the CT and MRI services (the "Imaging Services") at the Foxborough Center. The Patient Panel using Imaging Services at this location[15] were similarly representative of the Partners HealthCare patient panel (57% female, 43% male).

In FY18, the Foxborough Center received 10,114 MRI and CT orders (4,868 MRI; 5,426 CT). As shown in Attachment 6, MRI and CT orders originated from a number of specialties, however, Internal Medicine and Orthopedics made up more than 40% of the total orders. Urology, Emergency Medicine, and Oncology each represented more than 5% of total orders.

The portion of the Patient Panel utilizing CT or MRI services tended to be older than the general Patient Panel (see Attachment 3). Approximately one-third (32%) of Patient Panel receiving Imaging Services is 65 or older. Approximately two-thirds (67%) of the Patient Panel receiving Imaging Services is non-elderly adults (18-65), with the majority of the patients in this age group being older (42.97% of the total Imaging Services Patient Panel is 46-65). The Foxborough Center only offers MRI and CT services to patients 15 and older. As such, only 0.76% of the Imaging Services patients were under age 18. The racial mix of the Patient Panel receiving Imaging Services was nearly identical to the racial mix of the Patient Panel. Patients receiving Imaging Services at the Foxborough Center similarly live in the greater Foxborough area (see Attachment 5).

F1.a.ii **Need by Patient Panel:**
Provide supporting data to demonstrate the need for the Proposed Project. Such data should demonstrate the disease burden, behavioral risk factors, acuity mix, health disparities, or other objective Patient Panel measures as noted in your response to Question F1.a.i that demonstrates the need that the Proposed Project is attempting to address. If an inequity or disparity is not identified as relating to the Proposed Project, provide information justifying the need. In your description of Need, consider the principles

[12] Because of the way data is gathered by the Applicant (permitting a patient to decline to answer, answer "other," or otherwise not have information about the patient's race captured), there may be some differences in how racial minorities are identified between the Applicant's own data and U.S. Census data.
[13] The northwest border of Taunton is approximately 12 miles from the Foxborough Center.
[14] Mansfield, Walpole, North Attleboro, Wrentham, Sharon, Norfolk, and Plainville all border Foxborough
[15] The Foxborough Center also provides x-ray, ultrasound, and mammography services. For the purposes of this application, patients receiving Imaging Services refers only to those patients receiving CT or MRI services.

underlying Public Health Value (see instructions) and ensure that Need is addressed in that context as well.

The Proposed Project is designed to meet the current and future needs of the Patient Panel to receive CT and MRI services. The future need for Imaging Services at the Foxborough Center will be driven by both an overall increased demand for Imaging Services throughout the population, particularly as the population ages, and the increased demand created by expanding the number of primary care and specialty providers to increase access at the Foxborough Center.

A. Increase in Overall Need for CT and MRI Services

Diagnostic imaging utilization, including imaging with CT and MRI, has increased significantly in the United States over the last several decades.[16] A number of factors have contributed to this increase, including technological advancements (e.g., improvements in techniques, resolution, and image acquisition time) and expansion of clinical applications (particularly to diagnose and treat age-related conditions).[17] These imaging modalities are used by a variety of medical specialties to provide earlier and more accurate diagnoses and to guide patient care decisions.

BWH provides a variety of inpatient and outpatient imaging services to meet its patients' needs. As shown in the chart below, in each fiscal year, the number of patients needing Imaging Services at BWH and Brigham and Women's Faulkner Hospital ("BWFH")[18] has increased and the number of MRI and CT exams performed has increased.

Fiscal Year	Patient Count	MRI Exams	CT Exams
2018	78,270	71,114	108,395
2017	72,080	64,428	99,667

[16] Rebecca Smith-Bindman et al., *Rising Use Of Diagnostic Medical Imaging In A Large Integrated Health System,* 27 HEALTH AFFAIRS 1491 (2008), *available at* https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2765780/pdf/nihms-137739.pdf (last visited Jul. 17, 2019); Rebecca Smith-Bindman et al., *Use of Diagnostic Imaging Studies and Associated Radiation Exposure For Patients Enrolled in Large Integrated Healthcare Systems, 1996-2010,* 307 JAMA2400 (2012), *available at* https://jamanetwork.com/journals/jama/fullarticle/1182858 (last visited Jul. 17, 2019); Robert J. McDonald et al., *The Effects of Changes in Utilization and Technological Advancements of Cross-Sectional Imaging on Radiologist Workload,* 22 ACADEMIC RADIOLOGY 1191 (2015); Michael Walter, *Feeling overworked? Rise in CT, MRI images adds to radiologist workload,* RADIOLOGY BUSINESS (Jul. 31, 2015), https://www.radiologybusiness.com/topics/quality/feeling-overworked-rise-ct-mri-images-adds-radiologist-workload (last visited Jul. 17, 2019); *Increases in Imaging Procedures, Chronic Diseases Spur Growth of Medical Imaging Informatics Market,* IMAGING TECHNOLOGY NEWS (Oct. 28, 2016), https://www.itnonline.com/content/increases-imaging-procedures-chronic-diseases-spur-growth-medical-imaging-informatics-market (last visited Jul. 17, 2019).

[17] *Rising Use Of Diagnostic Medical Imaging In A Large Integrated Health System, supra* note 16; *Use of Diagnostic Imaging Studies and Associated Radiation Exposure For Patients Enrolled in Large Integrated Healthcare Systems, 1996-2010, supra* note 16; McDonald et al., *supra* note 16; Walter et al., *supra* note 16; *Increases in Imaging Procedures, Chronic Diseases Spur Growth of Medical Imaging Infonnatics Market, supra* note 16.

[18] Located in Jamaica Plain, the BWFH location is the closest location to the Foxborough Center with MRI and CT Services in the Applicant's system.

2016	67,879	59,343	90,445

At BWH and BWFH the number of unique patients requiring MRI and/or CT exams has been increasing at a rate of 6-8% per year from FY16-18. Across its locations, BWH's MRI and CT services have device utilization rates above 80% in many locations. As further discussed below, the MRI and CT services at the Foxborough Center have very high utilization rates and the majority of the Patient Panel lives some distance from other MRI and CT services within the Applicant's system.

BWH has experienced growth consistent with nationwide trends. As reflected in the table above, the demand for CT and MRI services at BWH and BWFH, including outpatient satellites, has grown at a rate of 8-9% over the past three years. From FY 16 to FY 17, the number of MRI exams for both hospitals increased by 8%; from FY 17 to FY 18, the number of MRI exams increased by 9%. Similarly, from FY 16 to FY 17, the number of CT exams for both hospitals increased by 9%; from FY 17 to FY 18, the number of CT exams increased by 9%.

The Foxborough Center has also experienced significant growth in the demand for CT and MRI services. As set forth in Attachment 3, from calendar year (CY) 16 to CY 17, the Foxborough Center's CT exam volume grew by 14%; from CY 17 to CY 18, it grew by 7%. Similarly, from CY 16 to CY 17, the Foxborough Center's MRI exam volume grew by 21%; from CY 17 to CY 18, it grew by 9%.

The Proposed Project will also meet the future needs of the Applicant's patient panel, including the Foxborough Center's Patient Panel. According to the University of Massachusetts' Donahue Institute's ("UMDI") *Long-Term Population Projections for Massachusetts Regions and Municipalities*, the statewide population is projected to grow a total of 11.8% from 2010 through 2035.[19] An analysis of UMDI's projections shows that the growth of the Commonwealth's population is segmented by age sector, and that within the next 20 years, the bulk of the Commonwealth's population growth will cluster around residents that are age 50 and older.[20] Moreover, between 2015 and 2035, the Commonwealth's 65+ population is expected to increase at a higher rate compared to all other age cohorts; by 2035, the 65+ age cohort will represent approximately a quarter of the Massachusetts population.[21] The same report finds that areas surrounding the Foxborough Center will experience similar growth during this 25-year timeframe. Both the MetroWest and Southeast regions of Massachusetts are projected to grow by more than 6% during this time period and each will experience a population trend toward older residents.

[19] University of Massachusetts' Donahue Institute's ("UMDI") *Long-Term Population Projections for Massachusetts Regions and Municipalities* available at http://pep.donahue-institute.org/downloads/2015/new/UMDI_LongTermPopulationProjectionsReport_2015%2004%20_29.pdf (last visited Jul. 17, 2019).

[20] Donahue Institute, *supra* note 19.

[21] Donahue Institute, *supra* note 19.

B. Increase in Need for CT and MRI Services at the Foxborough Center and the Value of Local Services

The increased demand for MRI and CT scans has led to high utilization for MRI and CT units across BWH and BWFH's locations, including at the Foxborough Center. The Foxborough Center's current MRI and CT units have utilization of 94% and 86%, respectively. To accommodate the demand, CT and MRI services are currently provided on the following schedules:

	CT	MRI
Monday – Thursday	7:45 a.m. – 6:00 p.m.	6:30 a.m. – 11 p.m.
Friday	7:45 a.m. – 6:00 p.m.	6:30 a.m. – 8 p.m.
Saturday	8:00 a.m. – 4:00 p.m.	8:00 a.m. – 4:00 p.m.
Sunday	8:00 a.m. – 4:00 p.m.	8:00 a.m. – 4:00 p.m.

Even with these long hours of operation, there are lengthy wait times for MRI and CT appointments. The wait time for an MRI exam is, on average, 4-5 days, while the wait time for a CT exam is generally 1-2 days. Note that the Foxborough Center recently expanded the hours of operation of the CT unit to include weekend appointments. A certain number of slots are held back each day for urgent appointments, including use by the Foxborough Center's urgent care center patients.

As indicated above, the current CT and MRI units situated at the Foxborough Center are already experiencing very high utilization. In the future, demand for CT and MRI services at the Foxborough Center is also anticipated to grow as the number of primary care and specialty providers seeing patients there increases. As described in Factor F1.a.i, the majority of the Foxborough Center's patients live in the greater Foxborough area with the Foxborough Center accessible via public transportation and free self-parking. In some instances, these patients are receiving most of their health care, including CT and MRI exams, at the Foxborough Center. In other instances, a patient may see a specialist at one of the Applicant's Boston hospital locations, but wishes to have imaging studies and other ancillary services performed closer to their home, thereby minimizing travel to Boston. For a patient living near the Foxborough Center, traveling to BWH would take a minimum of 45 minutes; during morning rush hour, the one-way journey could take up to 2 hours.[22] Similarly, traveling to BWFH without traffic takes approximately 35 minutes, but rush hour traffic can extend travel time to 80 minutes. For a more detailed discussion of transportation options, please see Section F1.b.iii.

The Foxborough Center's Press Ganey surveys for the past two years[23] have consistently included responses indicating how important patients find having health care services located nearby. Those responses have included:

- *Love that I can receive Brigham and Women's excellence of care without having to drive into Boston.*

[22] Travel times and distances calculated for this section F1.a.ii calculated using Google Maps from 20 Patriot Place, Foxborough, MA. Rush hours times based on a scheduled arrival at the provider location of 9:00 a.m.

[23] Comments from April 1, 2017 to April 20, 2019 reviewed for this Proposed Project and Application.

- *Very grateful to have my Brigham doctor local.*
- *Great facility and convenient location to see B&W physicians.*
- *I am very grateful to have the opportunity to be cared for by BWH doctors at such a wonderful facility so close to my home.*
- *I think this practice is excellent and so very convenient to where I live. I'm very glad B&W is expanding this practice and more people will be able to be cared for at this facility.*
- *I found the Foxboro location surprisingly convenient. Though I only live 10 miles from Boston it took less time to go to Foxboro and parking was easy.*

The level of demand for providing care to the Patient Panel close to their homes has strained the capacity of the current operations at the Foxborough Center. The Foxborough Center's primary care providers have had such high demand that they had to close their waitlists for new patients, for approximately four years, as waitlist times had grown so long. Beginning in November 2019, additional primary care and specialty care services will be available at the Foxborough Center. That expansion will allow for increased access to primary care providers, eventually doubling the number of providers, and expand access to women's health specialties (Ob-Gyn, Center for Infertility & Reproductive Surgery, Minimally-Invasive Gynecologic Surgery, Maternal Fetal Medicine, and Urogynecology), Dermatology services, and the multi-specialty service (expanding services in Allergy, Electrophysiology, Gastroenterology, Neurology, Neurosurgery, Pulmonology, Renal, Rheumatology, Sports Neurology, and Vein/Vascular care). As indicated above, the current referrals for CT and MRI at the Foxborough Center primarily come from Internal Medicine and Orthopedics. As access to primary care providers and specialists grows in Foxborough, there will be an increased demand for MRI and CT services. Patients living or working in the area surrounding Foxborough will continue to want to have their imaging needs met at the Foxborough Center.

Though the Applicant currently has a number of MRI and CT units located in the greater Boston area, these other locations are not located near the communities that make up the majority of the Patient Panel. As noted above, the BWFH location is the closest location to the Foxborough Center in the Applicant's system offering Imaging Services. For a 9:00 a.m. weekday appointment, traveling to BWFH from the Foxborough Center is a 20-25 mile drive, taking approximately 35-80 minutes.[24] The next closest MRI (and the closest CT) in the Applicant's system is located at 850 Boylston Street, Chestnut Hill, and requires travel of 24-28 miles (depending on route) taking approximately 45 to 110 minutes.[25] The Applicant has one Verio 3T[26] MRI unit located in West Bridgewater, MA, which does not offer CT. For a 9:00 a.m. week day

[24] Google Maps, leaving from 20 Patriot Place, Foxborough Massachusetts with a proposed arrival, at BWFH, time of 9:00AM, https://www.google.com/maps/dir/20+Patriot+Pl,+Foxborough,+MA+02035/Brigham+and+Women's+Faulkner+Hospital,+Centre+Street,+Boston,+MA/@42.200874,-71.3389961,11z/data=!3m1!4b1!4m18!4m17!1m5!1m1!1s0x89e47cb874eb5515:0x67aafb18d85834e1!2m2!1d-71.2661235!2d42.0928312!1m5!1m1!1s0x89e3793bec018837:0x95e3cc6725f3909b!2m2!1d-71.128923!2d42.3016136!2m3!6e1!7e2!8j1562576400!3e0

[25] Google Maps, leaving from 20 Patriot Place, Foxborough Massachusetts with a proposed arrival, at 850 Boylston, time of 9:00 a.m., https://www.google.com/maps/dir/20+Patriot+Pl,+Foxborough,+MA+02035/850+Boylston+Street,+Chestnut+Hill,+MA/@42.2037277,-71.3667346,11z/data=!3m1!4b1!4m18!4m17!1m5!1m1!1s0x89e47cb874eb5515:0x67aafb18d85834e1!2m2!1d-71.2661235!2d42.0928312!1m5!1m1!1s0x89e378febbf7cf15:0xc2f08223948d1085!2m2!1d-71.1496779!2d42.3260772!2m3!6e1!7e2!8j1562576400!3e0

[26] *See* Section F1.a.iii (regarding differences between 1.5T and 3T MRI units).

appointment, traveling to that unit from the Foxborough Center is a 23-28 mile drive taking approximately 25-50 minutes.[27] During non-rush hour traffic, driving time from the Foxborough Center, to make a 1:00 p.m. appointment at BWFH would take 30-60 minutes[28], 850 Boylston would take 45-65 minutes[29] and West Bridgewater, 25-40 minutes.[30]

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[27] Google Maps, leaving from 20 Patriot Place, Foxborough Massachusetts with a proposed arrival, at West Bridgewater, time of 9:00 a.m. https://www.google.com/maps/dir/20+Patriot+Pl,+Foxborough,+MA+02035/711+West+Center+Street,+West+Bridgewater,+MA/@42.0818803,-71.3180093,11z/data=!3m1!4b1!4m18!4m17!1m5!1m1!1s0x89e47cb874eb5515:0x67aafb18d85834e1!2m2!1d-71.2661235!2d42.0928312!1m5!1m1!1s0x89e48f00c44dbf67:0x96ec89f176d4d34a!2m2!1d-71.0518831!2d42.0124839!2m3!6e1!7e2!8j1562576400!3e0 We also note that there is a 16.3 mile route using local roads. This route takes more time (40 minutes or more) than the 23 mile route on I-495 (26-35 minutes) for a 9:00 a.m. arrival.

[28] Google Maps, https://www.google.com/maps/dir/20+Patriot+Pl,+Foxborough,+MA+02035/Brigham+and+Women's+Faulkner+Hospital,+Centre+Street,+Boston,+MA/@42.200874,-71.3389961,11z/data=!3m1!4b1!4m18!4m17!1m5!1m1!1s0x89e47cb874eb5515:0x67aafb18d85834e1!2m2!1d-71.2661235!2d42.0928312!1m5!1m1!1s0x89e3793bec018837:0x95e3cc6725f3909b!2m2!1d-71.128923!2d42.3016136!2m3!6e1!7e2!8j1562590800!3e0

[29] Google Maps, https://www.google.com/maps/dir/20+Patriot+Pl,+Foxborough,+MA+02035/850+Boylston+Street,+Chestnut+Hill,+MA/@42.2037277,-71.3667346,11z/data=!3m1!4b1!4m18!4m17!1m5!1m1!1s0x89e47cb874eb5515:0x67aafb18d85834e1!2m2!1d-71.2661235!2d42.0928312!1m5!1m1!1s0x89e378febbf7cf15:0xc2f08223948d1085!2m2!1d-71.1496779!2d42.3260772!2m3!6e1!7e2!8j1562590800!3e0

[30] Google Maps, https://www.google.com/maps/dir/20+Patriot+Pl,+Foxborough,+MA+02035/711+West+Center+Street,+West+Bridgewater,+MA/@42.0818803,-71.3180093,11z/data=!3m1!4b1!4m18!4m17!1m5!1m1!1s0x89e47cb874eb5515:0x67aafb18d85834e1!2m2!1d-71.2661235!2d42.0928312!1m5!1m1!1s0x89e48f00c44dbf67:0x96ec89f176d4d34a!2m2!1d-71.0518831!2d42.0124839!2m3!6e1!7e2!8j1562590800!3e0

F1.a.iii **Competition:**
Provide evidence that the Proposed Project will compete on the basis of price, total medical expenses, provider costs, and other recognized measures of health care spending. When responding to this question, please consider Factor 4, Financial Feasibility and Reasonableness of Costs.

The Proposed Project will not have an adverse impact on competition in the Massachusetts health care market based on price, TME, provider costs or other recognized measures of health care spending as evidenced by the information below. As discussed in Factors F1.a.i and F1.a.ii, data indicate that across BWH's and BWFH's facilities, there has been a 6-8% increase in demand for CT and MRI services each year over past three years. CT and MRI volumes at the Foxborough Center have similarly seen large increases. Notwithstanding BWH's efforts to meet increased demand, including operating with extremely long hours, the existing CT and MRI units at the Foxborough Center are at capacity. Moreover, the Applicant expects the demand for CT and MRI services at the Foxborough Center to increase in the coming years in connection with both an expansion in the population seeking services (both overall population increase and an increase in the elderly population) and planned expansion of physician services at the Foxborough Center.

As noted throughout this Application, the Proposed Project is part of a larger effort of the Applicant to meet the health care needs of the residents of Foxborough and surrounding communities at a convenient location. The overall effort will help to address severe primary care shortages in Bristol County, which has one of the worst ratios of primary care doctors to residents in the Commonwealth.[31] By adding additional primary care capacity at the Foxborough Center and coupling those primary care services with specialists, laboratory, and imaging capacity, the Applicant can meet the health care needs of many of the region's residents without requiring them to travel outside their community.

Adding additional MRI and CT capacity at the Foxborough Center will allow the Applicant to maximize its ability to deliver the full continuum of care to its patients living in the Foxborough region in a single location. Foxborough Center patients will be able to receive MRI and CT services locally, and avoid the time and expense involved in going to Boston locations for Imaging Services whenever possible.

Currently demand for MRI and CT services in the Foxborough region far outpaces the supply of CT and MRI services in the Foxborough area as offered at the Foxborough Center and by other providers. In order to provide a full suite of services to Foxborough Center patients, and the residents of the Foxborough region, the Foxborough Center must be able to keep up with the demand for MRI and CT services in the region. To do so requires obtaining a second MRI unit and a second CT unit at the Foxborough Center.

After review of available options and its imaging needs, the Applicant has determined that a 1.5T MRI unit is appropriate for the second MRI unit at the Foxborough Center. A 1.5T unit is generally much less expensive to obtain and maintain than a 3T unit, with acquisition cost for a 3T unit being nearly double the cost of a 1.5T unit.[32] While both 1.5T and 3T MRIs have been proven to

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[31] *See* Robert Wood Johnson Foundation, *County Health Rankings & Road Maps*, available at https://www.countyhealthrankings.org/app/massachusetts/2019/measure/factors/4/map (showing Bristol County having a primary care to resident ratio of 1,930:1 compared to a ratio of 960:1 for Massachusetts as a whole) (last visited Jul. 17, 2019).

[32] *See* GE Healthcare, *1.5T Compared to 3.0T MRI Scanners*, available at https://insights.gehealthcare.com/medical-imaging/1217-2/ (last visited Jul. 17, 2019)

be safe and effective, each has certain positive features and limitations. In particular, while 3T units can reduce scan time and improve imaging for certain special scans requiring extreme detail (including brain scans), scans from 3T units are more likely to include artifacts. As technology has continued to improve, scan times for 1.5T units continue to improve. The unit the Applicant proposes to acquire allows for simultaneous multi-slice scanning. This scanning method can reduce musculoskeletal exam time by up to 46%.[33] Reduced scan times improve patient experience while increasing the daily throughput of patients on a single unit, thereby maximizing capacity without the need to add additional units. Additionally, for patients with medical devices or implants, a 1.5T unit is a safer alternative to a 3T unit. Based on these factors, the fact that the Foxborough Center already has a 3T unit, and the availability of other 3T units in the Applicant's system for additional 3T capacity, the Applicant has determined that the lower cost alternative of a 1.5T unit will meet the Patient Panel's clinical needs and reduce the cost of the Proposed Project.

Similarly, the Applicant has determined that the 128-slice CT unit it plans to acquire is the appropriate unit for the needs of the Patient Panel. This 128-slice CT unit provides high quality scans and delivers lower doses of radiation than older CT units. The Applicant has determined that a costlier higher slice unit is not required to meet the clinical needs of the Patient Panel.

The Applicant will use the same contracted rates for the additional MRI and CT units as are used for the current units at the Foxborough Center. TME for these services will not be impacted given that no change in price is occurring.

By co-locating additional imaging capacity at the Foxborough Center, the Applicant can take advantage of certain efficiencies of co-located services. Based on quotes for the MRI and CT equipment and necessary renovations at the Foxborough Center to install the additional units (included in the total cost of this Proposed Project), the Applicant has determined that it is more cost effective to add this additional imaging capacity at the same location as the current CT and MRI units. Consequently, the capital expenditure competes on the basis of provider cost.

F1.b.i **Public Health Value /Evidence-Based:**
Provide information on the evidence-base for the Proposed Project. That is, how does the Proposed Project address the Need that Applicant has identified.

A. MRI as an Imaging Modality

MRI is a well-established, non-invasive imaging system that uses a magnetic field combined with pulses of radio waves to produce detailed images of organs, tissues, and structures within the human body.[34] MRI has been the gold standard for imaging the brain, spine and joints since the mid-1980s. MRI has the major benefit of imaging the human body without the need for ionizing radiation.[35] The current generation of MRI scanners offer patients to be imaged more rapidly and in greater comfort than with older devices, while maintaining or even improving image

[33]Siemens Healthineers, *Simultaneous Multi-Slice Accelerate Advanced Neuro Applications for Clinical Routine*, available at https://www.siemens-healthineers.com/magnetic-resonance-imaging/options-and-upgrades/clinical-applications/simultaneous-multi-slice (last visited Jul. 17, 2019).
[34] Magnetic Resonance Imaging (MR/). NAT'L INST. OF BIOMEDICAL IMAGING & BIOENGINEERING, https://www.nibib.nih.gov/science-education/science-topics/magnetic-resonance-imaging-mri (last visited Jul. 17, 2019).
[35] *Id.*

quality. With this generation of imaging devices, major improvements in breast, cardiac and abdominopelvic imaging (particularly the prostate) have been realized. With these instruments, MRI is not only capable of performing anatomic imaging, but also allows for dynamic functional assessment of pathology that is integral to assessing treatment effects.

In addition to conditions affecting the brain, MRI also demonstrates clinical utility in diagnosing a wide spectrum of spinal and musculoskeletal conditions due to its ability to noninvasively display high definition images of the bones, cartilage, muscles, tendons, ligaments, and joints.[36] MRI is often used to obtain better images of a bone mass first seen on an x-ray, can show if the mass is a tumor, an infection, or some other damage, and can also help make a specific diagnosis when a lesion is indeterminate or shows signs of aggressiveness.[37] MRI scans have the ability to show the extent of a tumor, the marrow inside the bone, and the soft tissue around a tumor, and is the preferred modality to determine if a tumor has grown.[38]

B. CT as an Imaging Modality

CT is a well-established, non-invasive imaging system that has been available for clinical use for several decades and has gained widespread acceptance in several fields of medicine.[39] Generally speaking, CT is a diagnostic imaging test that combines the use of sophisticated x-ray technology and computer processing to provide detailed anatomical and structural information.[40] Since its introduction into clinical use in the United States in the 1970s, CT has made enormous technical

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[36] Gail Dean Deyle, *The role of MRI in musculoskeletal practice: a clinical perspective,* 19 J. MANUAL & MANIPULATIVE THERAPY 152 (2011), *available at* https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3143009/ (last visited Jun. 10, 2019); Maravi et al., *Role of MRI in Orthopaedics,* 21 ORTHOPAEDIC J. M.P. CHAPTER 74 (2015); Apostolos H. Karantanas, *What's new in the use of MRI in the orthopaedic trauma patient?,* 45 INT'L J. CARE INJURED 923 (2014), *available at* https://www.ncbi.nlm.nih.gov/pubmed/24502985 (last visited Jul. 17, 2019).

[37] *Tests for Bone Cancer,* AM. CANCER Soc'y, https://www.cancer.org/cancer/bone-cancer/detection-diagnosis-staging/how-diagnosed.html (last updated Feb. 5, 2018); *Tests for Osteosarcoma,* AM. CANCER Soc'y https://www.cancer.org/cancer/osteosarcoma/detection-diagnosis-staging/how-diagnosed.html (last updated Jan. 30, 2018); Duarte Nascimento et al, *The role of magnetic resonance imaging in the evaluation of bone tumours and tumour-like lesions,* 5 INSIGHTS IMAGING 419 (2014), *available at* https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4141345/ (last visited Jul. 17, 2019).

[38] *Tests for Osteosarcoma, supra* note 38; Nascimento et al, *supra* note 38; *MRI for Cancer,* AM. CANCER Soc'y, https://www.cancer.org/treatment/understanding-your-diagnosis/tests/mri-for-cancer.html (last updated Nov. 30, 2015).

[39] Liguori et al; *Computed Tomography*; *Computed Tomography in Clinical Use*, 12 J. INT'L COMMISSION ON RADIATION UNITS & MEASUREMENTS 25 (2012).

[40] Liguori et al; *Computed Tomography*; *Computed Tomography (CT)*, U.S. FOOD & DRUG ADMINISTRATION, https://www.fda.gov/radiation-emittingproducts/radiationemittingproductsandprocedures/medicalimaging/medicalx-rays/ucm115317.htm (last updated Mar. 6, 2018); *Computed Tomography (CT or CAT) Scan of the Brain*, JOHNS HOPKINS MEDICINE, https://www.hopkinsmedicine.org/healthlibrary/test_procedures/neurological/computed_tomography_ct_or_cat_scan_of_the_brain_92,P07650 (last visited Jul. 17, 2019).

and engineering advances that have led to improvements in image quality, speed, and dose reduction, and have increased the clinical utilization of the technology.[41]

C. Clinical Applications of CT and MRI for Patients at the Foxborough Center

Both the additional CT unit and additional MRI unit will assist a variety of providers in providing timely, accurate diagnoses of patients with a variety of health conditions, including cardiovascular, oncology, orthopedics, urology, and women's health.

D. Serving the Imaging Needs of an Expanding Patient Panel

As noted earlier in this Application, the Applicant is expanding the physician office space at the Foxborough Center to allow for more primary care providers and specialists to practice at this location and serve the needs of the greater Foxborough community. A large component of this overall plan is increasing access to primary care for this geographic area. Foxborough Center physicians currently see patients from a number of cities and towns in Southeastern Massachusetts, with the majority of patients coming from towns in Norfolk and Bristol counties, as discussed above. While the entire Commonwealth has a shortage of primary care physicians, Bristol County is particularly undeserved. Bristol County has the worst ratio of primary care physicians to population in the Commonwealth (1,930:1 compared to 960:1 in the Commonwealth as a whole).[42] The Applicant has seen this shortage and the resulting wait times for new primary care appointments directly. For the past four years, the Applicant had been unable to accept new primary care patients at the Foxborough Center. With the addition of more clinicians at the Foxborough Center, the physicians have begun accepting new patients; up to 30 phone calls per day requesting new patient appointments are received. The Applicant hopes to meet this demand by adding additional primary care providers at the Foxborough Center and plans to nearly double the number of primary care providers at the Foxborough Center in the coming years.

E. Value of Co-Located Imaging Services

The evidence-based literature also details the benefits of co-located services. Generally speaking, a variety of benefits of co-location are identified in the literature, including but are not limited to, improved access for patients, more patient/family satisfaction, greater opportunities for providers to collaborate and improve their skills and service to patients, improved referrals (appropriate, timely, and with higher completion rates), increased efficiency, and improved health outcomes.[43] With regard to imaging specifically, imaging at the point of care can provide immediate information to clinicians, eliminate the need for costly follow-up visits, allow for an earlier commencement of treatment, and thereby improve health outcomes.

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[41] Norbert J. Pelc, Sc.D., *Recent and Future Directions in CT Imaging*, Ann Biomed Eng. (feb. 2014), available at https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3958932/ (last visited Jun 17, 2019); International Society for Computed Tomography, *Half a Century in CT: How Computed Tomography Has Evolved*, Oct. 7, 2016, available at https://www.isct.org/computed-tomography-blog/2017/2/10/half-a-century-in-ct-how-computed-tomography-has-evolved (last visited Jul. 17, 2019).

[42] Robert Wood Johnson Foundation, *County Health Rankings & Road Maps*, *supra* note 31.

[43] SUSANNA GINSBURG, ISSUE BRIEF: COLOCATING HEALTH SERVICES: A WAY TO IMPROVE COORDINATION OF CHILDREN'S HEALTH CARE? (The Commonwealth Fund 2008), *available at* https://www.commonwealthfund.org/sites/default/files/documents/___media_files_publications_issue_brief_2008_jul_colocating_health_services_a_way_to_improve_coordination_of_childrens_health_care_ginsburg_colocation_issue_brief_pdf.pdf (last visited Jul.17, 2019); Dennis L. Kodner & Corinne Kay Kyriacou, *Fully integrated care for frail elderly: two American models*, 1 INT'L J. INTEGRATED CARE (2000), *available at* https://ijic.ubiquitypress.com/articles/10.5334/ijic.11/ (last visited Jul. 17, 2019).

F1.b.ii **Public Health Value/Outcome-Oriented:**
Describe the impact of the Proposed Project and how the Applicant will assess such impact. Provide projections demonstrating how the Proposed Project will improve health outcomes, quality of life, or health equity. Only measures that can be tracked and reported over time should be utilized.

A. Improving Health Outcomes and Quality of Life

The Applicant anticipates that the Proposed Project will provide patients with improved access to high-quality MRI and CT services in their local community, which in turn will improve health outcomes and quality of life. Research indicates that delayed access to quality health care negatively affects patient satisfaction as well as health outcomes due to delays in diagnosis and treatment.[44] Given that quality of life is a multidimensional concept that includes aspects of physical health, delayed access to care also results in decreased quality of life.[45] By increasing MRI and CT capacity at the Foxborough Center, the Applicant hopes and expects to provide patients with access to a continuous quality health care experience, reduced wait times, improved patient satisfaction, and better health outcomes. These benefits will be experienced by both patients getting the majority of their health care at the Foxborough Center and those getting specialty care at Boston locations but wanting to receive related imaging services closer to home.

B. Assessing the Impact of the Proposed Project

To assess the impact of the Proposed Project, the Applicant has developed the following quality metrics and reporting schematic, as well as metric projections for quality indicators that will measure patient satisfaction, access and quality of care.

1. **Patient Experience/Satisfaction:** Patients who are satisfied with care are more likely to seek additional treatment when necessary. BWH staff will review overall ratings of care via Press Ganey Survey scores. The Foxborough Center has historically had very high overall rating on its Press Ganey Survey scores and will work to maintain those scores as it expands the volume of services at the Foxborough Center. BWH staff will also review survey comments and follow up with patients reporting negative experiences who choose to leave their name and phone number on the survey.

   Measure: Overall rating of Care - Response Options, include: Very Good, Good, Fair, Poor and Very Poor.

   Projections: Baseline: >90% Year 1: >90% Year 2: >90% Year 3: >90%

   Monitoring: BWH staff review Press Ganey comments on a monthly basis. Patients who report a very negative experience and indicate that they wish to be contacted about their experience (and leave a name and number on the survey) are contacted. Mean score trends are evaluated on a monthly basis, and policy changes instituted as deemed appropriate. This data will be provided on an annual basis.

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[44] Julia C. Prentice et al., *Delayed Access to Health Care and Mortality*, Health Serv. Res. (Apr. 2007), available at https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1955366/ (last visited Jul. 17, 2019).
[45] Id.

2. **Access – Wait Times:** The Proposed Project seeks to ensure timely access to CT and MRI services. Accordingly, BWH will track the median time from order placement to scheduled appointment, as well as the time from CT or MRI scanning to radiology report finalization.

    a. **Measure:** Average (mean) time interval from when the CT exam request was initiated for scheduling to the next available appointment.

    Projections: Baseline: 1-2 days[46] Year 1: 1 day Year 2: 1 day Year 3: 1 day

    Monitoring: This data will be provided on an annual basis.

    b. **Measure:** Average (mean) time interval from when a MRI exam request was initiated for scheduling to the next available appointment.

    Projections: Baseline: 4-5 days[47] Year 1: 2-3 days Year 2: 2-3 days Year 3: 2-3 days.

    Monitoring: This data will be provided on an annual basis.

    c. **Measure:** Median time interval from the completion of a patient's CT/MRI service at the Foxborough Center to finalization of radiology report.

    Projections: Baseline: 10 hours Year 1: 10 hours Year 2: 10 hours Year 3: 10 hours

    Monitoring: This data will be provided on an annual basis.[48]

F1.b.iii **Public Health Value/Health Equity-Focused:**
For Proposed Projects addressing health inequities identified within the Applicant's description of the Proposed Project's need-base, please justify how the Proposed Project will reduce the health inequity, including the operational components (e.g. culturally competent staffing). For Proposed Projects not specifically addressing a health disparity or inequity, please provide information about specific actions the Applicant is and will take to ensure equal access to the health benefits created by the Proposed Project and how these actions will promote health equity.

To ensure health equity to all populations, including those deemed underserved, the Proposed Project will not affect accessibility of BWH's services for poor, medically indigent, and/or Medicaid eligible individuals. BWH does not discriminate based on ability to pay or payer source and this practice will continue following implementation of the Proposed Project. As further detailed throughout this narrative, the Proposed Project will increase access to high-quality major imaging services for all of the Applicant's and BWH's patients.

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[46] This measure fluctuates somewhat based on the day of the week and time of day a request for a CT scan is made.
[47] Similar to CT exams, this measure fluctuates somewhat based on the day of the week and time of day a request for a MRI exam is made.
[48] The measures in item 2 (Access – Wait Times) will be measured with "Year 1" beginning on the date on which the applicable imaging unit is installed and fully operational for patients.

In addition, Partners HealthCare, and specifically BWH, has adopted the Culturally and Linguistically Appropriate Service ("CLAS") standards set forth by the U.S. Department of Health and Human Services Office of Minority Health for all practice sites. BWH provides effective, understandable, and respectful care with an understanding of patients' cultural health beliefs and practices and preferred languages. BWH also has arrangements to offer ongoing education and training in culturally and linguistically appropriate areas for staff at all levels and across all disciplines. Language assistance services are provided by certified translators at no cost to BWH's patients with limited English proficiency by BWH at all points of clinical contact in a timely manner; additional translation services in less frequently encountered languages are available at all times through Language Assistance lines. Additionally, all patient-related materials and signage are posted in multiple languages.

With regard to language assistance, BWH offers access to interpreter and translation services via several modalities at no cost to BWH's limited-English speaking ("LEP") and hearing-impaired patients at all points of clinical contact in a timely manner, including at the Foxborough Center. For LEP patients, BWH provides access to qualified interpreters skilled in 50+ languages via iPad Video Remote (Interpreters on Wheels) or via phone (Language Line). For patients that are deaf or hard of hearing, sign language interpreter services are offered through contracted agencies, and the PHS Bulfinch Temporary Services Department or, when in-person interpreters are not available, through the use of iPad Video Remote Units which allow for visual access to an interpreter on the iPad screen. These services, which are currently available at the Foxborough Center and will continue to be in place following implementation of the Proposed Project, further health equity by ensuring that all patients have meaningful access to robust health services regardless of any language limitations.

All of the Applicant's hospitals, including BWH, participate in the American Hospital Association's #123Equity Pledge Campaign. This Campaign seeks to eliminate health and health care disparities that exist for racially, ethnically and culturally diverse individuals and identifies area for hospital and health system leaders to focus on to ensure high quality, equitable, and safe care for everyone. Specifically, the Campaign requires hospital leaders to accelerate progress in the following areas: (1) Increasing the collection and use of race, ethnicity, language preference and other socio-demographic data; (2) Increasing cultural competency training; (3) Increasing diversity in leadership and governance; and (4) Improving and strengthening community partnerships. This Campaign will allow BWH staff to ensure equal access to the benefits created by the Proposed Project.

For patients relying on public transportation, there are a number of local and affordable options for patients to reach the Foxborough Center. The town of Foxborough operates a shuttle service, GATRA, with a new stop at the Foxborough Center and with transportation between Foxborough and the surrounding towns. The Tri-Town Connector line operates Monday – Saturday, all day, and picks up and drops off at the Norfolk MBTA Commuter Rail station, the Foxborough Center and other places in Foxborough, Wrentham, Franklin and Norfolk. While Foxborough does not currently have a regular MBTA commuter rail station, starting this fall, the MBTA is scheduled to start a commuter rail pilot project that would add Patriot Place to the Fairmont Line, with easy access to the Foxborough Center. The pilot project is scheduled to run for 11 consecutive months. The town of Foxborough also operates the FISH Program which uses volunteers to transport Foxborough residents to medical appointments within an 11 mile radius of the town of Foxborough. To schedule FISH program transportation to and from the Foxborough Center, a Foxborough resident must call the town to schedule an appointment. A town volunteer will then pick the patient up at home and transport them to and from their scheduled appointment at the Foxborough Center.

In addition to public transportation services, the local senior centers run shuttle buses for seniors with stops at the Foxborough Center. There are also a number of parking options at the Foxborough Center, including a drop-off area in front of the building, free valet parking located in front of the building, free self-parking, and 18 handicap-accessible parking spots located in front of the building.

Finally, the Foxborough Center has worked to develop relationships in the local community to address social determinants of health. As further detailed at Attachment 7, in FY 18, the Foxborough Center's community outreach and education efforts touch over 1,500 people in the greater Foxborough community.

F1.b.iv Provide additional information to demonstrate that the Proposed Project will result in improved health outcomes and quality of life of the Applicant's existing Patient Panel, while providing reasonable assurances of health equity.

The Proposed Project will facilitate improved health outcomes and quality of life indicators for the Patient Panel by allowing patients in need of MRI and CT services to receive care in an integrated community setting close to where they live. These expanded imaging services provide an alternative to traveling to Boston for coordinated, integrated care. Receiving care at the Foxborough Center is more convenient for many patients, resulting in improvement in access and care coordination. The Proposed Project will ensure that patients receive primary care, specialty care, and urgent care services at the Foxborough Center have access to timely co-located imaging services. Combined with the fact that the Applicant does not discriminate and offers a variety of services to address social determinants of health and health care disparities (e.g., CLAS standards, interpreting services, and social services), the Applicant anticipates that the Proposed Project will result in improved patient care experiences and quality outcomes while assuring health equity.

F1.c Provide evidence that the Proposed Project will operate efficiently and effectively by furthering and improving continuity and coordination of care for the Applicant's Patient Panel, including, how the Proposed Project will create or ensure appropriate linkages to patients' primary care services.

Because the satellite is a satellite of BWH, all CT and MRI results for tests performed at the Foxborough Center will be integrated into the Partners HealthCare electronic health record ("EHR"). Studies show that integrated health information technology systems directly affect health outcomes as access to a single, integrated health record improves care coordination. This is true of the system used by the Applicant, EPIC, which not only enables imaging results and information to be available to primary care and specialty physicians across the system, but also allows patients to authorize providers outside of Partners HealthCare to access their data, view their record, and send progress notes back for improved continuity of care via the "Care Everywhere" feature. In sum, the availability of these integrated record services ensures that patients at the Foxborough Center benefit from appropriate care coordination, better outcomes, and improved quality of life.

Through the co-location of imaging services with primary care, specialty care, and other ancillary services (including clinical laboratory services) allows continuity of care, avoiding fragmentation, multiple scans, and other inefficiencies for patients and providers. Evidence indicates that care fragmentation is an important source of inefficiency in the US healthcare

system, that health care delivery spread out across a number of separately located providers leads to care fragmentation, and that co-location is one way to address fragmented care and promote efficiency.[49]

F1.d Provide evidence of consultation, both prior to and after the Filing Date, with all Government Agencies with relevant licensure, certification, or other regulatory oversight of the Applicant or the Proposed Project.

Since a broad range of input is valuable in the planning of a project, the Applicant carried out a diverse consultative process with individuals at various regulatory agencies regarding the Proposed Projects. The following individuals are some of those consulted regarding this Project:

- Elizabeth Chen, PhD, MBA, MPH, Interim Director, Determination of Need Program, Department of Public Health
- Determination of Need Program Staff
- Rebecca Rodman, Esq., Deputy General Counsel, Department of Public Health
- Ben Wood, Director, Office of Community Health Planning and Engagement, Department of Public Health
- Stephen Davis, MBA, Licensure Unit Manager, Division of Health Care Facility Licensure and Certification, Department of Public Health

F1.e.i **Process for Determining Need/Evidence of Community Engagement:**
For assistance in responding to this portion of the Application, Applicant is encouraged to review *Community Engagement Standards for Community Health Planning Guideline.* With respect to the existing Patient Panel, please describe the process through which Applicant determined the need for the Proposed Project.

Based on the need for patients to continue to receive comprehensive health care, including MRI and CT Services, at the Foxborough Center, the Applicant developed a plan to expand the availability of providers and services at the Foxborough Center. In developing this plan, the Applicant recognized that one of the greatest values to patients of the health care available at the Foxborough Center was the value of having co-located services, including diagnostic imaging. Based on its review of patient comments about the importance of having services close to home and its review of the current service offerings in the community, the Applicant determined that the community would be best served by expanding the number of primary care and specialty providers at the Foxborough Center. Recognizing that the current MRI and CT units are already operating at capacity and that this influx of new providers at the Foxborough Center would require additional access to Imaging Services, the Applicant determined that it would need to expand its capacity for co-located Imaging Services at the Foxborough Center.

F1.e.ii **Please provide evidence of sound Community Engagement and consultation throughout the development of the Proposed Project. A successful Applicant will, at a minimum, describe the process whereby the "Public Health Value"**

[49] Kurt C. Stange, *The Problem of Fragmentation and the Need for Integrative Solutions,* 7 ANNALS FAMILY MED. 100 (2009), *available at* https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2653966 (last accessed Jul. 17, 2019).

of the Proposed Project was considered, and will describe the Community Engagement process as it occurred and is occurring currently in, at least, the following contexts: Identification of Patient Panel Need; Design/selection of DoN Project in response to "Patient Panel" need; and Linking the Proposed Project to "Public Health Value".

To ensure sound community engagement throughout the development of the Proposed Project, the Applicant in conjunction with BWH staff took the following actions:

- *Community Meeting on June 6, 2019.* On the evening of Thursday, June 6, 2019, the Applicant hosted a community meeting to provide the public with information about the Proposed Project and the overall expansion of services at the Foxborough Center and to answer questions and address concerns. This meeting was publicized through both broad community outreach efforts, including signage at the Foxborough Center and leaflets left at town halls, libraries, and post offices in Foxborough and the surrounding communities, and targeted outreach to local government officials, public health organizations, and business leaders. At the meeting, personnel from BWH and the Foxborough Center answered questions about the planned expansion at the Foxborough Center and the increased access to health care services that the expansion will provide.

- *Email address for questions.* In addition to holding the June 6 community meeting, in publicizing that meeting, the Applicant provided the public with an email address for questions about the meeting or the Proposed Project. To date, the Applicant has not received any inquiries about the Proposed Project.

For detailed information on these activities, including meeting agendas and presentations, see Attachment 8.

Factor 2: Health Priorities

Addresses the impact of the Proposed Project on health more broadly (that is, beyond the Patient Panel) requiring that the Applicant demonstrate that the Proposed Project will meaningfully contribute to the Commonwealth's goals for cost containment, improved public health outcomes, and delivery system transformation.

F2.a. **Cost Containment:**
Using objective data, please describe, for each new or expanded service, how the Proposed Project will meaningfully contribute to the Commonwealth's goals for cost containment.

The goals for cost containment in the Commonwealth center around providing low-cost care alternatives without sacrificing high-quality. The Proposed Project seeks to align with these goals and meaningfully contribute to cost containment in Massachusetts by providing cost-effective high-quality imaging services and creating care efficiencies for patients.

The Proposed Project will have no material impact on provider price, TME, provider costs or other recognized measures of health care spending because the Applicant is seeking to add an additional MRI and an additional CT unit at the Foxborough Center to meet existing demand which already out paces the ready available supply for Imaging Services in the Foxborough area. From CY 16 to CY 18, total volume of scans on the existing MRI and the existing CT at the Foxborough

Center have increased by 27%. The Foxborough Center's current units are heavily utilized, despite the fact that the operating hours have been expanded as much as possible. Current wait times for CT imaging appointments are 1-2 days and for MRI imaging appointments, 4-5 days; however time is reserved each day for urgent imaging. Through the Proposed Project, the Applicant can meet the increasing demand for imaging services at the Foxborough Center and provide patients with more convenient scheduling options, thus preventing the need for patients to travel further from home to obtain necessary Imaging Services.

As previously discussed, the services provided by the proposed additional CT and MRI units at the Foxborough Center will be reimbursed at the same rate as the services currently provided at that location. TME for these services will not be impacted given that no change is occurring in the pricing. BWH will also realize cost savings; Foxborough Center staff will no longer be required to work overtime shifts as the CT and MRI units will not need to run on such expanded schedules. The additional MRI and CT units will also save patients' time and money by reducing their out-of-pocket expenses associated with obtaining health care outside of their local community, i.e. traveling time, parking and transportation costs, and other related costs, etc. By co-locating these services and improving continuity of care, the expansion of Imaging Services at the Foxborough Center will reduce duplicative, unnecessary imaging and will lead to faster, accurate diagnoses.

In sum, TME will not be impacted given that no change will occur with respect to the price of MRI or CT services. Accordingly, as there will not be any change in TME and with the anticipated decrease in THCE, the Proposed Project will have a negligible effect on the overall healthcare cost benchmark for the Commonwealth.

F2.b. **Public Health Outcomes:**
Describe, as relevant, for each new or expanded service, how the Proposed Project will improve public health outcomes.

Additional CT and MRI capacity is needed at the Foxborough Center as demonstrated by the current volume of such services being provided, the inability to further expand the use of the current imaging units at the Foxborough Center, the anticipated growth in the Patient Panel, and the overall anticipated growth in demand for Imaging Services throughout the population. Additional capacity to provide CT and MRI services at the Foxborough Center will improve patient outcomes by leading to earlier diagnoses and tailored treatment plans based on the results of such imaging. Additionally, as discussed above, patients benefit from co-located services. The co-location of primary and specialty care with Imaging Services at the Foxborough Center permits patients in Foxborough and the surrounding communities to have many of their healthcare needs met at a "one-stop shop" and obviates the need to travel further for Imaging Services. Additionally, for patients who reside near the Foxborough Center but who are seen by specialists in downtown Boston, enhanced imaging capabilities at the Foxborough Center permits the patient to have pre- or post-visit imaging handled closer to home, eliminating unnecessary travel.

As indicated above, the Foxborough Center has serviced 102,381 unique patients and 18,491 imaging patients from FY16 to FY18.

As discussed throughout this narrative, the expansion of imaging services at the Foxborough Center is one component of a broader plan to enhance the primary and specialty healthcare services offered to the residents of Southeastern Massachusetts. The co-location and integration of these services, the Imaging Services, and other ancillary services will help to reduce wait times, provide continuous, collaborative care, and allow the Applicant to provide the right care in the right place at the right time for its patients residing in the Foxborough region and seeking their

care locally at the Foxborough Center. By providing improved access to timely services in the appropriate integrated care setting, the Proposed Project will improve health outcomes for Massachusetts patients and the Massachusetts health care market overall.

As discussed above, the residents of Southeastern Massachusetts face the same challenges in finding primary care providers as the rest of the Commonwealth. Bristol County, in particular, has one of the worst ratios of primary care doctors to residents in the Commonwealth.[50] Patient panels for primary care providers at the Foxborough Center had to be closed to new patients for approximately four years due to demand and have only recently re-opened with additional primary care providers serving patients at the Foxborough Center. Access to primary care services is an important predictor of health outcomes on an individual and population-wide basis.[51] By enhancing access to primary care services in Southeastern Massachusetts, the Applicant seeks to address this shortage and the related public health outcomes. In addition to enhanced primary care services at the Foxborough Center, the expansion of the number of specialists practicing at the Foxborough Center will provide the residents of Southeastern Massachusetts with access to comprehensive care offerings close to home.

By locating more primary care and specialty services in this region of Massachusetts, the expansion of the Foxborough Center will allow more residents of this region to have their care needs met close to home. Co-located imaging and other ancillary services at the Foxborough Center will provide primary care practitioners and specialists with timely clinical information needed to treat their patients. Absent the additional Imaging Services capacity from the Proposed Project, these patients will experience longer wait times or will need to receive Imaging Services at a separate location.

F2.c. **Delivery System Transformation:**
Because the integration of social services and community-based expertise is central to goal of delivery system transformation, discuss how the needs of their Patient Panel have been assessed and linkages to social services organizations have been created and how the social determinants of health have been incorporated into care planning.

As outlined in Factor F.1.b.iii, above, the Applicant, BWH, and the Foxborough Center have a number of programs to connect patients with social services organizations. Patients receiving care from Applicant's physician groups at the Foxborough Center have access to clinical social workers. These clinical social workers can assess patient needs and work with patients and their families to implement appropriate interventions. As indicated in Factor F1.b.iii, above, the Foxborough Center has also worked with the surrounding greater Foxborough community to address social determinants of health including health education (including around dizziness and fall risks, a key topic for seniors), domestic violence prevention, and food insecurity, partnering with a number of local community groups to provide this programming.

Factor 5: Relative Merit

F5.a.i **Describe the process of analysis and the conclusion that the Proposed Project, on balance, is superior to alternative and substitute methods for**

[50] See Robert Wood Johnson Foundation, *supra* note 31.
[51] M. Gulliford, Access to Primary Care and Public Health, *The Lancet*, Volume 2, e532 (December 2017), available at https://www.thelancet.com/journals/lanpub/article/PIIS2468-2667(17)30218-9/fulltext (last visited Jun. 10, 2019).

meeting the existing Patient Panel needs as those have been identified by the Applicant pursuant to 105 CMR 100.210(A)(1). When conducting this evaluation and articulating the relative merit determination, Applicant shall take into account, at a minimum, the quality, efficiency, and capital and operating costs of the Proposed Project relative to potential alternatives or substitutes, including alternative evidence-based strategies and public health interventions.

Proposal: The Proposed Project is for the expansion of CT and MRI imaging capacity at the Foxborough Center through the acquisition and implementation of one additional CT unit and one additional MRI unit.

Quality: Studies have shown that patients receiving care in ambulatory care settings - including medical offices and clinics, diagnostics imaging centers, ambulatory surgery centers, and hospital outpatient departments have high-quality outcomes, similar to patients who obtain these services in the inpatient setting. Given specialization by clinicians and their level of experience in specific fields, care is effective, timely and seamless in these ambulatory care settings. Moreover, the Applicant follows various quality assurance programs and utilizes various quality assurance mechanisms to ensure patients receive high-quality, patient-focused imaging and related diagnostic and support care.

Efficiency:

Capital Expense: There are capital expenses associated with the implementation of the additional CT and MRI units. The total capital expenditure cost for these units and related construction is $9,476,208.

Operating Costs: The first-year incremental operating expense of the Proposed Project is $748,000.

List alternative options for the Proposed Project:

Option 1

Alternative Proposal: The first alternative for the Proposed Project would be to maintain the status quo of operations at the Foxborough Center and continue to operate with a single MRI unit and a single CT unit and to rely on other imaging units across the Applicant's locations for additional capacity.

Alternative Quality: This is not a feasible solution, as demand for services, wait times, patient experience, and convenience would not be addressed and would have a negative impact on both patients seeing providers located at the Foxborough Center and those seeing providers at more distant locations but hoping to have imaging performed close to home. Moreover, the benefits of additional co-located imaging capacity would not be realized. The benefits of having co-located services are outlined in various sections throughout this narrative.

Alternative Efficiency: This alternative would be inefficient because it would not create operating efficiencies that may be achieved through co-location of these additional units with the other services available at the Foxborough Center.

Alternative Capital Expenses: Although this alternative would allow the Applicant to forego certain construction costs and the cost of acquiring new units, it would have an overall negative impact on access, efficient, quality of care, and patient and provider satisfaction.

Alternative Operating Costs: There would be no operating costs associated with sustaining the current MRI and CT units at the Foxborough Center and foregoing an expansion. However, this alternative would not afford the Applicant with any operational efficiencies as the current CT and MRI units would continue to operate at their capacity and patients receiving health care services at the Foxborough Center would suffer care fragmentation and need to travel outside their community to receive imaging services at one of Applicant's other imaging locations.

Option 2

Alternative Proposal: The second alternative would be to leave the current imaging capacity at the Foxborough Center in place and to locate additional MRI or CT capacity at other locations of the Applicant.

Alternative Quality: The Applicant provides excellent quality care throughout its locations and as a result, siting new units elsewhere in the Applicant's system would not decrease quality outcomes. However, patient experience and convenience would suffer if additional capacity were sited elsewhere in the Applicant's system. The Patient Panel would not receive the benefit of additional quality Imaging Services located in the greater Foxborough community and would not benefit from the convenience and care coordination of co-locating these additional units with the other health care services at the Foxborough Center.

Alternative Efficiency: Adding additional MRI or CT capacity at a different Applicant location would be inefficient to serve the needs of the Patient Panel. As indicated above, these patients generally live a great distance from Applicant's other locations offering Imaging Services. Siting additional units elsewhere in the Applicant's system would also not allow the Applicant to achieve the efficiencies of care coordination inherent in co-locating imaging services with other health care services.

Alternative Capital Expenses: This alternative would require the Applicant to incur the same capital expenses to obtain additional equipment and would require additional capital expenditures to build out space for additional imaging units.

Alternative Operating Costs: This alternative would require the Applicant to incur many of the same operating costs as the Proposed Project. Though there may be some variation in total operating costs based on where additional units are sited, the Applicant would not achieve the efficiencies of locating the units where volumes are already very high and existing equipment operates at capacity.

Attachment 2

PATIENT PANEL INFORMATION – PARTNERS HEALTHCARE SYSTEM, INC.

Table 1: Total PHS Patient Panel

	FY16		FY17		FY18		FY19YTD[1]	
	Count	%	Count	%	Count	%	Count	%
PHS Total	1,380,203		1,409,382		1,504,478		1,182,064	
Gender								
Female	807,014	58.5%	821,100	58.3%	874,594	58.1%	691,057	58.5%
Male	572,742	41.5%	587,998	41.7%	629,748	41.9%	490,882	41.5%
Other/Unknown	447	0.0%	284	0.0%	136	0.0%	125	0.0%
Age								
0-17	140,527	10.2%	153,413	10.9%	173,386	11.5%	134,115	11.3%
18-64	844,879	61.2%	867,566	61.6%	927,594	61.7%	732,660	62.0%
65+	394,438	28.6%	388,198	27.5%	403,456	26.8%	315,263	26.7%
Unknown	359	0.0%	205	0.0%	42	0.0%	26	0.0%
Race								
American Indian or Alaska Native	1,517	0.1%	1,597	0.1%	1,887	0.1%	1,451	0.1%
Asian	55,128	4.0%	58,210	4.1%	62,248	4.1%	49,541	4.2%
Black or African American	79,476	5.8%	81,160	5.8%	83,262	5.5%	65,493	5.5%
Hispanic/Latino	24,148	1.7%	22,726	1.6%	21,231	1.4%	17,346	1.5%
Native Hawaiian or Other Pacific Islander	1,024	0.1%	1,127	0.1%	1,131	0.1%	831	0.1%
Other/Unknown	209,781	15.2%	217,873	15.5%	242,613	16.1%	169,365	14.3%
White	1,009,129	73.1%	1,026,689	72.8%	1,092,106	72.6%	878,037	74.3%
Patient Origin								
HSA_1	12,711	0.9%	13,672	1.0%	90,902	6.0%	76,463	6.5%
HSA_2	47,712	3.5%	47,880	3.4%	49,437	3.3%	38,026	3.2%
HSA_3	91,544	6.6%	95,405	6.8%	97,667	6.5%	82,037	6.9%
HSA_4	620,714	45.0%	633,792	45.0%	652,456	43.4%	541,719	45.8%
HSA_5	205,542	14.9%	213,440	15.1%	205,029	13.6%	134,865	11.4%
HSA_6	246,715	17.9%	246,855	17.5%	244,040	16.2%	196,902	16.7%
In MA but not in HSA 1-6	88	0.0%	63	0.0%	38	0.0%	20	0.0%
Outside of MA	146,467	10.6%	151,535	10.8%	158,537	10.5%	108,377	9.2%
Unknown	8,710	0.6%	6,740	0.5%	6,372	0.4%	3,655	0.3%

Date Pulled: May 22, 2019

Notes:

(1) FY19 displays YTD data, capturing Oct 2018-April 30, 2019

Attachment 3

PATIENT PANEL INFORMATION – THE FOXBOROUGH CENTER

Foxborough Demographic Information

Date Range: 10/1/2015 - 9/30/2018

Segment	Race	Patients	% of Segment
All Foxboro	White or Caucasian	91,191	89.07%
	Black or African American	2,494	2.44%
	Unavailable	2,345	2.29%
	Asian	2,123	2.07%
	Declined	1,669	1.63%
	Other	1,306	1.28%
	Multiracial	569	0.56%
	Hispanic or Latino	538	0.53%
	American Indian or Alaska Native	112	0.11%
	Native Hawaiian or Other Pacific Islander	34	0.03%
All Foxboro Total		**102,381**	**100.00%**
Imaging (MRI or CT) Only	White or Caucasian	16,809	90.90%
	Black or African American	390	2.11%
	Unavailable	341	1.84%
	Asian	276	1.49%
	Declined	273	1.48%
	Other	218	1.18%
	Hispanic or Latino	88	0.48%
	Multiracial	71	0.38%
	American Indian or Alaska Native	23	0.12%
	Native Hawaiian or Other Pacific Islander	2	0.01%
Imaging (MRI or CT) Only Total		**18,491**	**100.00%**

Segment	SexDSC	Patients	% of Segment
All Foxboro	Female	59,652	58.26%
	Male	42,723	41.73%
	Unknown	6	0.01%
All Foxboro Total		**102,381**	**100.00%**
Imaging (MRI or CT) Only	Female	10,599	57.32%
	Male	7,892	42.68%
Imaging (MRI or CT) Only Total		**18,491**	**100.00%**

Segment	Age Bucket	Patients	% of Segment
All Foxboro	Under 18	9,029	8.82%
	18-25	9,446	9.23%
	26-45	22,779	22.25%
	46-65	37,737	36.86%
	65+	23,390	22.85%
All Foxboro Total		**102,381**	**100.00%**
Imaging (MRI or CT) Only	Under 18	141	0.76%
	18-25	1,117	6.04%
	26-45	3,359	18.17%
	46-65	7,946	42.97%
	65+	5,928	32.06%
Imaging (MRI or CT) Only Total		**18,491**	**100.00%**

Calendar Year	MRI Exams	CT Exams
2018	5,861	6,139
2017	5,368	5,731
2016	4,442	5,044

Attachment 4

RACIAL COMPOSITION OF TOP FIVE MUNICIPALITIES MAKING UP FOXBOROUGH CENTER PATIENT PANEL

Racial Composition of Top Five Municipalities Making Up Patriot Place Patient Panel

	Foxborough	Walpole	Mansfield	Franklin	North Attleboro
White	90.30%	89.30%	89.50%	90.50%	90.70%
Black of African American	5.50%	2.40%	2.50%	0.90%	1.60%
Asian	1.80%	4.30%	5.00%	5.60%	4.10%
Hispanic or Latino	2.90%	4.30%	3.40%	2.20%	5.10%
American Indian and Alaska Native	0.00%	0.10%	0.10%	0.00%	0.00%
Native Hawaiian or Other Pacific Islander	0.00%	0.00%	0.00%	0.00%	0.00%

Source: United States Census Bureau, American Fact Finder, available at
https://factfinder.census.gov/faces/nav/jsf/pages/community_facts.xhtml?src=bkmk (Data Accessed on May 24, 2019)

Attachment 5

PATIENT PANEL INFORMATION – TOP 50 ZIP CODES – FOXBOROUGH CENTER

Patient Panel of Patriot Place - Top 50 Zip Codes

Zip Code	Municipality	Number of Unique Patients	% of Total
2035	Foxborough	7,260	7.09%
02048	Mansfield	6,194	6.05%
02038	Franklin	4,843	4.73%
02081	Walpole	4,476	4.37%
02760	North Attleboro	4,105	4.01%
02093	Wrentham	3,832	3.74%
02067	Sharon	3,614	3.53%
02056	Norfolk	3,248	3.17%
02703	Attleboro	3,227	3.15%
02766	Norton	3,112	3.04%
02062	Norwood	2,457	2.40%
02762	Plainville	2,247	2.19%
02021	Canton	1,839	1.80%
02780	Taunton	1,825	1.78%
02072	Stoughton	1,504	1.47%
02052	Medfield	1,461	1.43%
02356	North Easton	1,089	1.06%
02019	Bellingham	1,014	0.99%
02090	Westwood	972	0.95%
02032	East Walpole	922	0.90%
02054	Millis	833	0.81%
02053	Medway	828	0.81%
02767	Raynham	779	0.76%
02375	South Easton	733	0.72%
02026	Dedham	698	0.68%
01757	Milford	669	0.65%
02360	Plymouth	644	0.63%
02864	Cumberland, RI	639	0.62%
02324	Bridgewater	631	0.62%
02346	Middleboro	617	0.60%
02301	Brockton	465	0.45%
02347	Lakeville	439	0.43%
02184	Braintree	431	0.42%
01746	Holliston	406	0.40%
02368	Randolph	405	0.40%
02186	Milton	393	0.38%
02769	Rehoboth	375	0.37%
02043	Hingham	364	0.36%
02071	South Walpole	356	0.35%
02763	Attleboro Falls	355	0.35%

01748	Hopkinton	342	0.33%
02169	Quicny	325	0.32%
02132	West Roxbury	316	0.31%
02050	Marshfield	313	0.31%
02771	Seekonk	292	0.29%
02649	Mashpee	267	0.26%
01504	Blackstone	266	0.26%
02536	East Falmouth	257	0.25%
02136	Boston (Hyde Park)	249	0.24%
02302	Brockton	241	0.24%
Total		**73,169**	**71.47%**

Patient Panel - MRI and CT Patients - Top 50 Zip Codes

Zip Code	Municipality	Number of Unique Patients	% of Total
02035	Foxborough	1,361	7.36%
02048	Mansfield	1,044	5.65%
02038	Franklin	843	4.56%
02081	Walpole	797	4.31%
02760	North Attleboro	774	4.19%
02067	Sharon	747	4.04%
02093	Wrentham	636	3.44%
02703	Attleboro	612	3.31%
02766	Norton	604	3.27%
02062	Norwood	551	2.98%
02056	Norfolk	496	2.68%
02762	Plainville	402	2.17%
02021	Canton	388	2.10%
02072	Stoughton	362	1.96%
02780	Taunton	353	1.91%
02356	North Easton	233	1.26%
02019	Bellingham	201	1.09%
02052	Medfield	199	1.08%
02090	Westwood	192	1.04%
02032	East Walpole	168	0.91%
01757	Milford	162	0.88%
02767	Raynham	159	0.86%
02053	Medway	154	0.83%
02375	South Easton	150	0.81%
02360	Plymouth	147	0.80%
02054	Millis	122	0.66%
02346	Middleboro	117	0.63%
02864	Cumberland, RI	113	0.61%
02324	Bridgewater	113	0.61%
02026	Dedham	103	0.56%
2347	Lakeville	89	0.48%
2769	Rehoboth	87	0.47%
01748	Hopkinton	82	0.44%
02301	Brockton	81	0.44%
2043	Hingham	79	0.43%
02368	Randolph	75	0.41%
02184	Braintree	71	0.38%
02050	Marshfield	68	0.37%
02649	Mashpee	65	0.35%
02771	Seekonk	62	0.34%
01746	Holliston	62	0.34%
02763	Attleboro Falls	57	0.31%
02536	East Falmouth	57	0.31%
02720	Fall River	54	0.29%
02066	Scituate	53	0.29%
02790	Westport	52	0.28%
02071	South Walpole	52	0.28%
02719	Fairhaven	51	0.28%
02333	East Bridgewater	51	0.28%
01756	Mendon	51	0.28%
Total		**13,602**	**73.56%**

Attachment 6

ORDERING SPECIALTY INFORMATION

Brigham and Women's Hospital
Imaging Orders by Specialty
For FY18 Orders Completed at the Satellite

	MRI & 3D MRI			CT & 3D CT			Total		
	Vol	Rank	%	Vol	Rank	%	Vol	Rank	%
Internal Medicine	821	2	16.9%	1,292	1	24.6%	2,113	1	20.9%
OB/GYN	27	17	0.6%	38	18	0.7%	65	21	0.6%
Orthopedic Surgery/Podiatry	1,552	1	31.9%	545	4	10.4%	2,097	2	20.7%
Urology	107	11	2.2%	583	3	11.1%	690	3	6.8%
Emergency Medicine	18	19	0.4%	662	2	12.6%	680	4	6.7%
Oncology	103	12	2.1%	488	5	9.3%	591	5	5.8%
Neurology	408	4	8.4%	43	16	0.8%	451	7	4.5%
PT/OT/Rehab	453	3	9.3%	17	22	0.3%	470	6	4.6%
Ordering Provider Information Missing	174	6	3.6%	84	12	1.6%	258	12	2.6%
Gastroenterology	139	8	2.9%	115	10	2.2%	254	13	2.5%
Otolaryngology	91	13	1.9%	264	7	5.0%	355	8	3.5%
General/GI Surgery	149	7	3.1%	128	8	2.4%	277	11	2.7%
Pulmonary Medicine	3	33	0.1%	312	6	5.9%	315	9	3.1%
Neurosurgery	226	5	4.6%	61	14	1.2%	287	10	2.8%
Endocrinology	52	15	1.1%	25	21	0.5%	77	20	0.8%
Unknown Specialty	116	10	2.4%	56	15	1.1%	172	14	1.7%
Rheumatology	132	9	2.7%	39	17	0.7%	171	15	1.7%
Vascular Surgery	1	37	0.0%	124	9	2.4%	125	16	1.2%
Nephrology	6	28	0.1%	11	26	0.2%	17	29	0.2%
Thoracic Surgery	9	25	0.2%	110	11	2.1%	119	17	1.2%
Other Specialties	*281*		*5.8%*	*249*		*4.7%*	*530*		*5.2%*
Grand Total	**4,868**		**100.0%**	**5,246**		**100.0%**	**10,114**		

Notes:

- Data Source: Enterprise Data Warehouse, Epic Orders Imaging (BWH) for any orders completed at FXB (from 10/01/17 - 09/30/18), excludes cancellations
- Unknown Specialty represents instances in which the ordering provider did not have a specialty listed in Epic_Provider_Master despite matching between databases
- Ordering Provider Information Missing represents instances in which an ordering provider was listed, but provider ID did not match with Epic_Provider_Master (no provider name or specialty could be linked between databases)
- Internal Medicine represents instances in which the ordering provider specialty was Adult, Family, Geriatrics/Gerontology, Hospital Medicine, or Internal Medicine
- OB/GYN represents instances in which the ordering provider specialty was GynOnc, Gynecology, Obstetrics, Reproductive Endocrine/Infertility, or Urogyn
- Orthopedic Surgery/Podiatry represents instances in which the ordering provider specialty was Hand Surgery, Orthopedic Surgery, Podiatry, or Sports Medicine
- Oncology represents instances in which the ordering provider speciatly was Medical Oncology

Attachment 7

COMMUNITY EFFORTS AND SOCIAL DETERMINANTS

Brigham and Women's/Mass General Health Care Center (BW/MG HCC)

Goal Description	Goal Status
Supporting community educational initiatives by local organizations in the greater Foxborough elder population.	In FY18, we again helped increase HESSCO's reach within the community through sponsorship/promotion of its annual caregiver conference and sponsorship for its' 5K Run.
Provision of free spring and fall health classes designed for consumers in the greater Foxborough community.	On-site health classes covered topics such as diagnosis management and prevention of rotator cuff pathology, diabetes technology and two vein screenings.
Present general health education information to the greater Foxborough community via speakers bureau and other options.	In FY18, the center sponsored multiple health-related speaking events that took place in the communities of Sharon and Foxborough. Events were free of charge to the public & presented by BW/MG HCC providers. We reached another 80+ consumers via this approach, covering topics including dizziness, and fall risks and balance.
Active participation in domestic violence (d/v) and violence prevention & wellness/health education in greater Foxborough community.	Proponent and supporter of local d/v educational/advocacy organizations (local D/V support group run by Foxborough Human Services); significant contributor to two local Chambers of Commerce and community, eldercare, and women's leadership awareness-building around various options.
Support local violence prevention and domestic violence (d/v) awareness work in Foxborough community.	In FY18, support included promotion and fundraising assistance for HUGS & D/V support group members at holidays, and general awareness-building around violence education and prevention, particularly in the community's school-age population.
Community support provided to local organizations addressing key health issues.	In FY18, provided support to Foxborough Public Schools' school-to-career partnerships, local YMCA, Foxborough Discretionary Fund holiday food drive (with Foxboro Jaycees), Norton Cupboard of Kindness Food Pantry, Foxborough Food Pantry, and Birthday Wishes.
Community support provided to local organizations addressing key health issues.	In FY18, supported communities through Neponset Valley Chamber of Commerce's Eldercare & Women's Leadership Alliances, and Tri-Town Chamber Community Relations efforts, which focused on raising profile of small local non-profits.

Partner Name, Description	Partner Web Address
Foxborough Human Services & COA	http://www.foxboroughma.gov/Pages/FoxboroughMA_COA/index
Hockomock YMCA	https://www.hockymca.org/
Tri-Town Chamber of Commerce	http://www.tri-townchamber.org/
HESSCO Elder Services	http://www.hessco.org/
Foxboro Jaycees	http://www.foxborojaycees.org/
Foxboro Food Pantry	http://www.foxborofoodpantry.com
Norton Cupboard of Kindness	http://www.cupboardofkindness.org/
Neponset Valley Chamber of Commerce	http://www.nvcc.com/
Birthday Wishes	http://www.birthdaywishes.org
School-to-Career Partnership	www.schooltocareer.info

Attachment 8

EVIDENCE OF COMMUNITY ENGAGEMENT FOR FACTOR 1

BRIGHAM AND WOMEN'S/MASS GENERAL

HEALTH CARE CENTER

PLEASE JOIN US FOR

COFFEE

AND

CONVERSATION

You're invited to join our staff, patients, and neighbors for an informational presentation and discussion of future renovations that will allow our Radiology department to add 1 new MRI machine, as well as 1 new CT machine.

Thursday, June 6, 2019

6:00 PM – 7:00 PM

Brigham and Women's/Mass General Health Care Center
20 Patriot Place, Foxborough
2nd Floor Community Room

For questions, please email: FXBinfo@partners.org.

Brigham and Women's/Mass General Health Care Center at Foxborough
Community Meeting on CT & MRI Services

20 Patriot Place, Foxborough
2nd Floor Community Room

Thursday, June 6, 2019
6:00 PM – 7:00 PM

Agenda

1)	Welcome & Purpose	Stephen Dempsey, Executive Director Brigham Health Real Estate & Facilities
2)	Patient Care at Foxborough	Cindy Peterson, Vice President Brigham Health Regional Ambulatory Operations and Business Development
3)	Imaging Expansion at Foxborough	Keri-Leigh Doiron, Clinical Director Radiology Department, Brigham and Women's/ Mass General Health Care Center at Foxborough
4)	Next Steps	Stephen Dempsey, Executive Director Brigham Health Real Estate & Facilities
5)	Questions & Answers	

Brigham and Women's/Mass General Health Care Center at Foxborough

Community Meeting on CT & MRI Services

Thursday, June 6, 2019
6:00 PM – 7:00 PM

Brigham and Women's/Mass General
Health Care Center
20 Patriot Place, Foxborough
2nd Floor Community Room

BRIGHAM HEALTH
BRIGHAM AND WOMEN'S HOSPITAL

HARVARD MEDICAL SCHOOL TEACHING HOSPITAL

Welcome

Thank you for coming today.

We are excited to share with you our plans to expand the Brigham and Women's/Mass General Health Care Center at Foxborough.

We want to answer any questions you have and give you an opportunity to share your feedback.

About the Brigham and Women's/Mass General Health Care Center at Foxborough . . .

- Opened in February 2009.
- A licensed satellite of Brigham and Women's Hospital staffed with physicians and providers from Brigham and Women's Hospital and Massachusetts General Hospital.
- Provides a number of health care services for the residents of Foxborough and surrounding towns.
- Fully integrated with the Partners electronic medical record system (EPIC).
- We've seen more than 100,000 patients over the past 3 years.

Brigham and Women's/Mass General Health Care Center at Foxborough provides high-quality care in a convenient community location.

Programs and services include:

Allergy and Immunology
Anesthesiology
Audiology Services
Cardiac Arrhythmia Service
Cardiac Rehabilitation Program
Dermatology
Endocrinology
ENT/Otolaryngology
Gastroenterology
General and Gastrointestinal (GI) Surgery
Infertility Services
Kidney Medicine
Maternal Fetal Medicine
Minimally Invasive Gynecologic Surgery
Neurology
Neurosurgery
Nutrition
Obstetrics and Gynecology
Orthopaedic Surgery/Sports Medicine
Pain Management
Pathology
Pediatric Specialties
Pharmacy Services
Physiatry
Plastic Surgery
Podiatry
Primary Care
Pulmonary
Radiology/Diagnostic Imaging
Rehabilitation Services
Rheumatology
Sports Neurology and Concussion Clinic
Urgent Care
Urogynecology
Urology
Vascular and Vein Care

What are we currently planning...

We will be expanding into two floors of an adjacent new building this November, enabling Brigham Health services to expand significantly. Specifically, the expansion will usher in better access to services for the greater Foxborough community, including:

- Growing our **Primary Care** office, eventually doubling our number of providers;
- Consolidating and expanding our **Women's Health** specialties (Ob-Gyn, Center for Infertility & Reproductive Surgery, Minimally-Invasive Gynecologic Surgery, Maternal Fetal Medicine, and Urogynecology);
- Expanding our **Dermatology** offerings;
- Growing our **Multi-Specialty Clinic**, expanding the presence of: Allergy, Electrophysiology, Gastroenterology, Neurology, Neurosurgery, Pulmonology, Renal, Rheumatology, Sports Neurology, Vein/Vascular care, with room for more specialties as well;
- Addition of six **Phlebotomy** stations for blood draws.

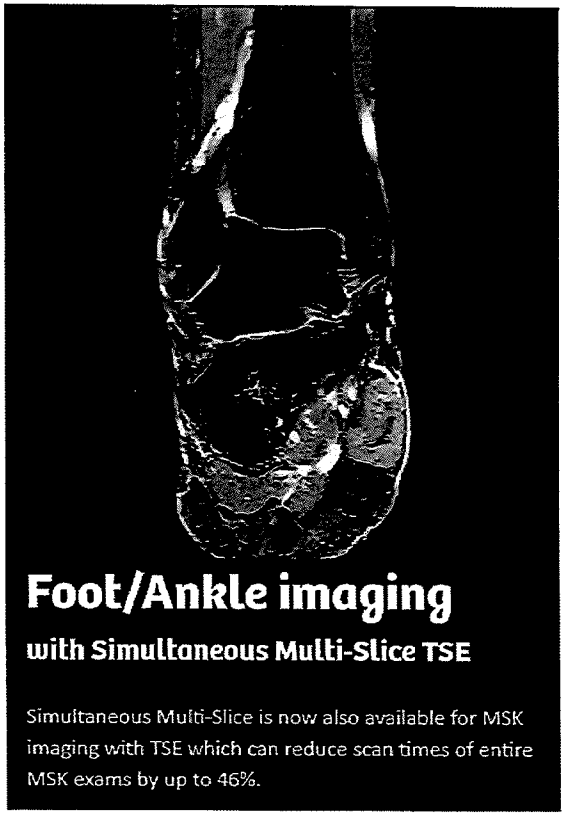
Once the new building is open, we will begin enhancing services in the current building, adding capacity in areas such as: Imaging, Fluoroscopy, EMG, Clinical Lab, and more!

What are our future plans?

- We need additional capacity for our Radiology Department in Foxborough. Currently, we have one MRI and one CT.
- **Plan to add one additional MRI and one additional CT .**
- Having radiology services available in Foxborough means that we can provide you with the imaging services you need when you see a provider here in Foxborough.
- We can also serve the radiology needs of patients who see our providers in Boston but want to get as much care as possible close to home.
- **Goals:**
  - **Reduce wait times for CT and MRI appointments;**
  - **Improve efficiency and access;**
  - **Continue to provide full spectrum of health care services, including imaging, to our patients.**

What is Magnetic Resonance Imaging ("MRI")?

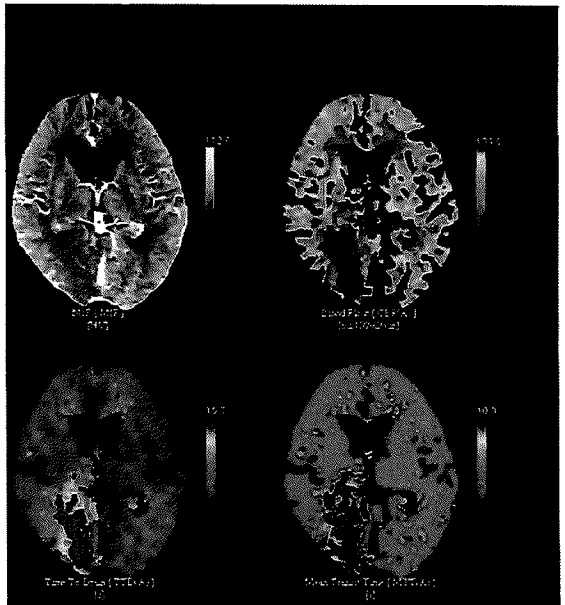
- MRI has been the gold standard for imaging the brain, spine and joints since the mid-eighties.
- MRI has the major benefit of imaging the human body without the need for ionizing radiation.
- The current generation of MRI scanners enable patients to be imaged more rapidly and in greater comfort than with older devices, while improving image quality.
- With this generation of imaging devices, major improvements in breast, cardiac and abdomen/pelvic imaging (particularly the prostate) have been realized.
- With these instruments, MRI is not only capable of performing anatomic imaging, but also allows for dynamic functional assessment of pathology that is integral to assessing treatment effects.



https://www.siemens-healthineers.com/en-us/magnetic-resonance-imaging/0-35-to-1-5t-mri-scanner/magnetom-sola#FEATURES_BENEFITS; May 28, 2019.

What is Computed Tomography ("CT")?

- CT is a well-established, non-invasive imaging system that has been available for clinical use for several decades and has gained widespread acceptance in several fields of medicine.
- CT is a diagnostic imaging test that combines the use of sophisticated x-ray technology and computer processing to provide detailed anatomical and structural information.
- Since its introduction into clinical use in the United States in the 1970s, CT has made enormous technical and engineering advances that have led to improvements in image quality, speed, and dose reduction, and have increased the clinical utilization of the technology.



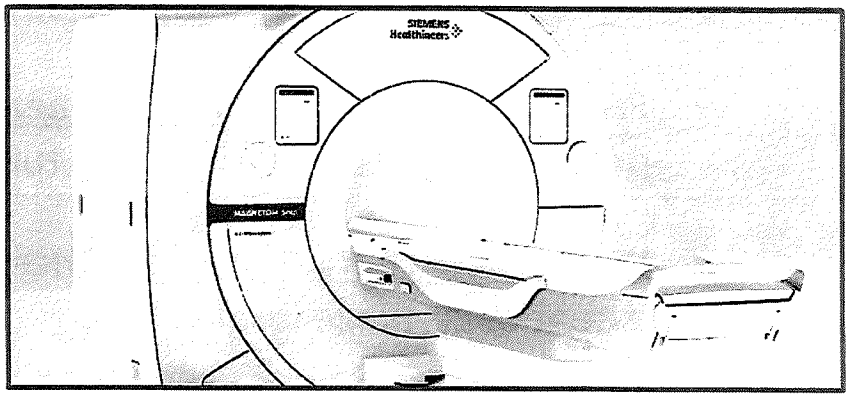
Comprehensive stroke assessment
The Adaptive 4D Spiral puts perfusion scanning on a new level. Being able to evaluate perfusion deficits in a very short time, and to effortlessly acquire scan range beyond detector coverage, greatly improves stroke assessment and workflow.

https://www.siemens-healthineers.com/en-us/computed-tomography/single-source-ct/somatom-definition-edge/use; May 28, 2019.

What are we planning to add?

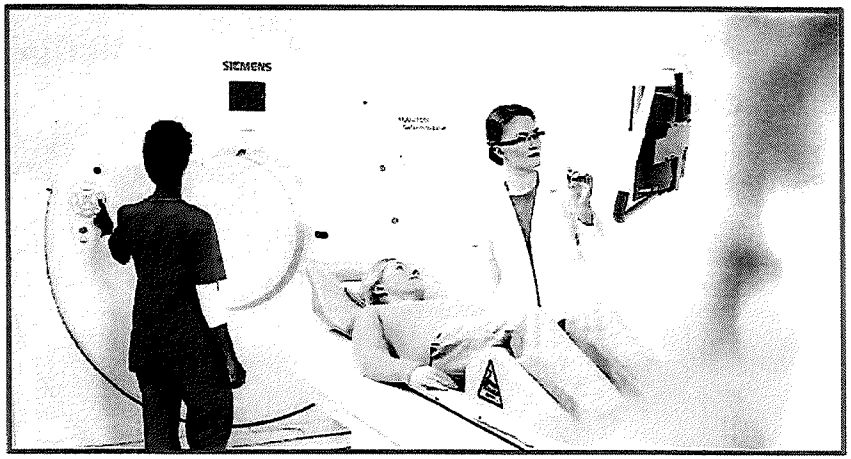
MRI Scanner

- Model: Magnetom Sola 1.5t MRI Scanner
- Latest technology resulting in higher resolution creating clearer images.



CT Scanner

- Model: Siemens Definition Edge
- Latest technology resulting in lower radiation dose.



How do providers use imaging technologies to improve care?

- As imaging technology continues to advance…
  - Providers are able to **make a diagnosis earlier** in the disease &/or injury process (*i.e.,* multiple sclerosis, tumors, reduced cartilage), and
  - **With better clarity** (*i.e.,* difference between tumor and health tissue, extent of cartilage loss)
- Medical imaging technology advancements are helping providers act quicker and more aggressively to help patients and increase the amount of positive outcomes.

What are the advantages of adding these new scanners?

- **Joint Replacement** - These new scanners allow patients to be scanned following joint replacement surgery where in the past a joint replacement device would cause streaking on the images making an accurate interpretation very difficult.
- **Minimize rescheduling of patients to the main hospital** - These scanners allow patients with certain types of implants to be scanned in Foxborough. In the past those patients had to be rescheduled to the main hospital.
- **Flexibility** - Having a second MRI and CT scanner allows us to have redundancy if one of the two scanners experience operating issues. Currently all scans would have to be rescheduled until the single scanner on site was repaired.
- **Access** – Two MRI and two CT scanners on site will allow for quicker access to services since the current scanners are currently operating at full capacity resulting in less appointment availability.

What are the next steps?

1. Adding an MRI machine and a CT machine requires the approval of the Massachusetts Department of Public Health ("DPH"), Determination of Need Program

2. We hope to begin interior construction for the machines in Spring 2020; the construction will be completed in phases.

3. We hope to bring our new CT machine online in Fall 2020, and the new MRI in Spring 2021

4. If you want to stay updated on the project, you can provide us with your email address today, or you can contact us at FXBinfo@partners.org.

5. Questions?

Thank you for attending!

For questions, please email:
FXBinfo@partners.org

Attachment 9

COMMUNITY HEALTH INITIATIVE MATERIALS

Massachusetts Department of Public Health
Determination of Need
Community Health Initiative
Community Engagement Plan

Version: 8-1-2017

The Community Engagement Plan is intended for those Applicants with CHIs that require further engagement above and beyond the regular and routine CHNA/CHIP processes. For further guidance, please see the *Community Engagement Standards for Community Health Planning Guidelines* and its appendices for clarification around any of the following terms and questions.

All questions in the form, unless otherwise stated, must be completed.

Approximate DoN Application Date: 07/25/2019 DoN Application Type: DoN-Required Equipment

Applicant Name: Partners HealthCare System, Inc.

What CHI Tier is the project? (•) Tier 1 ( ) Tier 2 ( ) Tier 3

1. Community Engagement Contact Person

Contact Person: Wanda McClain Title: Vice President, Community Health and Health Equity, BWH

Mailing Address: 75 Francis Street

City: Boston State: Massachusetts Zip Code: 02115

Phone: 6172648747 Ext: E-mail: wmcclain@bwh.harvard.edu

2. Name of CHI Engagement Process

Please indicate what community engagement process (e.g. the name DoN CHI Initiative associated with the CHI amount) the following form relates to. This will be use as a point of reference for the following questions.
(please limit the name to the following field length as this will be used throughout this form):

BWH DoN CHI 2019

3. CHI Engagement Process Overview and Synergies with Broader CHNA /CHIP

Please briefly describe your overall plans for the CHI engagement process and specific how this effort that will build off of the CHNA / CHIP community engagement process as is stated in the *DoN Community-Based Health Initiative Planning Guideline.*

To further engage the community, CCHHE staff will conduct a community meeting with local stakeholders, including representation from the local public health authority, the Foxborough Health Department, community-based organizations, as well as with residents and resident groups from Foxborough and the surrounding towns to obtain feedback on the communities' needs that are documented in the CHNA and to assist in prioritizing the needs and resources. Since members of BWH's Community Advisory Committee ("CAC") work in statewide organizations, these individuals will activate their networks in Foxborough throughout the engagement process to solicit feedback. Members of the community will be continually updated and engaged through correspondence and interaction with BWH staff.

4. CHI Advisory Committee

In the CHNA/CHIP Self Assessment, you listed (or will list) the community partners that will be involved in the CHI Advisory Committee to guide the BWH DoN CHI 2019 . As a reminder:

For Tier 2 DON CHI Applicants: The CHI Advisory Committee is tasked with helping select DoN Health Priorities based on the CHNA / CHIP unless the Applicant is directed by DPH to conduct additional community engagement. If so, the advisory committee's role is to guide that additional work.

For Tier 3 DON CHI Applicants: The CHI Advisory Committee is to select DoN Health Priorities based on**, but not exclusive to,** the CHNA / CHIP. This includes the additional community engagement that must occur to develop the issue priorities.

5. Focus Communities for CHI Engagement

Within the BWH DoN CHI 2019 , please specify the target community(ies), please consider the community(ies) represented in the CHNA / CHIP processes where the Applicant is involved.

Add/Del Rows	Municipality	If engagement occurs in specific neighborhoods, please list those specific neighborhoods:
+ -	Foxborough	

6. Reducing Barriers

Identify the resources needed to reduce participation barriers (e.g., translation, interpreters, child care, transportation, stipend). For more information on participation barriers that could exist, please see Appendix A from the *Community Engagement Standards for Community Health Planning Guidelines* http://www.mass.gov/eohhs/docs/dph/quality/don/guidelines-community-engagement.pdf

BWH has reviewed the Community Planning Toolkit to understand the barriers and design issues that need to be considered when engaging community members. Based on this evaluation, BWH staff have developed the following solutions to overcome barriers. By working with community partners, BWH will mitigate barriers through the following approaches:

• Translation of the RFP Announcement into appropriate languages, based on community need, for inclusion in community newspapers (as noted in question #11).

• Where needed, provide interpreters in appropriate community languages as part of the evaluation process.

• Ensure access for individuals with disabilities at meetings and gatherings associated with the CHI and community engagement.

• For the evaluation process, BWH staff will confer with the CHI CAC to determine the range of options for evaluation processes.

• Develop a pre-assessment regarding location and time of any gatherings to maximize participation of relevant community members/ groups. Additionally, BWH will provide food at these gatherings and ensure a family friendly environment that is responsive to the needs of young people and parents/caregivers in the area.

7. Communication

Identify the communication channels that will be used to increase awareness of this project or activity:

BWH is committed to a transparent process and ongoing communication to ensure stakeholders are informed, engaged and have opportunities to provide feedback and participate as partners to shape our strategy. We anticipate that this CHI process will provide an opportunity to deepen community understanding of the impact of the social determinants of health and we will take every opportunity to build these messages into our communication processes. The communication channels that will be utilized are described in detail in question #11 below and include broad email communication, a dedicated CHI email inbox, a dedicated CHI web page on the BWH and BWH Foxborough web sites and local media outlets that are accessed by residents and organizations in Foxborough and the surrounding communities.

8. Build Leadership Capacity

Are there opportunities with this project or activity to build community leadership capacity? (●) Yes ( ) No

If yes, please describe how.

Throughout each aspect of the CHI process, BWH staff, the CAC and the local public health authority, in tandem with evaluation staff, will determine what these opportunities may be and seek to work with community partners to bolster their leadership capacity. Given the procurement and evaluation aspects of the CHI, there are potential opportunities for building community leadership capacity. During the procurement phase, Community Allocation Committee ("Allocation Committee") members will be directly involved in all aspects of the solicitation process. This experience builds their capacity in the decision-making process and engages them as equal and valued partners in the effort. BWH is committed to evaluation designs that build capacity for those involved. The 'ground up' evaluation design that BWH has previously used for the evaluation work undertaken with the Health Equity grantees is evidence of this capacity building approach.

9. Evaluation

Identify the mechanisms that will be used to evaluate the planning process, engagement outcome, and partner perception and experience:

The evaluation design for this CHI is anticipated to have specific objectives (or similar objectives) as described below. As indicated BWH will hire a third-party evaluator to conduct the evaluation process.

It is anticipated that the following four evaluation objectives will form the basis of the evaluation plan:

Objective #1 – Assess and provide data-driven feedback regarding the community engagement process and strategies used over the course of the CHI.

Objective #2- Inform future practice and innovation by monitoring and documenting the process of grant implementation of the overall DoN and the grant recipient level.

Objective #3 - Assess grant-level program health equity impacts by working with grant recipients to identify, measure, and report outcomes at key points in the grant process.

Objective #4 – To build evaluation capacity among grant recipients and awareness among DoN stakeholders.

The mechanism to be used to evaluate the planning process, engagement outcome(s), and partner perception and experience will involve collaborative consultation with CAC and Allocation Committee members, as well as grant recipients to develop program-specific processes and outcomes measures, data collection plans, and reporting templates. Through this collaborative consultation, evaluators will aim to build grantee capacity to engage in program evaluation and use results to inform practice(s). Mixed methods approaches will be considered to gather all necessary data relevant to the priority areas and key measures appropriate to the initiative at the both the overall DoN level and grant recipient level.

10. Reporting

Identify the mechanisms that will be used for reporting the outcomes of this project or activity to different groups within the community:

Residents of Color

BWH staff will ensure communication materials are sent to the following organization with a request to distribute the information to its network: NAACP - Brockton Branch Office.

Residents who speak a primary language other than English

BWH staff will ensure communication materials are sent to the following organization with a request to distribute the information to its network: The Literary Center in Attleboro.

Aging population

BWH staff will ensure communication materials are sent to the following organizations with a request to distribute among their networks: local senior providers and HESSCO Elder Services.

Youth

BWH staff will ensure communication materials are sent to the following organizations with a request to distribute among their networks: Foxborough Public Schools, Norfolk Advocates for Children, Hockomock Area YMCA – Invensys Foxboro branch, ConfiKids, New Hope, Inc. and other youth-based community organizations.

Residents Living with Disabilities

BWH staff will ensure communication materials are sent to the following organizations with a request to distribute among their networks: the Kennedy-Donovan Center, Yawkey House of Possibilities (HOPe), The Arc – Bristol County, Horace Mann Educational Associates ("HMEA") and other community-based organizations providing services to people living with disabilities.

GLBTQ Community

BWH staff will ensure communication materials are sent to the following organizations with a request to distribute among their networks: BrAGLY and other community-based organizations working with the GLBTQ community.

Residents with Low Incomes

BWH staff will ensure communication materials are sent to the following organizations with a request to distribute among their networks: Riverside Community Care, Citizens for Citizens, community development corporations that service Foxborough and the surrounding communities.

Other Residents

BWH staff will ensure communication materials are sent to the following organizations with a request to distribute among their networks: community-based organizations and local providers, including: HUGS Foxboro assiting domestic violence surviors; Foxborough Jaycees; and South Foxboro Community Center, as well as the MetroWest Health Foundation. The Advisory Committee with its diverse and multi-sector composition also will support dissemination to additional organizations. Finally, BWH staff also will request that the MA Department of Public Health and the Foxborough Health Department distribute the notification of the RFP among their networks relevant to the focus communities.

11. Engaging the Community At Large

Which of the stages of a CHNA/CHIP process will the BWH DoN CHI 2019 focus on? Please describe specific activities within each stage and what level the community will be engaged during the BWH DoN CHI 2019 . While the step(s) you focus on are dependent upon your specific community engagement needs as a result of your previous CHNA/CHIP work, for tier 3 applicants the CHI community engagement process must at a minimum include the "Focus on What's Important," "Choose Effective Policies and Programs" and "Act on What's Important" stages. (For definitions of each step, please see pages 12-14 in the *Community Engagement Standards for Community Health Planning Guidelines* http://www.mass.gov/eohhs/docs/dph/quality/don/guidelines-community-engagement.pdf).

	Inform	Consult	Involve	Collaborate	Delegate	Community - Driven / -Led
[x] Assess Needs and Resources	○	◉	○	○	○	○

	Inform	Consult	Involve	Collaborate	Delegate	Community - Driven / -Led
Please describe the engagement process employed during the "Assess Needs and Resources" phase.	BWH will be conducting a community health needs assessment ("CHNA") on Foxborough to access the needs and resources of the area. The CHNA will consist of both quantitative and qualitative components. First, the CHNA will consist of a secondary data review, including the health and social determinant of health statistics for the area. Second, through a community meeting, BWH will engage the community to understand specific needs around the social determinants of health and health care needs.					
☒ Focus on What's Important	○	○	○	◉	○	○
Please describe the engagement process employed during the "Focus on What's Important" phase.	BWH will hold a community meeting with local residents, resident groups, community-based organizations and other interested parties to receive feedback on the documented needs from the CHNA and assist in prioritizing the Health Priorities and Strategies for the CHI. Furthermore, a representative from the local public health authority will join the Community Advisory Committee ("CAC") to determine the priorities and strategies and submit the Health Priorities and Strategies Form to the Department of Public Health. Furthermore, the CAC will determine if alternative allocation processes (beyond RFP processes) should be used for the distribution of CHI funding.					
☒ Choose Effective Policies and Programs	○	○	○	◉	○	○
Please describe the engagement process employed during the "Choose Effective Policies and Programs" phase.	The CAC, including representation from the local public health authority, will utilize the key findings from the CHNA to develop health priorities and strategies. Based on this priorities and strategies, the Allocation Committee will develop the CHI RFP process. Overall, these activities will allow BWH to reach the "Collaborate" level of engagement for this work with the CAC and Allocation Committees given their consensus building efforts and participatory decision-making in determining health priorities and strategies for the CHI and the overall RFP process. The CAC, with the assistance of the local public health authority, also will explore alternative, accountable and transparent processes for distributing CHI monies as a potential alternative to an RFP process and share this information with the Allocation Committee.					
☒ Act on What's Important	○	○	◉	○	○	○
Please describe the engagement process employed during the "Act on What's Important" phase.	The Allocation Committee will develop a transparent funding and allocation process. This Committee is tasked with developing a sound solicitation process including a Bidders Conference that allows potential grantees to inquire about questions on the RFP. Additionally, the Allocation Committee will ensure that technical assistance resources are available during the RFP process, so as many applicants as possible may submit viable proposals. The Allocation Committee also will ensure there are no conflicts of interest with the distribution of funds. For the procurement process aspect of this phase, BWH will reach the "Involve" level of engagement. Additionally, for the CHI implementation aspect of this phase, where CHI funds are distributed to organizations and CHI projects are implemented, BWH will reach the "Consult" level of engagement.					
☒ Evaluate Actions	○	◉	○	○	○	○

	Inform	Consult	Involve	Collaborate	Delegate	Community - Driven / -Led
Please describe the engagement process employed during the "Evaluate Actions" phase.	Post-Public Health Council approval, BWH will be selecting an evaluator to work with on the CHI process. The evaluator will be tasked with monitoring and evaluating the community partners on an ongoing basis and reporting progress to BWH on CHI activities on an annual basis. Post-review, these reports will be submitted to the Department of Public Health. For this phase, BWH will reach the "Consult" level of engagement. Furthermore, BWH will have the evaluator review the processes that the CAC uses to make decisions, determine health priorities and strategies and how the Allocation Committee distributes funding.					

12. Document Ready for Filing

When the document is complete, click on "document is ready to file". This will lock in the responses, and Date/Time stamp the form. To make changes to the document, un-check the "document is ready to file" box. Edit the document, then lock file and submit. Keep a copy for your records. Click on the "Save" button at the bottom of the page.

To submit the application electronically, click on the"E-mail submission to DPH" button.

This document is ready to file: ☒

Date/Time Stamp: 07/25/2019 5:05 pm

E-mail submission to DPH

Attachment 10

NOTICE OF INTENT

Talks drag into state's new fiscal year

ontrolling drug prices, axes, UMass tuition among key topics

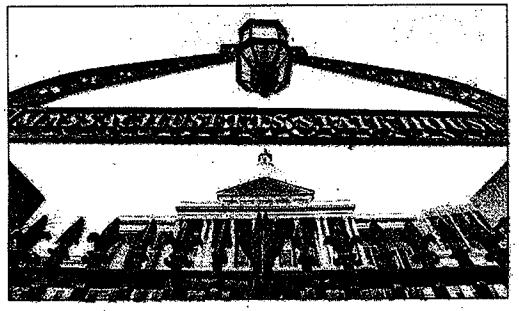
By Bob Salsberg
The Associated Press

BOSTON – There were no fiscal fireworks coming from the Massachusetts Statehouse this past week as a deadline for producing a new state budget passed quietly without eliciting much, if any, concern from state leaders.

A six-member legislative conference committee led by Senate Ways and Means Chairman Michael Rodrigues and House Ways and Means Chairman Aaron Michlewitz is working to settle disagreements between the two chambers over a $42.7 billion spending plan for the 12-month period that started July 1.

Meanwhile state government is operating on a stopgap budget.

The scenario is a familiar one on Beacon Hill where annual budgets often arrive on the governor's desk days or even weeks into the new fiscal year.



Massachusetts state government is operating on a stopgap budget. [AP PHOTO/ELISE AMENDOLA, FILE]

if necessary, refer pricing disputes to the state's Health Policy Commission for public hearings. But there are key differences in the language adopted in the House and Senate plans, including a Senate provision that would allow the attorney general to intervene if the cost of a particular drug was deemed unreasonable.

The dispute is generating considerable attention in part because of the state's standing as a hotbed of biomedical research and innovation, and the estimated 300,000 jobs supported by it. The Mas-

Neither of the proposed taxes, which would generate relatively modest amounts of revenue for the state, appear in the House's version of the budget. Speaker Robert DeLeo hasn't stated any opposition to the taxes, but has publicly declared his desire to wait until later this year for a broader discussion of all revenue options, including potential new sources of funding for the beleaguered Boston-area public transit system.

FREEZE OR NO FREEZE?

freeze and has urged Senate leaders to back off that demand, something they so far have not shown a willingness to do. Meehan says the freeze could trigger $22 million in university budget cuts absent a corresponding increase in state funding.

ACHIEVEMENT GAP

The final budget will almost certainly include a sizeable boost in funding for public schools with the specific goal of helping economically disadvantaged children catch up academically with those from more affluent areas of the state.

The Senate proposed a $268 million increase in so-called Chapter 70 funds that are distributed to public school districts, while the House called for a $218 million hike in Chapter 70 along with a $16.5 million reserve fund for low-income students.

Yet whatever finally emerges from the conference committee would likely be but a prelude to a more expansive debate among lawmakers over how

LEGAL NOTICES

PUBLIC ANNOUNCEMENT CONCERNING A PROPOSED HEALTH CARE PROJECT

Partners HealthCare System, Inc. ("Applicant") located at 800 Boylston Street, Suite 1150, Boston, MA 02199 intends to file a Notice of Determination of Need ("Application") with the Massachusetts Department of Public Health for a change in service by Brigham and Women's Hospital ("BWH") for its licensed satellite, the "Brigham and Women's/Mass General Health Care Center at Foxborough," located at 20 Patriot Place, Foxborough, MA 02035. The satellite currently has one MRI unit and one CT unit. The project is for the expansion of imaging services at the satellite through the acquisition of one additional magnetic resonance imaging ("MRI") unit and the acquisition of one additional computed tomography ("CT") unit (the "Proposed Project"). The Proposed Project also includes certain internal renovations of the satellite with no expansion in the square footage of the satellite. The total value of the Proposed Project based on the maximum capital expenditure is $9,476,208. The Applicant does not anticipate any price or service impacts on the Applicant's existing Patient Panel as a result of the Proposed Project. Any ten Taxpayers of Massachusetts may register in connection with the intended Application by no later than August 21, 2019, or 30 days from the filing date of the Application, whichever is later, by contacting the Department of Public Health, Determination of Need Program, 250 Washington Street, 6th Floor, Boston, MA 02108.

Legal Notices

ceping, lighting, and a bocce ourt. Connections will be ıade to the existing Town ıwer and water services on illage Street.

he application and plans for ıe proposed William Wallace 'illage development are on le with the Medway Town lerk and the Community and :conomic Development office t Medway Town Hall, 155 'illage Street, Medway, MA :nd may be inspected Monday through Thursday rom 7:30 a.m. to 4:30 p.m. :nd Fridays from 7:30 a.m. to 2:30 p.m. The plans have ıeen posted to the Town's veb site at ttps://www.townofmedway.or i/planning-economic-develop nent-board/pages/current-pplications-pedb-0.

Any person or party who is nterested or wishes to be ıeard on this proposal is invit- ıd to review the plan and xpress their views at the des- gnated date, time and place. Written comments are encour- ıged and may be forwarded o the Medway Planning & Economic Development Board at 155 Village Street, Medway, MA 02053 or emailed to the Board at: plan- ningboard@townofmedway.or g. All comments will be entered into the record during the public hearing.

Any questions regarding this application should be directed to the Medway Planning and Economic Development office at 508-533-3291.

Andy Rodenhiser
Chairman

AD#13814119
MDN 7/8, 7/16/19

AD# 13813917
MDN 7/8, 7/15/19

20 PATRIOT PLACE
LEGAL NOTICE
PUBLIC ANNOUNCEMENT CONCERNING A PROPOSED HEALTH CARE PROJECT

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AD#13814180
MDN 7/8/19

for a variety of activities on a year-round basis.

"We're going to be very excited and proud of what comes out of the design process," said City Manager Edward M. Augustus Jr. "Hopefully, people will be as enthusiastic (about the design) as those of us who have been part of it are today."

Work is still being done on the design of Polar Park. Augustus recently told the City Council that work probably won't be done until next month at the earliest.

"It will be something we share in great detail with the entire community," he said of the ballpark design. "It could be into August before it is completed. We've been going back and forth on the design and value engineering process now. If I had to guess, I'd say (the design will be completed) sometime in August, give or take."

So far, no plans have gone before any city board or commission for the ballpark or any part of the associated private development that will be done by Madison Properties.

According to the voluminous Draft Environment Impact

Madison Street, 220 residential units and the parking garage to be done in the first phase.

The time frame for the second phase will depend on market conditions but is expected to be completed within five to 10 years.

Before the construction of the ballpark can begin, much site preparation work will have to be done first.

Because the area on the north side of Madison Street where the ballpark will be built has a higher elevation than the roughly 18 acres on the south side of the street where there will be the private development, excavation work will need to be done to bring that elevation to street level. Earth removed from the north side of Madison Street will be used to raise the elevation of the land on the south side of Madison to street level.

A significant amount of new drainage, water and sewer lines will have to be installed in that area. The drainage improvements are also planned to better serve the Canal District and Green Island neighborhood, which has been prone to flooding in the past because of its aging and insufficient drainage system.

To-do list

In order to make Thursday's groundbreaking for Polar Park the ballpark project.

- December 2018 – City moves to expand the boundary of its Downtown Urban Revitalization Plan to include 11 properties in the vicinity of the site of the proposed ballpark. By including the properties in the urban revitalization plan, the WRA would have the authority to acquire them, either through negotiated sales or eminent domain, if necessary. Most of the properties are considered ancillary to the ballpark site itself.
- December 2018 – The WRA board approves a policy that commits every contractor for the ballpark project to workforce diversity and good-faith efforts to meet hiring goals it has set. The goals include having 25% of work hours going to Worcester residents, 15.3% to people of color and indigenous people, and 6.9% to women. The policy will apply to every contractor at every tier of the project.
- March 2019 – WRA board hires Gilbane-Hunt, a joint venture, to be the construction manager at risk for the ballpark project and the construction of the 522-space parking garage that will be built on the south side of Madison Street.

The WRA board also hired Sasaki Associates as a consultant handling urban and landscape design issues for the ballpark and associated private development.

- May 2019 – City Council rezones roughly 20 acres in the Canal District and Kelley Square area to facilitate the construction of the ballpark and the private development.
- May 2019 – WRA board hires Walker Consultants to design the multilevel parking garage on the south side of Madison Street.
- June 2019 – WRA moves forward on completing ancillary land takings needed to support the construction of Polar Park. Eleven properties were acquired either through negotiated sale or eminent domain.
- June 2019 – City proposes changes to street network in area of ballpark and private development.
- June 2019 – City Council approves fiscal 2020 Capital Improvement Plan that calls for the borrowing of $27.9 million for Polar Park project. It is the second one for the $100.8 million ballpark project.
- June 2019 – City Council approves land takings for $17.8 million redesign of Kelley Square – a project being overseen and funded by the state. The land takings involve 59 temporary easements and 31 permanent easements, totaling $228,720 in damages.

RETURN OF PUBLICATION

I, the undersigned, hereby certify under the pains and penalties of perjury, that I am employed by the publishers of the ***Sun Chronicle*** and the following Public/Legal announcement was published in two sections of the newspaper on July 8, 2019 accordingly:

1. "Public Announcement Concerning a Proposed Health Care Project" page B6 Legal Notice Section.
2. "Public Announcement Concerning a Proposed Health Care Project" page ___, A2 Section.

Kathleen Madden
Signature

Kathleen Madden
Name

Classifieds
Title

FROM PAGE A1 ■ CITY & TOWN

Motorcyclist seriously injured in Wrentham accident

By STU SKERKER
FOR THE SUN CHRONICLE

WRENTHAM — A motorcyclist was airlifted to a Boston hospital after he was seriously injured following an accident late Sunday afternoon.

Fire Capt. Robert Harrison said a motorcycle with two people on-board crashed into a traffic island and then struck a sign, seriously injuring the driver of the bike.

The accident was reported around 4:21 p.m. when the motorcycle, which was traveling on South Street (Route 1A,) was making a turning onto West Street, (Route 121,) also known as Wampum Corner when he lost control and drove over a traffic island and then struck the sign.

The driver, a male in his 50's suffered serious injuries, Harrison said.

He was transported to a baseball field at King Phillip Regional High School and then flown by a medical helicopter to Boston Medical Center for treatment.

The passenger on the motorcycle suffered minor injuries, and was not transported, the captain said.

Norfolk Fire provided assistance at the landing zone for the medical helicopter and Plainville Fire sent a second ambulance to treat the passenger.

CRASHES: Plans eyed to reduce accidents

FROM PAGE A1

produced by Massachusetts Department of Transportation and based on reports from Attleboro and state police.

And there have been more since. Most of the accidents occur on or near the ramp which funnels traffic to the east-bound lane which heads into Attleboro.

Vehicles merge at that point and some are trying to cut across east- and west-bound lanes to turn into a Shell gas station on the north side of South Avenue or onto Lathrop, also on the north side.

Lane reductions and a rise in the road which limits visibility also create problems.

"Car crashes are [illegible] course outside their homes and just trying to get to or from their homes is risky.

Hawkins said both city and state solutions can be implemented.

The state plan's main feature is the installation of traffic signals at the off ramps from the north and southbound lanes of I-95. It would also move the southern end of Lathrop to the west.

Heroux said the city-based plan, which can be implemented over the next two to three years, would involve the construction of a median on South Avenue.

The median would prevent left turns and consequently the lane switching as vehicles come off the ramp which funnels traffic into the east-bound lane of South Avenue [illegible] left turns," Heroux said.

ASSOCIATED PRESS

U.S. players celebrate at the end of the Women's World Cup final soccer match after beating the Dutch team at the Stade de Lyon in Decines, outside Lyon, France.

WORLD CUP: Women celebrate victory

FROM PAGE A1

The equal pay will come, if not for this team then maybe for the next. It has to, because not only are the U.S. women more successful than the men, they are far more entertaining.

That showed when Rapinoe posed dramatically after putting the U.S. ahead for good with a second half penalty shot. It showed with some final match head banging that put one player out of the final and left another bloodied.

It showed all tournament long whenever controversy threatened to interfere with the mission of a group of very talented players and a coach not afraid to push all the right buttons.

"We're crazy, that's what makes it special," Rapinoe said. "We have no quit in us, we're so tight and we'll do anything to win."

They may not end up visiting the White House, but that doesn't mean there's not more celebrating to do. The final had barely ended when they were invited to a parade Wednesday in New York City, and there will be the obligatory late night TV appearances for Rapinoe and her teammates.

What it means for the future of women's soccer is less clear, if only because great breakthroughs that were predicted from earlier World Cup titles never quite happened. The good news is there were some encouraging signs this week with ESPN agreeing to televise National Women's Soccer League games the rest of the season and Budweiser announcing on Sunday it was signing on as a multi-year national sponsor of the league.

Still, in one final indignity, the women didn't even have the day to themselves in soccer. For some reason international soccer officials not only played the Copa America final on the same day, but the 2019 Gold Cup, too.

This was a day to celebrate, though, not to complain about what should be. That can come later, though the fact FIFA is looking to expand from 24 to 32 teams for the 2023 World Cup is further evidence that world soccer is beginning to take the women's game more seriously.

What is also evident is that the rest of the world is catching up to the U.S., though the Americans never trailed in any match. With European countries in particular devoting more resources to the women's game there's going to be a World Cup in the not so distant future in which the U.S. isn't an overwhelming favorite.

It won't help that those future teams will also likely be without the 34-year-old Rapinoe, who was the unquestioned star of this World Cup, on the field and off. She scored goals in bunches, wasn't afraid to tangle with both her own president and the ruling soccer elite, and was the center of attention everywhere.

And when she posed majestically after scoring the only goal that would be needed against the Netherlands?

Well, let's just say she did it better than any man.

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felt very or extremely pre-

called Time Goes By that chronicles her experiences aging, relocating and, during the past two years, living with a pancreatic cancer diagnosis.

Meanwhile, Americans workforce may be unrealistic for people dealing with unexpected illness or injuries. For them, high medical bills and a lack of savings loom large over day-to-day expenditures.

and treatment programs those with similar diseases and certain traumatic brain injuries. He has also helped lobby state and national lawmakers to address rising prescription drug prices.

THE SUN CHRONICLE
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Attleboro, MA 02703
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The Audit Bureau

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4	8	6					3	
	7			4	1		8	
5	1				3			4
	4	8	5					
9	3			2	6		4	7
				8		5		
	2						5	
			4			3	7	8
7				3	8	1		2

Level: Beginner

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Sudoku puzzles are formatted as a 9x9 grid, broken down into nine 3x3 boxes. To solve a sudoku, the numbers 1 through 9 must fill each row, column and box. Each number can appear only once in each row, column and box. You can figure out the order in which the numbers will appear by using the numeric clues already provided in the boxes. The

LEGALS

Sterry St

ATTLEBORO MUNICIPAL COUNCIL
JOINT PUBLIC HEARING
JULY 16, 2019

Notice is hereby given in accordance with Chapter 40A, Section 5 of the Massachusetts General Laws that a **PUBLIC HEARING** will be held by the Attleboro Municipal Council on Tuesday, JULY 16, 2019 at 7:00 P.M in the Council Chambers, 77 Park Street, Attleboro, MA relative to the following:

JOINT PUBLIC HEARING with the Planning Board relative to the Rezoning Petition from Sterry Street Auto Sales, Inc., 495 Calkins Street, Attleboro, MA, from Single Residence-B and Industrial zoning to General Business zoning, said premises being Assessors Plat 30, Assessors Lot Number 399, being approximately one acre

07/01, 07/08/2019

Witness, GORDON H. PIPER Chief Justice of this Court on June 17, 2019

Attest:
Deborah J. Patterson
Recorder

(17-014310 Orlans)
07/08/2019

LEGALS

Site Plan

ATTLEBORO PLANNING BOARD
NOTICE OF PUBLIC HEARING
JULY 16, 2019

In accordance with the provisions of §17-15.0 SITE PLAN REVIEW of the City of Attleboro Zoning Ordinance, as amended, a public hearing will be held on Tuesday, July 16, 2019 at 6:30 p.m. in the **Annex Room**, located in **City Hall, 77 Park Street, Attleboro, MA 02703,** relative to the following:

The application of **SOWA, LLC** for an amendment to the approved Major Project Site Plan Review decision dated July 17, 2018 for Shops on Washington to reconfigure the proposed bank, restaurant, and retail buildings, and create new curb-cuts providing right-in only access to the site from Newport Avenue and Route 1A, the subject premises being located at **1 Highland Avenue and 5 Route 1A,** more specifically Assessors plat #64, lots #1A and #1B, located in the General Business zoning district.

The application and plans may be reviewed in the Department of Planning and Development located on the first floor of City Hall. Any person interested or wishing to be heard on the application may appear at the public hearing at the time and place designated above.

Paul Danesi
Chairman
07/08/2019

LEGALS

Flynn

NOTICE OF MORTGAGEES SALE OF REAL ESTATE

By virtue and in execution of the Power of Sale contained in a certain mortgage given by Joseph M. Flynn and April Rae Flynn to Mortgage Electronic Registration Systems, Inc., as nominee for Mortgagee, Inc. dated December 11, 2006, registered at the Bristol County (Northern District) Registry District of the Land Court as Document No. 85814 and noted on Certificate of Title No. 15142; said mortgage was then assigned to U.S. Bank National Association as Trustee for WAMU Mortgage Pass Through Certificate WMALT Series 2007-OA3 by virtue of an assignment dated March 26, 2013, and registered as Document No. 98079; of which mortgage the undersigned is the present holder for breach of conditions of said mortgage and for the purpose of foreclosing the same will be sold at PUBLIC AUCTION at 11:00 AM on July 29, 2019, on the mortgaged premises. This property has the address of 160 Bungay Road, North Attleboro, MA 02760. The entire mortgaged premises, all and singular, the premises as described in said mortgage. The land in North Attleborough, Bristol County, Massachusetts shown as Lot 4BC on Subdivision Plan entitled, Land in North Attleboro, W.T. Whalen Engineering Co., Engineers, January 1950, shown on Subdivision Plan #11941V, Filed with Certificate of Title #1573 Book 10, Page 119. Said premises are conveyed subject to the right of way shown on said plan and the grantor hereby reserves the use of said right of way in common with others entitled thereto. There is appurtenant to said land the rights and restrictions as set forth in a deed from George C. Calef to Walter J. Budzinski and Phyllis J. Budzinski, filed and registered as Document No. 1064, so far as in force and applicable. See L.C. CTF. 12340 BK 63 PG 131 Subject to and with the benefit of easements, reservation, restrictions, and taking of record, if any, insofar as the same are now in force and applicable. In the event of any typographical error

§16-2.2 of the REVISED ORDINANCES OF THE CITY OF ATTLEBORO, as amended, to layout Marigold Circle (length of 610 feet, from STA 0+00 to STA 6+10) as a public way.

PUBLIC HEARING relative to street acceptance pursuant to §16-2.2 of the REVISED ORDINANCES OF THE CITY OF ATTLEBORO, as amended, to layout Cedar Creek Drive (length of 1,310 feet, from STA 0+00 to STA 13+10) as a public way.

PUBLIC HEARING relative to street acceptance pursuant to §16-2.2 of the REVISED ORDINANCES OF THE CITY OF ATTLEBORO, as amended, to layout Joanne Drive (length of 839.47 feet, from STA 0+00 to STA 8+39.47) as a public way.

PUBLIC HEARING relative to street acceptance pursuant to §16-2.2 of the REVISED ORDINANCES OF THE CITY OF ATTLEBORO, as amended, to layout Marissa Circle (length of 212 feet, from STA 0+00 to STA 2+12) as a public way

PUBLIC HEARING relative to street acceptance pursuant to §16-2.2 of the REVISED ORDINANCES OF THE CITY OF ATTLEBORO, as amended, to layout Austin Drive (length of 413 feet, from STA 0+00 to STA 4+13) as a public way

PUBLIC HEARING relative to street acceptance pursuant to §16-2.2 of the REVISED ORDINANCES OF THE CITY OF ATTLEBORO, as amended, to layout Austin Drive (length of 400.00 feet, from STA 0+00 to STA 4+00) as a public way.

PUBLIC HEARING relative to street acceptance pursuant to §16-2.2 of the REVISED ORDINANCES OF THE CITY OF ATTLEBORO, as amended, to layout a portion of St Dor Street (length of 228.58 feet, from STA 1+15 to STA 3+43.58) as a public way

PUBLIC HEARING relative to street acceptance pursuant to §16-2.2 of the REVISED ORDINANCES OF THE CITY OF ATTLEBORO, as amended, to layout a portion of Woodside Avenue (length of 352.92 feet, from STA 0+20 to STA 3+72.92) as a public way

PUBLIC HEARING relative to street acceptance pursuant to §16-2.2 of the REVISED ORDINANCES OF THE CITY OF ATTLEBORO, as amended, to layout Landers Road (length of 396.89 feet, from STA 0+00 to STA 3+96.89) as a public way.

PUBLIC HEARING relative to street acceptance pursuant to §16-2.2 of the REVISED ORDINANCES OF THE CITY OF ATTLEBORO, as amended, to layout Tennant Circle (length of 202.16 feet, from STA 0+00 to STA 2+02.16) as a public way.

07/08/2019

LEGALS

Town Manager

TOWN OF NORTH ATTLEBORO

The Town Manager is seeking town residents to serve on the following Boards and Commissions:
Business & Industrial Commission Historical Commission
Cable TV Advisory Planning Board
Commission on Disability
Applications are at the Town Manager's office at Town Hall, or the Town's website, Town Manager's page. Please mail completed applications no later than noon on August 2, 2019 to:
Town Managers Office
Attn: Susan Harvey
43 South Washington Street
North Attleborough MA 02760
Or email completed applications to sharvey@nattleboro.com
Town Manager, Michael Gallagher
07/08/2019

LEGALS

Public Works

TOWN OF NORTH ATTLEBOROUGH

The Town Council in conjunction with the Board of Public Works is seeking town residents to serve on the following Board:

Board of Public Works
This is a joint appointment between the Town Council and the Board of Public Works to fill a current vacancy on the Board of Public Works until the April 2020 election.
Applications are at the Town Manager's Office at Town Hall, or can be obtained on the town's website, Town Manager's page.
Please return completed forms no later than 12pm on August 2, 2019

Town Managers Office
Attn: Susan Harvey
43 South Washington Street
North Attleborough MA 02760

district.
The applications and plans may be reviewed in the Department of Planning and Development located on the first floor of City Hall. Any person interested or wishing to be heard on the application may appear at the public hearing at the time and place designated above.

Paul Danesi
Chairman
07/01,07/08,2019

LEGALS

Healthcare project

TOWN OF FOXBORO

PUBLIC ANNOUNCEMENT CONCERNING A PROPOSED HEALTH CARE PROJECT

Partners HealthCare System, Inc. ("Applicant") located at 800 Boylston Street, Suite 1150, Boston, MA 02199 intends to file a Notice of Determination of Need ("Application") with the Massachusetts Department of Public Health for a change in service by Brigham and Women's Hospital ("BWH") for its licensed satellite, the "Brigham and Women's/Mass General Health Care Center" at Foxborough, located at 20 Patriot Place, Foxborough, MA 02035. The satellite currently has one MRI unit and one CT unit. The project is for the expansion of imaging services at the satellite through the acquisition of one additional magnetic resonance imaging ("MRI") unit and the acquisition of one additional computed tomography ("CT") unit (the "Proposed Project"). The Proposed Project also includes certain internal renovations of the satellite with no expansion in the square footage of the satellite. The total value of the Proposed Project based on the maximum capital expenditure is $9,476,208. The Applicant does not anticipate any price or service impacts on the Applicant's existing Patient Panel as a result of the Proposed Project. Any ten Taxpayers of Massachusetts may register in connection with the intended Application by no later than August 21, 2019, or 30 days from the filing date of the Application, whichever is later, by contacting the Department of Public Health, Determination of Need Program, 250 Washington Street, 8th Floor, Boston, MA 02108.
07/08/2019

Attachment 11

FACTOR 4 – INDEPENDENT CPA ANALYSIS

Partners HealthCare System, Inc.

Analysis of the Reasonableness of Assumptions Used For and Feasibility of Projected Financials of Partners HealthCare System, Inc. For the Years Ending September 30, 2019 Through September 30, 2023

TABLE OF CONTENTS

BERNARD L. DONOHUE, III, CPA

One Pleasure Island Road
Suite 2B
Wakefield, MA 01880

(781) 569-0070
Fax (781) 569-0460

July 12, 2019

Mr. Brian Huggins
Partners HealthCare System, Inc.
399 Revolution Drive STE 645
Somerville, MA 02145

RE: Analysis of the Reasonableness of Assumptions and Projections Used to Support the Financial Feasibility and Sustainability of the Proposed Expansion of MRI and CT Imaging Services at Brigham and Women's Hospital Outpatient Satellite in Foxborough, MA

Dear Mr. Huggins:

I have performed an analysis of the financial projections prepared by Partners HealthCare System, Inc. ("Partners HealthCare") detailing the projected operations of Partners HealthCare including the projected operations of Brigham and Women's Hospital outpatient satellite in Foxborough, MA (the "Foxborough Center"). This report details my analysis and findings with regards to the reasonableness of assumptions used in the preparation and feasibility of the projected financial information of Partners HealthCare as prepared by the management of Partners HealthCare ("Management"). This report is to be included by Partners HealthCare in its Determination of Need ("DoN") Application – Factor 4(a) and should not be distributed or relied upon for any other purpose.

I. EXECUTIVE SUMMARY

The scope of my analysis was limited to the five year consolidated financial projections (the "Projections") prepared by Partners HealthCare as well as the actual operating results for Partners HealthCare for the fiscal year ended 2018 ("Base Budget"), and the supporting documentation in order to render an opinion as to the reasonableness of assumptions used in the preparation and feasibility of the Projections with regards to the impact of capital projects involving and ancillary to the Brigham and Women's Hospital expansion of MRI and CT imaging services at the Foxborough Center.

The impact of the proposed expansion of MRI and CT imaging services at the Foxborough Center, which are the subject of this DoN application, represent a relatively insignificant component of the projected operating results and financial position of Partners HealthCare. As such, I determined that the Projections are not likely to result in a scenario where there are insufficient funds available for capital and ongoing operating costs necessary to support the ongoing operations of Partners HealthCare. Therefore, it is my opinion that the Projections are financially feasible for Partners HealthCare as detailed below.

II. RELEVANT BACKGROUND INFORMATION

Refer to Factor 1 of the application for description of proposed capital projects at the Foxborough Center and the rationale for the expenditures.

III. SCOPE OF REPORT

The scope of this report is limited to an analysis of the Projections, Base Budget and the supporting documentation in order to render an opinion as to the reasonableness of assumptions used in the preparation and feasibility of the Projections with regards to the impact of certain capital projects involving and ancillary to the Foxborough Center. My analysis of the Projections and conclusions contained within this report are based upon my detailed review of all relevant information (see Section IV which references the sources of information). I have gained an understanding of Partners HealthCare and the Foxborough Center through my review of the information provided as well as a review of Partners HealthCare website, annual reports, and the DoN application.

Reasonableness is defined within the context of this report as supportable and proper, given the underlying information. Feasibility is defined as based on the assumptions used, the plan is not likely to result in insufficient "funds available for capital and ongoing operating costs necessary to support the proposed project without negative impacts or consequences to [Partners HealthCare] existing patient panel" (per Determination of Need, Factor 4(a)).

This report is based upon historical and prospective financial information provided to me by Management. If I had audited the underlying data, matters may have come to my attention that would have resulted in my using amounts that differ from those provided. Accordingly, I do not express an opinion or any other assurances on the underlying data presented or relied upon in this report. I do not provide assurance on the achievability of the results forecasted by Partners HealthCare because events and circumstances frequently do not occur as expected, and the achievement of the forecasted results are dependent on the actions, plans, and assumptions of management. I reserve the right to update my analysis in the event that I am provided with additional information.

IV. PRIMARY SOURCES OF INFORMATION UTILIZED

In formulating my opinions and conclusions contained in this report, I reviewed documents produced by Management. The documents and information upon which I relied are identified below or are otherwise referenced in this report:

1. Five-Year Pro-Forma Statements for the fiscal years ending 2019 through 2023, provided June 7, 2019;

2. Multi-Year Financial Framework of Partners Healthcare System, Inc. for the fiscal years ending 2019 through 2023 prepared as of December 6, 2018;

3. Audited Financial Statements of Partners HealthCare System, Inc. and Affiliates as of and for the years ended September 30, 2018 and 2017;

4. Company website – www.partners.org;

5. Various news publications and other public information about the Company;

6. Determination of Need Application Instructions dated March 2017; and

7. Draft Determination of Need Factor 1, provided July 12, 2019.

V. REVIEW OF THE PROJECTIONS

This section of my report summarizes my review of the reasonableness of the assumptions used and feasibility of the Projections. The Projections are delineated between five categories of revenue and six general categories of operating expenses of Partners HealthCare as well as other non-operating gains and losses for the Organization. The following table presents the Key Metrics, as defined below, of Partners HealthCare which compares the results of the Projections for the fiscal years ending 2019 through 2023 to Partners HealthCare historical results for the fiscal year ended 2018.

	Partners, as reported	Change in Key Metric of pro forma results compared to prior year				
	2018	**2019**	**2020**	**2021**	**2022**	**2023**
EBIDA ($)	1,164,519	19,481	120,000	50,516	43,014	55,715
EBIDA Margin (%)	8.8%	0.0%	0.5%	0.0%	-0.1%	0.0%
Operating Margin (%)	2.3%	-0.2%	0.3%	0.0%	0.0%	0.1%
Total Margin (%)	6.2%	-1.7%	0.5%	0.0%	0.0%	0.0%
Total Assets ($)	18,303,531	781,560	858,959	633,012	911,996	942,211
Total Net Assets ($)	8,972,581	742,000	767,000	792,516	820,530	847,245
Unrestricted Cash Days on Hand (days)	212.2	5.0	(6.4)	(13.7)	2.6	7.0
Unrestricted Cash to Debt (%)	132.5%	5.1%	-0.7%	0.4%	5.3%	8.1%
Debt Service Coverage (ratio)	6.5	(1.8)	1.2	(2.8)	3.2	0.3
Debt to Capitalization (%)	43.3%	-2.3%	-1.8%	-2.8%	-1.5%	-1.4%

The Key Metrics fall into three primary categories: profitability, liquidity, and solvency. Profitability metrics, such as EBIDA, EBIDA Margin, Operating Margin, Total Margin, and Debt Service Coverage Ratio are used to assist in the evaluation of management performance in how efficiently resources are utilized. Liquidity metrics, such as Unrestricted Days Cash on Hand, and Unrestricted Cash-to-Debt measure the quality and adequacy of assets to meet current obligations as they come due. Solvency metrics, such as Debt to Capitalization, and Total Net Assets, measure the company's ability to service debt obligations. Additionally, certain metrics can be applicable in multiple categories.

The following table shows how each of the Key Metrics are calculated.

Key Metric	Definition
EBIDA ($)	(Earnings before interest, depreciation and amortization expenses) - Operating gain (loss) + interest expense + depreciation expense + amortization expense
EBIDA Margin (%)	EBIDA expressed as a % of total operating revenue. EBIDA / total operating revenue
Operating Margin (%)	Income (loss) from operations / total operating revenue
Total Margin (%)	Excess (deficit) of revenue over expenses / total operating revenue
Total Assets ($)	Total assets of the organization
Total Net Assets ($)	Total net assets of the organization (includes unrestricted net assets, temporarily restricted net assets and permanently restricted net assets)
Unrestricted Cash Days on Hand (days)	(Cash & cash equivalents + investments + current portion investments limited as to use + investments limited as to use - externally limited funds) / ((Total operating expenses - non recurring charges - depreciation & amortization) / YTD days)
Unrestricted Cash to Debt (%)	Unrestricted Cash-to-Debt (%) - (Cash & cash equivalents + investments + current portion investments limited as to use + investments limited as to use - externally limited funds) / (Current portion of long-term obligations + long-term obligations)
Debt Service Coverage (ratio)	Debt service coverage ratio (ratio) - (Excess (deficit) of revenue over expenses + depreciation expense + amortization expense + interest expense) / (Principal payments + interest expense)
Debt to Capitalization (%)	Debt to Capitalization (%) - (Current portion of long-term obligation + long-term obligations) / (Current portion of long-term obligations + long-term obligations + unrestricted net assets)

In preparing the Key Metrics, Management noted the following:

- Partners HealthCare has a balloon payment on long-term debt maturing in fiscal year ending 2021 and prepared the Projections to include the balloon payment.

1. Revenues

The only revenue category on which the proposed capital projects would have an impact is net patient service revenue. Therefore, I have analyzed net patient service revenue identified by Partners HealthCare in both their historical and projected financial information. Based upon my analysis of the projected results from Fiscal Year 2019 through Fiscal Year 2023, the proposed capital projects would represent approximately 0.007% (about 7 one-thousandths of 1%) of Partners HealthCare operating revenue beginning in FY 2021 to 0.027% (about 3 one-hundredths of 1%) in FY 2023. The first year in which revenue is present for the proposed capital projects is FY 2021.

It is my opinion that the revenue growth projected by Management reflects a reasonable estimation based primarily upon the organization's historical operations.

2. Operating Expenses

I analyzed each of the categorized operating expenses for reasonableness and feasibility as it relates to the projected revenue items. I reviewed the actual operating results for Partners HealthCare for the years ended 2017 and 2018 in order to determine the impact of the proposed capital projects at the Foxborough Center on the consolidated entity and in order to determine the reasonableness of the Projections for the fiscal years 2019 through 2023. Based upon my analysis of the projected results from Fiscal Year 2019 through Fiscal Year 2023, the proposed capital projects would represent approximately 0.003% (about 3 one-thousandths of 1%) of Partners HealthCare operating expenses beginning in FY 2021 to 0.014% (about 1 one-hundredths of 1%) in FY 2023.

It is my opinion that the growth in operating expenses projected by Management reflects a reasonable estimation based primarily upon the organization's historical operations.

3. Non-Operating Gains/Expenses and Other Changes in Net Assets

The final categories of Partners HealthCare Projections are various non-operating gains/expenses and other changes in net assets. The items in these categories relate to investment account activity (realized and unrealized), philanthropic and academic gifts, benefit plan funded status, fair value adjustments and other items. Because many of these items are unpredictable, nonrecurring, or dependent upon market fluctuations, I analyzed the non-operating activity in aggregate. Based upon my analysis, there were no non-operating expenses projected for the proposed capital projects at the Foxborough Center. Accordingly, it is my opinion that the pro-forma non-operating gains/expenses and other changes in net assets are reasonable.

4. Capital Expenditures and Cash Flows

I reviewed Partners HealthCare capital expenditures and cash flows in order to determine whether Partners HealthCare anticipated reinvesting sufficient funds for technological upgrades and property, plant and equipment and whether the cash flow would be able to support that reinvestment.

Based upon my discussions with Management and my review of the information provided, I considered the current and projected capital projects and loan financing obligations included within the Projections and the impact of those projected expenditures on Partners HealthCare cash flow. Based upon my analysis, it is my opinion that the pro-forma capital expenditures and resulting impact on Partners HealthCare cash flows are reasonable.

VI. FEASIBILITY

I analyzed the projected operations for Partners HealthCare and the changes in Key Metrics prepared by Management as well as the impact of the proposed expansion of MRI and CT imaging services at the Foxborough Center upon the Projections and Key Metrics. In performing my analysis, I considered multiple sources of information including historical and projected financial information for Partners HealthCare. It is important to note that the Projections do not account for any anticipated changes in accounting standards. These standards, which may have a material impact on individual future years, are not anticipated to have a material impact on the aggregate Projections.

Because the impact of the proposed expansion of MRI and CT imaging services at the Foxborough Center represents a relatively insignificant portion of the operations and financial position of Partners HealthCare, I determined that the Projections are not likely to result in insufficient funds available for capital and ongoing operating costs necessary to support the proposed projects. Based upon my review of the Projections and relevant supporting documentation, I determined the projects and continued operating surplus are reasonable and based upon feasible financial assumptions. Therefore, the proposed expansion of MRI and CT imaging services at the Foxborough Center is financially feasible and within the financial capability of Partners HealthCare.

Respectively submitted,

Bernard L Donohue, III, CPA

Bernard L. Donohue, III, CPA

Attachment 12

FACTOR 4.A.I CAPITAL COSTS CHART

F4a.ii For each Category of Expenditure document New Construction and/or Renovation Costs.				
	Category of Expenditure	New Construction	Renovation	Total
	Land Costs			
	Land Acquisition Cost	$ -	$ -	
	Site Survey and Soil Investigation	$ -	$ -	
	Other Non-Depreciable Land Development	$ -	$ -	
	Total Land Costs	$ -	$ -	
	Construction Contract (including bonding cost)			
	Depreciable Land Development Cost	$ -	$ -	
	Building Acquisition Cost	$ -	$ -	
	Construction Contract (including bonding cost)	$ -	$ 4,350,000	
	Fixed Equipment Non in Contract	$ -	$ 4,515,000	
	Architectural Cost (Including fee, Printing, supervision etc.) and Engineering Cost	$ -	$ 200,000	
	Pre-filing Planning and Development Costs	$ -	$ -	
	Post-filing Planning and Development Costs	$ -	$ -	
	Other (specify): Furniture, Fixtures, and Equipment (FFE)	$ -	$ 336,000	
	Net Interest Expensed During Construction	$ -	$ -	
	Major Movable Equipment	$ -	$ -	
	Total Construction Costs	$ -	$ 9,401,000	
	Financing Costs			
	Cost of Securing Financing (legal, administrative, feasibility studies, mortgage insurance, printing, etc	$ -	$ 75,208	
	Bond Discount	$ -	$ -	
Add/Del Rows	Other (specify)	$ -	$ -	
	Total Financing Costs	$ -	$ 75,208	
	Estimated Total Capital Expenditure	$ -	$ 9,476,208	

Attachment 13

HPC ACO Certification Approval Letter

The Commonwealth of Massachusetts
HEALTH POLICY COMMISSION
50 MILK STREET, 8TH FLOOR
BOSTON, MASSACHUSETTS 02109
(617) 979-1400

STUART H. ALTMAN
CHAIR

DAVID M. SELTZ
EXECUTIVE DIRECTOR

December 29, 2017

Sree Chaguturu
Partners HealthCare System, Inc.
800 Boylston Street, 11th Floor
Boston, MA 02199

RE: ACO Certification

Dear Dr. Chaguturu:

Congratulations! The Health Policy Commission (HPC) is pleased to inform you that Partners HealthCare System, Inc. meets the requirements for ACO Certification. This certification is effective from the date of this letter through December 31, 2019.

The ACO Certification program, in alignment with other state agencies including MassHealth, is designed to accelerate care delivery transformation in Massachusetts and promote a high quality, efficient health system. ACOs participating in the program have met a set of objective criteria focused on core ACO capabilities including supporting patient-centered care and governance, using data to drive quality improvement, and investing in population health. Partners Healthcare System, Inc. meets those criteria.

The HPC will promote Partners HealthCare System, Inc. as a Certified ACO on our website and in our marketing and public materials. In addition, a logo is enclosed for your use in accordance with the attached Terms of Use. We hope you will use the logo to highlight the ACO Certification to your patients, payers, and others.

The HPC looks forward to your continued engagement in the ACO Certification program over the next two years. In early 2018, HPC staff will contact you to discuss any updates to your submission and to plan a site visit for later in the year.

Thank you for your dedication to providing accountable, coordinated health care to your patients. If you have any questions about this letter or the ACO Certification program, please do not hesitate to contact Catherine Harrison, Deputy Policy Director, at HPC-Certification@state.ma.us or (617) 757-1606.

Best wishes,

David Seltz
Executive Director

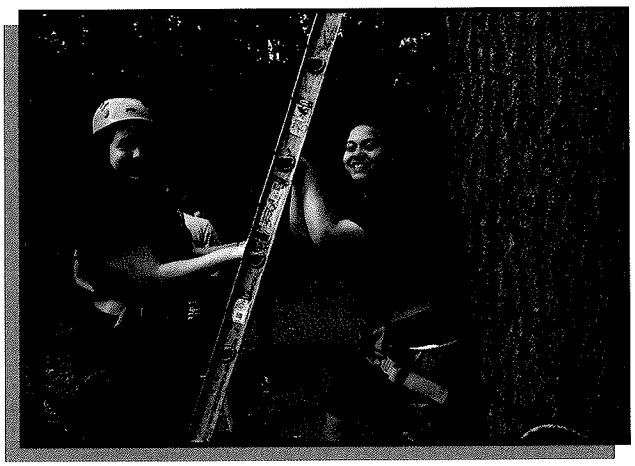
Attachment 14

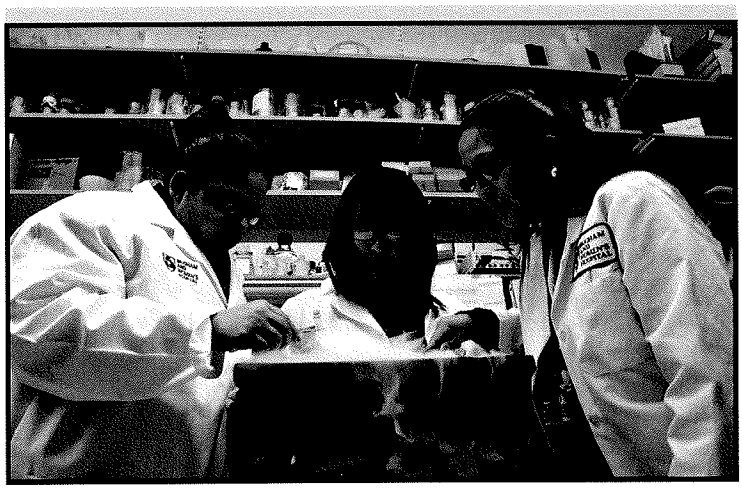
Form 990 –

Schedule H Community Health Needs

Assessment – Brigham and Women's Hospital

BRIGHAM AND WOMEN'S HOSPITAL





Community Health Needs Assessment and Implementation Plan

2016

ACKNOWLEDGEMENTS

The Brigham and Women's Hospital 2016 Community Health Needs Assessment and implementation planning process required the contributions of a range of organizations and individuals and we are thankful for their assistance. The Community Health staff of Partners HealthCare provided valuable guidance and access to health and social data. We collaborated with hospitals of the Conference of Boston Teaching Hospitals (CoBTH) in planning, conducting and analyzing findings from neighborhood discussion groups and worked closely with Brigham and Women's Faulkner Hospital throughout the CHNA process. Dr. Justeen Hyde from the Institute for Community Health conducted and analyzed the external key informant interviews.

We also wish to express our gratitude to our community partners who made the community meetings possible. Thank you to David Aronstein at Boston Alliance for Community Health, Rev. Bill Loesch at Codman Square Neighborhood Council, Margaret Noce at Jamaica Plain Tree of Life/Arbol de Vita, Jasmin Johansen at Mattapan United, and Vivien Morris at Mattapan Food and Fitness. We would also like to acknowledge the advisory boards of Southern Jamaica Plain Health Center and Brookside Community Health Center for their participation in this assessment.

We are particularly grateful to the residents of the five neighborhoods who shared their insight and guidance during this process. We learned a great deal from you.

Special thanks to staff at the Center for Community Health and Health Equity who assisted in this process. For their considerable effort, acknowledgement is due to Michelle Keenan, Director for Community Programs, Shirma Pierre, Director for Community Health Operations & Projects, and importantly Sarah Ingerman, who provided invaluable support and expertise throughout the process.

All are welcome to use our findings to inform future practice and create healthier, equitable communities. We request that you please use the following citation: Brigham and Women's Hospital, Center for Community Health and Health Equity (2016). *Community Health Needs Assessment and Implementation Plan 2016*. Boston, MA.

EXECUTIVE SUMMARY

In 2016, Brigham and Women's Hospital (BWH) embarked on a Community Health Needs Assessment (CHNA) and implementation planning process to inform community-based efforts as well as to adhere to requirements set by the *Patient Protection and Affordable Care Act (the Act)*. This work builds upon the foundation of past assessment work and current investments in advancing health in the BWH priority neighborhoods (Dorchester, Jamaica Plain, Mattapan, Mission Hill and Roxbury). These neighborhoods are cited in the hospital's community benefit mission as a focus for effort with residents who experience disproportionately high rates of poverty, unemployment and chronic disease.

BWH COMMUNITY HEALTH COMMITMENT

BWH has a long-standing commitment to promoting health equity and reducing health disparities for patients, families, employees, and vulnerable members of the community. As part of this commitment, the BWH Center for Community Health and Health Equity (CCHHE) was established in 1991 to serve as the coordinating department for community health programs and to act as a liaison for community-based organizations and the hospital. The Center works in partnership with other hospital departments and with community health centers, schools, and community-based organizations to identify barriers to health and related services to address the social factors contributing to health and well-being. The Center's programs have evolved over the past two decades and include efforts aimed at eliminating inequities in infant mortality, and cancer; promoting youth development and employment through education and career opportunities; curbing the cycle of violence in our communities and improving knowledge of healthy habits and behaviors.

ASSESSMENT METHODOLOGY

The *Act* requires hospitals to solicit input from broad interests within the community and those with knowledge and expertise in public health for their assessments. Applying a social determinants of health framework that looks at the social and economic factors that impact a community's health, BWH's community assessment used a mixed methods approach. This included an analysis of key quantitative data and the collection of primary data through key informant interviews, structured community discussion groups, as well as an online community engagement process that engaged a broad range of community residents. The community discussion groups were conducted collaboratively with several other Boston hospitals participating in the Conference of Boston Teaching Hospitals (CoBTH).

KEY FINDINGS

- Residents of color experience greater poverty, unemployment, lower educational attainment and greater economic vulnerability. Unemployment rates were highest in Mattapan (18.2%) and Dorchester (17.7% in North Dorchester and 15.8% in South Dorchester) compared to Boston overall (10.3%).

- Hispanic/Latino households in Boston had the lowest median household income ($27,461) and White households had the highest ($70,644).
- Interpersonal violence and trauma was cited as a major concern among community residents and stakeholders, and in 2012, the homicide rate for Black residents was 19.9 per 100,000 residents in Boston, which was significantly higher than the rate for White residents (2.0).
- Behavioral health concerns emerged as key issues with a specific focus on the availability, cost and cultural accessibility of mental health and substance abuse services.
- Many Boston public high school students (30.1%) and adults (12.2%) reported persistent sadness (feeling sad, blue or depressed 15 or more of the past 30 days). Hispanic/Latino adults were more likely to self-report experiencing persistent sadness compared to White adults.
- Significant health inequities persist across all health conditions examined, including chronic disease, reproductive and sexual health as well as obesity.
- Black and Hispanic/Latino residents were more likely to report having diabetes (14.1% and 12.6% respectively) and hypertension (36.7% and 26.2% respectively) compared to White residents (5.1% and 18.6% respectively).
- Although the rate of uninsured residents in Massachusetts is at historically low levels, models of care that are responsive to the needs of underserved communities are an important area for development.
- Low income residents face multiple access issues, including transportation barriers and the potential negative impact of policy changes in 2016/17 to the Health Safety Net and MassHealth plan enrollment.
- Racial equity was identified as one of the key community health issues in BWH's 2015 on-line, community engagement process *What Matters for Health*. Nearly three-quarters (73%) of respondents to the question on equity indicated that they do not believe the City of Boston is a racially equitable place to live.
- Community residents and other stakeholders underscored the importance of working in partnership with communities and prioritizing sustainable investment that leverages existing community assets and strengths.

Based on these findings and considering the available resources, the interests of BWH's priority communities, and opportunities for collaboration, BWH identified the following priority areas for its implementation plan:

1. Social determinants of health (employment, education, economic stability, and transportation)
2. Interpersonal violence and trauma
3. Behavioral health
4. Health equity
5. Healthcare access

BACKGROUND

ABOUT BRIGHAM AND WOMEN'S HOSPITAL

Brigham and Women's Hospital (BWH) is a not-for-profit 793-bed academic medical center located in historic Boston, Massachusetts. A national leader in patient care, research, innovation, education and community health, BWH is a teaching affiliate of Harvard Medical School with specialty care for cancer, heart disease, orthopedic conditions and women's health, including the largest obstetrical program in Massachusetts. Along with its modern inpatient facilities, BWH offers extensive outpatient services and clinics, neighborhood primary care through its two licensed community health centers and primary care sites and state-of-the art diagnostic and treatment technologies and research laboratories. BWH has more than 4.2 million annual patient visits and nearly 46,000 inpatient stays. Further, as the largest birthing center in Massachusetts, and a regional leader in high-risk obstetrics and newborn care, approximately 6,500 babies are born each year at BWH. Expert newborn care for nearly 3,000 premature and seriously ill babies and their families are provided each year.

To meet the needs of its patient population, BWH and Brigham and Women's Physicians Organization (BWPO) employs approximately 16,000 people. The hospital is a top recipient of research grants from the National Institutes of Health and has ranked on *US News and World Report's* Honor Roll of America's Best Hospitals for 23 consecutive years and in 2015, BWH ranked 6th in the nation.

BWH COMMITMENT TO THE COMMUNITY

BWH has a long-standing commitment to promoting health equity and reducing health disparities for patients, families, employees and vulnerable members of the community. BWH is particularly committed to working with residents of Boston's diverse neighborhoods to break through the barriers to health – economic, social, educational and cultural – so often encountered by the individuals and families in our community. As part of that commitment, the Center for Community Health and Health Equity (CCHHE) was established in 1991 to serve as the coordinating department for community health programs and acts as a liaison for community-based organizations and the hospital. The CCHHE develops, implements, manages and evaluates initiatives that aim to address and minimize inequities in health status. To achieve these goals, the Center works in partnership with other hospital departments and with community health centers, schools and community-based organizations to identify barriers to healthcare and related services and to address the social factors contributing to health and well being.

The Center's programs have evolved over the past two decades and include efforts aimed at eliminating inequities in infant mortality, and cancer; promoting youth development and employment through education and career opportunities; curbing the cycle of violence in our communities; and improving knowledge of healthy habits and behaviors.

Community Health efforts in FY15 included:

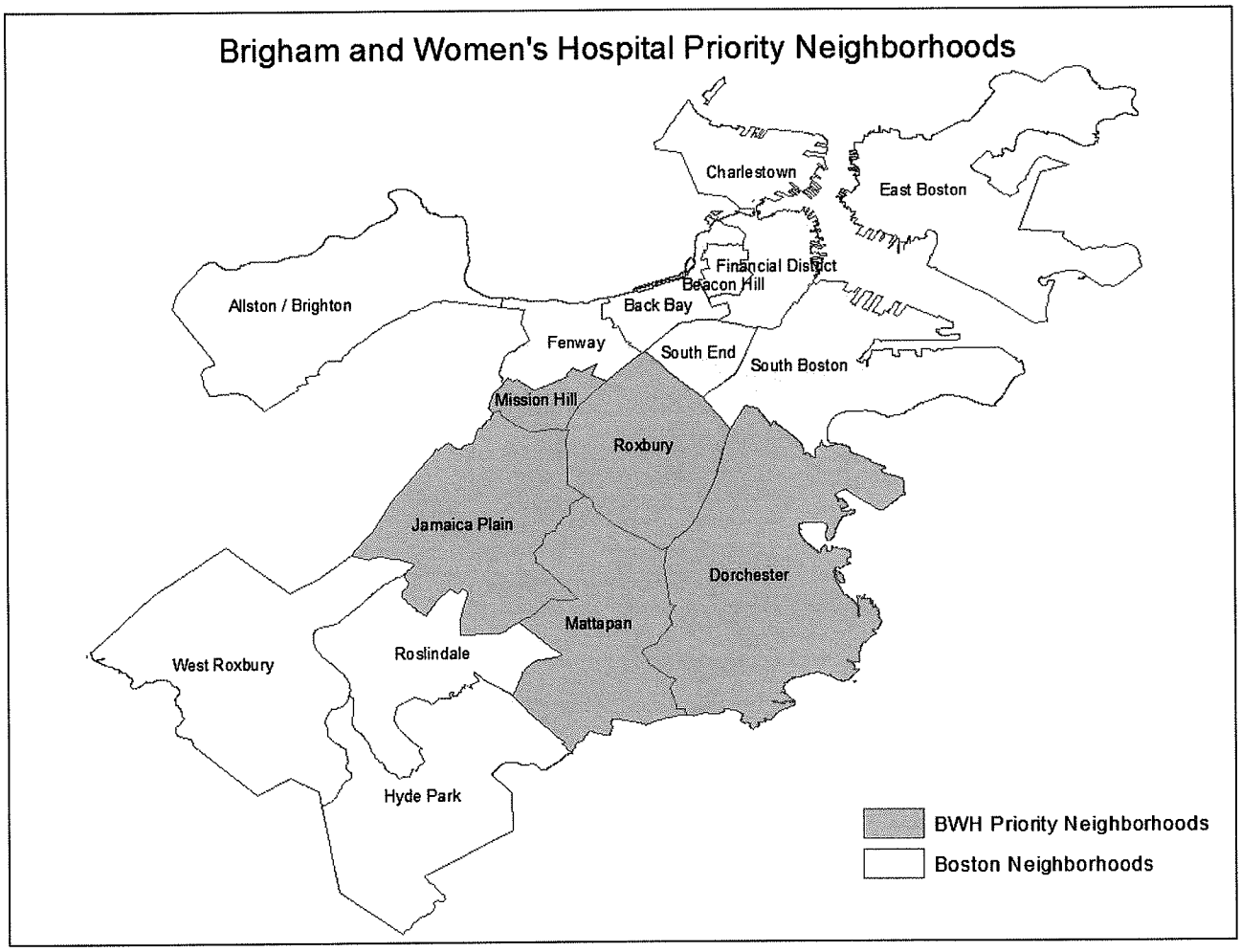
- The Passageway domestic violence program provided 8,322 service contacts to or on behalf of 1,295 clients of Brigham and Women's HealthCare.
- 100% of Student Success Jobs Program participants entered college after completion of the high school program.
- 484 patients were referred to a patient navigator for colorectal cancer screening and colonoscopy; completion rates of screening among health center patients increased from 49% at program inception to 70% in 2015.
- 101 low income women with breast cancer were provided financial assistance to cover expenses associated with their diagnosis that were not covered by insurance.
- Nearly 22,000 patients received care at our two BWH licensed health centers in Jamaica Plain (Brookside Community Health Center and Southern Jamaica Plain Health Center).
- 273 women received pregnancy and parenting services from health center based case managers through the Stronger Generations case management program.
- Over 500 young people received educational support and mentoring from nearly 300 Brigham and Women's employees.

BWH'S PRIORITY COMMUNITIES

This assessment informs BWH's community activities and programs that address the health and well-being of residents of the hospital's priority neighborhoods of **Dorchester, Jamaica Plain, Mattapan, Mission Hill and Roxbury**. The BWH community benefit mission specifically cites these neighborhoods as a focus for effort with residents who experience disproportionately high rates of poverty, unemployment and chronic disease.

As discussed in greater detail in subsequent sections of this report, there are clear variations in the racial and ethnic diversity of Boston's neighborhoods. BWH's priority neighborhoods are home to many of Boston's communities of color. Mattapan, North and South Dorchester, and Roxbury are predominately Black communities (44.0% to 80.4%). Approximately one-quarter of the populations of Roxbury, Jamaica Plain, and North Dorchester are Hispanic/Latino (22.6% to 27.0%).

Figure 1. Map of Brigham and Women's Hospital Priority Neighborhoods, 2016



THE COMMUNITY HEALTH NEEDS ASSESSMENT PROCESS

The goals of the 2016 Community Health Needs Assessment (CHNA) were to:

1. Identify the health and well-being needs and assets of BWH's target populations in the neighborhoods of Dorchester, Jamaica Plain, Mattapan, Mission Hill and Roxbury
2. Engage community members and other key stakeholders in the process
3. Determine the hospital's priorities for the next three years; and
4. Develop an implementation strategy to address the identified needs

Throughout the course of this CHNA, we worked collaboratively on community engagement and data collection with several other Boston hospitals participating in the Conference of Boston Teaching Hospitals (CoBTH). This assessment and implementation plan build upon the foundation from our last CHNA and our current investments in advancing the health of BWH's priority neighborhoods.

PAST COMMUNITY HEALTH NEEDS ASSESSMENTS

A comprehensive CHNA was conducted in 2011/12 and in 2013, supplemental CHNA work was conducted to assess any changes and delve further into the themes that had been identified in the earlier assessment work. Our 2013 assessment work engaged over 150 residents and stakeholders in key informant interviews or one of the 13 focus groups conducted at community sites throughout BWH priority neighborhoods.

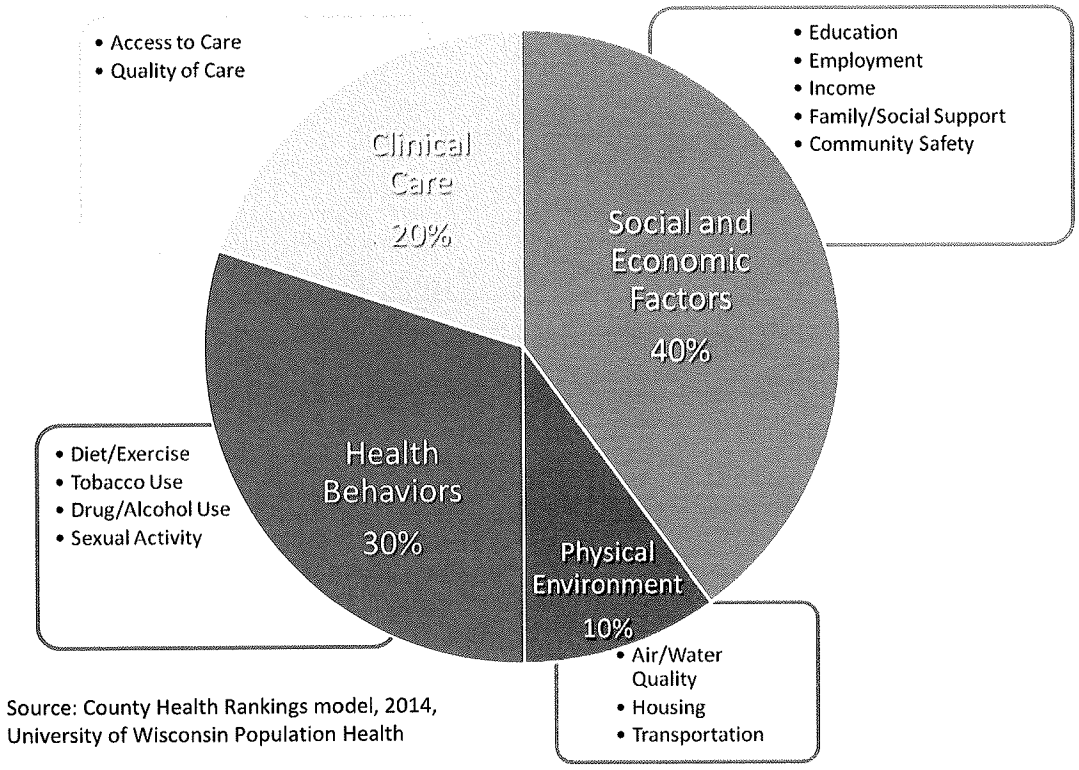
A report on progress on our previous CHNA can be found on the CCHHE's website.

METHODOLOGY

Overall Approach: Social Determinants of Health

The CHNA defines health in the broadest sense and recognizes that factors at multiple levels impact a community's health – from lifestyle behaviors (e.g. diet and exercise), to clinical care (e.g. access to medical services), to social and economic factors (e.g. employment opportunities), to the physical environment (e.g. open space) (Figure 2). This CHNA examined data at all these levels, but considerable focus was given to social determinants of health because of its significant influence on the health and long-term health outcomes of communities. As illustrated in Figure 2 on the following page, social and economic factors have the greatest impact on the health of individuals, and this understanding informed the data we sought and analyzed in the course of the assessment.

Figure 2: Social Determinants of Health Model



Source: County Health Rankings model, 2014, University of Wisconsin Population Health

We understand that where we are born, grow, live, work, and age—from our environment in the womb to our community environment later in life—and the interconnections among these factors are critical to our health. While genes and lifestyle behaviors affect health, it is most profoundly influenced by more upstream factors such as quality of education, economic stability, employment status, quality of housing stock and issues of racial inequity. These factors determine the context in which people live and shape the opportunities that are available to them, which in turn impact their health and the health of their families.

We also approached this assessment with the knowledge that communities of color throughout the nation experience poorer health outcomes, which is very true in Boston as well. There is growing interest and body of research on the health impact of inequality and racism, and this has been a prominent feature of the work of the Boston Public Health Commission and other leading public health organizations in recent years. Racism, a system of advantage based on race, both intersects and compounds the negative impacts of social and economic challenges faced by community members. While people often think of the interpersonal manifestations of racism, the most profound impact of racism is experienced through the systems and institutions in our society, and over time it results in health enhancing opportunities being available to some groups, and not available to others. This is referred to as institutional and structural

racism. Disinvestment in community infrastructure, unequal educational resources and the legacy of redlining in the housing market are illustrations of the policies and structures that reproduce systemic forms of racism. Understanding the health impacts of racism, how it operates in societal structures and within organizations and taking steps towards dismantling these inequities is a crucial area of interest for those seeking to promote health equity. This understanding informs and shapes our community health work at BWH.

Data Collection Methods

A mixed methods approach was used for the 2016 CHNA. We included the analysis of key demographic, social, economic and health and well-being data. The Boston Public Health Commission (BPHC) was the primary source of our neighborhood level data. BWH utilization and emergency department data were also analyzed. Primary data were collected through interviews and structured community discussion groups. BWH embarked on an innovative on-line community engagement process entitled *What Matters for Health* that obtained extensive community input from 488 participants. Key reports that analyzed the health and social and economic status of Boston communities also provided valuable data to inform this CHNA. Through these multiple methods, we worked to identify the pressing health and wellness issues facing BWH's priority communities.

BWH collaborated with members of the Conference of Boston Teaching Hospitals (CoBTH) to plan, implement and analyze findings from community meetings in key neighborhoods identified by the group. A core set of questions was developed by participating hospitals to guide meeting discussions (Appendix A). The total number of participants at each meeting ranged from 9 to 20 residents and the meetings averaged 90 minutes in duration. Interpreters were provided at meetings when requested by our community partners. Furthermore, the input of the community advisory boards of Southern Jamaica Plain Health Center (SJPHC) and Brookside Community Health Center (BWH's two licensed health centers), both which are located in Jamaica Plain, was solicited for this CHNA. A forum was conducted with high school students from the CCHHE's Student Success Job Program (SSJP) to learn more about young peoples' perspectives on community health needs.

Key informant interviews were conducted with 6 internal and 9 external stakeholders (Appendix B). These stakeholders were selected based on their strategic areas of expertise and connection to BWH's priority communities. A series of interview questions was created to guide conversations with key informants and to solicit their input and feedback on the health and wellness issues facing BWH's priority communities (Appendices C and D).

Table 1. Summary of Data Sources Informing 2016 BWH CHNA

Data Type	Data Source	Notes
Quantitative Data	U.S. Census & American Community Survey	Obtained from and analyzed by Boston Public Health Commission (BPHC)
	Boston Behavioral Risk Factor Surveillance Survey (BBRFSS)	Obtained from and analyzed by BPHC
	Youth Risk Behavior Survey (YRBS)	Obtained from and analyzed by BPHC
	Vital Statistics	Obtained from and analyzed by BPHC
	BWH Utilization Data	Obtained from EPSi (an internal Partners HealthCare service utilization and billing database)
	BWH Emergency Department Data	Obtained from Partner's HealthCare, Massachusetts Data Warehouse Database
Qualitative Data	Community meetings with residents of priority communities	5 conducted in the following neighborhoods: Jamaica Plain, Roxbury, Bowdoin Geneva (Dorchester), Mattapan, and Codman Square (Dorchester); 79 residents attended in total
	Meetings with community advisory boards at Southern Jamaica Plain Health Center and Brookside Health Center	2 conducted
	Forum with high school students involved with the Student Success Job Program	1 conducted
	Interviews with internal stakeholders	6 conducted
	Interviews with external stakeholders	9 conducted; interviews conducted by sub-contractor, the Institute for Community Health
Reports	BPHC's *Health of Boston* report	Published 2014-2015
	Federal Reserve Bank of Boston's *The Color of Wealth in Boston* report	Published 2015
	What Matters for Health: A Community Health Planning Report	Published 2015 and available on the CCHHE website, this report details the analysis of over 8,000 comments from 488 participants in an innovative on-line game that BWH undertook to explore perceptions and recommendations from community members on personal, neighborhood and citywide health issues.

In addition to the data sources listed above, information from the following sources informed sections of this CHNA:

- Brigham and Women's Hospital (http://www.brighamandwomens.org/)and Partners HealthCare (http://www.partners.org/) websites
- The County Health Rankings & Roadmaps, which is a collaboration between the Robert Wood Johnson Foundation and the University of Wisconsin Population Health Institute (http://www.countyhealthrankings.org/)
- The U.S. Bureau of Labor Statistics (2014-2016) (http://www.bls.gov/)
- Fair Public Transportation Report: Community Health Center Directors Roundtable (December 2015)
- The Democracy Collaborative's *Can Hospitals Heal America's Communities*?, written by Tyler Norris and Ted Howard (December 2015) (http://democracycollaborative.org/content/can-hospitals-heal-americas-communities-0)
- The American Public Health Association's website and section on "Racism and Health" (https://www.apha.org/topics-and-issues/health-equity/racism-and-health)
- The U.S. Department of Health and Human Services' HealthyPeople 2020 website (https://www.healthypeople.gov/)
- The Blue Cross Foundation and the Urban Institute's *Summary of Health Insurance Coverage and Health Care Access and Affordability in Massachusetts: 2015 Update* (March 2015) (http://bluecrossfoundation.org/sites/default/files/download/publication/MHRS_2015_Summary_FINAL.pdf)
- The Center for Health Information and Analytics (CHIA)'s "Annual Report Premiums Databook" (updated November 2015) (http://www.chiamass.gov/premiums/) and "The Performance of the Massachusetts Healthcare System Series – Massachusetts High Deductive Health Plan Membership" (Updated November 2015) (http://www.chiamass.gov/the-performance-of-the-massachusetts-health-care-system-series/#hdhp)

Limitations and Considerations

It is also important to note specific methodological considerations as we embarked on our CHNA work, as well as limitations that are characteristic of applied research efforts. Specifically;

- Every effort was made to ensure diverse and broad participation in the community throughout the CHNA data collection and analysis process.
- Community meetings were conducted to obtain more in-depth, meaningful conversations from a wide sampling of community members.
- Key informant interviews were held to ensure that the perspectives of specific internal and external sub-groups were represented.
- There was very limited health and other data specific to the neighborhood of Mission Hill. Available data typically includes Mission Hill within the larger community of Roxbury.

NEEDS ASSESSMENT FINDINGS

This section presents key findings from the BWH's 2016 CHNA, which are organized into the following subsections:

- Community demographics
- Social determinants of health
- Interpersonal violence and trauma
- Behavioral health
- Health equity
- Access to healthcare; and
- Approach to working with communities.

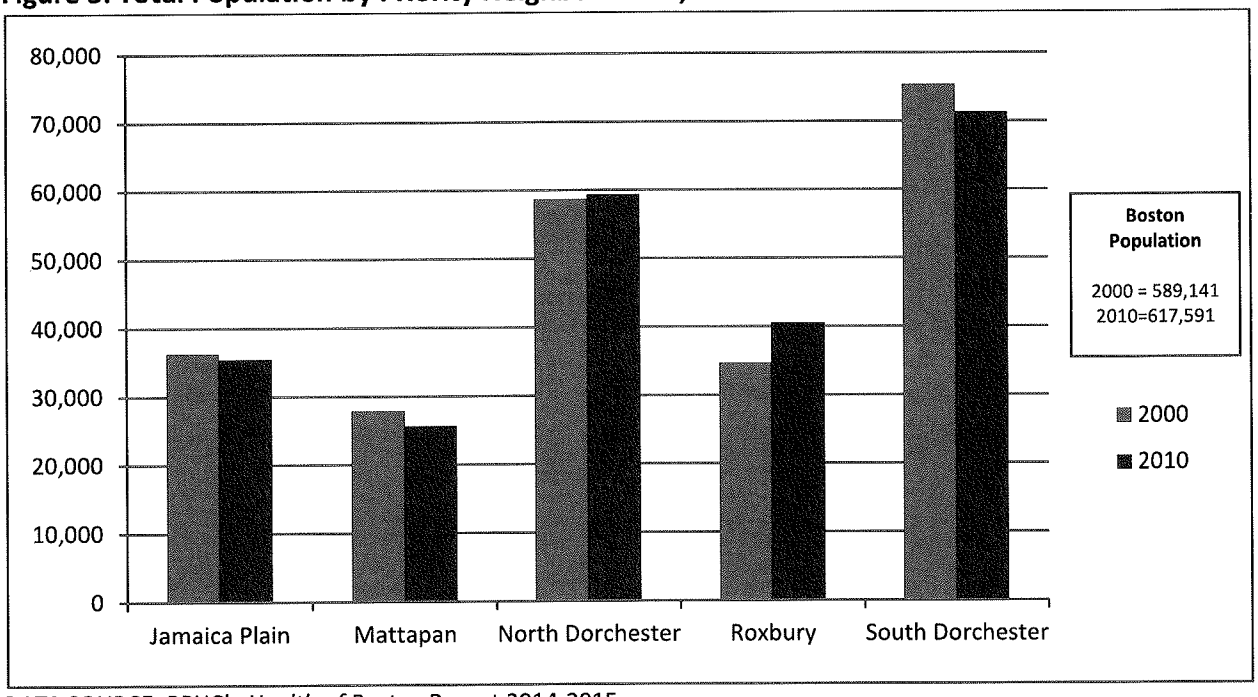
COMMUNITY DEMOGRAPHICS

The health of a community is associated with numerous factors, including what resources and services are available (e.g. safe green space, access and affordability of healthy foods) as well as who lives in the community. The section below provides an overview of the population of Boston and of BWH's priority neighborhoods of Dorchester, Jamaica Plain, Mattapan, Mission Hill and Roxbury. The demographics of a community are important to understanding health outcomes and behaviors of that area. While age, gender, race and ethnicity are important characteristics that impact on an individual's health, the distribution of these characteristics in a community and the social and economic opportunities available (or not readily available) to a group are key to our understanding of what supports a healthy community. Please note, the population, age distribution, and race/ethnicity data included in this section are informed by the 2010 U.S. Census, the most recently available Census data.

Population

In 2010, Boston's total population was estimated to be 617,591 people, a growth of almost 5% since 2000, when the city's population was 589,141. Over the past decade, several Boston neighborhoods have experienced growth rates similar to that of the city overall. Notably, Roxbury, with a 16.9% increase in population, has seen the most substantial growth among BWH's priority neighborhoods. Of the seventeen neighborhoods that comprise the City of Boston, four experienced a decrease in their populations over the past decade—and three of which are BWH's priority neighborhoods (Jamaica Plain [-2.5%), Mattapan [-8.1%], and South Dorchester [-5.4%]). (Figure 3)

Figure 3: Total Population by Priority Neighborhoods, 2000-2010



DATA SOURCE: BPHC's *Health of Boston* Report 2014-2015

Age Distribution

While there have been fluctuations over time, the percent of residents aged 15-24 and 45-64 has generally increased since 1990. Residents aged 25-34 have seen the largest proportional decrease in total population between 1990 and 2010. Table 2 presents the age distribution in Boston by priority neighborhood. In 2010, Jamaica Plain was the neighborhood with the lowest percentage of youth aged 14 years and under (12.8%), while Roxbury had the highest (22.3%). Meanwhile, Mattapan had the highest percentage of adults aged 65-74 years (6.7%), while North Dorchester had the lowest (4.7%).

Table 2: Age distribution by city and priority neighborhoods, 2010

	Boston	Jamaica Plain	Mattapan	North Dorchester	Roxbury	South Dorchester
Under 5 years	5.2%	5.2%	6.9%	5.8%	7.5%	6.8%
5-14 years	8.6%	7.6%	14.6%	9.7%	14.8%	13.3%
15-24 years	22.4%	21.9%	16.6%	20.0%	17.7%	15.4%
25-34 years	20.7%	21.2%	13.1%	20.4%	14.5%	15.2%
35-44 years	12.5%	12.7%	13.4%	13.9%	12.6%	14.8%
45-64 years	20.4%	20.7%	24.6%	21.9%	23.6%	24.2%
65-74 years	5.3%	5.7%	6.7%	4.7%	5.5%	5.9%

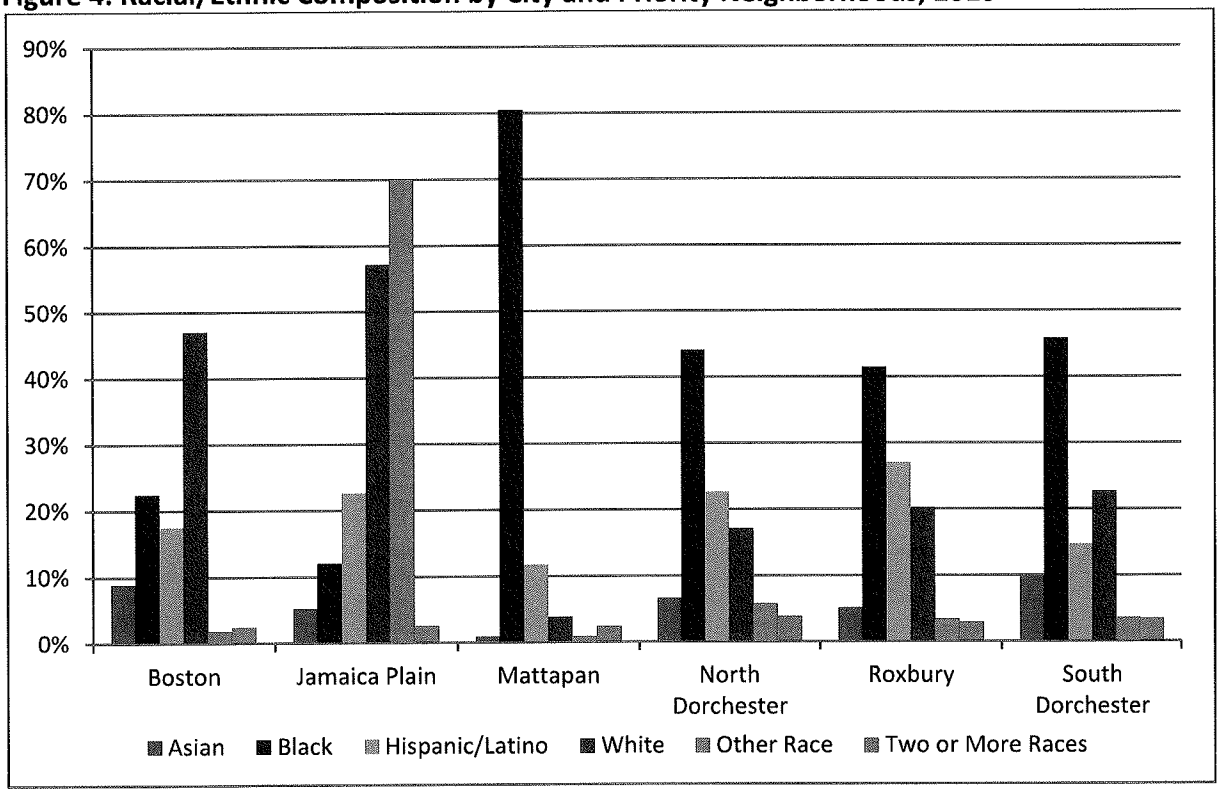
DATA SOURCE: U.S. Department of Commerce, Bureau of the Census, American FactFinder, 2010 Census

Racial and Ethnic Diversity

Quantitative results illustrate that some neighborhoods exhibit greater resident diversity than others. Racial/ethnic diversity is also increasing; a greater proportion of the city identified as non-White than reported in the last several years. Although nearly half of all Boston residents were White (47%) in 2010, there is substantial variation in the racial and ethnic diversity stratified by neighborhood. (Figure 4)

For example, in the North End, South Boston, Back Bay, Charlestown, West Roxbury, Fenway, and Allston/Brighton, at least two-thirds of residents are White (64.7%-91.8%). In contrast, Mattapan, North and South Dorchester, Hyde Park, and Roxbury are predominantly Black communities (41.4%-80.4%). More than half of East Boston residents (52.9%) and about one quarter of Roxbury's population (27.0%), Roslindale's population (25.9%), Jamaica Plain's population (22.6%), and North Dorchester's population (22.6%) are Hispanic/Latino. In Chinatown, about half of residents are Asian (48.3%). Additionally, while English was the most common language spoke at home in Boston (63.4%), other languages included Spanish or Spanish Creole (15.9%), French Creole (5.1%), Chinese languages (4.2%), and Vietnamese (1.7%).

Figure 4: Racial/Ethnic Composition by City and Priority Neighborhoods, 2010



NOTE: 'Other Race' consists of American Indians/Alaskan Natives and Some Other Races
DATA SOURCE: BPHC's *Health of Boston* Report 2014-2015

BWH Specific Data on Priority Communities

In FY2015, BWH served approximately 281,300 individuals[1]; one-quarter of BWH's patients during this time were residents of the City of Boston (24.7%, n=69,400). Of BWH's patients who resided in Boston, nearly half (49.0%) were residents of one of BWH's priority neighborhoods (Table 3). When examining payor information, we see that 37.6% of patients from BWH's priority neighborhoods were insured by public payors (i.e. Medicaid, Health Safety Net and CommCare/ConnectorCare) and 62.4% were insured by all other payors.[2] BWH patients from North Dorchester (54.0%), Roxbury (45.9%), Mattapan (43.2%), and South Dorchester (43.1%) were more likely to be insured through public payors compared to BWH patients from Jamaica Plain (27.2%) and patients citywide (16.2%) (Figure 5).

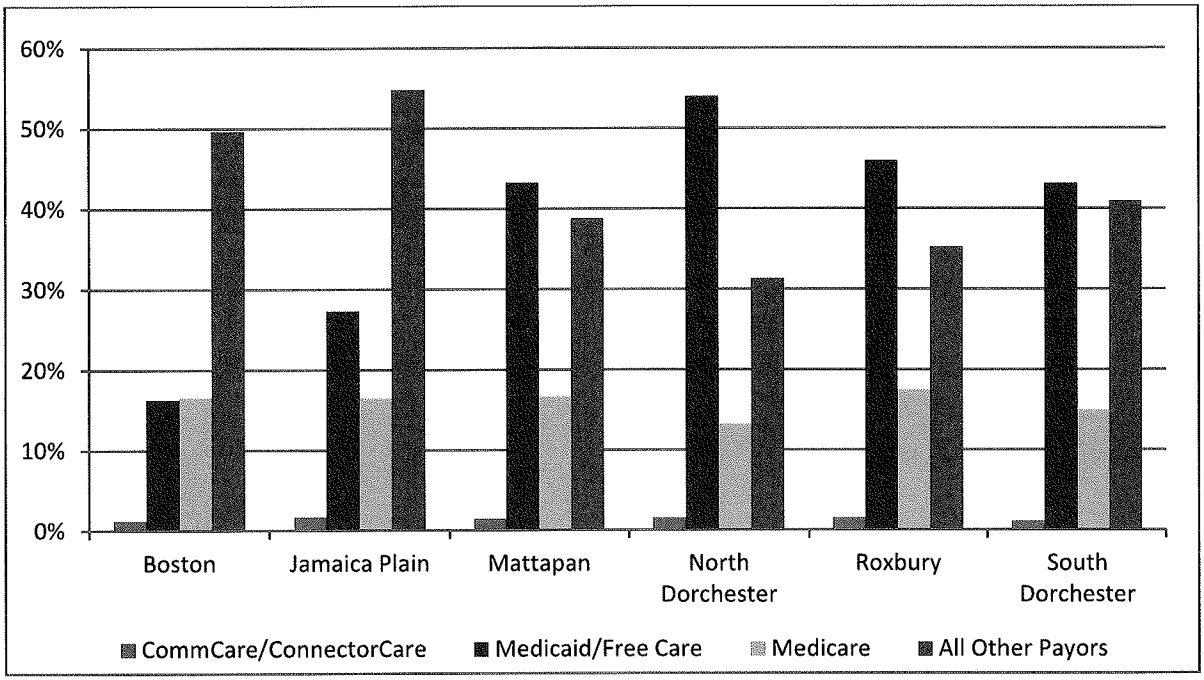
Table 3: BWH Patient Population by City and Priority Neighborhood, FY 2015

Geography	Percentage of BWH Patients From Specified Geographies *(Out of Total Patient Population)*
City of Boston	24.7% (N=69,353)
BWH Priority Neighborhoods	12.1% (n=33,929)
Jamaica Plain	3.6% (n=10,027)
Mattapan	1.0% (n=2,820)
North Dorchester	2.4% (n=6,803)
Roxbury	2.6% (n=7,368)
South Dorchester	2.5% (n=6,911)
Other Boston Neighborhoods	12.6% (n=35,424)

DATA SOURCE: EPSi (an internal Partners HealthCare service utilization and billing database)
NOTE: These data do not include patients served by BWPO

[1] These data do not include patients served by Brigham and Women's Physicians Organization (BWPO).
[2] These data do NOT include BWPO data. All other payors includes commercial insurance, self pay, other and unknown.

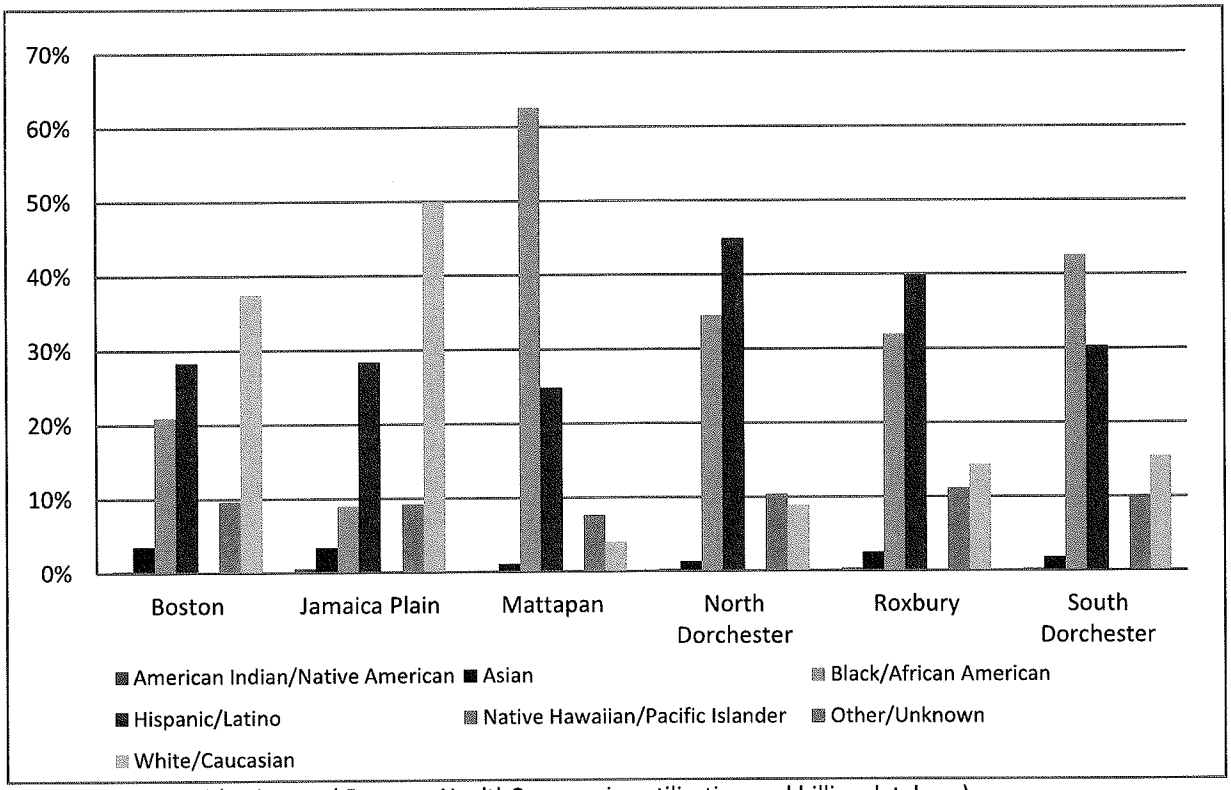
Figure 5: Payor Information of BWH Patient Population by City and Priority Neighborhood, FY 2015



DATA SOURCE: EPSi (an internal Partners HealthCare service utilization and billing database)
NOTE: These data do not include patients served by BWPO

Looking at BWH patient data by race/ethnicity, there is substantial variation in the race/ethnicity of BWH's patient population across priority neighborhoods. For instance, in FY2015, Mattapan had the largest Black/African American patient population (62.6%) and North Dorchester and Roxbury had the largest Hispanic/Latino patient populations (44.9% and 39.9% respectively). (Figure 6)

Figure 6: Race/Ethnicity of BWH Patient Population by City and Priority Neighborhood, FY 2015



DATA SOURCE: EPSi (an internal Partners HealthCare service utilization and billing database)
NOTE: These data do not include patients served by the Brigham and Women's Physicians Organization

SOCIAL DETERMINANTS OF HEALTH

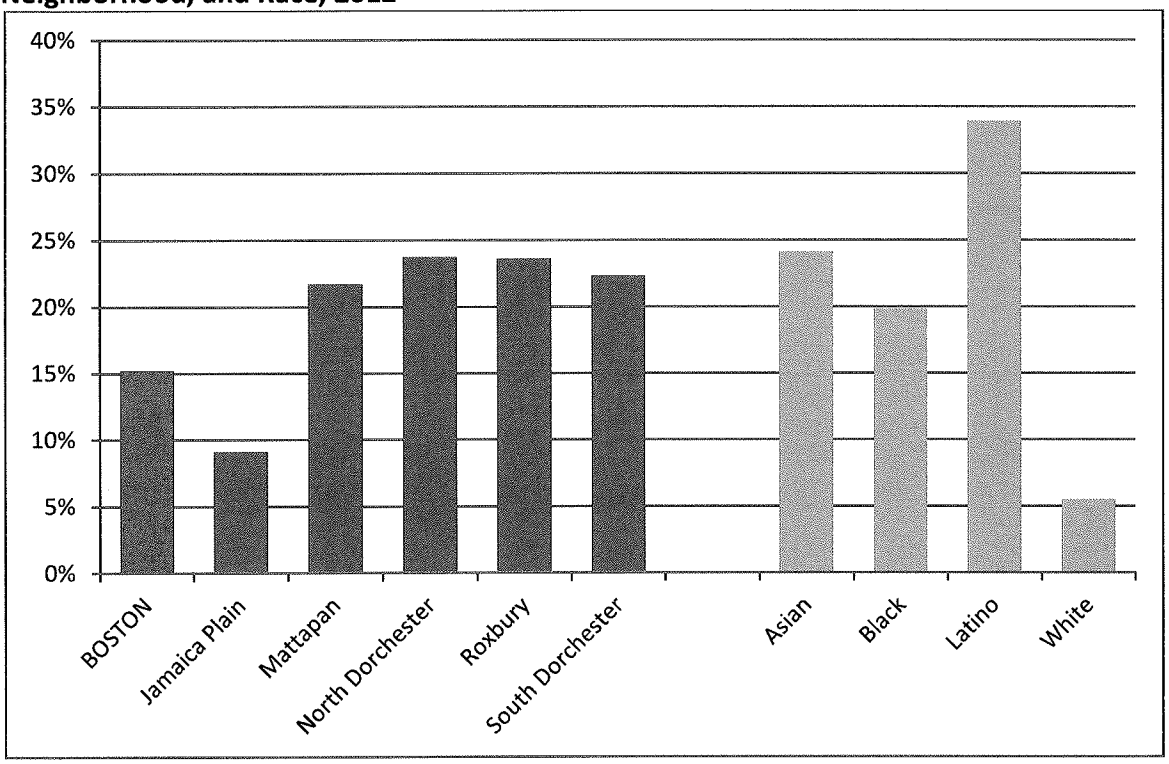
As previously noted, at the foundation of this report is an understanding of social determinants of health and the ways in which important contextual factors, including social, economic, and physical environments, have a significant impact on the health and well-being of individuals and communities. This section presents the findings on various social determinants of health that emerged strongly through the quantitative and qualitative data. These determinants include education, employment, economic stability, housing, transportation, community cohesion, and youth and youth development.

Education

Quantitative data demonstrate some variation in educational attainment across the priority neighborhoods and substantial variation by race (Figure 7). Nearly one-quarter of adults (18 years of age or older) in North Dorchester (23.7%), Roxbury (23.6%), South Dorchester (22.3%), and Mattapan (21.7%) had less than a high school diploma compared to 15.2% citywide. Jamaica Plain had the lowest percentage of adults with less than a high school diploma (9.1%).

The data also show that the percentage of residents in Boston with less than a high school diploma or GED is highly differentiated by race. Specifically, 33.9% of Hispanic/Latino adults, 24.1% of Asian adults and 19.8% of Black adults are without this qualification compared to 5.5% of White Boston residents.

Figure 7: Percentage of Adults (18+) with Less than a High School Diploma by City, Priority Neighborhood, and Race, 2012



DATA SOURCE: BPHC's *Health of Boston* Report 2014-2015

The Federal Reserve Bank of Boston's *The Color of Wealth in Boston* (2015) report analyzes educational attainment by specific racial and ethnic groups in the Boston Metropolitan Statistical Area. This report indicates that Puerto Ricans and Dominicans were the least likely to have a bachelor's degree or higher (17% and 11% respectively); these percentages are far less than that of White residents (55%) and other nonwhite groups.[3]

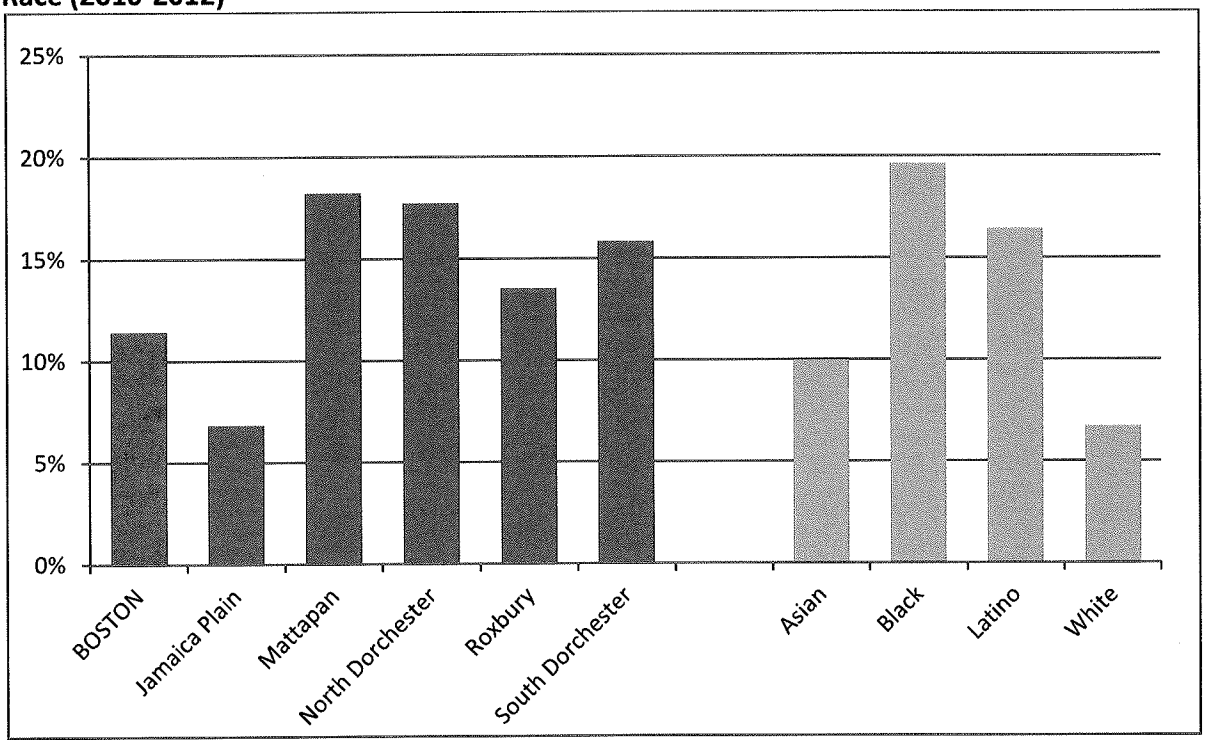
Employment

Quantitative data show disproportionate unemployment rates among some population groups. The unemployment rate for Boston residents 16 years of age or older decreased from 4.9% in December 2014 to 4.4% as of March 2016.

[3] *The Color of Wealth in Boston* report targets the following nonwhite groups: multigenerational African Americans/U.S. Blacks; Caribbean Blacks; Cape Verdeans; Puerto Ricans; and Dominicans.

For the combined years of 2010 through 2012, the unemployment rate was highest among Black (19.6%) and Hispanic/Latino (16.4%) residents; these percentages were more than double the unemployment rate of White residents (6.7%). There were variations in the unemployment rate among BWH's priority neighborhoods. For the combined years of 2008 through 2012, residents of Mattapan (18.2%), North Dorchester (17.7%), South Dorchester (15.8%), and Roxbury (13.5%) were all more likely to be unemployed compared to residents citywide (10.3%)[4] and of Jamaica Plain (6.8%). (Figure 8)

Figure 8: Unemployment Rate by City (2010-2012), Priority Neighborhood (2008-2012) and Race (2010-2012)



DATA SOURCE: BPHC's *Health of Boston* Report 2014-2015

Economic Stability

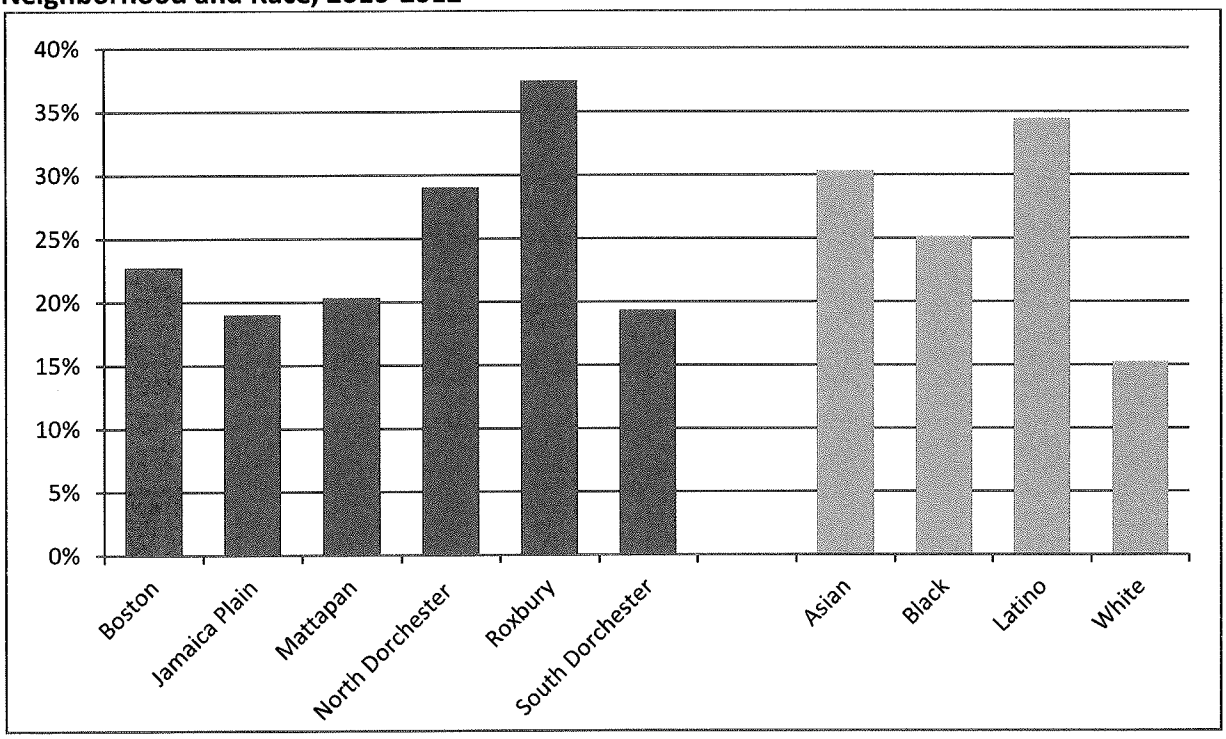
Economic data demonstrate considerable proportions of neighborhood residents living in poverty and substantial income inequities by race and ethnicity. For the combined years of 2008 through 2012, the median household income in Boston was $51,452. Yet, the median income for Hispanic/Latino households ($27,461) was less than half of the median income for White households ($70,644). The median income for Asian households ($36,419) and Black households ($37,385) was also considerably less than that of White households.

[4] This citywide unemployment rate is based off data from the U.S. Census Bureau's American Community Survey, 2008-2012. Please note: the U.S. Census Bureau utilizes a different methodology for calculating unemployment rates compared to the Bureau of Labor Statistics.

Furthermore, in the Boston Metropolitan Statistical Area[5], Dominicans and Puerto Ricans have the lowest median family income ($37,000 and $25,000 respectively); this is substantially lower compared to the median family income of White residents ($90,000). Differences in median household income by priority neighborhood were evident as well. Households in Roxbury ($27,051 for ZIP Code 02119 and $32,367 for 02120) and North Dorchester ($30,419 for ZIP Code 02121 and $30,823 for 02215) had the lowest median household incomes, followed by Mattapan, South Dorchester ($48,329 for ZIP Code 02122 and $51,798 for 02124) and Jamaica Plain ($74,198).

Additionally, poverty rates vary by race and by priority neighborhood (Figure 9). Hispanic/ Latino families (34.4%) and Asian families (30.3%) were more likely to live below the Federal Poverty Level (FPL) than families citywide (23.0%). Comparing BWH's priority neighborhoods, the greatest percentage of families living in poverty were residents of Roxbury (37.4%) and North Dorchester (29.0%).

Figure 9: Percentage of Families Living Below the Federal Poverty Level by City, Priority Neighborhood and Race, 2010-2012



DATA SOURCE: BPHC's *Health of Boston* Report 2014-2015

According to the National Asset Scorecard for Communities of Color (NASCC), White households were more likely to hold every type of asset (i.e. savings and checking accounts, money market funds, government bonds, stocks, retirement accounts, business equity, life insurance, houses,

[5] *The Color of Wealth in Boston* report provides an analysis of data for the Boston Metropolitan Statistical Area, which includes counties outside of the City of Boston and Suffolk County.

vehicles and other real estate) in comparison to the other racial and ethnic group in the Boston Metropolitan Statistical Area. In general, Puerto Ricans and Dominicans were the most asset poor. Additionally, Whites had a substantially higher total median wealth ($247,500) compared to nonwhite groups; Dominicans and U.S. Blacks had the lowest net worth at a median wealth of close to zero. Overall, these data highlight the severe financial vulnerability faced by nonwhite households in the Boston Metropolitan Statistical Area.

Poverty and income inequality were strong themes that emerged across key informant stakeholder interviews. Stakeholders specifically discussed the implications of poverty on the ongoing health and wellness of BWH's priority communities. Interviewees mentioned the growing gap between rich and poor communities in Boston, unemployment, the impact of gentrification, and the slow economic recovery in Boston's poorest communities. Stakeholders noted that these structural issues frequently take precedent over health concerns for many residents. Moreover, members of one of the health center community advisory boards discussed the impact of parents working multiple jobs in order to support their families, specifically to pay for rising housing and food costs. Members noted that this economic pressure results in children and youth being left at home alone or *"out on the streets."*

Housing

Concerns regarding housing were voiced in the key informant interviews and community meetings. Key informant stakeholders highlighted issues surrounding the skyrocketing housing costs and unstable housing situations for many of Boston's low-income residents. Interviewees also spoke to, what they believe are, historic levels of displacement and instability. Finally, stakeholders expressed concern regarding the poor quality of low-income housing in Boston, and named the high rates of childhood asthma and unintentional injuries among seniors as some of the health problems that residents face living in low-income housing.

> *"We are seeing more [housing] instability than we have ever seen, especially in our early childhood programs. When your housing is unstable, everything else becomes unstable – your connections to schools, your healthcare, everything."*
> -- Key Informant Stakeholder

Additionally, community residents spoke strongly of their concern regarding a lack of affordable housing in their neighborhoods and the stress that high housing costs can impose on a community. In reference to the challenge seniors' face paying for rising housing costs, one resident stated, *"Do I get a reverse mortgage, or do I move out of this community?"* Advisory board members of the community health centers echoed these concerns and also discussed the impact of gentrification on their community. These sentiments were raised in the BWH *What Matters for Health* process as well. Participants reported that increasing the availability of affordable housing would improve the health of neighborhoods and the City of Boston overall.

The cost of housing is a particular concern for renters. A greater percentage of Boston residents rent (66.0%) than own homes (34.0%). While this is consistent across Boston, percentages vary by neighborhood. Among the priority neighborhoods, Roxbury has the highest

percentage of residences that are renter-occupied (84.0%), while Jamaica Plain has the highest percentage of residences that are owner-occupied (46.0%).

Transportation

Participants of community meetings, health center community advisory board discussions, and the Students Success Jobs Program (SSJP) student forum underscored the need to improve transportation systems across BWH's priority neighborhoods. Residents specifically cited insufficient and unreliable modes of transportation, which can impact community members' ability to travel to healthcare appointments and access health care. Participants noted that elderly residents have a particularly difficult time accessing transportation services. Participants mentioned that for elderly community members interested in accessing services in the community, there are limited transportation options to access these services. SSJP students also voiced concerns regarding transportation access and stated that some communities feel very isolated.

There are several direct negative impacts of poor public transportation, including: missed primary care appointments and decreased pharmacy access; increased stress due to long commutes and unreliable service; increased chronic hospitalizations and ER visits if primary care is delayed; decreased levels of physical activity; increased air pollution; among other impacts. In 2015, the Southern Jamaica Plain Health Center, in collaboration with community partners Alternatives for Community and Environment (ACE) and the Center for Community Health Education Research and Service (CCHERS), surveyed approximately 1,000 patients at 11 community health centers in Boston on their transportation and healthcare access. Key findings from this survey include:

- Nearly half of respondents (49.0%) indicated that they have missed an appointment in the last year due to issues with transportation
- More than half of respondents (51.7%) reported that they rely on the Massachusetts Bay Transportation Authority (MBTA) to access healthcare services
- Nearly half of respondents (47.8%) indicated that they typically get to healthcare appointments by bus, which was the most common method of transportation among respondents
- Non-White patients reported higher percentages of public transit use (by bus and/or train) for travel to healthcare appointments in comparison to White respondents
- Respondents 65 years of age and older were the most likely to report using MBTA bus service as their mode of transportation to healthcare appointments
- When looking at race/ethnicity and age group, Hispanic/Latino respondents and respondents 65 years of age and older were the most likely to travel more than 30 minutes for their healthcare appointments; and
- Non-White respondents were more likely to miss or be late for healthcare appointments due to 'out of service' or 'overcrowded' buses compared to White respondents.

In addition, at the community meeting in Jamaica Plain, the unreliability of service with subsidized transportation for those with a disability was an issue of notable concern.

Community Cohesion

Community meeting participants voiced their concern regarding a lack of community cohesion in their neighborhoods. Many cited this to be a change in recent years and felt it connected to other issues that impacted community connections, including fears associated with community violence as well as having limited time and opportunity for neighborhood engagement (often due to working multiple jobs to get by). Specific concerns regarding community cohesion included:

- A lack of trust and neighborliness among community members; one resident stated that neighbors are *"not looking out for each other"*;
- A mixed level of engagement among community members as well as a mixed level of investment in community improvement efforts (i.e., some community residents are very engaged and others are not at all engaged); and
- The disruption of the family unit, which some feel has been the root cause of many of the social problems in their community.

> *"It is difficult to get people to do things in the community together."*
> -- Community meeting participant

At the health center community advisory board meetings, participants discussed the need to build community capacity and foster opportunities for community members to connect with one another. Community participants in the BWH *What Matters for Health* process similarly expressed a desire for activities that strengthen social relationships within and across neighborhoods and suggested that these activities would promote community health and well-being. As community cohesion has a positive 'protective' effect on health and well-being, this is an important area of consideration.

Youth and Youth Development

Key informant stakeholders and community meeting participants discussed the need for a greater investment in and engagement around youth development. Key stakeholders identified the importance of early exposure to career options and opportunities for youth as well as the need to engage parents and caregivers in non-traditional ways (e.g., gardening, cooking classes, and embedding those with community health expertise into these activities). Interviewees also recommended that efforts to support young people, particularly young people of color living in low-income communities, need to be holistic, engaging, and begin at an early age.

> *"There are parks and playgrounds, but no one goes to them because there is a lot of trash."*
> -- SSJP High School Student

Community meeting participants and community advisory board members highlighted the need for more youth programs and physical spaces for youth to gather in BWH's priority communities. Participants suggested implementing additional after-school and employment-based programming for youth and

> *"Youth need to come out and be involved"*
> -- Community meeting participant

other supports for young adults between the ages of 18 and 24 was very important. There was also conversation around a need for both inside and outside spaces for youth programming and encouraging physical activity. Student Success Job Program (SSJP) students voiced similar concerns regarding the limited availability of and access to activities for youth and younger children. Students stated that trash and inadequate lighting in outdoor "play" areas is a problem as well.

Youth and workforce development was a key community health issue identified through the BWH *What Matters for Health* process. Participants made connections between youth engagement and active participation in the workforce as adults. Participants also emphasized the need to keep youth engaged in their neighborhoods and communities as well as provide high quality education and social supports to youth.

INTERPERSONAL VIOLENCE AND TRAUMA

The presence of interpersonal violence and trauma throughout BWH's priority communities was a strong theme across both the quantitative and qualitative data. These data demonstrate that violence disproportionately affects communities of color.

Black and Hispanic/Latino residents were more affected by certain types of violence compared to White residents. In 2012, the Boston nonfatal assault-related gunshot/stabbing emergency department visit rate was 0.8 per 1,000 residents. This rate was higher for Black (2.3) and Hispanic/Latino (0.7) residents compared to White residents (0.3). The Boston homicide rate in 2012 was 6.6 per 100,000 residents. The homicide rate for Black residents was 19.9 and 7.7 for Hispanic/Latino residents, both of which were significantly higher than the rate for White residents (2.0).

Additionally, more than one-quarter of Boston children (0-17) lived in households where their parent or caregiver felt that her or his child was unsafe in their neighborhood (26%). Asian, Black and Hispanic/Latino children were more likely to live in households where their parent or caregiver felt her/his neighborhood was unsafe compared to White children. The 2013 Youth Risk Behavior Survey results show 17.0% of Boston public high school students indicated that they have been bullied at school or electronically in the past 12 months. Asian high school students were the most likely to identify being bullied on school property (15.6%) and White students were the most likely to identify being bullied electronically (13.1%).

Concerns surrounding violence and trauma were emphasized across the key informant interviews and community meetings. Key informants vocalized concerns regarding the pervasiveness of interpersonal violence and the impacts such violence can have on a community. Stakeholders specifically raised concerns about the impact of violence on youth development and on long-term health outcomes in adults. Women and the transgender community were specifically mentioned as groups disproportionately affected by

> *"More likely to know someone who has been murdered than someone who has cancer"*
> -- Community meeting participant

interpersonal violence. Interviewees mentioned a lack of cohesive linkages between service sectors addressing interpersonal violence and the need to reinforce messages and provide supports as early as possible after violence exposure.

Stakeholders interviewed highlighted concerns regarding community violence in BWH's priority communities. Stakeholders reiterated that communities of color and individuals living in poverty are disproportionately affected by community violence. They noted that investment in quality education, meaningful employment opportunities for young people, and community-building activities are important prevention strategies.

Participants in all of the five community meetings spoke to the impact of different types of violence on the fabric of their neighborhoods. Residents specifically mentioned:

- The presence of high-level violence and trauma impacting both adults and children in their communities, including domestic violence, child abuse and neglect, and community violence
- The intergenerational impact of collective trauma and the effects of such trauma on mental health
- The connection between crime and violence specifically among young adults between the ages of 18 and 24; and
- The lack of a comprehensive and/or holistic response to community violence.

> *"Brigham and Women's Hospital has been doing a great job of screening people for domestic violence. What happens once people are identified is the next phase of work. Efforts need to be made to strengthen relationships and linkages to quality community-based programs that can accept a referral from the hospital and then provide wrap around supports for that individual or family."*
> -- Key Informant Stakeholder

Health center community advisory board members shared concerns regarding trauma and violence in their communities. Participants indicated that there are insufficient resources and services to address the trauma experienced by community members and that trauma is not being addressed in a holistic manner. Board members also spoke to violence, specifically gang violence, present in their neighborhoods and general concerns about community safety.

> *"People know it isn't safe, but at the same time, what can you really do about it?"*
> -- SSJP High School Student

SSJP students discussed the presence of violence in their communities; specifically gang violence, street violence and drug use that contribute to feelings of a lack of safety.

In the BWH *What Matters for Health* process, participants identified violence prevention and intervention as a key community health issue. Many participants commented on the need to address violence within their communities and in the City of Boston; gun violence was specifically mentioned in this context. Respondents indicated the need for both individual and community-based services to deal with crisis and tragedy in their communities. Participants reported that improving public safety and preventing violence in all communities is essential to enhancing community health and the health of residents citywide. Relevant data findings include:

- Among residents of priority neighborhoods, one-third (33.0%) of participants indicated that having one-on-one counseling offered on a drop-in basis for those who experience or are affected by trauma or violence in their neighborhoods would be helpful.
- One-fifth (20.0%) of participants indicated that programs and services that support or facilitate community activism around violence prevention would be helpful in their neighborhoods.

It is important to note that health and social services are increasingly recognizing the value of and need for trauma informed care and planning for the provision of care that is trauma informed. BWH participates in a working group of providers within the Partners HealthCare system that is working on this issue and seeking to develop coordinated system response.

BEHAVIORAL HEALTH

Behavioral health needs, including mental health and substance abuse disorders, remain primary concerns for BWH's priority communities as evidenced by both quantitative and qualitative data collected.

> *"Behavioral health is so poorly taken care of on the healthcare side"*
> -- Community Meeting Participant

Mental Health

Quantitative data demonstrate the presence of symptoms of depression and anxiety among adults and youth in Boston. More than one in ten (12.2%) adults and three in ten (30.1%) public high school students in Boston reported persistent sadness (feeling sad, blue, or depressed 15 or more of the past 30 days). Female high school students (37.0%) were more likely to experience persistent sadness compared to male students (23.1%). For adults, this percentage did not vary substantially across BWH's priority neighborhoods, however, was highest among residents of North Dorchester (16.5%) and South Dorchester (14.5%). Also, Hispanic/Latino adults were more likely to self-report experiencing persistent sadness (16.7%) compared to White adults (10.8%).

One-fifth of Boston adults reported feeling tense or anxious more than 15 days within the past 30 days (20.2%). Residents of Roxbury were the most likely to self-report feeling tense or anxious (29.1%). White adults had the highest percentage of self-reported persistent anxiety in 2013 (23.1%). Additionally, citywide, the average annual suicide rate from 2009 to 2013 was 6.7 per 100,000 population.[6] This rate was higher in North Dorchester (8.7) and in South Dorchester (7.7).

In 2012, the rate of mental health hospitalizations per 1,000 residents was 8.2. White residents had the highest rates of mental health hospitalizations compared to Asian, Black, and Hispanic/Latino residents.[7] Additionally, among BWH's priority neighborhoods, Roxbury (10.1) and South Dorchester (9.9) had the highest mental health hospitalization rates.

[6] This rate is per 100,000 of the population. Average annual age-adjusted rates shown.
[7] Age-adjusted rates shown.

Participants across the key informant interviews and community meetings highlighted mental health as an ongoing issue that requires increased attention. Key informant stakeholders cited the following concerns related to mental health:

- Depression, anxiety, and trauma
- The need for greater access to mental health services
- A lack of awareness of symptoms of distress
- Stigma associated with mental health challenges
- Limited access to culturally appropriate resources
- Over-reliance on "quick fixes," such as medication; and
- The need for innovative approaches to supporting positive mental health.

Community meeting participants expressed similar concerns regarding the mental health of residents within their neighborhoods and the lack of access to mental health services. These concerns came up in four of the five community meetings. Community residents spoke to the following issues related to mental health:

- Trauma, isolation, persistent sadness and depression; unemployment and joblessness, hopelessness, and the challenges of immigration integration (or lack thereof) as contributing factors
- The link between untreated mental health issues and substance abuse, as well as the impact of these factors on community violence
- The insufficient accessibility and high cost of mental health services;
- The ongoing stigma associated with mental illness; and
- The historical neglect of communities of color by local government, which has contributed to community isolation and feelings of powerlessness.

Concerns surrounding mental health were also raised at one of the two meetings with community health center advisory board members. Participants mentioned that the need for mental health services does not line up with the capacity of existing services. They noted that Spanish speaking mental health providers are hard to find.

Furthermore, mental health was identified as one of the key community health issues by participants of the BWH *What Matters for Health* process. Managing stress and anxiety were two of the most commonly noted areas that people struggle with in their lives. Participants indicated that stress is often the result of the difficulty of balancing work, family life and personal time and managing personal responsibilities. Healthy aging and experiencing tragic events also came up in the context of mental health. The main themes of these community health issues focused on the need to build strong support networks at the individual and neighborhood levels.

Substance Use

The following types of substance abuse are addressed in this section: binge drinking, cigarette smoking, marijuana use, other drug use, unintentional overdoses, substance abuse treatment,

substance abuse hospital patient encounters, and deaths due to substance use disorders (SUDs).

One-quarter of Boston adults reported binge drinking[8] in 2013 (25.4%). This percentage did not vary much across BWH priority neighborhood. White adults were the most likely to report binge drinking (33.1%) by race and ethnicity. Among Boston public high school students, 14.9% reported binge drinking. White and Hispanic/Latino students reported higher rates of binge drinking (21.5% and 19.2% respectively).

In 2013, smoking rates were higher among North Dorchester residents (24.9%), Roxbury residents (22.5%), and South Dorchester residents (20.9%) than Boston residents overall (18.7%). Also, White public high school students were the most likely to have smoked cigarettes in the past 30 days (22.9% compared to 9.0% in Boston).[9] Approximately one-quarter of Boston public high school students reported using marijuana in the past 30 days in 2013 (25.6%); this number has been increasing since 2005. More than four in ten high school students reported having used marijuana at some point during their lifetime (41.9%). After marijuana, in 2013, Boston public high school students reported prescription drugs (e.g. Vicodin and OxyContin) (used without a prescription or not as prescribed) (7.8%) and ecstasy (MDMA) (4.6%) as the next most commonly tried drugs.

In 2013, the unique-person substance abuse treatment admission rates[10] were substantially lower for Asian, Black and Hispanic/Latino residents compared to White residents. The unique-person treatment admission rates (for substances identified as primary, secondary, or tertiary drugs of abuse) were highest for alcohol followed by heroin and cocaine. The unique-person admission rates for alcohol, cocaine and marijuana were notably higher for Black residents compared to White residents. White residents had the highest unique-person admission rates for heroin and prescription drugs. Hispanic/Latino residents also had a significantly higher admission rates for marijuana in comparison to White residents. Examining unique-person substance abuse treatment admissions by geography, it is evident that Roxbury and South Dorchester had the highest rates for all five types of substances listed on Table 4. It should be noted that we do not have an illustration of trends over time, but just the single year of 2014.

[8] Binge drinking is defined as a pattern of alcohol consumption that brings the blood alcohol concentration level to 0.08% or more. It usually corresponds to 5 or more drinks for men and 4 or more drinks for women on a single occasion, generally within 2 hours.

[9] These percentages reflect combined data from 2011 and 2013.

[10] These rates reflect the number of unduplicated persons (12 years of age or older) being admitted to treatment for substance abuse per 1,000 residents per year. These rates are age-adjusted as well.

Table 4: Unique-Person Treatment Admissions per 1,000 Residents 12+ by Drug*, City and Neighborhood, 2014

Geography	Alcohol	Heroin	Cocaine	Prescription Drugs	Marijuana
Boston	8.6	7.2	4.8	3.2	2.8
Jamaica Plain	7.8	6.3	4.4	2.7	2.4
Mattapan	7.0	4.2	3.2	1.2	3.1
North Dorchester	8.3	6.7	5.1	2.8	2.9
Roxbury	14.2	14.0	9.9	4.1	5.8
South Dorchester	13.2	13.4	9.2	5.6	6.4

*Self-identified as primary, secondary, or tertiary drug of abuse
NOTE: Age-adjusted rates per 1,000 population ages 12+ shown
DATA SOURCE: Bureau of Substance Abuse Services, Massachusetts Department of Public Health
DATA ANALYSIS: Boston Public Health Commission Research and Evaluation Office

Hospital patient encounter rates due to unintentional overdose/poisoning among Boston residents increased for opioids (including heroin) and for benzodiazepines from 2007 to 2012. These rates were highest among White residents. Table 5 demonstrates that Roxbury had the highest rates of substance abuse hospital patient encounters (for both alcohol and drug abuse) of residents 12 years of age and older.

Table 5: Substance Abuse Hospital Patient Encounters* per 1,000 Residents 12+ by Type, City and Neighborhood, 2013

Geography	Overall	Alcohol	Drug
Boston	24.4	17.7	6.8
Jamaica Plain	17.3	13.8	3.5
Mattapan	15.3	9.9	5.3
North Dorchester	19.9	13.4	6.5
Roxbury	34.9	22.6	12.2
South Dorchester	24.4	16.1	8.3

*Includes ED visits, observational stays and inpatient hospitalizations
NOTE: Age-adjusted rates per 1,000 population ages 12+ shown
DATA SOURCE: Bureau of Substance Abuse Services, Massachusetts Department of Public Health
DATA ANALYSIS: Boston Public Health Commission Research and Evaluation Office

Looking at emergency department (ED) data specific to BWH, there were 260 ED visits with a primary diagnosis of mental health or SUDs among individuals with a Boston ZIP Code in FY2014. Of all ED visits for Boston residents, 5.8% received a primary diagnosis of mental health or SUDs in FY2014. Of this 5.8%, 3.2% of ED visits received a primary diagnosis of SUDs (n=144). Among ED visits with SUDs diagnoses, approximately 85% of diagnoses were described as alcohol-related (n=122).

South Dorchester, Mattapan and Roxbury had the highest rates of substance deaths due to drugs of BWH's priority neighborhoods and South Dorchester, Roxbury and North Dorchester had the highest rates due to alcohol. For unintentional drug overdose deaths, South Dorchester and Mattapan had the highest rates of BWH's priority neighborhoods for all drugs and South Dorchester had the highest rate of opioid overdoses. (Table 6)

Table 6: SUD Related Deaths of Residents Ages 12+ per 100,000 Population by City and Neighborhood

Geography	Substance Abuse Deaths		Unintentional Drug Overdose Deaths		
	Drugs	*Alcohol*	*All Drugs*	*Opioids*	*Cocaine*
Boston	19.1	8.8	15.5	12.6	5.4
Jamaica Plain	18.0	6.2	15.0	11.6	3.7
Mattapan	23.6	2.5	18.8	13.5	6.8
North Dorchester	16.7	10.1	13.9	9.6	7.7
Roxbury	21.4	10.3	15.9	10.5	7.3
South Dorchester	24.0	12.6	19.2	17.6	5.4

NOTE: Average annual age-adjusted rates shown with 2009, 2010, 2011, 2012, 2013 data combined
DATA SOURCE: Boston Resident Deaths, Massachusetts Department of Public Health
DATA ANALYSIS: Boston Public Health Commission Research and Evaluation Office

Key stakeholders indicated that substance abuse and access to treatment are major issues for residents of BWH's priority neighborhoods. Interviewees acknowledged the strong link between substance use disorders and housing instability, homelessness, unemployment, and interpersonal and community violence. Stakeholders identified the following specific concerns:

- Widespread opioid use and the need for BWH to increase its current efforts to address the opioid epidemic
- The lack of immediately available detox beds; and
- The lack of communication between clinical and community-based support services.

In addition, community meeting participants in three of the community meetings spoke strongly of their concerns and impact of substance abuse in their neighborhoods. Meeting participants cited the following:

- The abuse of alcohol and drugs and the prevalence of cigarette smoking
- The link between substance abuse and untreated mental health issues
- The connection between drug activity and homelessness; and
- The need for affordable and accessible services (e.g., outreach and treatment programs).

> *"Substance use affects the whole family"*
> -- Community meeting participant

Concerns regarding substance abuse arose as strong themes across the meetings with health center community advisory board members as well. Participants discussed the need to educate

community members on the effects of drug and alcohol use as well as the need for culturally and linguistically appropriate treatment services. In addition, Student Success Jobs Program (SSJP) students mentioned that there are liquor stores on every corner and that alcohol is widely available.

HEALTH EQUITY

This assessment applies a health equity lens and examines not only who is at greater risk for disease, but also why some populations are at greater risk of preventable illness, injury and death compared to others. According to the Democracy Collaborative's *Can Hospitals Heal America's Communities*? (December 2015), health equity is the opportunity for everyone to achieve their full health potential through an environment where there is not disadvantage associated with social position (e.g. socioeconomic status) or socially assigned circumstances (e.g. race, gender, ethnicity, sexual orientation, geography, etc).

Findings from this assessment illustrate that health inequities persist across BWH's priority neighborhoods and specifically impact communities of color. Boston's Black and Hispanic/ Latino residents experience higher levels of poor health outcomes when compared to White residents. This section discusses the many areas in which we see troubling and ongoing inequities in health, particularly for communities of color. These topic areas include the impact of racism; obesity, active living and healthy eating; chronic disease; reproductive and maternal health; and sexual health.

Impact of Racism

Recent work of the American Public Health Association (APHA) (2016) identifies that racism fundamentally impacts social determinants of health (e.g., housing, education and employment) and stands as a major barrier to health equity. Structural and institutional racism and other exclusionary practices are significant contributors to social inequities among particular racial/ethnic groups. Black and Hispanic/Latino adults reported a substantially higher likelihood of experiencing a form of stress as a result of their race in comparison to White residents. Specifically, Black and Hispanic/Latino residents were more likely to:

- Feel emotionally upset by perceived race-related treatment once or more per day (19.3% of Black residents and 16.1% of Hispanic/Latino residents compared to 7.6% of White residents);
- Experience physical symptoms based on perceived race-related treatment once or more per day (12.5% of Black residents and 11.6% of Hispanic/Latino residents compared to 2.7% of White residents); and
- Perceive they were treated worse than other races when seeking healthcare (11.1% of Black residents and 6.8% of Hispanic/Latino residents compared to 2.5% of White residents).

Inequity in health, namely by race/ethnicity, was a reoccurring theme across the key informant stakeholder conversations. Stakeholders spoke to the troubling inequities and disparities in

health outcomes experienced by communities of color in Boston. One stakeholder specifically discussed the institutionalized racism and segregation present citywide, which has had a particularly harmful effect on BWH's priority communities. Interviewees mentioned inequities in income, housing, neighborhood infrastructure, employment opportunities, food access, feelings of belonging in one's neighborhood, among others, which are concentrated in communities of color and impact the overall health and well-being of individuals.

Moreover, racial equity was identified as one of the key community health issues in the BWH *What Matters for Health* Initiative. Nearly three-quarters (73%) of respondents to the question on equity indicated that they do not believe the City of Boston is a racially equitable place to live. These perceptions did not vary based on neighborhood affiliation, racial/ethnic characteristics, or other demographic information.

Obesity, Active Living, and Healthy Eating

This section examines the quantitative and qualitative data pertaining to obesity, physical activity, fruit and vegetable consumption, and soda consumption. These data demonstrate that residents of color are more likely to be obese, less likely to be physically active, less likely to consume fruits and vegetables, and more likely to drink soda. These behaviors, as demonstrated by Figure 2, have an important impact on overall health and well-being and are strongly linked to the social and economic context in which people live. In neighborhoods where people are fearful to exercise outside because of community violence or access to healthy, affordable food is limited, the 'health promoting' opportunities available are greatly diminished. In health promotion parlance, the 'healthy choice' is not by any means the 'easy choice.'

In 2013, 21.7% of Boston adults (18+) were obese. Obesity rates are disproportionately higher in BWH's priority communities, Mattapan, Roxbury, North Dorchester, and South Dorchester. Black and Hispanic/Latino adults were more likely to be obese compared to White adults. Among public high school students in Boston, 13.8% were considered obese in 2013. Obesity rates are highest among Hispanic/Latino high school students. (Figure 10) One internal key informant discussed the concern of obesity among pregnant women and children in particular. Obesity was also raised as a concern by residents in one of the community meetings and among SSJP students.

Center for Disease Control (CDC) recommends 150 minutes of aerobic physical activity a week. Nearly six in ten Boston residents met these guidelines in 2013 (57.5%). Residents of Mattapan (49.5%), North Dorchester (54.0%), and South Dorchester (54.5%) were less likely to have met the CDC's guidelines for physical activity. Hispanic/Latino and Black adults were less likely to have met these guidelines (46.9% and 53.4% respectively) compared to White residents (62.3%). Health center community advisory board members and community meeting participants stressed the need for additional spaces for community members to engage in physical activity. Furthermore, getting regular exercise was one of the most commonly identified personal health priorities by participants of the BWH *What Matters for Health*

process. Participants recommended expanding opportunities that promote physical activity to improve the health and well-being of neighborhoods.

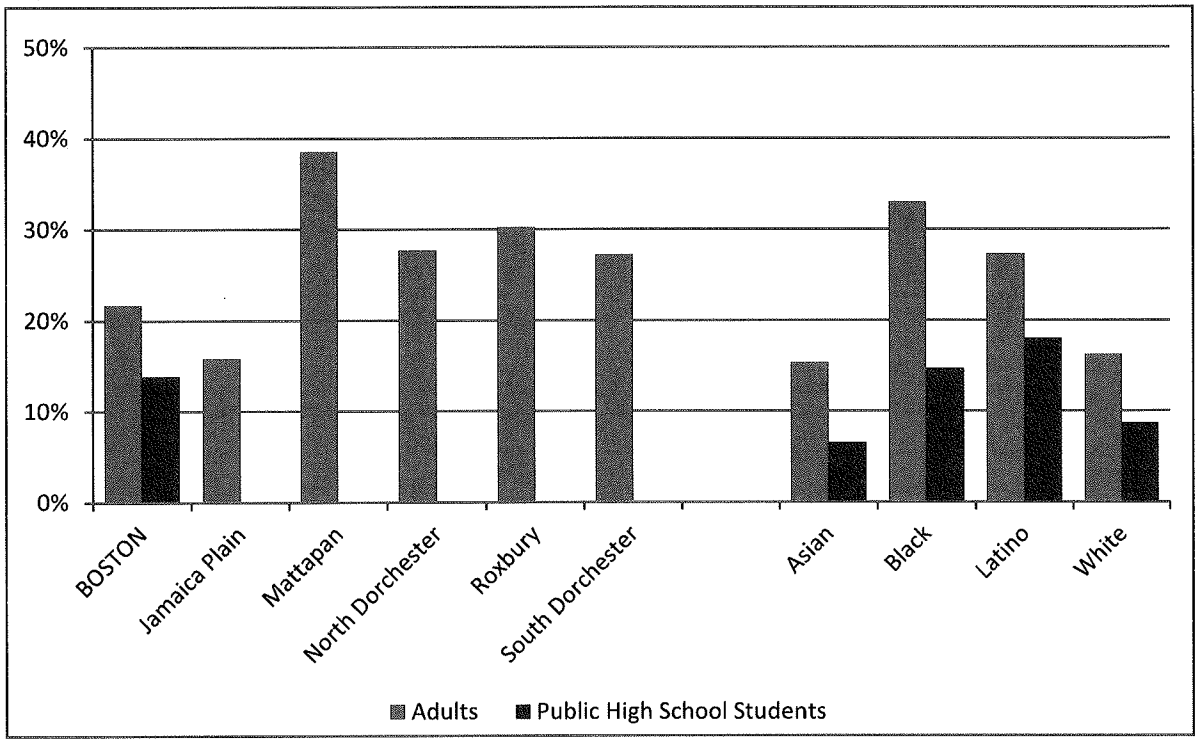


Figure 10. Percentage of Adults and Public High School Students who are Obese by City, Neighborhood and Race, 2013
NOTE: Data by neighborhood is unavailable for high school students.
DATA SOURCE: BPHC's *Health of Boston* Report 2014-2015 and population health data obtained from BPHC.

One-quarter of Boston adults consumed less than one serving of vegetables per day (24.8%) in 2013 and 37.5% consumed less than one serving of fruits per day. These percentages were higher among four of five BWH priority neighborhoods—North Dorchester, South Dorchester, Roxbury and Mattapan. Black residents were more likely to have consumed less than one serving of vegetables per day (34.0%) and Hispanic/Latino, Black and Asian residents were more likely to have consumed less than one serving of fruits per day (42.9%, 42.0%, and 41.5% respectively).

Participants from two of the five community meetings communicated that residents are interested in eating healthier foods, but there is an ongoing need for nutrition education in their communities. Residents from one community specifically indicated a need for education around how to read and understand food labels. SSJP high school students pointed out that there are corner stores at every block, but few grocery stores. According to *County Health Rankings & Roadmaps*, corner stores generally sell unhealthy and non-perishable food items. SSJP students also noted that healthy foods are often more expensive than unhealthy foods. Participants of the BWH *What Matters for Health* process also identified eating healthy as a top

personal health priority and indicated that neighborhoods would be healthier with increased access to healthy and affordable food.

Approximately 13% of Boston adults consumed one or more sodas per day in 2013 (12.7%). This percentage is higher among Hispanic/Latino (20.6%) and Black (16.8%) residents. In addition, 16.8% of Boston public high school students consumed one or more sodas per day. Hispanic/Latino high school students were the most likely to consume at least one soda daily (20.3%). The consumption of soda and other sugar-sweetened beverages is the largest source of empty calories for children and youth in the United States. Many leading health organizations (e.g. the Centers for Disease Control and Prevention, the American Academy of Pediatrics) have recommended reduced consumption of these beverages for health-related reasons and due to their tie to obesity.

Chronic Disease and Mortality

The following section provides an overview of quantitative and qualitative data on several chronic diseases, including heart disease, cancer, diabetes, asthma, hypertension, as well as stroke. Similar to the health behaviors discussed above, the data presented indicate that communities of color are disproportionately impacted by chronic disease.

Concerns regarding chronic diseases were evident across the qualitative data. Internal key informant interviews specifically highlighted diabetes, asthma and high blood pressure as areas of particular concern. An interviewee spoke to missed opportunities to prevent chronic diseases early on, which results in uncontrolled conditions and complications later on in life. Numerous interviewees suggested that BWH needs to take the responsibility for the coordination of care for patients with chronic health issues who are coming in and out of BWH's emergency department; this involves linking them to a primary care provider. In the BWH *What Matters for Health* process, nearly 30% of participants reported that more education on health and prevention would be helpful to reduce chronic diseases. Participants also focused on the link between chronic disease and poverty or income inequalities.

The heart disease hospitalization rate for Boston was 9.8 per 1,000 residents in 2012, a decrease from 11.3 per 1,000 in 2008. Black and Hispanic/Latino residents had higher rates hospitalization due to heart disease (13.6 and 9.9 per 1,000 residents respectively) in comparison to White residents (9.0). Among priority neighborhoods, Roxbury and North Dorchester had the highest heart disease hospitalization rates.

> *"Diabetes feels like it just came out of nowhere. It feels normal for people to have it now."*
> -- Community Meeting Participant

Data from the Behavioral Risk Factor Surveillance Survey (BRFSS) show diabetes disproportionately affecting residents in certain neighborhoods. It should be noted that these BRFSS data are in crude rates and are not age-adjusted. In 2013, 8.6% of Boston adults (18+) reported that they had been diagnosed with diabetes. The percentage of Mattapan residents surveyed that reported that they have

diabetes is more than double that of the Boston average (19.1%). Also, 15.1% of Roxbury residents, 12.4% of North Dorchester residents, and 10.0% of South Dorchester residents reported having diabetes. Black and Hispanic/Latino residents were more likely to report having diabetes (14.1% and 12.6% respectively) compared to 5.1% of White residents. Residents at one community meeting shared their concern regarding the prevalence of diabetes in their community.

In 2013, 11.1% of Boston adults (18+) had asthma. This percentage was higher among residents of North Dorchester (17.7%), Jamaica Plain (16.0%), and Roxbury (13.8%). Nearly one-quarter of Boston adults (18+) had hypertension in 2013 (24.0%). This percentage is substantially higher for Black residents (36.7%) and higher for Hispanic/Latino results (26.2%) as well.

Overall, cancer ranked as the City of Boston's most common cause of death, with 176.1 deaths per 100,000 population, followed by heart disease (133.6 deaths per population), and stroke (26.6 per 100,000 population). Among BWH's priority neighborhoods, residents of South Dorchester experience death due to cancer at a higher rate (199.6 deaths per 100,000 population) than residents citywide. In addition, residents of Roxbury (148.3 deaths per 100,000 population) have heart disease mortality rates above that of the City of Boston (133.6 deaths per 100,000 population). Mattapan has the highest mortality rate due to stroke (40.8 deaths per 100,000 population). (Table 7)

Table 7: Rate of the Leading Causes of Death per 100,000 Population by City and Neighborhoods, 2013

Geography	Cancer	Heart Disease	Cerebrovascular Disease (Stroke)
Boston	176.1	133.6	26.6
Jamaica Plain	126.7	133.6	28.3
Mattapan	170.6	131.3	40.8
North Dorchester	147.9	133.2	23.6
Roxbury	170.8	148.3	29.4
South Dorchester	199.6	123.1	29.8

NOTE: Age-adjusted rates shown
DATA SOURCE: Boston Resident Deaths, Massachusetts Department of Public Health
DATA ANALYSIS: Boston Public Health Commission Research and Evaluation Office

While community meeting participants (with the exception of Mattapan) did not generally identify cancer as a key community health issue unprompted, when asked specifically about cancer, some individuals expressed the following concerns:

- Concentrated areas of incidences of cancer in communities, including citing a two-to-three block radius in which many men have died of prostate cancer

- A lack of health literacy and trust as major barriers to regular cancer screening and prevention; and
- Confusion around insurance coverage of specific cancer screenings and the need for more education and support around this issue.

> *"I can't think of one male in my age group [on a particular street] that didn't get cancer"*
> -- Community Meeting Participant
> [Meeting comprised largely of seniors]

Reproductive and Maternal Health

Racial and ethnic disparities exist in mortality and morbidity for mothers and children, particularly among African Americans. This section highlights some of these disparities and specifically discusses infant mortality, low birth weight births, Women, Infant, and Children (WIC) enrollment[11], pre-term births, and births to women ages 15-19.

From 2008 to 2012, there was a significant decrease in the infant mortality citywide and among Black infants. The infant mortality rate for Black infants in 2008 was nearly 15 infant deaths per 1,000 births; this rate decreased to 6.5 in 2012. Despite this decline in the Black infant mortality rate, infant death rates for Black (6.5 per 1,000) and Latino (6.5 per 1,000) infants were still higher than White infants (3.3 per 1,000). In addition, in 2012, 11% of Black women and 9% of Hispanic/Latino women gave birth to low birth weight babies compared to 7% of White women. Data on WIC enrollment demonstrate that Hispanic/Latino (39%) and Black (37%) children ages 0 to 5 have higher WIC enrollment rates than White (11%) and Asian (11%) children.

In 2013, Mattapan, Roxbury, North Dorchester, and South Dorchester had higher rates of pre-term births (before 37 weeks gestation), low birth weight births (less than 2,500 grams), infant mortality, and repeat births to women ages 15 to 19[12] when compared to the rates citywide (Table 8).[13] Looking at births to women aged 15 to 19, Mattapan, North Dorchester, South Dorchester, and Jamaica Plain had the highest rates. The rate of births to women ages 15 to 19 in Mattapan (30.9 per 1,000 women) and North Dorchester (29.6) were nearly triple that of the rate citywide (11.7). Dorchester ranked in the highest quartile of the Poor Birth Outcomes Index[14] and Mattapan ranked in the second highest quartile.

[11] WIC provides supplemental nutritious foods, nutrition education and counseling, and screening and referrals to other services for low-income women and children who are assessed as nutritionally at-risk.
[12] According to the Centers for Disease Control and Prevention (2013), a repeat "teen" birth is the 2nd (or more) pregnancy ending in a live birth before the age of 20.
[13] These rates are the average annualized aggregate rates from 2009 to 2013.
[14] The Poor Birth Outcome Index is based on infant deaths, low birth weight births, and preterm births.

Table 8: Maternal and Child Health Indicators by City and Priority Neighborhood

	Boston	Jamaica Plain	Mattapan	North Dorchester	Roxbury	South Dorchester
Pre-term births (before 37 weeks gestation)*	9.4%	8.3%	11.6%	10.5%	10.5%	10.7%
Low birth weight births (less than 2,500 grams)*	9.0%	7.9%	11.4%	10.7%	10.5%	10.4%
Infant mortality rate**	5.0	1.9	6.5	6.4	5.5	6.5
Birth rate of women ages 15 to 19***	11.7	16.2	30.9	29.6	9.4	21.3
Repeat birth(s) to women ages 15 to 19*	12.0%	7.2%	10.7%	13.3%	11.5%	11.6%

*Average annualized rate (2009-2013)
**Average annualized rate (2009-2013); infant deaths per 1,000 live births
***Births per 1,000 women (2013)
DATA SOURCE: Boston Resident Births, Massachusetts Department of Public Health
DATA ANAYLIS: Boston Public Health Commission Research and Evaluation Office

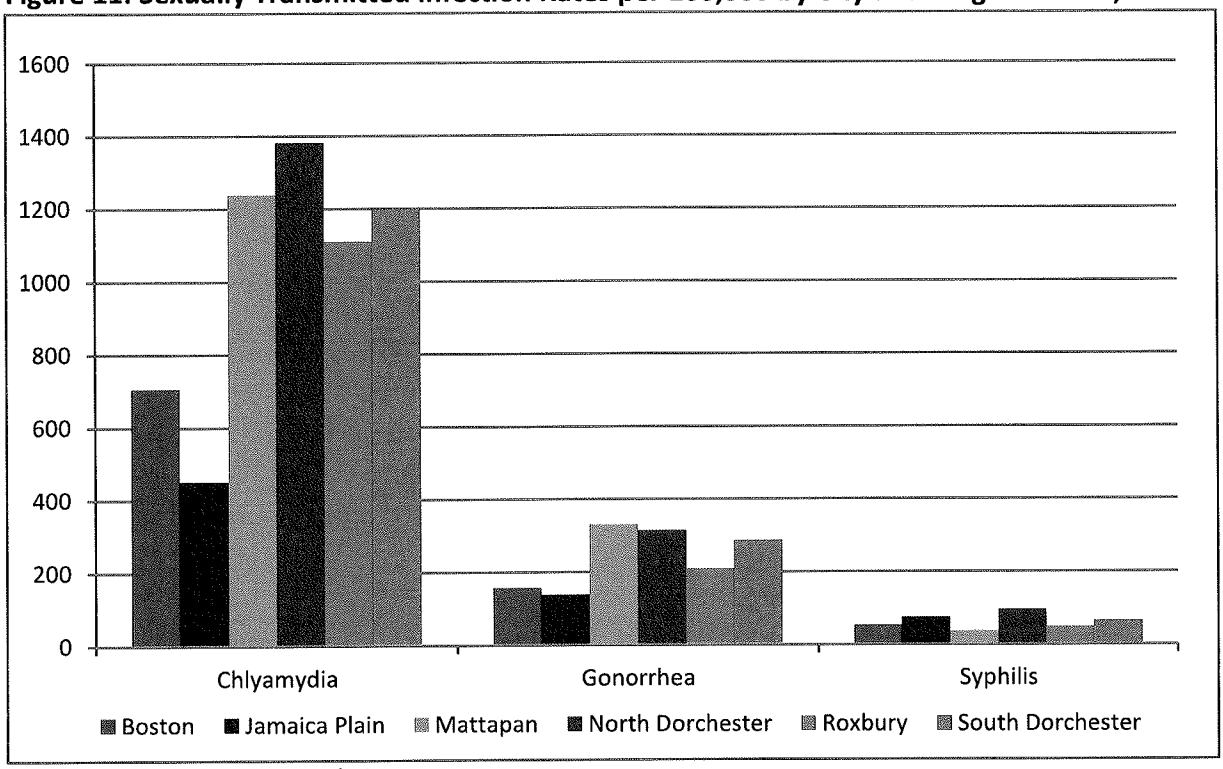
Two key informant stakeholders highlighted prenatal health as a key health and well-being issue for BWH's priority communities. In addition, when BWH *What Matters for Health* process participants were asked about recommendations for delivering healthy babies, respondents indicated that expecting parents should consult their primary care providers for information on how to maintain a healthy pregnancy.

Sexual Health

Inequities persist in the area of sexual health with communities of color disproportionately burdened by sexually transmitted infections (STIs). Based on data from the Youth Risk Behavior Survey (YRBS), in 2013, the percentage of high school students who have ever had sex was highest among Hispanic/Latino students (57.4%) and substantially higher than among White (35.0%) and Asian (22.0%) students. Also, the percentage of sexually active Boston public high school students who reported using a condom during the last time they had sex decreased from 76.3% in 2005 to 66.5% in 2013.

According to the Division of STD Prevention of the Massachusetts Department of Public Health, the Chlamydia rate in Boston was 705.5 new cases per 100,000 residents in 2013. This rate varies substantially across BWH priority neighborhood (Figure 11). In 2013, the Gonorrhea rate in Boston was 156.1 new cases per 100,000 and the Syphilis rate was 52.6. All three of these rates increased since 2009.

Figure 11: Sexually Transmitted Infection Rates per 100,000 by City and Neighborhood, 2013



NOTE: Rates per 100,000 population
DATA SOURCE: Division of STD Prevention, Massachusetts Department of Public Health
DATA ANALYSIS: Boston Public Health Commission Research and Evaluation Office

In 2011, the incidence rate for newly diagnosed HIV/AIDS cases was 31.0 per 100,000 Boston residents. The incidence rate for Black residents (66.9) and Hispanic/Latino residents (34.6) was higher than for White residents (18.2). The total number of individuals living with HIV/AIDS in Boston increased from 2007 to 2011. The rate for individuals living with HIV/AIDS in Boston was 858.3 per 100,000 residents in 2011. This rate was higher among Black and Hispanic/Latino residents compared to White residents. The neighborhoods of North Dorchester (46.5) and Roxbury (43.3) had the highest average annualized rates (2009-2013) per population of newly diagnosed cases of HIV infection. The rate for Boston citywide was 30.3.

ACCESS TO HEALTHCARE

An additional key theme evident in the qualitative and quantitative data focuses on access, or lack of access, to healthcare. Several key informant interviewees discussed concerns surrounding access to care for BWH's priority communities. There was specific mention of issues related to under-insurance and barriers to accessing healthcare services for those with government sponsored healthcare plans. Access to primary care and needed social services was also discussed.

While the rate of uninsured in Massachusetts is now at a historic low, roughly 37% of insured Massachusetts residents said they went without necessary medical care in 2015, and this number is significantly higher amongst low-income residents (52% for individuals at or below 138% of the Federal Poverty Level). Trouble finding a provider, trouble getting an appointment in a timely manner and costs were the three main reasons care was not received. Health insurance premium rates continue to grow year-on-year and as a result, 19% of Massachusetts commercial market members are in high deductible health plans which offer lower premium costs up front in exchange for high cost sharing/out of pocket costs later on.

> *"As we move into the brave new world of ACOs [Accountable Care Organizations], there will have to be strong community partners that can help ensure proper care and resources for an individual. These partnerships are the only ways that you get the cost savings that are hoping for and, frankly, to make a difference in any of these issues."*
>
> -- Key Informant Stakeholder

Regulatory changes for the Health Safety Net (HSN) that went into effect in June 2016 and changes to MassHealth plan enrollment rules that will go into effect in October 2016 have the potential to impact the access low income people have to care. HSN changes increased both the cost sharing and the administrative burden for patients to prove that they have paid their annual deductible. Given that this fund is to a large extent used by undocumented residents who are already an underserved population, these changes may further expand health inequities in communities across the state. Changes to MassHealth are planned that will have the effect of stabilizing the caseload and reducing churn – important outcomes for providers who will soon be taking financial risk on these populations. Members in MCO plans will be locked into their plan until the next annual open enrollment period (in line with what commercially insured and ConnectorCare members must commit to). Further changes to MassHealth may also come in 2017 as the state prepares to launch its MassHealth ACO.

APPROACH TO WORKING WITH COMMUNITIES

Throughout the course of the qualitative data collection, key informant interview and meeting participants shared their suggestions for how BWH and hospitals in general can best approach their work and engagement with communities. These suggestions are important findings from this CHNA and described in detail below.

Leverage Community Assets and Focus on Partnership

One theme that came through the key informant interviews, community meetings, and discussions with health center advisory board members and SSJP students centered on learning from and leveraging the expertise of community members and leaders. Participants suggested that hospitals draw upon and build on the existing strengths of communities, specifically the ongoing and fruitful community building and community development efforts taking place across BWH's priority neighborhoods. Partnering with individuals and organizations that have the trust of residents and a deep understanding of the community would be valuable assets in addressing the significant health inequities faced by residents.

In addition, community meeting participants mentioned that there are numerous community organizations and neighborhood groups dedicated to improving community health, yet more collaboration and coordination across organizations and providers is needed. They suggested that hospitals take a lead role in these collaborations and in promoting consistent education about the services that are available. Stakeholders stressed hospitals should avoid the duplication of services and should tailor programs and interventions to the unique needs of community members.

> *"When we do work around community health we usually try to figure out how we are going to 'fix' communities. Instead we need to start taking a look at ourselves. How can we fix ourselves because we might be part of what is causing problems within some of our most distressed communities."*
> -- Key Informant Stakeholder

Stakeholders encouraged hospitals to focus on efforts that build trust with communities, develop cohesion among community members, and empower residents "to get to know each other." At one community meeting, participants suggested utilizing peer to peer empowerment models, which allow residents to learn from others with similar experiences.

Similarly, stakeholders stressed the importance of hospitals partnering *with* communities to improve health and wellness. Interview and meeting participants suggested that hospitals invest their time and resources in developing long-lasting and sustainable partnerships with communities. A specific suggestion included expanding and developing new partnerships with community-based organizations. A community advisory board for the hospital was also seen as a valuable step.

Another suggested approach for leveraging community assets and partnering with community members is through the use of community health workers (CHWs). Stakeholders across the meetings and interviews noted the value of CHWs, who can connect with communities, develop trust with residents, and understand patients' needs. Key informant interviewees discussed BWH's current work with CHWs (specifically in primary care) and suggested expansions of CHW projects, namely in in-patient settings. One stakeholder noted that CHWs are currently a largely under-resourced support service across the Commonwealth of Massachusetts. Also, community meeting participants emphasized the importance of outreach workers and CHWs who are culturally competent and speak the languages of BWH's diverse priority communities.

Increase Hospital Presence in Priority Communities

Community and other stakeholders highlighted the need for BWH and other hospitals to "be more present in neighborhoods" and engage in the experiences and challenges of residents. It was suggested that hospitals embed services where

> *"We often don't know what we need and once we need it, we need it immediately and don't know who to contact"*
> -- Community meeting participant

residents live and congregate, and conduct additional community outreach to residents most in need. Community meeting participants stated that it is important for healthcare providers to understand the neighborhoods they are serving, specifically the social and community stressors many patients in those neighborhoods face. At one meeting, residents suggested having a hospital point person for community members to help improve communication, coordination and collaboration between health systems and communities.

SSJP students in particular had a number of suggestions for increasing BWH's presence in its priority communities. These include:

- Reach out to young people as well as adults in their 40s and 50s who spend more time at home and in the community and hold a valuable understanding
- Hold community fairs, host or sponsor community events (e.g. sports events)
- Implement a mobile "clinic truck" that provides services in the neighborhoods (e.g. flu shots)
- Increase hospitals' presence in schools and develop new mentoring opportunities
- Utilize SSJP students as community liaisons and/or navigators for other youth in their communities; and
- Engage in more prevention efforts, specifically around community violence.

Prioritize Sustainable Investment in Communities

A strong theme throughout the key informant interviews was the need to improve, expand, and prioritize BWH's relationships with its target neighborhoods. These individuals highlighted the opportunity for a greater commitment to and investment in community-driven work by hospital leadership as well as an integration of community benefit work into BWH's strategic planning efforts. Key informants also suggested inviting community members to actively participate in the decision-making and planning processes of BWH's community-based work.

In the key informant interviews, some advocated for an increase in resources and staff to address the ongoing community health needs, including CHWs, social workers, community resource specialists, trained lay people, among others. In addition, interviewees recommended increasing the presence of the CCHHE's work throughout the BWH institution. These interviewees underscored the importance of engaging and partnering with other BWH departments to increase the presence, scope and shared responsibility of the Center's work. Similarly, stakeholders specified the need to make hospital staff more universally aware of the hospital's commitment to its five priority neighborhoods.

Other Approaches

Meeting and interview participants provided a number of additional suggestions for how BWH can best serve its priority communities and improve the health and wellness of its residents. These approaches included the following:

- Start young and educate children on health literacy and the importance of prevention
- Develop inter-generational interventions and programs

- Implement cancer education and support groups
- Address violence and trauma in a comprehensive manner
- Consider ways to improve structural factors for residents, including housing and transportation
- Support families with children with disabilities
- Focus on a holistic approach to wellness (e.g. yoga, meditation)
- Consider partnerships with vocational organizations, housing authorities and tenant associations, and the Massachusetts Bay Transportation Authority (MBTA)
- Develop a forum at BWH for providers and professionals (e.g. nurses, physicians, CHWs, social workers, community resource specialists, etc.) dedicated to community health and health equity work.

OVERALL CONCLUSIONS AND SIGNIFICANT HEALTH ISSUES

On all major **social determinants of health,** residents of color in our priority neighborhoods experience greater poverty, unemployment, lower educational attainment and greater economic vulnerability. The association of these social and economic challenges with poorer health outcomes makes it imperative for programs and systemic approaches that provide a pathway to economic stability. The ever increasing cost of housing in Boston and unreliability of transportation were also noted as key issues for community members.

Interpersonal violence and trauma which disproportionately affect communities of color, was cited as a major concern in community meetings and among community stakeholders. Residents of our priority neighborhoods described short and long-term impacts of violence including increased stress and persistent feelings of anxiety, safety fears that greatly limited their free movement in the community (including outdoor physical activity), negative impacts on community cohesion and significant fears for children in the community and their future.

Behavioral health issues emerged as key issues facing BWH's priority neighborhoods. The availability, cost and cultural accessibility of mental health services were cited as challenges for community members needing support. Dealing with stigma was also noted and the need for trust in those providing the support. This is enhanced when caregivers have a deep cultural understanding or shared language with those seeking support. Community members and interviewees also cited the need for more accessible and affordable treatment for substance use disorders. With behavioral health issues, it was noted that failure to provide support and treatment results in more entrenched problems (including overdose risk), impacts community safety and also results in challenges in treating other medical conditions, as untreated behavioral health challenges make it very difficult to implement a care plan for other health conditions.

Significant health inequities persist across priority neighborhoods and disproportionately impact communities of color in our neighborhoods across all health conditions examined in the quantitative data including chronic disease and mortality, reproductive and sexual health and obesity. While efforts should continue to address specific health conditions, the systemic nature of these inequities necessitates a wider approach to have sustained impact. A racial equity 'lens' is key to understanding and working in partnership with communities on these issues.

Although the rate of uninsured residents in Massachusetts is at historically low levels**, models of care that are responsive to the needs of underserved communities** are an important area for development. The role and contribution of community health workers are key in this effort. Low income residents also face other access issues including transportation barriers and the potential negative impact of policy changes in 2016/17 to the Health Safety Net and MassHealth plan enrollment.

Community residents and stakeholders underscored the importance of working in **partnership with communities by supporting existing community assets and efforts,** focusing on partnership and collaboration and increasing the hospital's presence "on the ground" in communities, and prioritizing sustainable investment in communities.

STRATEGIES AND IMPLEMENTATION PLAN

THE HEALTH EQUITY IMPERATIVE

The imperative to address inequities in health continues to drive BWH's community health work. As a leading healthcare institution, we are responsive to the changes in the healthcare environment taking place at the local, state, and national levels, and ensure these changes inform our policies and practice. We also understand the urgency to address the health inequities in Boston that are particularly evident in our priority communities. Our Implementation Plan has been developed with a context of a rapidly changing healthcare landscape that prioritizes Population Health Management (PHM) as a strategy to meet national standards and fulfill its commitment to improving care and reducing healthcare costs. At BWH, the implementation of the Patient-Centered Medical Home and the Integrated Care Management Program are two examples of PHM in primary care.

CRITERIA FOR PRIORITIZATION

The five priority areas selected were based on: 1) community need 2) potential for impact 3) community interest, will and readiness, 4) available resources; and 5) institutional readiness.

ISSUES NOT ADDRESSING

For the majority issues raised in this report, we have identified implementation plan actions. In the area of the high cost of housing, however, resources and available expertise, limit our capacity to respond directly to this issue. We will, however, continue to monitor this issue and contribute a healthcare perspective to the City-wide dialogue on this issue as described in our plan.

IMPLEMENTATION PLAN

Priority 1	Interpersonal Violence and Trauma Address the public health issue of interpersonal violence in our communities
Objective	**Provide an integrated and effective response to those experiencing interpersonal violence and build system capacity to provide trauma informed care**
Strategies	**1.1.1 Interpersonal Violence** • Provide advocacy, safety planning and supportive counseling for patients who experience interpersonal violence (domestic violence and community violence) • Offer free and confidential advocacy services to the wider community through a domestic violence advocate based at a community site • Provide direct intervention to patients who are impacted by sexual violence and human trafficking • Collaborate with key community partners to offer supportive violence prevention education to young people in high risk environments • Coordinate and collaborate with the City of Boston and local hospitals on issues of interpersonal violence prevention and intervention • Develop and implement strategies to further integrate the BWH response with the City of Boston Streetworker program • Develop and implement a hospital wide policy on interpersonal violence inclusive of domestic, sexual, community violence and human trafficking
	1.1.2 Trauma Informed Care (TIC) • In collaboration with the Partners TIC network, provide learning opportunities for BWHC staff to develop awareness, skills and confidence in providing trauma informed care • Develop and implement an effective hospital-wide policy on the provision of trauma informed care

Priority 2	**Access to Healthcare** **Strengthen access for community members to enable improved health outcomes**
Objective	**Address the barriers that hinder access to care for low income patients and community members.**
	2.1.1 Utilize Certified Application Counselors (Financial Counselors) to Improve Patient Access
	2.1.2 Supporting and Utilizing Community Health Workers (CHWs) • Provide structured opportunities to increase communication among existing community health workers, patient navigators and community resource specialists at BWH to identify shared needs and resources and inform community health strategy • Share best practices of community health workers within the BWH community to increase understanding of the benefits of CHWs in the delivery of culturally responsive care • Identify next steps in assessing opportunities and potential resources for community health workers in selected clinical areas • Assess opportunities to engage CHWs and other staff in 'place-based' approaches with residents in a specific geographical area within our priority communities
	2.1.3 Enhance Structures to Incorporate Patient and Community Input • Establish a community advisory structure that builds upon and extends our existing networks, and recruit members with strong community experience and connection to inform hospital programs and priorities in priority neighborhoods • Expand community representation on BWH Patient Advisory Councils
Priority 3	**Behavioral Health** **Develop an integrated and culturally responsive system of assessment, care and referral for behavioral health needs**
Objective	**Strengthen our response to mental health and substance use disorders and support innovative community models**
Strategies	**3.1.1 Support Innovative Community Efforts to Promote Community Psychological Wellness** • Provide Health Equity Grants to community based organizations to support innovative models to: o Build support networks to strengthen the conditions of community psychological wellness

	○ Implement culturally and linguistically responsive models to assist community members to reduce and manage stress
	3.1.2 Integrated Behavioral Health, Wellness and Primary Care • Expansion of the Patient Centered Medical Home model across primary care to provide coordinated care delivery to encourage patient engagement in decision making and self management • Implement a Collaborative Care Model in Primary Care for screening and care for patients who have depression and/or anxiety • Explore expansion of health promotion activities (support groups, yoga, fitness, etc) in clinical settings or within partnering organizations to address sadness, social isolation, trauma, depression and other behavioral health needs • Continue to provide a self help group meeting space for community members with substance use disorders at Brookside CHC
	3.1.3 Comprehensive Opioid Response • Continue and explore expansion of community health center based substance abuse treatment • Continue opioid intervention B-CORE: The Brigham Comprehensive Opioid Response and Education Program which includes a senior level Executive Committee, a Prescribing Task Force and an Addiction Task Force • Work with the Partners Clinical Opioid Task Force to integrate measures and data collection • Provide patients and employees a "MedSafe" drop-off location for unwanted or expired medications • Dispense nasal Narcan to patients who request this life-saving medication that can stop or reverse the effects of an opioid overdose
Priority 4	**Advance Health Equity within BWH and Our Community**
Objective	**Enhance, strengthen and resource systems and structures within BWH to promote health equity and improve health outcomes for the communities we serve**

Strategies	**4.1.1 Collect Data on Health Inequities** • Collect and share data on significant health inequities, populations most affected and intersectional responses with the BWH community and community members and organizations • Develop a plan for moving forward on all the steps for the American Hospital Association #123forEquity Pledge to eliminate health care disparities • Explore the feasibility of incorporating standardized screening tools into eCare for assessing the health-related social needs of patients
	4.1.2 Foster a Culture of Collaborative Learning and Advancement • Identify interest and seek to establish a BWH learning community for those engaged or interested in health equity research and community informed practice • Participate in BWH innovation efforts and identify strategies to integrate health equity into those efforts • Collaborate across BWH departments on organizational efforts to advance equity, diversity and inclusion • Communicate and share experiences with other health systems also seeking to strengthen institutional commitment and expertise to advance health equity
	4.1.3 Interventions to Address Identified areas of Health Inequity <u>Cancer</u> • Provide patient navigation support for colorectal cancer screening targeted to patients at BWH community health centers • Leverage expertise at Dana Farber Cancer Institute (DFCI) and BWH to improve health and well-being of women of color cancer survivors • Provide financial resources to low income women with breast cancer for costs of treatment not covered by insurance <u>Birth Outcomes</u> • Continue to address the social and medical needs of pregnant women by offering comprehensive programs including the Stronger Generations Case Manager Program, the Centering Pregnancy Program and the Midwifery Program <u>Additional Community Health Equity Interventions</u> • Provide Health Equity Grants to community based organizations to implement programs that engage with residents to develop practical strategies to improve health outcomes for communities of color

	• Identify how our community approach can strengthen the health protective factors of community cohesion and resilience in partnership with other institutions, organizations and community members • Establish an annual BWH 'health equity champions' award where community members working to advance health equity can get a contribution towards their efforts and are recognized for their commitment and skill
	4.1.4 Advance Racial Equity in our Health System and in our Communities • Continue racial equity training and advocacy work based at Southern Jamaica Plain Health Center and identify opportunities and potential resources to further advance these efforts • Participate in the Boston Alliance for Racial Equity and continue to work with government partners and health and community partners to advance racial equity • Support community-based efforts through the BWH Health Equity grants and use evaluation results to inform future strategy and resource allocation • Look at potential application of the Racial Equity Impact Assessment tool within our health care environment and in our community efforts
Priority 5	**Social Determinants of Health (Employment, Education, Economic Stability, Housing, Transportation) Contribute proactively to build the community conditions for improved health outcomes, health system access and full civic engagement**
Objective	**Develop interventions and integrated solutions and partnerships that address the social and environmental factors impacting individual and community health**
Strategies	**5.1.1 Employment, Education and Economic Stability** <u>Employment</u> • Provide youth employment and mentoring opportunities for Boston Public School students and a pathway for a skilled and diverse health care workforce and communicate evaluation results • Develop a resource to share best practices on youth employment with other employers and stakeholders

	• Provide community residents with employment and career counseling, referrals to job skills development programs and facilitate job interviews of qualified community residents • Pilot and evaluate a CHC based intervention that incorporates referral and participation in job training and support from a career center as part of the care plan • Support Jamaica Plain Neighborhood Development Corporation to establish a youth employment program focused on out of school youth <u>Education</u> • Enhance literacy, science skills development and career exploration by programs that partner with employee volunteers with students in Mission Hill elementary and middle schools • Provide college scholarship support to graduates of our Student Success Jobs program and provide support and guidance to encourage their success in college <u>Economic Stability</u> • Provide job skill development as well as educational and employment opportunities for pregnant and parenting young people to enable family economic stability and self-sufficiency • Continue to monitor the impacts of poverty, inequity and housing affordability for neighborhood residents and contribute to the city- wide dialogue and advocacy on its impact • Consider opportunities for 'two generation' approaches in our community efforts (benefiting parents/caregivers and their children) and discuss these with CHCs and local pediatric providers
	5.1.2 Transportation • Share findings from the Fair Public Transportation Report: Community Health Center Directors Roundtable • Seek to further understand transportation barriers for low income patients and identify ways to improve transportation to facilitate health care access • Continue to provide Charliecards and cab vouchers to low income women through the Perinatal Transportation Assistance Program to increase their access to care and explore other cost effective transportation options
	5.1.3 Partnerships for addressing health-related social needs • Explore opportunities for partnerships with social service agencies to strengthen our response to the health-related social needs of patients

APPENDICES

APPENDIX A: Community Meeting Question Guide

Qualitative Data Collection Questions for COBTH Hospitals
2016 Community Health Needs Assessments
Final Version

Background
The Introduction and questions below are to be used as the 'core set' of questions for the neighborhood discussion/focus groups and community meetings that are being conducted to inform the 2016 Community Health Needs Assessments (CHNAs) of several of the CoBTH hospitals.

Verbal Introduction (this will assist in framing the discussion questions below)
When our hospitals did their needs assessments a few years ago, community members identified several things that impact their personal health and the health of their community. We heard that many social factors affect them such as employment and financial stress, community violence and lack of access to healthy, affordable food. In more recent assessments we have found more community members speaking about their emotional health, as well as difficulties with substance use. Health data in Boston also show high rates of conditions such as diabetes, asthma, cancer, obesity and heart disease. Community members expressed the importance of better coordination and integration of services, and responses that are relevant to their cultures. They voiced a strong desire to address these issues in equal partnership.

In our time together, we will be exploring four key questions about health and wellness issues for your community. Your input will inform our community health needs assessments and we will be taking notes of the discussion, but no individuals will be identified. We value everyone's participation today/tonight in this discussion, and encourage you to share your thoughts openly so we can learn from you.

Questions for the group:

1. What do you see as the most pressing health and wellness issues in your community today? Would you say things have gotten better, worse or pretty much the same from a few years ago?
2. What resources and/or supports currently exist in your community to address barriers to health and wellness for residents? What is working well?
3. What would be helpful in your neighborhood to address the most pressing health and wellness issues affecting your community?
4. What is important for hospitals to know so we can work collaboratively with residents and local community organizations?

APPENDIX B: List of Key Stakeholders Interviewed

Internal (BWH) Stakeholders	
▪ Jessica Dudley, MD	BWPO Chief Medical Officer, Vice President Care Redesign
▪ Audra Meadows, MD, MPH	Dept of Obstetrics and Gynecology
▪ Christin Price, MD	Clinical Consultant, BWPO
▪ Rose Kakoza, MD	Assistant Medical Director of Operations, The Phyllis Jen Center for Primary Care
▪ Jackie Somerville, RN	Senior Vice President of Patient Care Services and Chief Nursing Officer, Brigham and Women's Hospital
▪ Ali Salim, MD	Division Chief, Trauma, Burns, and Surgical Critical Care
External Stakeholders	
▪ Sharon Scott-Chandler, Esq., Executive Vice President ▪ Christina Sieber, Director of Institutional Advancement, Planning, and Grants	ABCD: Action for Boston Community Development
▪ Monica Valdes Lupi, JD, MPH ▪ Gerry Thomas, MPH, Director, Community Initiatives Bureau	Boston Public Health Commission
▪ S. Atyia Martin, PhD, Chief Resiliency Officer	City of Boston
▪ Myechia Minter-Jordan, MD, President and CEO	Dimock Community Health Center
▪ Carlene Pavlos, Director, Bureau of Community Health and Prevention	Massachusetts Department of Public Health
▪ Maura Pensak, Director, Client Services ▪ Molly Cain, Assistant Director, Operations	Metropolitan Boston Housing Partnership

APPENDIX C: Internal Key Informant Interview Question Guide

Community Health Assessment
One-on-One Guide for INTERNAL Key Informant Interviews

Introduction

- Thank you for taking the time to talk with us today and contributing to our community health assessment.
- In our time together, I will be asking about the current needs of BWH's priority neighborhoods, which are Dorchester, Jamaica Plain, Mattapan, Mission Hill, and Roxbury. We understand your knowledge of these specific neighborhoods may vary, and that is fine.
- We are also interested in hearing your perspective on opportunities for the hospital to address these community needs.
- In addition to interviews with BWH staff, we are analyzing community level health data and conducting interviews with external stakeholders and focus groups with residents of the neighborhoods mentioned above.

Background

1. I'd like to start by asking you to provide a brief overview of your primary role(s) and responsibilities at BWH.
2. As mentioned, the CHNA is focused on the neighborhoods of Dorchester, Jamaica Plain, Mattapan, Mission Hill, and Roxbury. What do you see as the key health issues in these communities, as well as the factors impacting overall health and well-being?
3. From your vantage point, what ***emerging*** community public health concerns are important for our priority neighborhoods to focus on in the near future?

Brigham and Women's Hospital Role

4. What role do you see Brigham and Women's Hospital playing in efforts to improve the health and well-being of individuals who live in our priority neighborhoods?
    a. What is your perception of the community-based outreach and programming currently offered?
    b. Are there BWH departments or staff that you believe should be specifically involved in future efforts?
5. What programs or partnerships do you think would help us better meet the needs of the individuals living in our priority neighborhoods?
6. We are always interested in learning from the experience of others. Are there any particularly impactful community health approaches that you would like us to be aware of (could be either happening at BWH or elsewhere)?
7. What additional information or feedback do you have to offer as we go through the process of understanding community health interests and needs at this point in time?

Closing

Thank you very much for your time. Our next steps will be to summarize the information we learn from each of the individuals we interview and prepare a final report and Implementation plan, which will be presented to the Board of Trustees in early summer.

APPENDIX D: External Key Informant Interview Question Guide

Community Health Assessment

One-on-One Guide for EXTERNAL Key Informant Interviews

Introduction

Thank you for taking the time to talk with me today and contributing to Brigham and Women's Hospital community health assessment. The purpose of this assessment is to gain a better understanding of the health issues of people who live and work in Boston, how those issues are currently being addressed, and your opinion about what more could be done to address them. Our ultimate goal for these interviews is to gather a broad range of input on community health issues that will help inform future programming and how they provide community-based services.

As you may or may not know, Brigham and Women's Hospital serves a broad range of individuals and communities, but has 5 specific neighborhoods in Boston where they have prioritized their community outreach and programming. These neighborhoods include: Dorchester, Jamaica Plain, Mattapan, Mission Hill, and Roxbury. Throughout this interview I will be asking some general questions about the health assets and needs for people who live in Boston, and then some specific questions about what is happening in these priority neighborhoods. Your knowledge of these specific neighborhoods may vary, so we will adjust our questions as we go along to make sure we are asking questions that are appropriate for you. At the conclusion of the interview we will write up summary notes. We will then synthesize the information we learn across all the people we interview and provide Brigham and Women's Hospital a summary report.

Do you have any questions about the purpose of the interview and how the information will be used?

Before we begin, I would like to request your permission to record our conversation today. The recording will help us develop a more accurate reflection of your input as we write up our notes. It will only be used by our team and not shared with anyone else. Would it be OK with you to record our conversation?

Background

1. I'd like to start by asking you provide a brief overview of your primary roles and responsibilities within your agency/institution.
2. What would you say are the major priorities that your agency/organization is focusing on to improve the health and well-being of the people your agency/organization serves?
    a. How are you addressing these priority areas?
    b. Who are you working in partnership with to address these issues? What other partners do you think are important to the success of your efforts?
    c. What do you see as the strengths/challenges of addressing these issues to-date?

3. How successful do you think your agency's work in these areas has been in improving the health and well-being of people who live in Brigham and Women's Hospital's priority neighborhoods?
4. From your vantage point at [state/city government, CBO], what other emerging health or public health concerns are important for local communities, especially those in Boston, to focus on in the near future?

Role of Hospitals

5. I'd like for you to think about the role that hospitals might play in addressing some of the issues we have discussed. What do you think hospitals (or healthcare delivery systems more broadly) are doing now that contributes to community health (*may want to focus in on those issues we have been discussing*)?
    a. What more do you think hospitals could do to support community health improvements (like those we have discussed)? In other words, what additional programs, services, investments, or roles could hospitals play in efforts to improve community health?

Questions Specific to Brigham and Women's Hospital

In this final set of questions, I'd like to focus specifically on Brigham and Women's Hospital and its community programs.

6. What role do you see Brigham and Women's Hospital playing in efforts to improve the health and well-being of individuals who live in their priority neighborhoods?
    a. What is your perception of the community-based outreach and programming currently offered?
7. How might Brigham and Women's Hospital provide programs or partner with others to better meet the needs of the individuals who are living in their priority neighborhoods?
8. What additional information or feedback do you have to offer Brigham and Women's Hospital as they go through the process of understanding community health interests and needs at this point in time?

Closing

Thank you very much for your time. Our next steps will be to summarize the information we learn from each of the individuals we interview and prepare a report for Brigham and Women's Hospital. This information will be included as part of their overall needs assessment.

BRIGHAM AND WOMEN'S HOSPITAL
A Teaching Affiliate of Harvard Medical School

FY16 Community Benefit Report
Brigham and Women's Hospital

Organization Information

Organization Address and Contact Information

Organization Name:	Brigham and Women's Hospital
Address (1):	75 Francis Street
Address (2):	Not Specified
City, State, Zip:	Boston, Massachusetts 02115
Web Site:	www.brighamandwomens.org
Contact Name:	Wanda McClain
Contact Title:	Vice President of Community Health and Health Equity
Contact Department:	Center for Community Health and Health Equity
Telephone Num:	(617) 264-8747
Fax Num:	(617) 264-8756
E-Mail Address:	wmcclain@partners.org
Contact Address (1): (If different from above)	41 Avenue Louis Pasteur
Contact Address (2):	Not Specified
City, State, Zip:	Boston, Massachusetts 02115

Organization Type and Additional Attributes

Organization Type:	Hospital
For-Profit Status:	Not-For-Profit
DHCFP ID:	Not Specified
Health System:	Partners HealthCare
Community Health Network Area (CHNA):	Alliance for Community Health (Boston/Chelsea/Revere/Winthrop)(CHNA 19)
Regional Center for Healthy Communities (RCHC):	6
Regions Served:	Boston

CB Mission

Community Benefits Mission Statement

Brigham and Women's Hospital (BWH) is committed to serving the health care needs of persons from diverse communities. The hospital, however, makes a unique commitment to the neighboring residents of Jamaica Plain and Mission Hill, who have some of the most pressing health problems in the state. The hospital, along with its two licensed community health centers (CHCs), is committed to developing integrated care networks to provide and assure appropriate access to high quality, cost-effective primary care to members of these communities regardless of their insurance status. The hospital also commits to meeting the needs of low-income pregnant women and their families from the communities of Mattapan, Roxbury and Dorchester.

In order to address the health needs of its target communities, the hospital must look beyond its walls and seek guidance from the community to implement programs that recognize and address the relationships between health and social problems, including economic and educational issues. The hospital is committed to collaborating with community groups and organizations to develop comprehensive programs that respond to the needs of the communities, as identified by the communities themselves, and as suggested by public health and other data. BWH seeks to improve the health status of residents of the communities by offering health services, continuing and expanding innovative community and school-based programs, and by serving as a resource to the community as a liaison to health careers education and as a possible employer of community residents.

Target Populations

Name of Target Population	Basis for Selection
Boston residents experiencing health disparities	Evidence of racial and ethnic health disparities in birth outcomes, cardiovascular disease, cancer and chronic conditions
Medically underserved and/or low income women in BWH priority communities	Evidence of persistent health disparities in rates of infant mortality and chronic disease for communities of color and need by low income women to meet the costs of breast cancer treatment that are not covered by health insurance
Medically underserved and/or low-income residents of Mission Hill, Roxbury, Jamaica Plain, Dorchester and Mattapan	Evidence of pressing and persistent health and social needs
Residents with disproportionately lower rates of colorectal cancer screening	Capacity to increase colorectal cancer screening and reduce the health disparity in colon cancer through a community navigator model

Victims of Domestic Violence	Domestic Violence is a public health issue that impacts 25% of women and a health care setting provides an excellent point of intervention to provide safety planning and support to survivors
Young People in BWH priority communities	There is a high rate of family poverty as well as a large youth population in BWH's priority communities. By providing educational and employment opportunities in the health, science and medical field to young people, BWH is able to impact the long term health and economic status of those communities
Native Americans	Significantly poorer health outcomes and health access for Native Americans
Victims of Intentional Violence	A growing body of science is consistently linking violence (the experience with and/or fear of) with risk for and incidence of a range of serious physical health problems. The effects of violence on health are a consequence of the physical, biological, environmental, social, behavioral, and emotional changes that violence imposes on individuals and the community

Publication of Target Populations
Marketing Collateral, Annual Report, Website

Hospital/HMO Web Page Publicizing Target Pop.
http://www.brighamandwomens.org/about_bwh/communityprograms/default.aspx

Key Accomplishments of Reporting Year

- The Passageway domestic violence program provided 3,778 service contacts to or on behalf of 1,243 clients of Brigham and Women's HealthCare.
- 95% of Student Success Jobs Program participants entered college after completion of the high school program.
- Two hundred and seventy-nine patients were referred to a patient navigator for colorectal cancer screening and colonoscopy completion rates among health center patients increased from 49% at program inception to 70% in 2016.
- More than one hundred low income women with breast cancer were provided financial assistance to cover expenses associated with their diagnosis that were not covered by insurance.
- Over 22,370 patients received care at our two BWH licensed health centers in Jamaica Plain (Brookside Community Health Center and Southern Jamaica Plain Health Center).
- Four hundred and fifty women received pregnancy and parenting services from health center based case managers through the Stronger Generations case management program.
- Over 500 young people received educational support and mentoring from nearly 300 Brigham and Women's employees.

Plans for Next Reporting Year

- Continue expansion of effective programs to increase educational and employment opportunities for young people in the community
- Continue to develop interventions to promote healthy birth outcomes through a focus on social determinants of health, increased social support and innovative approaches within our health system, as part of our Stronger Generations initiative.
- Expand support for those impacted by community violence

Community Benefits Process

Community Benefits Leadership/Team

The vice president, five program directors of the Center for Community Health and Health Equity (CCHHE) and two executive directors of the BWH licensed CHCs comprise the community benefits leadership team of BWH.

Community Benefits Team Meetings

The leadership team described above meets quarterly throughout the year and the CCHHE directors and staff also meets on a monthly basis. A sub-committee of the hospital's Board of Trustees focused on community health meets regularly to review programs and policy and set the strategic direction for community health aligned with the needs of BWH's priority neighborhoods.

Community Partners

ABCD Health Services
ABCD Parker Hill/Fenway NSC
ABCD SummerWorks
ADOBE Youth Voices
Achievement Network
Alice H. Taylor Tenant Task Force
America Scores
Apprentice Learning
Arbour Hospital
Bay State Banner
Biogen Community Lab
Boston Teachers Union School

Boston University School of Public Health
Bouve College of Health Science
BPD E-13 Community Service Department
Boston Public Health Commission
Brookline High School
Bromley Health Task Force
Bunker Hill Community College
Camp Harborview
Center for Community Health Education Research and Service, Inc. (CCHERS)
Centering Healthcare Institute
Children's Trust Fund (Massachusetts)
Children's Hospital Boston - Young Parents Program
(YPP)
Children's Services of Roxbury
Chinle Comprehensive Regional Health Care Facility
CHNA-7
City on the Hill Community Academy of Science and Health
City Real Estate
Community Academy of Science and Health
Community Dispute Settlement Center
Conference of Boston Teaching Hospitals
Curtis Hall/BCYF
Department of Transitional Assistance
Edward M. Kennedy Academy for Health Careers
Eliot School
ESAC
Fenway High School
Ferris Wheels
First Baptist Church
Fitz Urban Youth Sports
Foxboro Jaycees
Foxborough Human Services & COA
Gallup Indian Medical Center
Goodwill – Job Readiness
Greater Boston Food Bank
HarborCOV
Harvard Medical School
Harvard MedScience
Harvard School of Public Health
HESSCO Elder Services
HUGS-Foxboro
Hyde Square Task Force
Jamaica Plain Neighborhood Development Corporation
Jamaica Plain WIC

Jane Doe, Inc.
John D. O'Bryant High School
Jamaica Plain Health Planning Committee
Jamaica Plain VIP and Trauma Response Team
JP Youth Disparities Initiative
Jamaica Plain Youth Health Equity Collaborative
Jeremiah Program, Endicott Boston
Key Steps
Linda Wellness Warrior
Louis D. Brown Peace Institute
MA Coordinated Family and Community Engagement
Madison Park Technical and Vocational High School
March of Dimes
Martha Eliot Health Center
Mass Alliance on Teen Pregnancy
Mass Mentoring Partnership
Massachusetts College of Pharmacy & Health Services
Massachusetts General Hospital
Mattapan Community Health Center
Maurice J. Tobin K-8 School
Meridian Academy
Milton Academy
Mission Grammar School
Mission Hill Crime Committee
Mission Hill Health Movement
Mission Hill Little League
Mission Hill Main Streets
Mission Hill Men Softball League
Mission Hill Neighborhood Housing Services
Mission Hill School
Mission Hill Youth Collaborative
Mission Main Tenants Task Force
Mission SAFE
Neighborhood Health Plan
Northern Navajo Medical Center
Northeastern University
Neponset Valley Chamber-Elder Alliance
New Mission High School
Read Boston
Read to a Child
Renewal House
Roxbury Presbyterian Church Social Impact Center
Roxbury Tenants of Harvard
Roxbury YMCA

SAGE-Boston (Stop Abuse Gain Empowerment)
School-to-Career Partnership
Science from Scientists
Simmons College
Sociedad Latina
South End Community Health Center
Spontaneous Celebrations/Beantown Society
The City School Summer Leadership Program
The Mildred Hailey
The Samaritans
Tobin Community Center
Tri-Town Chamber of Commerce
Urban Edge
Urban Science Academy
Wentworth Institute of Technology
Whittier Street Health Center
WilmerHale Legal Services
Youth Connect
Youth Options Unlimited
YWCA (Init Program)

Community Health Needs Assessment

Date Last Assessment Completed and Current Status

In 2016, BWH conducted a Community Health Needs Assessment and implementation planning process to inform community-based efforts as well as to adhere to requirements set by the Patient Protection and Affordable Care Act. This work builds upon the foundation of past assessment work and current investments in advancing health in the hospital's priority neighborhoods (Dorchester, Jamaica Plain, Mattapan, Mission Hill and Roxbury). The CHNA included focus groups of community residents conducted in collaboration with members of the Conference of Boston Teaching Hospitals (CoBTH), as well as internal and external key informant interviews and review of public health and other data. Additionally, BWH sought broad community input via an innovative online community engagement process entitled 'What Matters for Health' that obtained extensive community input from close to 500 participants.

The CHNA and implementation plan was presented to and approved by the BWHC Board of Trustees at its July meeting and is now posted on our website: http://www.brighamandwomens.org/About_BWH/communityprograms/our-programs/2016-CHNA-Report.pdf. BWH also makes its annual progress reports on its CHNA widely available to the public by posting these reports on its website.
BWH's CHNA implementation plan is focused on the 5 priority areas below, and implementation is underway.

- Interpersonal Violence and Trauma
- Access to Healthcare
- Behavioral Health
- Health Equity within BWH and Our Community
- Social Determinants of Health

Consultants/Other Organizations

BWH engaged the Institute of Community Health (ICH) and the Engagement Lab at Emerson College to develop and implement its interactive online platform, "What Matters for Health" on Community PlanIt (described below). ICH also conducted the external key informant interviews. BWH collaborated closely with several other members of the Conference of Boston Teaching Hospitals to plan, implement and analyze finding from community focus groups.

Data Sources

Details of all the data sources used in the CHNA can be found on pages 13-14 of the 2016 CHNA report (see weblink above). This included community focus groups, internal and external key informant interviews, data from the U.S. Census, U.S. Bureau of Labor Statistics, Boston Police Department, Massachusetts department of Public Health, Boston Public Health Commission, including the Boston Behavioral Risk Surveillance Survey (BRFSS) and the Boston Youth Risk Behavioral Survey (BYRBS). Several health and social policy documents

were also reviewed. The 2016 CHNA was also informed by analysis of the findings from an innovative online game that BWH undertook to explore perceptions and recommendations from community members on personal, neighborhood and citywide health issues. The report of this process called 'What Matters for Health' details the analysis of over 8,000 comments from 488 participants on the on-line game, and can accessed on the BWH website: http://www.brighamandwomens.org/About_BWH/communityprograms/RFP/BWH%20WM4H%20Report%202015.pdf

Community Benefits Programs

Student Success Jobs Program Summer Internship for College Students (SSJP College)	
Program Type	Mentorship/Career Training/Internship, Outreach to Underserved
Statewide Priority	Promoting Wellness of Vulnerable Populations, Reducing Health Disparity
Brief Description or Objective	The Student Success Jobs Program Summer Internship for College Students is an intensive summer employment opportunity for students that have successfully graduated from the Student Success Jobs Program for high school students. SSJP College Summer Internship Program was created to support SSJP graduates, currently in college, majoring in a health related field. Summer internship opportunities are paid positions in a Brigham and Women's Hospital department and are available to students for ten weeks, 35 hours per week, from June through August. SSJP creates pathways into science, health, or medicine careers for those who have traditionally been underrepresented in the field with 96 percent of students self- identified as people of color. In FY16, 22 students were served. Since inception in 2006, 120 individual students have been served.
Target Population	• **Regions Served**: Boston • **Health Indicator:** Other: Education/Learning Issues • **Sex:** All • **Age Group:** Adult-Young • **Ethnic Group:** All • **Language:** All

Goal Description	Goal Status
To strengthen and sustain interest among college students in health careers through work-based mentoring by health care professionals.	In FY16, SSJP recruited 21 BWH health professionals as preceptors who provided internship experiences to students.
To foster networking opportunities for emerging under-represented health care professionals with peers and the hospital community.	In FY16, SSJP provided 22 SSJP college students with networking opportunities through educational and resume writing workshops as well as paid internships for ten weeks in a BWH department.

To address the need for proficient and under-represented professionals in health, science and medical careers.	In FY16, recruited 22 college students majoring in health, science or medicine into the SSJP College program and matched students to departments that were closely aligned to their career goals.

Contact Information Youth Development Manager, Center for Community Health and Health Equity, Brigham and Women's Hospital, ssjp@partners.org

The Passageway Domestic Violence Program

Program Type Community Education, Direct Services, Health Professional/Staff Training, Prevention, Support Group

Statewide Priority Promoting Wellness of Vulnerable Populations

Brief Description or Objective Passageway provides free, voluntary, and confidential services to patients, employees and community members who are experiencing domestic violence (DV). This intervention is based on a multidisciplinary and tailored response model that includes domestic violence advocates, nurses, physicians, social workers, mental health providers, security, and other health care providers. The team provides tailored interventions based on the needs of the individual. Passageway advocates come from diverse backgrounds reflecting the populations served. Advocates offer services in English and Spanish, and use hospital interpreters for all other languages. Advocates are on-site at the BWH campus, Brigham and Women's Faulkner Hospital, Southern Jamaica Plain Health Center, Brookside Community Health Center, Whittier Street Health Center. In FY16, Passageway provided services to 1,243 clients and since inception in 1997, 15,483 people have been served.

Target Population

- **Regions Served:** Boston
- **Health Indicator:** Injury and Violence, Other: Domestic Violence, Other: Safety, Other: Safety - Home
- **Sex:**All
- **Age Group:** All Adults
- **Ethnic Group:** All
- **Language:** All

Goal Description	Goal Status
Provide free, voluntary, and confidential services to patients, employees and community members who are experiencing domestic violence (DV).	In FY16, the Passageway Program provided services to 1,243 individuals; Since inception in 1997, 15,483 people have been served.

Continue to increase safety, health and well-being of patients, employees and community members by providing comprehensive services to those experiencing domestic violence.	In FY16, the Passageway Program provided 3,778 counseling sessions and contacts to members or on behalf of the 1,243 patients/employees community members experiencing domestic violence.
Increase access to services for patients and employees by increasing education and consultation services to health care providers, staff and community members.	In FY16, the Passageway Program provided 50 education/training sessions to 1,267 health care providers and community members on the impact of DV and health.
Increase access to services for patients and employees by increasing education and consultation services to health care providers and staff.	In FY16, the Passageway Program provided 912 individual consultations with providers.

Partners

Partner Name, Description	**Partner Web Address**
SAGE-Boston (Stop Abuse Gain Empowerment)	
Renewal House	http://renewalhouse.org/
Jane Doe, Inc.	http://www.janedoe.org/
Conference of Boston Teaching Hospitals	http://www.cobth.org/
WilmerHale Legal Services	http://www.law.harvard.edu/academics/clinical/lsc/index.htm
Whittier Street Health Center	http://www.wshc.org
Boston Public Health Commission	http://www.bphc.org
HarborCOV	http://www.harborcov.org/

Contact Information Mardi Chadwick, J.D. Director Violence Intervention and Prevention Programs, 41 Avenue Louis Pasteur, Boston, MA 02115, mchadwick1@partners.org

Connecting Hope, Assistance, and Treatment Program (CHAT)

Program Type	Direct Services, Health Coverage Subsidies or Enrollment, Outreach to Underserved
Statewide Priority	Address Unmet Health Needs of the Uninsured, Chronic Disease Management in Disadvantage Populations, Promoting Wellness of Vulnerable Populations, Reducing Health Disparity
Brief Description or Objective	The Connecting Hope, Assistance, and Treatment (CHAT) program provides financial assistance to low income, uninsured and underinsured women with breast cancer to pay for necessary services related to their breast cancer diagnosis. In the absence of the CHAT program, many women are forced to forego the items related to their breast cancer treatment in order to pay for rent, utilities, food, and other basic necessities. In the face of many competing survival priorities, the CHAT program is able to assist in providing the resources necessary to ensure the emotional and physical wellbeing of breast cancer patients. In FY16, there were 102 women served by the CHAT program. The majority of resources provided to women were breast prosthesis/ bra assistance, compression garments and transportation to treatment appointments. Since inception in 2002, the CHAT program has provided services to over 1,100 women.
Target Population	• **Regions Served:** Boston-Greater • **Health Indicator:** Access to Health Care, Other: Cancer, Other: Cancer - Breast • **Sex:** Female • **Age Group:** Adult • **Ethnic Group:** All • **Language:** All

Goal Description	Goal Status
Provide financial assistance to low income, uninsured and underinsured women with breast cancer to pay for necessary services related to their breast cancer diagnosis.	In FY16, there were 102 women served by the CHAT program.
To provide resources to at least 100 women through the CHAT program.	In FY16, 110 CHAT applications were processed and resources provided to 98% of approved CHAT clients. The majority of resources provided were for transportation assistance, breast prostheses and compression garments.

Contact Information	Maisha Douyon Cover, Director, Health Equity Programs, Center for Community Health and Health Equity Brigham and Women's Hospital 41 Avenue Louis Pasteur, Boston, MA 02115, mdouyon@partners.org

Open Doors to Health Colorectal Cancer Screening Initiative

Program Type	Direct Services, Health Screening, Prevention
Statewide Priority	Chronic Disease Management in Disadvantage Populations, Promoting Wellness of Vulnerable Populations, Reducing Health Disparity
Brief Description or Objective	The Open Doors to Health Colorectal Cancer Screening Initiative was launched to address barriers to colonoscopy screening among a patient population with known disparities in screening rates. The goals of the program are : 1) Increase awareness of the need for colorectal cancer screening among patients who receive care at two community health centers; Brookside Community Health Center and Southern Jamaica Plain Health Center 2) Increase physician recommendations for screening among patients aged 50 and older seeking care at BWH licensed community health centers; 3) Decrease no-show rates for screening colonoscopy; increase adequate test preparation; 4) Address barriers to screening through patient navigation, resource referral, and education. In FY16, 279 patients were referred to patient navigator. Since program inception in August 2009, over 2,400 patients have been referred to the patient navigator.
Target Population	• **Regions Served:** Boston-Dorchester, Boston-Jamaica Plain, Boston-Mattapan, Boston-Roxbury • **Health Indicator:** Other: Cancer, Other: Cancer - Colo-rectal • **Sex:**All • **Age Group:** Adult • **Ethnic Group:** Hispanic/Latino • **Language:** English, Spanish

Goal Description	**Goal Status**
Increase colon cancer screening rates for individuals above age 50.	In FY16, 70% of navigated patients completed colonoscopies. This is a significant increase from the period prior to patient navigator implementation when completion rates were 48.5%.

Reduce no-show rates for colonoscopy screening among health center patients.	In FY16, 12% of navigated patients did not show for an appointment, which is lower than national studies, and a significant improvement to no-show rates that exceeded 50% prior to patient navigator implementation.
Address barriers associated with colonoscopy through patient navigation.	In FY16, 279 patients were referred to the patient navigator and were provided with a range of services including: transportation assistance, medical escort to and from the colonoscopy appointment, colonoscopy procedure education, Spanish translation and appointment scheduling.

Contact Information Maisha Douyon Cover, Director, Health Equity Programs, Center for Community Health and Health Equity, Brigham and Women's Hospital, Boston, MA 02115, mdouyon@partners.org

Stronger Generations Case Manager Program

Program Type Direct Services, Health Professional/Staff Training, Outreach to Underserved, Prevention

Statewide Priority Promoting Wellness of Vulnerable Populations, Reducing Health Disparity

Brief Description or Objective The Stronger Generations Case Manager Program seeks to improve birth outcomes by addressing the social and medical needs of pregnant women. BWH provides technical assistance and training for case managers at each of five of the hospital's licensed or affiliated health centers. In FY16, 450 women were served by case managers through the Stronger Generations case management program. Since inception in 1991, the case managers in the case management program have served over 15,000 women and families.

Target Population

- **Regions Served:** Boston, Boston-Jamaica Plain, Boston-Mattapan, Boston-Roxbury, Boston-South End
- **Health Indicator:** Access to Health Care, Other: Nutrition, Other: Pregnancy
- **Sex:** Female
- **Age Group:** All
- **Ethnic Group:** All
- **Language:** All

Goal Description	Goal Status
To identify clients in need of case management services, conduct assessment for areas of medical and social concern.	In FY16, 94% of clients completed a client assessment with the case manager. Of these, the majority of clients had high intensity needs for services such as housing, mental health, social support, nutrition or material goods. Case managers work to create supports and linkages that complement their clinical care and improve birth outcomes.
To improve maternal health outcomes related to pregnancy and birth by addressing patients social and medical risks that improve health outcomes across the life course.	In FY16, 88% of women referred to a case manager attended the recommended 80% of prenatal visits, exceeding adequacy of prenatal care measures. There are a number of social risks being addressed by case managers in which, 33% of the clients are young parents, 35% reporting not being connected to any supports or social groups and their community and 15% screening positive for postpartum depression.
To provide assistance with material goods to a minimum of 30 families to address the gaps in services.	In FY16, we provided diapers, wipes, infant supplies including layettes, grocery food cards to over 170 clients of the case management program.
To provide transportation assistance to a minimum of 60 patients in BWH licensed and affiliated health centers.	In FY16, over 300 patients provided with transportation assistance through the provision of Charlie Cards and cab vouchers through the Perinatal Transportation Assistance Program.
To promote preconception and interconception health and women's reproductive health.	In FY16, Stronger Generations staff led preconception health community conversations and training with health centers and community members engaging over 50 women. Case managers attended professional development trainings including: DTA benefits, motivational interviewing, lactation counseling, community health education, and the Partners in Perinatal Health Conference.

Partners

Partner Name, Description	Partner Web Address
Mattapan Community Health Center	http://www.mattapanchc.org/
South End Community Health Center	http://www.sechc.org
Whittier Street Health Center	http://wshc.org

Contact Information Maisha Douyon Cover, Director, Health Equity Programs, Center for Community Health and Health Equity, Brigham and

Women's Hospital 41 Avenue Louis Pasteur, Boston, MA 02115, mdouyon@partners.org

Brigham and Women's Hospital - Mission Hill Community Activities

Program Type	Community Health Needs Assessment, Community Participation/Capacity Building Initiative, Grant/Donation/Foundation/Scholarship, Outreach to Underserved
Statewide Priority	Promoting Wellness of Vulnerable Populations, Reducing Health Disparity
Brief Description or Objective	Brigham and Women's Hospital (BWH) has a long-standing commitment to improving the health status of Boston residents, with a focus on Boston neighborhoods surrounding the hospital with disproportionately poor health and social outcomes, and documented need for comprehensive health and social services. BWH makes a unique commitment to the neighboring residents of Mission Hill. We take a broad approach to community health which includes supporting neighborhood schools, youth serving organizations, anti-poverty programs, housing and public health initiatives, and employment and business development throughout Mission Hill. In FY16, over 2,000 people received support from the resources that were provided to Mission Hill organizations. The majority of people were Mission Hill residents but other Boston neighborhoods were also served by the Parker Hill/Fenway ABCD Emergency Food Pantry.
Target Population	• **Regions Served:** Boston-Mission Hill • **Health Indicator:** Access to Health Care • **Sex:**All • **Age Group:** All • **Ethnic Group:** All • **Language:** All

Goal Description	Goal Status
Support neighborhood schools, youth serving organizations, anti-poverty programs, housing and public health initiatives, and employment and business development throughout Mission Hill.	In FY16, over 2,000 people received support from the resources and that were provided to Mission Hill organizations.

Increase capacity building efforts, economic development opportunities and education and training for youth in Mission Hill.	In FY16, $27,000 was allocated to two organizations that serve youth in Mission Hill creating 23 summer jobs for neighborhood youth.
Maintain community partnerships as part of our efforts to the underserved populations in Mission Hill.	In FY16, BWH worked in close partnership with the Parker Hill/Fenway ABCD Emergency Food Pantry. The food pantry served over 500 families and over 2,000 individuals.
Facilitate access to BWH healthcare facilities/services for the Mission Hill community.	In FY16, BWH collaborated with a major Mission Hill organization to provide a free flu clinic, which served over 40 Mission Hill seniors. In addition, BWH participated in several neighborhood health fairs and several neighborhood health education presentations. In addition, BWH offers a free meal program on the first Sunday of each month for 75 Mission Hill seniors. This program has been in existence for over twenty years and is greatly appreciated by the senior population of Mission Hill.

Partners

Partner Name, Description	Partner Web Address
Mission Hill Men's Softball League	
Mission Main Tenants Task Force	
Mission Hill Main Streets	http://www.missionhillmainstreets.org/
Mission Hill Health Movement	http://www.mhhm.org/
Mission Hill Crime Committee	
Roxbury Tenants of Harvard	http://www.roxburytenants.org/
Alice H. Taylor Tenants Task Force	
Mission Church Grammar School	http://www.missiongrammar.org/
Mission SAFE	http://www.missionsafe.org/home.asp
ABCD Parker Hill/Fenway NSC	http://www.bostonabcd.org/centers/parker-hill-fenway/
Tobin Community Center	
Mission Hill Neighborhood Housing Services	http://missionhillnhs.org/
Sociedad Latina	http://www.sociedadlatina.org/
Mission Hill Youth Collaborative	http://www.mhycboston.org
Mission Hill Little League	http://www.eteamz.com/missionhill

Contact Information	John McGonagle, Director of Community Relations, Center for Community Health and Health Equity, Brigham and Women's Hospital, 41 Avenue Louis Pasteur, Boston, MA 02118, jmcgonagle@partners.org

Elementary School Literacy Initiative

Program Type	Community Education, Outreach to Underserved, School/Health Center Partnership
Statewide Priority	Promoting Wellness of Vulnerable Populations, Reducing Health Disparity
Brief Description or Objective	The Elementary School Literacy Initiative is designed to help strengthen reading, comprehension, listening and writing skills in kindergarten to third grade students in select Mission Hill schools. Literacy skills are vital for the healthy development of children and a crucial building block for future academic success. Educational attainment is a key determinant of health. The program provides an opportunity for Brigham and Women's Hospital (BWH) employees to volunteer directly in the schools as pen pals or Brigham Book Buddies. Pen Pals develop a relationship with a child through the exchange of letters. Students are able to practice their literacy skills by receiving and responding to letters and increase their exposure to health care careers and BWH. Book Buddies read aloud to an entire classroom once a month for the school year, and then the books are donated to the classroom. In FY16: 104 Pen Pal students were served and 120 Brigham Book Buddy students were served. Since inception of the Book Buddy program in 1994, numerous students have been served, with 1,403 students served since 2006. Since its inception in 2006, the Pen Pal program has served 872 students.
Target Population	• **Regions Served:** Boston, Boston-Mission Hill • **Health Indicator:** Other: Language/Literacy • **Sex:**All • **Age Group:** Child-Preschool, Child-Primary School • **Ethnic Group:** All • **Language:** All
Goal Description	**Goal Status**

Strengthen reading, comprehension, listening and writing skills in kindergarten to fifth grade students.	In FY16, 104 Pen Pal students were served and 120 Brigham Book Buddy students were served.
Partner with Mission Hill elementary schools to enhance students' academic success.	In FY16, out of all participating teachers, 95% of teachers reported excellent benefits of the program in support of their students' literacy skills. Teachers also reported increased writing proficiency and listening skills among participating students.
To create enthusiasm around literacy in elementary school students.	In FY16, 100% of teachers involved with the Pen Pal and Brigham Book Buddy Program reported increased enthusiasm for reading and writing among their students.

Partners

Partner Name, Description	Partner Web Address
Mission Grammar School	http://www.missiongrammar.org/
Maurice J. Tobin School	http://www.bostonpublicschools.org/node/524

Contact Information Pamela Audeh, Center for Community Health and Health Equity, Brigham and Women's Hospital, 41 Avenue Louis Pasteur, Boston, MA 02115, paudeh@partners.org

BWH Health and Science Initiative

Program Type Community Education, Direct Services, Outreach to Underserved, School/Health Center Partnership

Statewide Priority Promoting Wellness of Vulnerable Populations, Reducing Health Disparity

Brief Description or Objective The Health and Science Initiative provides an informal learning environment that enables elementary and middle school students to learn about health, science and medicine via a hands-on approach. Elementary school students work together on science experiments in small groups led by hospital employees, and listen to presentations by BWH staff guest speakers. Middle School students do hands on science with BWH sponsored Science from Scientists and participate in a yearlong public health class taught by BWH staff. The relaxed, yet structured atmosphere promotes teamwork and produces cooperative learning experiences that increase science knowledge. All Health and Science Initiative curricula are aligned to the Massachusetts state science curriculum

frameworks and standards. The Health and Science Initiative also exposes students to new health careers and introduces them to the types of education and training that are necessary to pursue specific health career paths. Since inception in 2006, 993 students have been served in the Health and Science Initiative (177 in FY16).

Target Population

- **Regions Served:** Boston, Boston-Mission Hill
- **Health Indicator:** Other: Education/Learning Issues
- **Sex:**All
- **Age Group:** Child-Primary School
- **Ethnic Group:** All
- **Language:** All

Goal Description	Goal Status
Promote teamwork and enables cooperative learning experiences that increase science knowledge.	In FY16, 177 students from seven classrooms were served. Since Inception (2006), 993 students have been served in the Health and Science Initiative.
To provide science exploration opportunities for fourth and fifth grade students in Mission Hill participating schools.	In FY16, elementary school students participated in eight "hands on" science experiments and projects, and middle school students participated in eighteen science projects and 9 public health classes. These projects and classes are imbedded in the schools' science curriculum and comprise a large amount of the grade level science teaching.
To increase science knowledge of fourth grade students by working on science topics selected by the participating schools each academic year.	In FY16, students were given a pre-test before science instruction and a post-test after science instruction to measure increase in knowledge. The average percentage increase in scores, from the pre-test to the post test, was 70% for elementary school students and 80% for middle school students.
To provide health career exploration opportunities to fourth and fifth grade students.	In FY16, 22 BWH employees volunteered in the Health and Science Initiative. Students learned about various careers in the hospital, as well as the education needed to enter the healthcare field.

Partners

Partner Name, Description	Partner Web Address
Maurice J. Tobin School	http://www.bostonpublicschools.org/node/524

Contact Information	Pamela Audeh, Center for Community Health and Health Equity, Brigham and Women's Hospital, 41 Avenue Louis Pasteur, Boston, MA 02115, paudeh@partners.org

Indian Health Service

Program Type	Community Education, Direct Services, Health Screening, Outreach to Underserved
Statewide Priority	Promoting Wellness of Vulnerable Populations, Reducing Health Disparity
Brief Description or Objective	The BWH Physicians' Council, through its Brigham and Women's Outreach Programs (BWOP) is committed to supporting BWH physicians in contributing their skills and time through volunteerism. The goals of the Outreach Program include the development of a program that enables BWH physicians to directly support and enhance patient care delivered at a selected program site, while providing a sustainable, ongoing contribution to supporting an underserved community. The Indian Health Service (IHS) focuses on creating volunteer opportunities for BWH physicians at the IHS hospitals in Gallup and Shiprock, New Mexico and an IHS hospital in Chinle, Arizona. All sites serve American Indian communities in remote rural locations. The hospital in Shiprock is physically located on the Navajo reservation. The 55-bed hospital at Shiprock, 99-bed hospital at Gallup and 60-bed hospital in Chinle have adequate equipment, medication and supplies, but they are challenged by a shortage of staffing. The Indian Health Service reports a nearly 15 percent vacancy rate in essential clinical positions, including access to specialty services and consultations. The Brigham and Women's Outreach Program physician volunteers are working to address this challenge. In addition to health professionals volunteering on-site in New Mexico and Arizona, physicians led educational and remote-teaching video and audio conferences broadcast to our IHS clinical colleagues at these sites and IHS clinicians were hosted at BWH. Since the program's inception in 2008, volunteer clinicians have made 165 on-site visits, led 128 remote-teaching video and audio conferences and hosted 16 IHS clinicians at BWH.
Target Population	• **Regions Served:** Not Specified

- **Health Indicator:** Access to Health Care
- **Sex:**All
- **Age Group:** All
- **Ethnic Group:** American Indian/Alaskan Native
- **Language:** All

Goal Description	Goal Status
Create volunteer opportunities for BWH physicians at the IHS hospitals in Gallup and Shiprock, New Mexico and Chinle, Arizona.	Since 2008, 109 faculty members have made 165 volunteer visits to IHS hospitals in Shiprock and Gallup, NM and Chinle, AZ.
Create volunteer opportunities for BWH physicians at the IHS hospitals in Gallup and Shiprock, New Mexico and Chinle, Arizona.	In FY16, 23 faculty clinicians (plus 3 physicians-in-training) made 19 volunteer site-visits to the IHS hospitals in New Mexico and Arizona.
Create volunteer opportunities for BWH physicians to lead Boston- based educational and teaching video conferences to IHS clinician colleagues to expand their capacity to treat a range of conditions.	In FY16, 17 physician volunteers led 25 remote teaching video and audio conferences.
Create volunteer opportunities for BWH physicians to host IHS clinicians here in Boston to experience cutting edge medicine and training within our own hospital.	In FY16, BWH Department of Cardiovascular Medicine with multiple clinicians and allied health professionals hosted and mentored 2 IHS clinicians.

Partners

Partner Name, Description	Partner Web Address
Gallup Indian Medical Center	http://www.ihs.gov/navajo/index.cfm?module=nao_hcc_gallup
Northern Navajo Medical Center	http://www.ihs.gov/navajo/index.cfm?module=nao_hcc_shiprock
Chinle Comprehensive Regional Health Care Facility	http://www.ihs.gov/Navajo/index.cfm?module=nao_hcc_chinle

Contact Information Thomas Sequist, MD, Brigham & Women's Hospital, 617-278-1010, tsequist@partners.org

Partnership with Kennedy Academy for Health Careers (formerly Health Careers Academy)

Program Type	Mentorship/Career Training/Internship, School/Health Center Partnership
Statewide Priority	Reducing Health Disparity, Supporting Healthcare Reform
Brief Description or Objective	In FY16, BWH provided grant support to the Health Careers Engagement project at Edward M. Kennedy Academy for Health Careers (EMK), a Horace Mann Charter School that prepares students in the ninth through twelfth grades for careers in the health sciences. The goals of the Health Careers Engagement project are to promote student knowledge of health care professions, increase the number of students who enter college programs designed to prepare them for health careers, and expand the number and variety of internships and other workplace learning experiences that are available to Kennedy Academy students. In FY16, 334 youth in grades 9-12 participated. Since Inception, 1,284 youth have participated.
Target Population	• **Regions Served:** Boston • **Health Indicator:** Other: Education/Learning Issues • **Sex:**All • **Age Group:** Child-Teen • **Ethnic Group:** All • **Language:** All

Goal Description	Goal Status
A primary goal of the Health Careers Engagement work is to connect EMK students to a variety of mission-related internships, enrichment programs and paid work experiences both within and outside of school.	During the 2015-2016 school year, 209 (63%) Kennedy Academy students participated in academic or health-related enrichment programming outside of school including internships, school year programs, and paid summer work experiences.
A primary goal of the Health Careers Engagement work is to connect EMK students with health professionals as visitors to EMK classrooms to share information about their	During the 2015-2016 school year, 264 students were visited by 19 classroom guest speaker groups to share information and experiences from their health careers field.

career field, their career path, and the course of study required.

A primary goal of the Health Careers Engagement project is to allow EMK students to visit community based health care sites to observe and experience the wide range of career paths first hand.	During the 2015-2016 school year, 279 Kennedy Academy students participated in visits to health related sites to observe and experience varied health professions first hand.
A primary goal of the health careers engagement project is to allow EMK students to visit community based health care sites to observe and experience the wide range of career paths first hand.	During the 2015-2016 school year, there were at least 4 visits to health related sites for each student in grades 9 – 12.
A primary goal of the health careers engagement project is to allow EMK students to visit community based health care sites to observe and experience the wide range of career paths first hand.	During the 2015-2016 school year, 84 EMK students participated in a full day job shadowing or similar immersion experience at varied health care sites around the city.
A primary goal of the health careers engagement Project is to encourage EMK students to select a health related major in their pursuit of higher education.	In FY16, 59% of our 68 graduates selected a health-related major for their college education.

Partners

Partner Name, Description	Partner Web Address
Northeastern University	http://www.northeastern.edu/
Bouve College of Health Science	http://www.northeastern.edu/bouve/
Boston Private Industry Council	http://www.bostonpic.org/
Center for Community Health Education Research and Service (CCHERS)	http://www.cchers.org/
Bunker Hill Community College	http://www.bhcc.mass.edu/
Boston University School of Public Health	http://sph.bu.edu/
Harvard Medical School	http://www.hms.harvard.edu/
Harvard School of Public Health	http://www.hsph.harvard.edu/
Massachusetts College of Pharmacy & Health Sciences	https://www.mcphs.edu/
Simmons College	http://www.simmons.edu/
Wentworth Institute of Technology	http://www.wit.edu/
Mass Mentoring Partnership	http://massmentors.org/
Brigham & Women's Hospital	http://www.brighamandwomens.org/

Massachusetts General Hospital http://www.massgeneral.org/

Contact Information Bill Rawlinson, Health Engagement Coordinator Edward M. Kennedy Academy for Health Careers 360 Huntington Avenue-102 Cahners Hall Boston, MA 02115, wrawlinson@bostonpublicschools.org

Project TEACH (Teen Education About Careers in Health)

Program Type Community Education, Mentorship/Career Training/Internship, Outreach to Underserved, School/Health Center Partnership

Statewide Priority Promoting Wellness of Vulnerable Populations, Reducing Health Disparity, Supporting Healthcare Reform

Brief Description or Objective Project TEACH (Teen Education About Careers in Health) is a summer program targeted at rising 10th grade students attending BWH partnering public high schools in the surrounding neighborhoods. The program is designed to stimulate interest in health, science and medical careers. In FY16, 25 youth participated. Since inception in 2009, 175 students have participated.

Target Population

- **Regions Served:** Boston
- **Health Indicator:** Other: Education/Learning Issues
- **Sex:**All
- **Age Group:** Child-Teen
- **Ethnic Group:** All
- **Language:** All

Goal Description	Goal Status
Expose rising 10th grade students to a variety of professions in health and science in order to stimulate interest in the field.	Project TEACH students were provided with a paid internship for 24 hours per week for six weeks in BWH departments. In FY16, 25 students participated; Since inception in 2009, 175 students participated. Evaluation results show that 100% of FY16 participants reported a positive change in communication, reflection, and resiliency as a result of the program.
Prepare rising 10th grade students for high school math and science courses.	In FY16, Project TEACH provided teaching, support, and guidance in preparing research papers and presentations on science or health topics of students' choosing. Students participated in weekly science related field trips as well as college tours.

Strengthen the pipeline between our middle school and high school youth programs.	In FY16, 12 Summer Science Academy Alumni from Summer 2015 applied to Project TEACH, and 12 were accepted.
Strengthen the pipeline between our middle school and high school youth programs.	In addition, 15 Project TEACH Alumni from Summer 2016 and 3 from Summer 2014 applied to Student Success Jobs Program in the autumn of 2015 and 15 were accepted.
Provide students with summer work experience in a hospital setting with highly skilled health care professionals as their supervisors.	In FY16, recruited 14 BWH health professionals to advance learning and exposure of health, science and medical careers to participating rising 10th grade students in Project TEACH.

Partners

Partner Name, Description	Partner Web Address
Boston Private Industry Council	http://www.bostonpic.org/
Boston Latin Academy	http://latinacademy.org/
Community Academy of Science and Health	http://www.bostonpublicschools.org/node/416
Edward M. Kennedy Academy for Health Careers	http://www.kennedyacademy.org/
Urban Science Academy	http://www.urbansci.com/
Madison Park Technical Vocational High School	http://www.madisonparkhs.org/

Contact Information Jesenia Cortes, SSJP Coordinator, Center for Community Health and Health Equity, Brigham and Women's Hospital, jmcortes@partners.org

South Street Youth Center

Program Type	Community Education, Community Participation/Capacity Building Initiative, Grant/Donation/Foundation/Scholarship, Outreach to Underserved, Prevention
Statewide Priority	Promoting Wellness of Vulnerable Populations
Brief Description or Objective	BWH provides a financial contribution to the operation of the South Street Youth Center (SSYC) whose mission is to provide a safe, educational, and engaging space during out-of-school time for young residents of South Street Development. Through its broad-based programs, participants learn a happy, healthy, resilient attitude

toward life that will help sustain them through adulthood. In FY16, 111 youth accessed the Center. Since inception, approximately 655 youth have accessed SSYC.

Target Population

- **Regions Served:** Boston-Jamaica Plain
- **Health Indicator:** Other: Education/Learning Issues
- **Sex:**All
- **Age Group:** Child-Preteen, Child-Primary School, Child-Teen
- **Ethnic Group:** All
- **Language:** English, Spanish

Goal Description	Goal Status
Provide a safe, educational, and engaging space during out of school time for young residents of South Street Development in Jamaica Plain.	In FY16, 111 youth participated in SSYC. Since inception, approximately 655 youth accessed SSYC.
Maintain youth attendance rates in programming.	In FY16, 111 youth participated in SSYC. Since inception, approximately 655 youth accessed SSYC.
Maintain percentage of youth accessing SSYC as a resource for homework help during after-school.	In FY16, 100% of youth reported doing homework during homework time. There is a robust homework support team (an average of 5 extra volunteers come for the hour of homework time and has specific youth they work with).

Partners

Partner Name, Description	Partner Web Address
BPD E-13 Community Service department	http://www.bpdnews.com/districts/e-13/e-13-community-service-office/
Boston Housing Authority	http://www.bostonhousing.porg
Jamaica Plain Neighborhood Housing Corporation	http://www.jpndc.org
Spontaneous Celebration/ Beantown Society	http://www.spontaneouscelebrations.org/mission.html
Curtis Hall/BCYF	http://jpcommunitycenters.org/programs/curtis-hall-programs/
The Mildred Hailey	http://www.bostonhousing.org
ADOBE Youth Voices	http://www.adobe.com/corporate-responsibility/education/adobe-youth-voices.html

ABCD SummerWorks	http://www.bostonabcd.org/programs/youth-development/summer-works/index.html
Linda Wellness Warrior	
Contact Information	Corey Stallings, Program Coordinator, South Street Youth Center, South Street Development, 617-477-8263, southstreetyouth@gmail.com

Southern Jamaica Plain Health Center (SJPHC)

Program Type	Direct Services, Health Coverage Subsidies or Enrollment, Health Screening, Outreach to Underserved, Physician/Provider Diversity, Prevention, School/Health Center Partnership, Prevention, Health Screening
Statewide Priority	Address Unmet Health Needs of the Uninsured, Chronic Disease Management in Disadvantage Populations, Promoting Wellness of Vulnerable Populations, Reducing Health Disparity, Supporting Healthcare Reform
Brief Description or Objective	Southern Jamaica Plain Health Center (SJPHC) operates through the license of Brigham and Women's Hospital and has been serving the community for 46 years. SJPHC's mission is to provide personal, high quality health care with compassion and respect to a diverse community. The health center now serves over 13,000 patients with its comprehensive services of adult medicine, pediatrics, women's health, mental health/substance abuse services, cardiology, nutrition, and podiatry. Health center providers include seven internists, four pediatricians, two internists/pediatricians, two physician assistants, an obstetrician/gynecologist, midwives and nurse practitioners in women's health, a podiatrist, renal specialist and cardiologist, and social workers, psychologists and psychiatrists in the mental health/substance abuse department. A bilingual staff of nurses, medical assistants, secretaries, financial counselors, and other staff provide services and support the work of medical providers. The health center augments its medical and mental health services with health education, case management, screening programs (blood pressure, diabetes, mammography, cholesterol), and a Health Promotion Center that provides exercise, health education, support groups and other programming to patients and community. In addition, the health

center has a long history of providing substance abuse treatment services to patients, families, and the community. Health center staff also work collaboratively with residents of the local South Street public housing development to promote the health of public housing residents. In FY16, 10,343 patients completed 46,000 visits.

Target Population

- **Regions Served:** Boston
- **Health Indicator:** Access to Health Care, All
- **Sex:**All
- **Age Group:** All
- **Ethnic Group:** All
- **Language:** All

Goal Description	Goal Status
Provide personal, high quality health care with compassion and respect to a diverse community.	In FY16, 10,343 patients were served.
Operate a Health Promotion Center to provide more alternative and complementary health services.	In FY16, the Health Promotion Center continued to provide multiple movement programs, senior programs, and youth programs.
Expand group visits.	In FY16, mental health groups have increased utilization.
Take steps to become a Patient Centered Medical Home.	In FY16, SJPHC remained certified as a level 3 (highest level) Patient-Centered Medical Home by the National Committee on Quality Accreditation (NCQA).

Partners

Partner Name, Description	Partner Web Address
Hyde Square Task Force	http://www.hydesquare.org/
JP Neighborhood Development Corp	http://www.jpndc.org/
Boston Housing Authority – South Street	http://www.bostonhousing.org/detpages/devinfo52.html
Spontaneous Celebrations	http://www.spontaneouscelebrations.org/

Contact Information Tom Kieffer, Executive Director, Southern Jamaica Plain Health Center, 640 Centre Street, Jamaica Plain, MA 02130, tkieffer@partners.org

Student Success Jobs Program (SSJP)

Program Type	Grant/Donation/Foundation/Scholarship, Mentorship/Career Training/Internship, Outreach to Underserved, School/Health Center Partnership
Statewide Priority	Promoting Wellness of Vulnerable Populations, Reducing Health Disparity
Brief Description or Objective	SSJP is an intensive year-round employment and mentoring program for students of Boston public high schools. With the goal of addressing the under-representation of young people of color in health and science careers, SSJP provides 10th through 12th grade students the opportunity to build skills and a career pathway in the health and science field. Brigham and Women's Hospital (BWH) employees provide intensive mentoring to students in a dynamic and professional hospital environment. Tutoring support is also provided to ensure the academic success of students in their science and mathematics subjects. Individualized assistance enables students to identify their options for higher education and prepare college and financial aid applications. Since inception in 2001, SSJP has served 513 students (95 in FY16).
Target Population	• **Regions Served:** Boston • **Health Indicator:** Other: Education/Learning Issues • **Sex:**All • **Age Group:** Adult-Young, Child-Teen • **Ethnic Group:** All • **Language:** All

Goal Description	Goal Status
To address the need for proficient and traditionally underrepresented populations in the health, science, and medical careers.	In FY16, 95% of alumni entered college after SSJP or have graduated college, and 74% of those students majored in a health or science field. Seventy percent reported that they were first in their family to enroll in college.
To enhance high school students' interest in health careers through mentorship by health care professionals.	In FY16, SSJP recruited nine new health professionals to serve as mentors to SSJP, to join the other 60+ BWH departments and mentors already involved with SSJP.

To support academic progress and post-secondary education of participants.	SSJP maintained 100% college matriculation in FY16. Graduates were accepted into many top universities including: Harvard University, Tufts University, and Boston University. 93% of program participants cite being exposed to a professional environment as very important to their getting accepted into college.
To foster networking opportunities for emerging and underrepresented health care professionals with peers and the hospital community.	In FY16, SSJP provided seminars and a day- long retreat to increase communication, team building as well as foster friendships among student participants.

Partners

Partner Name, Description	Partner Web Address
Boston Latin Academy	http://latinacademy.org/
John D. O'Bryant High School	http://www.obryant.us/
Madison Park High School	http://www.madisonparkhs.org/
New Mission High School	http://www.bostonpublicschools.org/node/497
Community Academy of Science and Health	http://www.bostonpublicschools.org/node/416
Boston Private Industry Council	http://www.bostonpic.org/
Edward M. Kennedy Academy for Health Careers	http://www.kennedyacademy.org/
Urban Science Academy	http://www.urbansci.com/
Fenway High School	http://fenwayhs.org

Contact Information Youth Development Manager, Center for Community Health and Health Equity, ssjp@partners.org

Summer Science Academy

Program Type	Community Education, Direct Services, Mentorship/Career Training/Internship, Outreach to Underserved, School/Health Center Partnership
Statewide Priority	Promoting Wellness of Vulnerable Populations, Reducing Health Disparity, Supporting Healthcare Reform
Brief Description or Objective	Summer Science Academy is targeted to rising 9th grade students attending BWH partnering middle schools and organizations in the Mission Hill neighborhood of Roxbury. The goals of the Summer

Science Academy are to: • Engage rising ninth graders from Mission Hill schools and organizations in health and science topics through an interdisciplinary curriculum, scientific literature review, and an introduction to scientific writing. • Expose rising ninth grade students to professions in the health and science field. Since inception in 2009, Summer Science Academy has served 141 students. In FY16, Summer Science Academy served 19 students.

Target Population

- **Regions Served:** Boston, Boston-Mission Hill, Boston-Roxbury
- **Health Indicator:** Other: Education/Learning Issues
- **Sex:**All
- **Age Group:** Child-Teen
- **Ethnic Group:** All
- **Language:** All

Goal Description	Goal Status
Engage rising ninth graders from Mission Hill schools and organizations in health and science topics through an interdisciplinary curriculum, scientific literature review, and an introduction to scientific writing. Expose rising ninth grade students to professions in the health and science field.	In FY16, there were 19 students; Since inception in 2009, Summer Science Academy has served 141 students.
To address the need for traditionally under-represented populations in health, science and medical careers.	In FY16, 89% of the participants were youth of color attending schools in Roxbury with over 85% of the school population receiving free and reduced price lunch (a key indicator of low income status).
To enhance rising students' interest in health, science and medical careers through teaching and career exposure by health care professionals.	At the end of the six-week program, 100% of the students reported experiencing positive change in their academic motivation, while 94% reported a positive change in interest in learning and academic perseverance.

To advance health, science and medical learning for rising ninth grade students in participating Boston Public Schools.	Participants learned about public health topics and did hands on science experiments weekly, while also learning about health careers. All of their learning was recorded and documented in a summer book. All participants received a copy of the book to keep.

Partners

Partner Name, Description	Partner Web Address
Mission Hill School	www.missionhillschool.org/
Roxbury Tenants of Harvard	www.roxburytenants.org
Boston Teachers Union School	http://www.bostonpublicschools.org/school/boston-teachers-union-school
Maurice J. Tobin K-8 School	http://www.bostonpublicschools.org/Page/927
Apprentice Learning	http://apprenticelearning.org/

Contact Information Pamela Audeh, Center for Community Health and Health Equity, Brigham and Women's Hospital, 41 Avenue Louis Pasteur, Boston, MA 02115, paudeh@partners.org

Brookside Community Health Center

Program Type	Direct Services, Health Coverage Subsidies or Enrollment, Health Screening, Outreach to Underserved, Physician/Provider Diversity, Prevention, School/Health Center Partnership
Statewide Priority	Address Unmet Health Needs of the Uninsured, Chronic Disease Management in Disadvantage Populations, Promoting Wellness of Vulnerable Populations, Reducing Health Disparity, Supporting Healthcare Reform
Brief Description or Objective	Brookside's mission is to provide high quality, family-oriented, comprehensive health care, with a focus on serving the low income population of the community, regardless of ability to pay. Moreover, Brookside strives to: 1. Continue to be recognized as a leader in the delivery of high quality, multi-disciplinary, integrated family- oriented health care and as a model program for community-based primary care within the Brigham and Women's, Brigham and Women's Faulkner Hospitals, and Partners Healthcare Systems. 2. Continue to offer successful programs training practitioners in the provision of community-

based, culturally appropriate health care, while still maintaining a focus on the delivery of primary care. 3. Maintain a leadership role in developing programs designed to improve the health status of Jamaica Plain and the surrounding communities.

Target Population

- **Regions Served:** Boston
- **Health Indicator:** Access to Health Care
- **Sex:**All
- **Age Group:** All
- **Ethnic Group:** All
- **Language:** All

Goal Description	Goal Status
Provide high quality, family-oriented, comprehensive health care, with a focus on serving the low income population of the community, regardless of ability to pay.	In FY16, there were 31,071 routine and well visits and nearly 8,000 behavioral health visits. The total panel size across all departments is 12,029 patients.
Maintain ability to meet patient demand.	In FY16, continued to utilize two unpaneled providers to provide urgent care and increase access. Replaced two pediatrician vacancies.
Expand support to youth for increased access to physical activity and healthy lifestyles.	In FY16, two Health Corps Interns and Urban Youth Sports Coordinators offered community based programming for children and case management support.
Expand support to youth for increased access to physical activity and healthy lifestyles.	In FY16, Pediatric and Urban Youth Sports programs maintained coordination with the Nutrition Department's "Fitness in the City" Program adding physical activities. Additionally, in FY16, we initiated Cooking Matters for a group of 10 families.
Expand support to youth for increased access to physical activity and healthy lifestyles.	In FY16, expanded the Healthy Life-Styles Clinic – a curricula-based 12-week program of classes and group visits for children & families.
Expand support to youth for increased access to physical activity and healthy lifestyles.	In FY16 continued a very successful summer referral program assisting children with access to summer camps and/or summer jobs.
Maintain/exceed established clinical excellence in all departments.	In FY16, the Medical Department met goals for Population Health Management for diabetes disease management, hypertension and screening of various cancers.

Maintain/exceed established clinical excellence in all departments.	In FY16, Family Services Department successfully renewed the MA Department of Public Health's Substance Abuse (SA) License to ensure continued out-patient SA counseling.

Partners

Partner Name, Description	Partner Web Address
JP Health Planning JP VIP & Trauma Response Team JP Youth Disparities Initiative	www.intercreativadesign.com/jphealthplanning/
Martha Eliot Health Center	http://www.childrenshospital.org/locations/Site1395/mainpageS1395P57sublevel8.html
Boston Alliance for Community Health	http://www.bostonhealthalliance.org/
Center for Community Health Education Research and Service, Inc. (CCHERS)	http://www.ccher.org/index.html
Boston Centers for Youth & Families	http://www.cityofboston.gov/bcyf/
Roxbury YMCA	http://www.ymcaboston.org/roxbury/
Jamaica Plain Neighborhood Development Corporation	http://www.jpndc.org/
Urban Edge	http://www.urbanedge.org/
Camp Harborview	http://www.chvf.org/
ESAC	http://www.esacboston.org/
Fitz Urban Youth Sports	http://sportscorps.net/aboutfysi/

Contact Information Margaret (Mimi) Jolliffe, Executive Director, Brookside Community Health Center, 3297 Washington Street, Jamaica Plain, MA 02130, mjolliffe@partners.org

Racial Healing and Reconciliation Team

Program Type	Community Education, Community Health Needs Assessment, Mentorship/Career Training/Internship, Outreach to Underserved, Prevention
Statewide Priority	Promoting Wellness of Vulnerable Populations, Reducing Health Disparity
Brief Description or Objective	As an approach to improving community health, the Southern

Jamaica Plain Health Center, a licensed health center of BWH is working with a group of 16 youth (8 white youth and 8 youth of color) in a racial reconciliation and healing (RRH) process. Through readings, affinity groups, workshops, speak outs and community teaching, youth are challenged and supported to understand the levels of the system of racism, explore racial identity development theory, and transform into racial justice activists, channeling their efforts to address the impact of racism on the social determinants of health with a focus on employment, workforce development and education.

Target Population

- **Regions Served:** Boston, Boston-Jamaica Plain
- **Health Indicator:** Other: Education/Learning Issues
- **Sex:** All
- **Age Group:** Adult-Young, Child-Teen
- **Ethnic Group:** All
- **Language:** English

Goal Description	Goal Status
Train 16 youth in health equity, racial justice framing, basic public health and epidemiology and undoing racism work.	Training completed in June 2016; new group of 16 started in October 2016.
Train four adults in the RRH Model started in 2012.	Training completed in June 2016; 16 adults trained.
Provide community education on health equity and the connection between racism and health.	Within a 12-month period, the RRH provided 10 trainings; trainings completed August 2016.
Produce a second video documenting youth process.	Dante Luna Productions of Interaction Institute for Social Change who produced 3 short videos that will go on website.
Connect work of R&R team with larger Jamaica Plain JP Equity.	Monthly trainings have been offered to community members since December 2011, with over 1,500 individuals trained as of FY16.

Partners

Partner Name, Description	Partner Web Address
Boston Public Health Commission	www.bphc.org
JP Youth Health Equity Collaborative	
YWCA (Init Program)	www.ywcaboston.org/init/
The City School Summer Leadership Program	http://thecityschool.org
Brookline High School	http://bhs.brookline.k12.ma.us/

Boston Latin School	http://www.bls.org/
Boston Latin Academy	http://latinacademy.org/
Meridian Academy	http://www.meridianacademy.org/
City on the Hill	http://www.cityonahill.org
English High School	http://www.englishhs.org/
Milton Academy	http://milton.edu/

Contact Information Abigail Ortiz, MSW, MPH, Southern Jamaica Plain Health Center, 640 Centre Street, Jamaica Plain, MA 02130, aortiz3@partners.org

Brigham and Women's/Mass General Health Care Center (BW/MG HCC)

Program Type

Community Education, Direct Services, Health Screening, Prevention

Statewide Priority

Promoting Wellness of Vulnerable Populations

Brief Description or Objective

The goal of the Brigham and Women's/Mass General Health Care Center is to provide the same standards in high quality care and services to its patients in a more convenient community location. Moreover, it strives to provide maximum patient convenience and care by locating many specialty services under one roof. In FY16, our community outreach and

education efforts touched over 1,100 people and over 4,700 since the health center's inception.

Target Population

- **Regions Served:** Canton, Dedham, Foxborough, Franklin, Mansfield, Medfield, Medway, North Attleboro, Norwood, Plainville, Sharon, Stoughton, Walpole
- **Health Indicator:** Access to Health Care, All
- **Sex:**All
- **Age Group:** All
- **Ethnic Group:** All
- **Language:** All

Goal Description	Goal Status
Supporting community educational initiatives by local organizations in the greater Foxborough elder population.	In FY16, we again helped increase HESSCO's reach within the community through sponsorship/promotion of its annual caregiver conference. Recruited to join HESSCO Board of Directors.

Provision of free spring and fall health classes designed for consumers in the greater Foxborough community.	On-site health classes covered topics such as ob-gyn, urologic issues, pain management, and flu prevention. Over 120 people participated in the sessions held in FY16 in our Center.
Present general health education information to the greater Foxborough community via speakers bureau and other options.	In FY16, our center sponsored multiple health-related speaking events that took place in the communities of Foxborough, Attleboro, and Sharon. Events were free of charge to the public & presented by BW/MG HCC providers. We reached another 100+ consumers via this approach, covering topics including fall prevention, relief of knee pain, and urologic issues in adult men and women.
Active participation in domestic violence (d/v) and violence prevention & wellness/health education in greater Foxborough community.	Proponent and supporter of local d/v educational/advocacy organizations (HUGS-Foxboro, and local D/V support group run by Foxborough Human Services); significant contributor to two local Chambers of Commerce and community, eldercare, and health-related awareness-building around various options.
Support local violence prevention and domestic violence (d/v) awareness work in Foxborough community.	In FY16, support included promotion and fundraising assistance for HUGS & D/V support group members at holidays, and general awareness-building around violence education and prevention, particularly in the community's school-age population.
Community support provided to local organizations addressing key health issues.	In FY16, provided support to Foxborough and Norton Public Schools' school-to-career partnerships, local YMCA, Foxborough Discretionary Fund holiday food drive (via Jaycees), Norton Cupboard of Kindness Food Pantry, and HUGS-Foxboro.
Community support provided to local organizations addressing key health issues.	In FY16, supported communities through Neponset Valley Chamber of Commerce's Eldercare & Health/Wellness Alliances, and Tri-Town Chamber Community Relations efforts, which focused on raising profile of small local non-profits.

Partners

Partner Name, Description	Partner Web Address
Foxborough Human Services & COA	http://www.foxboroughma.gov/Pages/FoxboroughMA_COA/index
Tri-Town Chamber of Commerce	http://www.tri-townchamber.org/
HESSCO Elder Services	http://www.hessco.org/

Foxboro Jaycees	http://www.foxborojaycees.org/
Neponset Valley Chamber – Elder Alliance	http://www.nvcc.com/
School-to-Career Partnership	www.schooltocareer.info
HUGS-Foxboro	http://www.hugsfoxboro.org/
CHNA-7	

Contact Information Cindy Peterson, Executive Director, Brigham and Women's/Mass General Health Care Center (BW/MG HCC) 20 Patriot Place Foxborough, MA 02035, clpeterson@partners.org

Violence Intervention and Prevention Program

Program Type Community Education, Health Professional/Staff Training, Outreach to Underserved, Prevention

Statewide Priority Promoting Wellness of Vulnerable Populations, Reducing Health Disparity

Brief Description or Objective The Violence Recovery Program works to reduce the disproportionate burden of violence in our communities and improve health outcomes through direct interventions, education, prevention, community building and trauma recovery. Our prevention efforts focus on increasing awareness and education on the adverse health effects of all intentional violence on both an individual and community level. The Violence Recovery Program (VRP) works collaboratively with the Burn, Trauma and Surgical Critical Care Division (BTSCC) to provide direct intervention to any patient admitted to BWH as a result of intentional violence. The Violence Recovery advocates meet with patients within 24 hours of admission, provide safety assessments, and help develop an individualized plan for ongoing advocacy and support after discharge. The VRP also provides supportive services to the patient's family and significant others as appropriate. The VRP provides ongoing support, case management and community referrals as needed for patients after discharge. In FY16, the program worked with 162 people. Since program inception in 2011,

we have worked with 611 people. Through our prevention efforts we held 45 different meetings or trainings for 614 people. We started a girls group to work with young women at risk for violence exposure/victimization. This 8-week workshop series covered issues such as social media, healthy relationships, yoga and relaxation, health consequences of violence.

Target Population

- **Regions Served:** Boston
- **Health Indicator:** Injury and Violence, Other: Safety, Other: Safety - Home
- **Sex:**All
- **Age Group:** Adult-Young, All Adults, Child-Preteen
- **Ethnic Group:** All
- **Language:** All

Goal Description	Goal Status
Address the burden of violence in Boston by improving the outcomes of individuals exposed to violence through a focus on safety planning, risk reduction, asset promotion, trauma recovery and prevention.	In FY16, the Violence Recovery Program provided services to 162 patients of the Brigham and Women's Hospital admitted for treatment of penetrating injuries.
Increase awareness and understanding of violence as a social determinant of health, and the impact exposure to multiple forms of violence have on individuals and our communities.	In FY16, the Violence Recovery Program provided 45 training/education sessions to 614 people. Our audience includes health care providers, community members, and other professionals in the community.

Partners

Partner Name, Description	Partner Web Address
Boston Center for Youth and Families	http://www.cityofboston.gov/BCYF/
Louis D. Brown Peace Institute	http://www.ldbpeaceinstitute.org/
Boston Medical Center- Violence Intervention and Advocacy Program	http://www.bmc.org/violence-intervention-advocacy.htm
Mission Hill Youth Collaborative	http://missionhillyouthcollaborative.org/
Youth Options Unlimited	Http://youboston.org
Youth Connect	http://www.youboston.org/partner-profiles/boys-and-girls-clubs-of-boston/

Goodwill – Job Readiness	http://www.goodwillmass.org/
Roxbury Presbyterian Church Social Impact Center	
Contact Information	Mardi Chadwick, J.D. Director Violence Intervention and Prevention Programs, 41 Avenue Louis Pasteur, Boston, MA 02115 , mchadwick1@partners.org

Brigham and Women's Hospital - Maurice J. Tobin School Partnership

Program Type	Community Education, Direct Services, Outreach to Underserved
Statewide Priority	Promoting Wellness of Vulnerable Populations, Reducing Health Disparity
Brief Description or Objective	For 25 years, BWH and the Maurice J. Tobin School in Mission Hill have partnered to support the school's academic mission by increasing parent, family, community, and hospital involvement in students' learning. With the established link between educational attainment and health status, this partnership was created to support the hospital's mission of improving the health status of the Mission Hill community. Elements of the program are designed to engage hospital employees in students' education. Further, in FY16, efforts were made to support students and teachers directly in the classroom in order to improve educational outcomes and achievement. In FY16, 453 children and their families participated. Since inception in 1991, approximately 10,305 students and their families have had access to services provided by the Brigham and Women's Hospital- Maurice J. Tobin Partnership.
Target Population	• **Regions Served:** Boston-Mission Hill • **Health Indicator:** Access to Health Care, Other: Education/Learning Issues, Other: Language/Literacy • **Sex:**All

- **Age Group:** Child-Preschool, Child-Primary School
- **Ethnic Group:** All
- **Language:** Not Specified

Goal Description	Goal Status
Support the school's academic mission by increasing parent, family, community and hospital involvement in students' learning.	In FY16, 453 children and their families served; Since inception (1991), approximately 10,305 students and their families.
Support the school's academic mission by increasing BWH employee involvement.	In FY16, 37 BWH employees volunteered to be matched with a Tobin student needing additional assistance, as identified by school faculty, to read to once a week for an hour for the entire school year through the non-profit, Read to a Child.
Create a continuum of services to students and families to support their emotional, social and academic needs.	In FY16, the school administration and faculty coordinated supplemental student services (afterschool programs, etc) and interventions and family support programs to address learning and service gaps for students and families.
Create a continuum of services to students and families to support their emotional, social and academic needs.	In FY16, all grade 3-8 teachers (18) received instructional support through the Achievement Network which provided real time individualized student assessment (for 243 students) enabling teachers to use data to drive and improve instructional practices.
Create a continuum of services to students and families to support their emotional, social and academic needs.	In FY16, students received additional supports in reading, technology and science including hands on science instruction, and online academic supports.

Partners

Partner Name, Description	**Partner Web Address**
Maurice J. Tobin K-8 School	http://www.bostonpublicschools.org/school/tobin-k-8-school
Greater Boston Food Bank	http://www.gbfb.org/
Read to a Child	http://www. readtoachild.org
Science from Scientists	http://www.sciencefromscientists.org/
America Scores	http://www.americascores.org/about-us/program
Achievement Network	http://www.achievementnetwork.org/

Contact Information Pamela Audeh, Center for Community Health and Health Equity, Brigham and Women's Hospital, 41 Avenue Louis Pasteur, Boston, MA 02115 , paudeh@partners.org

Stronger Generations

Program Type	Community Education, Community Participation/Capacity Building Initiative, Direct Services, Outreach to Underserved, Prevention, Support Group
Statewide Priority	Promoting Wellness of Vulnerable Populations, Reducing Health Disparity
Brief Description or Objective	Stronger Generations, formerly the Birth Equity Initiative, seeks to eliminate the racial disparities in infant mortality and poor birth outcomes among the communities served by Brigham and Women's Hospital. Beyond eliminating the persistent racial and ethnic disparities in infant mortality, the Stronger Generations program aims to lay a foundation for a lifetime of health equity through a focus on the social, medical, and economic needs of women and their families before, during, and after their pregnancies. This effort aims to reach pregnant and parenting young adults. These individuals are often marginalized, at high-risk for poor birth outcomes and have significant psychosocial needs. Our program activities strive to address the diverse needs of the pregnant and parenting young adult population through an array of programs aimed at providing social support and reducing the stress and isolation that some young parents face. In FY16, Stronger Generations continued community outreach efforts, particularly those supporting adolescent and young adult parents, and supported the initiatives growing programmatic offerings in leadership development, workforce development,

and social support. In FY16, Stronger Generations engaged a total of 665 individuals. Since inception in 2010, this effort has engaged over 5,000 individuals.

Target Population

- **Regions Served:** Boston
- **Health Indicator:** Other: Family Planning, Other: Parenting Skills, Other: Pregnancy, Responsible Sexual Behavior
- **Sex:** All
- **Age Group:** Adult-Young
- **Ethnic Group:** Black/African American, Hispanic/Latino
- **Language:** All

Goal Description	Goal Status
To lead a Young Parent Ambassador Program to provide outreach, resources and social support for pregnant and parenting young families.	In FY16, hired 5 young parents as BWH employees to participate in a year-long leadership, personal development and training program aimed at education, workforce development and self-sufficiency.
To lead a consortium of providers focusing on the needs of pregnant and parenting young adults.	In FY16, led consortium of 25 providers and community organizations for pregnant and parenting young adults.
To organize a city-wide summit for pregnant and parenting young adults.	In FY16 the Summit for Teen Empowerment & Parenting Success (STEPPS) convened over 110 pregnant and parenting young adults & 75 young parent providers in the Boston area.
To increase social support, self-efficacy and empowerment for young parents through activities focused on family engagement, peer support	Convened 6 gatherings for young parents, engaging over 125 young families through educational workshops, and social events.
To provide vulnerable/at-risk families with infant/child safety resources and information through our infant car seat program.	In FY16, distributed over 75 infant car seats for families in need, and provided them with information and education related to infant/child safety.
To provide transportation assistance to low-income pregnant and postpartum women who experience barriers to attending medical appointments.	In FY16, provided 300 women and families with transportation assistance to attend prenatal, postpartum and pediatric medical appointments at 10 health care sites.
To provide Centering Pregnancy as a shared medical visit model for women receiving prenatal care at Brigham and Women's Hospital's Resident OB Ambulatory Care clinic.	In FY16 provided Centering Pregnancy prenatal care to 25 Brigham and Women's Hospital patients.

Partners

Partner Name, Description	Partner Web Address
Jeremiah Program, Endicott Boston	https://jeremiahprogram.org/boston
Children's Hospital Boston - Young Parents Program (YPP)	http://www.childrenshospital.org/clinicalservices/Site2277/mainpageS2277P0.html
Centering Healthcare Institute	www.centeringhealthcare.org
March of Dimes	www.marchofdimes.com
ABCD Health Services	http://www.bostonabcd.org/health.aspx
Mass Alliance on Teen Pregnancy	www.massteenpregnancy.org
Neighborhood Health Plan	www.nhp.org
Jamaica Plain WIC	www.wicprograms.org/ci/ma-jamaica_plain
Bunker Hill Community College	http://bhcc.mass.edu
Read Boston	http://readboston.org
Community Dispute Settlement Center	www.cdsc.org
Key Steps	http://www.keystepsboston.org
BPHC Healthy Baby Healthy Child Program	http://www.bphc.org/whatwedo/childrens-health/healthy-baby-healthy- child/Pages/Healthy-Baby-Healthy- Child.aspx
BPHC Father Friendly Program	http://www.bphc.org/whatwedo/childrens-health/father-friendly/Pages/Father-Friendly.aspx
Simmons College	http://www.simmons.edu/
Children's Services of Roxbury	http://csrox.org/
Department of Transitional Assistance	http://www.mass.gov/eohhs/gov/departments/dta/
MA Coordinated Family & Community Engagement	http://www.mass.gov/edu/birth-grade-12/early-education-and-care/find-early-education-and-care-programs/coordinated-family-and-community-engagement.html

Contact Information Maisha Douyon Cover, Director, Health Equity Programs, Center for Community Health and Health Equity, Brigham and Women's Hospital 41 Avenue Louis Pasteur, Boston, MA 02115, mdouyon@partners.org

Brigham and Women's Hospital Certified Application Counselors

Program Type	Direct Services
Statewide Priority	Address Unmet Health Needs of the Uninsured, Supporting Healthcare Reform
Brief Description or Objective	Brigham and Women's Hospital Certified Application Counselors (CACs) provide information about the full range of insurance programs offered by EOHHS and the Health Connector. Our CACs help individuals complete an application or renewal; work with the individual to provide required documentation; submit applications and renewals for the Insurance Programs; interact with EOHHS and the Health Connector on the status of such applications and renewals; and help facilitate enrollment of applicants or beneficiaries in Insurance Programs. In FY16, BWH CACs contributed to the estimated 75 patient financial counselors that served patients who needed assistance with their coverage.
Target Population	• **Regions Served:** Boston • **Health Indicator:** Access to Health Care • **Sex:**All • **Age Group:** All • **Ethnic Group:** All • **Language:** All

Goal Description	Goal Status
Provide information about the full range of insurance programs offered by EOHHS and the Health Connector.	In FY16, BWH CACs contributed to the estimated 75 patient financial counselors that served patients who needed assistance with their coverage.

Contact Information	Kim Simonian, Director for Public Payer Patient Access, Community Health, Partners Healthcare, ksimonian@partners.org

Expenditures

Community Benefits Programs

Expenditures	Amount
Direct Expenses	$26,084,100
Associated Expenses	Not Specified
Determination of Need Expenditures	$292,591
Employee Volunteerism	Not Specified
Other Leveraged Resources	$7,024,199

Net Charity Care

Expenditures	Amount
HSN Assessment	$33,641,171
HSN Denied Claims	$169,189
Free/Discount Care	$1,841,898
Total Net Charity Care	$35,652,258

Corporate Sponsorships	$1,139,877
Total Expenditures	$70,193,025
Total Revenue for 2016	$1,958,256,00
Total Patient Care-related expenses for 2016	$1,701,676,898
Approved Program Budget for 2017 (*Excluding expenditures that cannot be projected at the time of the report.)	$70,193,025

Attachment 15

ARTICLES OF ORGANIZATION

Examiner

Name Approved

The Commonwealth of Massachusetts

OFFICE OF THE MASSACHUSETTS SECRETARY OF STATE
MICHAEL J. CONNOLLY, Secretary
ONE ASHBURTON PLACE, BOSTON, MASSACHUSETTS 02108

ARTICLES OF ORGANIZATION

(Under G.L. Ch. 180)

ARTICLE I

The name of the corporation is:

MGH/BRIGHAM HEALTH CARE SYSTEM, INC.

ARTICLE II

The purpose of the corporation is to engage in the following activities:

(i) To organize, operate and support a comprehensive health care system, including without limitation hospital and other health care services for all persons, and education and research for the prevention, diagnosis, treatment and cure of all forms of human illness: (ii) to improve the health and welfare of all persons: (iii) to operate for the benefit of and to support The Massachusetts General Hospital, The Brigham Medical Center, Inc., their respective affiliated corporations and such other charitable, scientific or educational organizations which are or are affiliated with teaching hospitals in the Greater Boston Area: and (iv) to carry on any other activity that may lawfully be carried on by a corporation formed under Chapter 180 of the Massachusetts General Laws which is exempt under section 501(c)(3) of the Internal Revenue Code.

93-349060

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P.C.

Note: If the space provided under any article or item on this form is insufficient, additions shall be set forth on separate 8½ x 11 sheets of paper leaving a left hand margin of at least 1 inch. Additions to more than one article may be continued on a single sheet so long as each article requiring each such addition is clearly indicated.

ARTICLE III

If the corporation has one or more classes of members, the designation of such classes, the manner of election or appointments, the duration of membership and the qualification and rights, including voting rights, of the members of each class, may be set forth in the by-laws of the corporation or may be set forth below:

The designation of classes of members, if any, the manner of election or appointment, the term of office, and the qualifications and rights of members are set forth in the by-laws of the Corporation.

ARTICLE IV

* Other lawful provisions, if any, for the conduct and regulation of the business and affairs of the corporation, for its voluntary dissolution, or for limiting, defining, or regulating the powers of the corporation, or of its directors or members, or of any class of members, are as follows:

See Continuation Sheets IV-A through IV-D attached hereto and incorporated herein by reference.

* . If there are no provisions, state "None".

Note: The preceding four (4) articles are considered to be permanent and may ONLY be changed by filing appropriate Articles of Amendment.

MGH/BRIGHAM HEALTH CARE SYSTEM, INC.

IV. Other Lawful Provisions for Conduct and Regulation of the Business and Affairs of the Corporation, for its Voluntary Dissolution, and for Limiting, Defining and Regulating the Powers of the Corporation and of its Trustees and Members.

4.1. The corporation shall have in furtherance of its corporate purposes all of the powers specified in Section 6 of Chapter 180 and in Sections 9 and 9A of Chapter 156B of the Massachusetts General Laws (except those provided in paragraph (m) of said Section 9) as now in force or as hereafter amended, and may carry on any operation or activity referred to in Article 2 to the same extent as might an individual, either alone or in a joint venture or other arrangement with others, or through a wholly or partly owned or controlled corporation; provided, however, that no such power shall be exercised in a manner inconsistent with said Chapter 180 or any other chapter of the Massachusetts General Laws or which would deprive it of exemption from federal income tax as an organization described in Section 501(c)(3) of the Internal Revenue Code.

4.2. The by-laws may authorize the trustees to make, amend or repeal the by-laws in whole or in part, except with respect to any provision thereof which by law, the articles of organization or the by-laws requires action by the members.

4.3. Meetings of the members may be held anywhere in the United States.

4.4. No trustee or officer of the corporation shall be personally liable to the corporation or its members for monetary damages for breach of fiduciary duty as such trustee or officer notwithstanding any provision of law imposing such liability, except to the extent that such exemption from liability is not permitted under Chapter 180 of the Massachusetts General Laws.

4.5.(a) The corporation shall, to the extent legally permissible, indemnify each person who serves as one of its members, trustees or officers, or who serves at its request as a member, trustee or officer of another organization or in a capacity with respect to any employee benefit plan (each such person being called in this Section 4.5 a "Person") against all liabilities and expenses, including amounts paid in satisfaction of judgments, in compromise or as fines and penalties, and

counsel fees, reasonably incurred by such Person in connection with the defense or disposition of any action, suit or other proceeding, whether civil or criminal, in which such Person may be involved or with which such Person may be threatened, while in office or thereafter, by reason of being or having been such a Person, except with respect to any matter as to which such Person shall have been adjudicated in any proceeding not to have acted in good faith in the reasonable belief that his or her action was in the best interests of the corporation or, to the extent that such matter relates to service at the request of the corporation for another organization or an employee benefit plan, in the best interests of such organization or of the participants or beneficiaries of such employee benefit plan. Such best interests shall be deemed to be the best interests of the corporation for the purposes of this Section 4.5.

(b) Notwithstanding the foregoing, as to any matter disposed of by a compromise payment by any Person, pursuant to a consent decree or otherwise, no indemnification either for said payment or for any other expenses shall be provided unless such compromise shall be approved as in the best interests of the corporation, after notice that it involves such indemnification, (a) by a disinterested majority of the trustees then in office; or (b) by a majority of the disinterested trustees then in office, provided that there has been obtained an opinion in writing of independent legal counsel to the effect that such Person appears to have acted in good faith in the reasonable belief that his or her action was in the best interests of the corporation; or (c) by a majority of the disinterested members entitled to vote, voting as a single class.

(c) Expenses, including counsel fees, reasonably incurred by any Person in connection with the defense or disposition of any such action, suit or other proceeding may be paid from time to time by the corporation in advance of the final disposition thereof upon receipt of an undertaking by such Person to repay the amounts so paid if such Person ultimately shall be adjudicated to be not entitled to indemnification under this Section 4.5. Such an undertaking may be accepted without reference to the financial ability of such Person to make repayment.

(d) The right of indemnification hereby provided shall not be exclusive. Nothing contained in this Section shall affect any other rights to indemnification to which any Person or other corporate personnel may be entitled by contract or otherwise under law.

(e) As used in this Section 4.5, the term "Person" includes such Person's respective heirs, executors and administrators, and

a "disinterested" member, trustee or officer is one against whom in such capacity the proceeding in question, or another proceeding on the same or similar grounds, is not then pending.

4.6.(a) No person shall be disqualified from holding any office by reason of any interest. In the absence of fraud, any trustee, officer or member of this corporation, or any concern in which any such trustee, officer or member has any interest, may be a party to, or may be pecuniarily or otherwise interested in, any contract, act or other transaction (collectively called a "transaction") of this corporation, and

(1) such transaction shall not be in any way invalidated or otherwise affected by that fact; and

(2) no such trustee, officer, member or concern shall be liable to account to this corporation for any profit or benefit realized through any such transaction;

provided, however, that such transaction either was fair at the time it was entered into or is authorized or ratified either (i) by a majority of the trustees who are not so interested and to whom the nature of such interest has been disclosed, or (ii) by vote of a majority of each class of members of the corporation entitled to vote for trustees, at any meeting of members the notice of which, or an accompanying statement, summarizes the nature of such transaction and such interest. No interested trustee or member of this corporation may vote or may be counted in determining the existence of a quorum at any meeting at which such transaction shall be authorized, but may participate in discussion thereof.

(b) For purposes of this Section 4.6, the term "interest" shall include personal interest and also interest as a trustee, officer, stockholder, shareholder, director, member or beneficiary of any concern; and the term "concern" shall mean any corporation, association, trust, partnership, firm, person or other entity other than this corporation.

(c) No transaction shall be avoided by reason of any provisions of this paragraph 4.6 which would be valid but for such provisions.

4.7. No part of the assets or net earnings of the corporation shall inure to the benefit of any member, officer or trustee of the corporation or any individual; no substantial part of the activities of the corporation shall be the carrying on of propaganda, or otherwise attempting, to influence legislation except to the extent permitted by Section 501(h) of the Internal Revenue Code; and the corporation shall not participate in, or

intervene in (including the publishing or distributing of statements), any political campaign on behalf of (or in opposition to) any candidate for public office. It is intended that the corporation shall be entitled to exemption from federal income tax as an organization described in Section 501(c)(3) of the Internal Revenue Code and shall not be a private foundation under Section 509(a) of the Internal Revenue Code.

4.8. If and so long as the corporation is a private foundation (as that term is defined in Section 509 of the Internal Revenue Code), then notwithstanding any other provisions of the articles of organization or the by-laws of the corporation, the following provisions shall apply:

A) the income of the corporation for each taxable year shall be distributed at such time and in such manner as not to subject the corporation to the tax on undistributed income imposed by Section 4942 of the Internal Revenue Code, and

B) the corporation shall not engage in any act of self dealing (as defined in Section 4941(d) of the Internal Revenue Code), nor retain any excess business holdings (as defined in Section 4943(c) of the Internal Revenue Code), nor make any investments in such manner as to subject the corporation to tax under Section 4944 of the Internal Revenue Code, nor make any taxable expenditures (as defined in Section 4945(d) of the Internal Revenue Code).

4.9. Upon the liquidation or dissolution of the corporation, after payment of all of the liabilities of the corporation or due provision therefor, all of the assets of the corporation shall be disposed of pursuant to Massachusetts General Laws, Chapter 180, Section 11A, to The Massachusetts General Hospital and The Brigham Medical Center, Inc. if exempt from taxation as organizations described in Section 501(c)(3) of the Internal Revenue Code or, if both are not, to one or more organizations with similar purposes and similar tax exemption.

4.10. All references herein: (i) to the Internal Revenue Code shall be deemed to refer to the Internal Revenue Code of 1986, as now in force or hereafter amended; (ii) to the General Laws of The Commonwealth of Massachusetts, or any chapter thereof, shall be deemed to refer to said General Laws or chapter as now in force or hereafter amended; and (iii) to particular sections of the Internal Revenue Code or said General Laws shall be deemed to refer to similar or successor provisions hereafter adopted.

MGH/BRIGHAM HEALTH CARE SYSTEM, INC.

Continuation Sheet VII(b)

	Name	Residence or Post Office Address
Officers		
Vice-President	J. Robert Buchanan, M.D.	25 Commonwealth Avenue Boston, MA 02116
President	H. Richard Nesson, M.D.	565 Boylston Street Brookline, MA 02146
Treasurer	Richard A. Spindler	210 Schoolmaster Lane Dedham, MA 02026
Clerk	David M. Donaldson	22 Weston Road Lincoln Center, MA 01773
Trustees	W. Gerald Austen, M.D.	163 Wellesley Street Weston, MA 02193
	Eugene Braunwald, M.D.	75 Scotch Pine Road Weston, MA 02193
	J. Robert Buchanan, M.D.	25 Commonealth Avenue Boston, MA 02116
	Francis H. Burr	44 Prince Street Beverly, MA 01915
	Ferdinand Colloredo-Mansfeld	Winthrop Street Hamilton, MA 01982

MGH/BRIGHAM HEALTH CARE SYSTEM, INC.

Continuation Sheet VII(b)

Name	Residence or Post Office Address
John H. McArthur	Fowler 10 Soldiers Field Boston, MA 02134
H. Richard Nesson, M.D.	565 Boylston Street Brookline, MA 02146
Richard A. Spindler	210 Schoolmaster Lane Dedham, MA 02026

ARTICLE V

By-laws of the corporation have been duly adopted and the initial directors, president, treasurer and clerk or other presiding, financial or recording officers, whose names are set out below, have been duly elected.

ARTICLE VI

The effective date of organization of the corporation shall be the date of filing with the Secretary of the Commonwealth or if a later date is desired, specify date, (not more than 30 days after date of filing).

The information contained in ARTICLE VII is NOT a PERMANENT part of the Articles of Organization and may be changed ONLY by filing the appropriate form provided therefor.

ARTICLE VII

a. The post office address of the initial principal office of the corporation IN MASSACHUSETTS is:

c/o Ropes & Gray, One International Place, Boston, MA 02110

b. The name, residence and post office address of each of the initial directors and following officers of the corporation are as follows:

	NAME	RESIDENCE	POST OFFICE ADDRESS
President:	See Continuation Sheet VII(b) attached hereto and incorporated herein by reference.		
Treasurer:			
Clerk:			

Directors: (or officers having the powers of directors).

NAME	RESIDENCE	POST OFFICE ADDRESS
See Continuation Sheet VII(b) attached hereto and incorporated herein by reference.		

c. The fiscal year of the corporation shall end on the last day of the month of: September

d. The name and BUSINESS address of the RESIDENT AGENT of the corporation, if any, is:

I/We the below-signed INCORPORATORS do hereby certify under the pains and penalties of perjury that I/We have not been convicted of any crimes relating to alcohol or gaming within the past ten years. I/We do hereby further certify that to the best of my/our knowledge the above-named principal officers have not been similarly convicted. If so convicted, explain.

IN WITNESS WHEREOF and under the pains and penalties of perjury, I/WE, whose signature(s) appear below as incorporator(s) and whose names and business or residential address(es) ARE CLEARLY TYPED OR PRINTED beneath each signature do hereby associate with the intention of forming this corporation under the provisions of General Laws Chapter 180 and do hereby sign these Articles of Organization as incorporator(s) this 9th day of December, 19 93

David M. Donaldson

David M. Donaldson

Ropes & Gray
One International Place
Boston, MA 02110

NOTE: If an already-existing corporation is acting as incorporator, type in the exact name of the corporation, the state or other jurisdiction where it was incorporated, the name of the person signing on behalf of said corporation and the title he/she holds or other authority by which such action is taken.

SECRETARY OF STATE
RECEIVED
1993 DEC 15 PM 1:39
CORPORATION DIVISION

449104

THE COMMONWEALTH OF MASSACHUSETTS

ARTICLES OF ORGANIZATION

GENERAL LAWS, CHAPTER 180

I hereby certify that, upon an examination of the within-written articles of organization, duly submitted to me, it appears that the provisions of the General Laws relative to the organization of corporations have been complied with, and I hereby approve said articles; and the filing fee in the amount of $35.00 having been paid, said articles are deemed to have been filed with me this 15TH day of December 1993.

Effective date

Michael Joseph Connolly

MICHAEL J. CONNOLLY
Secretary of State

A PHOTOCOPY OF THESE ARTICLES OF ORGANIZATION SHALL BE RETURNED

TO: David M. Donaldson, Esq.
Ropes & Gray
One International Place, Boston, MA 02110

Telephone: (617) 951-7250

FEE: $15.00

The Commonwealth of Massachusetts

MICHAEL J. CONNOLLY
Secretary of State
ONE ASHBURTON PLACE, BOSTON, MASS. 02108

FEDERAL IDENTIFICATION NO. 000449104

ARTICLES OF AMENDMENT

General Laws, Chapter 180, Section 7

This certificate must be submitted to the Secretary of the Commonwealth within sixty days after the date of the vote of members or stockholders adopting the amendment. The fee for filing this certificate is $15.00 as prescribed by General Laws, Chapter 180, Section 11C(b). Make check payable to the Commonwealth of Massachusetts.

We, H. Richard Nesson, President/~~Vice President~~, and David M. Donaldson, Clerk/~~Assistant Clerk~~ of

MGH/BRIGHAM HEALTH CARE SYSTEM, INC.
(Name of Corporation)

located at One International Place, Boston, MA 02110

do hereby certify that the following amendment to the articles of organization of the corporation was duly adopted at a meeting held on March 14, 1994, by vote of all members/~~shareholders, being at least two-thirds of its members/shareholders legally qualified to vote in the case of a corporation having capital stock~~

That the Articles of Organization of this corporation be and they hereby are amended to change the name of the corporation to "Partners HealthCare System, Inc."

Note: If the space provided under any article or item on this form is insufficient, additions shall be set forth on separate 8½ x 11 sheets of paper leaving a left hand margin of at least 1 inch for binding. Additions to more than one article may be continued on a single sheet so long as each article requiring each such addition is clearly indicated.

The foregoing amendment will become effective when these articles of amendment are filed in accordance with Chapter 180, Section 7 of the General Laws unless these articles specify, in accordance with the vote adopting the amendment, a later effective date not more than thirty days after such filing, in which event the amendment will become effective on such later date.

IN WITNESS WHEREOF AND UNDER THE PENALTIES OF PERJURY, we have hereto signed our names this 18th day of March, in the year 1994

H. Richard Nesson ..... President/~~Vice President~~

..... Clerk/~~Assistant Clerk~~

459052

781

SECRETARY OF STATE
RECEIVED

1994 MAR 18 PM 4:10

CORPORATION DIVISION

THE COMMONWEALTH OF MASSACHUSETTS

ARTICLES OF AMENDMENT

(General Laws, Chapter 180, Section 7)

I hereby approve the within articles of amendment and, the filing fee in the amount of $ 15 having been paid, said articles are deemed to have been filed with me this 18th day of March, 1994

Michael Joseph Connolly

MICHAEL J. CONNOLLY

Secretary of State

TO BE FILLED IN BY CORPORATION

PHOTO COPY OF AMENDMENT TO BE SENT

TO: John E. Beard

Ropes & Gray

One International Place, Boston 02110

Telephone 617-951-7411

Copy Mailed

FEDERAL IDENTIFICATION NO. 0432 0035
Fee: $15.00

The Commonwealth of Massachusetts

William Francis Galvin
Secretary of the Commonwealth
One Ashburton Place, Boston, Massachusetts 02108-1512

012
041

Examiner

Name Approved

ARTICLES OF AMENDMENT
(General Laws, Chapter 180, Section 7)

We, Samuel O. Thier, M.D., *President / ~~Vice President~~,

and Ernest M. Haddad, Secretary ~~/ Assistant Clerk~~,

of Partners HealthCare System, Inc.,
(Exact name of corporation)

located at 800 Boylston Street, Suite 1150, Boston, MA 02199,
(Address of corporation in Massachusetts)

do hereby certify that these Articles of Amendment affecting articles numbered:

II and IV
(Number those articles 1, 2, 3, and/or 4 being amended)

of the Articles of Organization were duly adopted at a meeting held on May 4 1998, by vote of:

277 members, xxxxxxxxxxxxxxxxx ~~directors, or~~ xxxxxxxxxxxxxxxxxx ~~shareholders,~~

being at least two-thirds of its members/directors legally qualified to vote in meetings of the corporation ~~(or, in~~ ~~the case of a corporation having capital stock, by the holders of at least two-thirds of the capital stock having the right to vote therein):~~

1. Delete Article II and insert in place thereof the following:

Article II

(i) To organize, operate and support a comprehensive health care system, including without limitation hospital and other health care services for all persons, and education and research for the prevention, diagnosis, treatment and cure of all forms of human illness: (ii) to improve the health and welfare of all persons: (iii) to operate for the benefit of and to support The Massachusetts General Hospital, The Brigham Medical Center, Inc., The North Shore Medical Center, Inc., their respective affiliated corporations, such other hospitals, charitable, scientific or educational organizations, and their affiliated corporations that become affiliated with Partners HealthCare System, Inc.

C ☐
P ☐
M ☐
R.A. ☐

*Delete the inapplicable words.
Note: If the space provided under any article or item on this form is insufficient, additions shall be set forth on one side only of separate 8 1/2 x 11 sheets of paper with a left margin of at least 1 inch. Additions to more than one article may be made on a single sheet so long as each article requiring each addition is clearly indicated.

3
P.C.

(collectively, the "Partners Affiliated Corporations") and such other charitable, scientific or educational organizations which are or are affiliated with teaching hospitals in the Greater Boston Area; and (iv) to carry on any other activity that may lawfully be carried on by a corporation formed under Chapter 180 of the Massachusetts General Laws which is exempt under Section 501(c)(3) of the Internal Revenue Code; and in furtherance of the foregoing purposes to:

(a) Serve as the controlling and coordinating organization for the Partners Affiliated Corporations in order to assure the consistency and appropriateness of their respective missions, activities, governance and administration;

(b) Solicit and receive devises of real property and grants, donations and bequests of money and other property to be used to further the foregoing purposes and those of the Partners Affiliated Corporations; and

(c) Support the Partners Affiliated Corporations by loan, lease or donation of funds or other assets, by guaranty of obligations or by other action.

2. Delete Section 4.5. of Article IV.

The foregoing amendment(s) will become effective when these Articles of Amendment are filed in accordance with General Laws, Chapter 180, Section 7 unless these articles specify, in accordance with the vote adopting the amendment, a *later* effective date not more than *thirty days* after such filing, in which event the amendment will become effective on such later date.

XXXXXXXXXXXXXXXX: _____.

SIGNED UNDER THE PENALTIES OF PERJURY, this 29TH day of MAY, 1998.

_____, *President XXXXXXXXXXXX

_____, *Secretary XXXXXXXXXXXXXXXX

*Delete the inapplicable words.

THE COMMONWEALTH OF MASSACHUSETTS

ARTICLES OF AMENDMENT

(General Laws, Chapter 180, Section 7)

51710

SECRETARY OF THE COMMONWEALTH
98 JUN -2 AM 9:52

I hereby approve the within Articles of Amendment and, the filing fee in the amount of $ 15.00 having been paid, said articles are deemed to have been filed with me this 2nd day of JUNE 19 98.

Effective date: _____

William Francis Galvin

WILLIAM FRANCIS GALVIN
Secretary of the Commonwealth

TO BE FILLED IN BY CORPORATION
Photocopy of document to be sent to:

Ernest M. Haddad, Esq.
Partners HealthCare System, Inc.
800 Boylston Street, Ste. 1150
Boston, MA 02199

Telephone: (617) 278-1065

AACR.6,

FEDERAL IDENTIFICATION NO. 043230035 ✓
Fee: $15.00

Examiner

The Commonwealth of Massachusetts

William Francis Galvin
Secretary of the Commonwealth
One Ashburton Place, Boston, Massachusetts 02108-1512

N/A
Name Approved

ARTICLES OF AMENDMENT
(General Laws, Chapter 180, Section 7)

042

We, Samuel O. Thier, M.D. , *President / ~~Vice President~~

and Ernest M. Haddad , Secretary ~~Clerk / Assistant Clerk~~

of Partners HealthCare System, Inc. ,
(Exact name of corporation)

located at 800 Boylston Street, Suite 1150, Boston, MA 02199 ,
(Address of corporation in Massachusetts)

do hereby certify that these Articles of Amendment affecting articles numbered:

II
(Number those articles 1, 2, 3, and/or 4 being amended)

of the Articles of Organization were duly adopted at a meeting held on May 3 19 99 , by vote of:

293 members, ~~xxxxxxxxxxxxxxxxxx directors, xxxxxxxxxxxxxxxxxx shareholders;~~

being at least two-thirds of its members/directors legally qualified to vote in meetings of the corporation ~~(or if the case of a corporation having capital stock, by the holders of at least two-thirds of the capital stock having the right to vote thereon);~~

Delete Article II and insert in place thereof the following:

Article II

The purpose of the corporation is to engage in the following activities:

(i) To organize, operate, coordinate and support a comprehensive integrated health care delivery system (the "System") that provides, without limitation, hospital, physician and other health care services for all persons and education and research for the prevention, diagnosis, treatment and cure of all forms of human illness; (ii) to improve the health and welfare of all persons; (iii) to serve as the controlling and coordinating organization for the System and its member institutions and entities including Brigham and Women's/Faulkner Hospitals, Inc., The Massachusetts General Hospital, The North Shore Medical Center, Inc., Newton-Wellesley Health Care System, Inc., and such other hospital, physician, charitable, scientific, educational,

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R.A. ☐

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P.C.

**Delete the inapplicable words.*
Note: If the space provided under any article or item on this form is insufficient, additions shall be set forth on one side only of separate 8 1/2 x 11 sheets of paper with a left margin of at least 1 inch. Additions to more than one article may be made on a single sheet so long as each article requiring each addition is clearly indicated.

research and other institutions and entities that are controlled, directly or indirectly, through sole corporate membership, stock ownership or otherwise, by the Corporation (collectively, the "Affiliated Organizations"); (iv) to assist and support the Affiliated Organizations in fulfilling their respective purposes, missions and objectives in a manner consistent with the purposes, missions and objectives of the Corporation and the System; and (v) to carry on any other activity that may lawfully be carried on by a corporation formed under Chapter 180 of the Massachusetts General Laws which is exempt under Section 501(c)(3) of the Internal Revenue Code; and in furtherance of the foregoing purposes to:

(a) Solicit and receive devises of real property and grants, donations and bequests of money and other property to be used to further the foregoing purposes; and

(b) Support the Affiliated Organizations by loan, lease or donation of funds or other assets; and

(c) Support the Affiliated Organizations by guaranty of the obligations of the Affiliated Organizations or by other action.

The foregoing amendment(s) will become effective when these Articles of Amendment are filed in accordance with General Laws, Chapter 180, Section 7 unless these articles specify, in accordance with the vote adopting the amendment, a *later* effective date not more than *thirty days* after such filing, in which event the amendment will become effective on such later date.

~~Later effective date~~ xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx

SIGNED UNDER THE PENALTIES OF PERJURY, this 24th day of May, 19 99,

[signature], *President, ~~Vice President~~

[signature], Secretary ~~Clerk, Assistant Clerk~~

**Delete the inapplicable words.*

660922

THE COMMONWEALTH OF MASSACHUSETTS

ARTICLES OF AMENDMENT

(General Laws, Chapter 180, Section 7)

I hereby approve the within Articles of Amendment and, the filing fee in the amount of $ 15.00 having been paid, said articles are deemed to have been filed with me this 26th day of May 19 99.

99 MAY 26 AM 9:24

Effective date: _____

William Francis Galvin

WILLIAM FRANCIS GALVIN

Secretary of the Commonwealth

TO BE FILLED IN BY CORPORATION

Photocopy of document to be sent to:

Mary LaLonde

Partners HealthCare System

Office of the General Counsel
50 Staniford St., 10th floor
Boston, MA 02114

Telephone: 617-726-5315

The Commonwealth of Massachusetts
William Francis Galvin

Minimum Fee: $15.00

Secretary of the Commonwealth, Corporations Division
One Ashburton Place, 17th floor
Boston, MA 02108-1512
Telephone: (617) 727-9640

Articles of Amendment
(General Laws, Chapter 180, Section 7)

Identification Number: 043230035

We, BRENT L. HENRY __ **President** X **Vice President,**

and MARY C. LALONDE __ **Clerk** X **Assistant Clerk** ,

of PARTNERS HEALTHCARE SYSTEM, INC.
located at: 800 BOYLSTON ST., SUITE 1150 BOSTON , MA 02199 USA

do hereby certify that these Articles of Amendment affecting articles numbered:

__ Article 1 X Article 2 __ Article 3 __ Article 4

(Select those articles 1, 2, 3, and/or 4 that are being amended)

of the Articles of Organization were duly adopted at a meeting held on 4/19/2016 , by vote of: 197 members, 0 directors, or 0 shareholders,
being at least two-thirds of its members/directors legally qualified to vote in meetings of the corporation (or, in the case of a corporation having capital stock, by the holders of at least two thirds of the capital stock having the right to vote therein):

ARTICLE I

The exact name of the corporation, ***as amended***, is:
(Do not state Article I if it has not been amended.)

ARTICLE II

The purpose of the corporation, ***as amended***, is to engage in the following business activities:
(Do not state Article II if it has not been amended.)

THE PURPOSE OF THE CORPORATION IS TO ENGAGE IN THE FOLLOWING ACTIVITIES: (I) TO ORGANIZE, OPERATE, COORDINATE AND SUPPORT A COMPREHENSIVE INTEGRATED HEAL TH CARE DELIVERY SYSTEM (THE "SYSTEM") THAT PROVIDES, WITHOUT LIMITATION, HOS PITAL, PHYSICIAN AND OTHER HEALTH CARE SERVICES FOR ALL PERSONS AND EDUCATI ON AND RESEARCH FOR THE PREVENTION, DIAGNOSIS, TREATMENT AND CURE OF ALL FO RMS OF HUMAN ILLNESS; (II) TO IMPROVE THE HEALTH AND WELFARE OF ALL PERSONS A ND TO CONDUCT AND SUPPORT EDUCATION, RESEARCH AND OTHER ACTIVITIES RELATIN G THERE TO, (III) TO SERVE AS THE CONTROLLING AND COORDINATING ORGANIZATION F OR THE SYSTEM AND ITS MEMBER INSTITUTIONS AND ENTITIES INCLUDING BRIGHAM AN D WOMEN'S HEALTH CARE, INC., THE MASSACHUSETTS GENERAL HOSPITAL, NSMC HEALT HCARE, INC., NEWTON WELLESLEY HEALTH CARE SYSTEM, INC., PARTNERS COMMUNITY PHYSICIANS ORGANIZATION, INC., PARTNERS CONTINUING CARE, INC., NEIGHBORHOOD HEALTH PLAN, INC. AND SUCH OTHER HOSPITAL, PHYSICIAN, CHARITABLE, SCIENTIFIC, E

DUCATIONAL, RESEARCH AND OTHER INSTITUTIONS AND ENTITIES THAT ARE CONTROLLED, DIRECTLY OR INDIRECTLY, THROUGH SOLE CORPORATE MEMBERSHIP, STOCK OWNERSHIP OR OTHERWISE, BY THE CORPORATION (COLLECTIVELY, THE "AFFILIATED ORGANIZATIONS"); (IV) TO ASSIST AND SUPPORT THE AFFILIATED ORGANIZATIONS IN FULFILLING THEIR RESPECTIVE PURPOSES, MISSIONS AND OBJECTIVES IN A MANNER CONSISTENT WITH THE PURPOSES, MISSIONS AND OBJECTIVES OF THE CORPORATION AND THE SYSTEM; AND (V) TO CARRY ON ANY OTHER ACTIVITY THAT MAY LAWFULLY BE CARRIED ON BY A CORPORATION FORMED UNDER CHAPTER 180 OF THE MASSACHUSETTS GENERAL LAWS WHICH IS EXEMPT UNDER SECTION 501(C)(3) OF THE INTERNAL REVENUE CODE; AND IN FURTHERANCE OF THE FOREGOING PURPOSES TO: (A) SOLICIT AND RECEIVE DEVISES OF REAL PROPERTY AND GRANTS, DONATIONS AND BEQUESTS OF MONEY AND OTHER PROPERTY TO BE USED TO FURTHER THE FOREGOING PURPOSES; AND (B) SUPPORT THE AFFILIATED ORGANIZATIONS BY LOAN, LEASE OR DONATION OF FUNDS OR OTHER ASSETS; AND (C) SUPPORT THE AFFILIATED ORGANIZATIONS BY GUARANTY OF THE OBLIGATIONS OF THE AFFILIATED ORGANIZATIONS OR BY OTHER ACTION.

ARTICLE III

A corporation may have one or more classes of members. ***As amended,*** the designation of such classes, the manner of election or appointments, the duration of membership and the qualifications and rights, including voting rights, of the members of each class, may be set forth in the by-laws of the corporation or may be set forth below:

ARTICLE IV

As amended, other lawful provisions, if any, for the conduct and regulation of the business and affairs of the corporation, for its voluntary dissolution, or for limiting, defining, or regulating the powers of the business entity, or of its directors or members, or of any class of members, are as follows:
(If there are no provisions state "NONE")

The foregoing amendment(s) will become effective when these Articles of Amendment are filed in accordance with General Laws, Chapter 180, Section 7 unless these articles specify, in accordance with the vote adopting the amendment, a *later* effective date not more than *thirty days* after such filing, in which event the amendment will become effective on such later date.

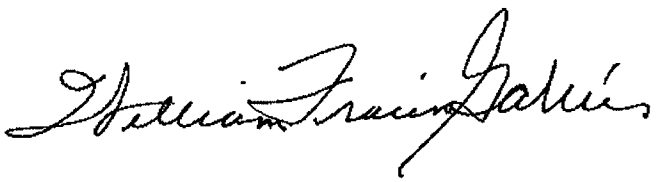
Later Effective Date:

Signed under the penalties of perjury, this 20 Day of April, 2016, BRENT L. HENRY , its , President / Vice President,
MARY C. LALONDE , Clerk / Assistant Clerk.

THE COMMONWEALTH OF MASSACHUSETTS

I hereby certify that, upon examination of this document, duly submitted to me, it appears that the provisions of the General Laws relative to corporations have been complied with, and I hereby approve said articles; and the filing fee having been paid, said articles are deemed to have been filed with me on:

April 20, 2016 04:09 PM



WILLIAM FRANCIS GALVIN

Secretary of the Commonwealth

Attachment 16

CHANGE IN SERVICE TABLE QUESTIONS 2.2 AND 2.3

Massachusetts Department of Public Health
Determination of Need
Change in Service

Version: DRAFT 6-14-17

DRAFT

Application Number: PHS-19072212-RE Original Application Date: 07/25/2019

Applicant Information

Applicant Name: Partners HealthCare System, Inc.

Contact Person: Daria Niewenhous Title: Attorney

Phone: 6173484865 Ext: E-mail: dniewenhouse@mintz.com

Facility: Complete the tables below for each facility listed in the Application Form

1 Facility Name: Brigham and Women's/Mass General Health Care Center CMS Number: 220110 Facility type: Hospital

Change in Service

2.2 Complete the chart below with existing and planned service changes. Add additional services with in each grouping if applicable.

Add/Del Rows		Licensed Beds	Operating Beds	Change in Number of Beds (+/-)		Number of Beds After Project Completion (calculated)		Patient Days	Patient Days	Occupancy rate for Operating Beds		Average Length of Stay	Number of Discharges	Number of Discharges
		Existing	Existing	Licensed	Operating	Licensed	Operating	(Current/ Actual)	Projected	Current Beds	Projected	(Days)	Actual	Projected
	Acute													
	Medical/Surgical									0%	0%			
	Obstetrics (Maternity)									0%	0%			
	Pediatrics									0%	0%			
	Neonatal Intensive Care									0%	0%			
	ICU/CCU/SICU									0%	0%			
+ -										0%	0%			
	Total Acute									0%	0%			
	Acute Rehabilitation									0%	0%			
+ -										0%	0%			
	Total Rehabilitation									0%	0%			
	Acute Psychiatric													

Add/Del Rows		Licensed Beds	Operating Beds	Change in Number of Beds (+/-)		Number of Beds After Project Completion (calculated)		Patient Days	Patient Days	Occupancy rate for Operating Beds		Average Length of Stay (Days)	Number of Discharges	Number of Discharges
		Existing	Existing	Licensed	Operating	Licensed	Operating	(Current/ Actual)	Projected	Current Beds	Projected		Actual	Projected
	Adult									0%	0%			
	Adolescent									0%	0%			
	Pediatric									0%	0%			
	Geriatric									0%	0%			
+ -										0%	0%			
	Total Acute Psychiatric									0%	0%			
	Chronic Disease									0%	0%			
+ -										0%	0%			
	Total Chronic Disease									0%	0%			
	Substance Abuse													
	detoxification									0%	0%			
	short-term intensive									0%	0%			
+ -										0%	0%			
	Total Substance Abuse									0%	0%			
	Skilled Nursing Facility													
	Level II									0%	0%			
	Level III									0%	0%			
	Level IV									0%	0%			
+ -										0%	0%			
	Total Skilled Nursing									0%	0%			

2.3 Complete the chart below If there are changes other than those listed in table above.

Add/Del Rows	**List other services** if Changing e.g. OR, MRI, etc	Existing Number of Units	Change in Number +/-	Proposed Number of Units	Existing Volume	Proposed Volume
+ -	MRI	1	1	2	5,861	
+ -	CT	1	1	2	6,139	

Document Ready for Filing

When document is complete click on "document is ready to file". This will lock in the responses and date and time stamp the form. To make changes to the document un-check the "document is ready to file" box.
Edit document then lock file and submit Keep a copy for your records. Click on the "Save" button at the bottom of the page.

To submit the application electronically, click on the"E-mail submission to Determination of Need" button.

This document is ready to file: ☒ Date/time Stamp: 07/25/2019 5:22 pm

E-mail submission to Determination of Need

Attachment 17

AFFIDAVIT OF TRUTHFULNESS AND COMPLIANCE

Massachusetts Department of Public Health
Determination of Need
Affidavit of Truthfulness and Compliance with Law and Disclosure Form 100.405(B)

Version: 7-6-17

Instructions: Complete Information below. When complete check the box "This document is ready to print:". This will date stamp and lock the form. Print Form. Each person must sign and date the form. When all signatures have been collected, scan the document and e-mail to: **dph.don@state.ma.us** Include all attachments as requested.

Application Number: PHS-19072212-RE

Original Application Date: 7/25/19

Applicant Name: Partners HealthCare System, Inc.

Application Type: DoN-Required Equipment

Applicant's Business Type: (•) Corporation ( ) Limited Partnership ( ) Partnership ( ) Trust ( ) LLC ( ) Other

Is the Applicant the sole member or sole shareholder of the Health Facility(ies) that are the subject of this Application? (•) Yes ( ) No

The undersigned certifies under the pains and penalties of perjury:

1. The Applicant is the sole corporate member or sole shareholder of the Health Facility[ies] that are the subject of this Application;
2. I have ~~read~~* 105 CMR 100.000, the Massachusetts Determination of Need Regulation;
3. I understand and agree to the expected and appropriate conduct of the Applicant pursuant to 105 CMR 100.800;
4. I have ~~read~~* this application for Determination of Need including all exhibits and attachments, and ~~certify that~~** all of the information contained herein is accurate and true;
5. I have submitted the correct Filing Fee and understand it is nonrefundable pursuant to 105 CMR 100.405(B);
6. I have submitted the required copies of this application to the Determination of Need Program, and, as applicable, to all Parties of Record and other parties as required pursuant to 105 CMR 100.405(B);
7. I have caused, as required, notices of intent to be published and duplicate copies to be submitted to all Parties of Record, and all carriers or third-party administrators, public and commercial, for the payment of health care services with which the Applicant contracts, and with Medicare and Medicaid, as required by 105 CMR 100.405(C), et seq.;
8. I ~~have caused~~** proper notification and submissions to the Secretary of Environmental Affairs pursuant to 105 CMR 100.405(E) and 301 CMR 11.00;
9. If subject to M.G.L. c. 6D, § 13 and 958 CMR 7.00, I have submitted such Notice of Material Change to the HPC - in accordance with 105 CMR 100.405(G);
10. Pursuant to 105 CMR 100.210(A)(3), I certify that both the Applicant and the Proposed Project are in material and substantial compliance and good standing with relevant federal, state, and local laws and regulations, as well as with all ~~previously issued~~ Notices of Determination of Need ~~and the terms and Conditions attached therein;~~***
11. I have read and understand the limitations on solicitation of funding from the general public prior to receiving a Notice of Determination of Need as established in 105 CMR 100.415;
12. I understand that, if Approved, the Applicant, as Holder of the DoN, shall become obligated to all Standard Conditions pursuant to 105 CMR 100.310, as well as any applicable Other Conditions as outlined within 105 CMR 100.000 or that otherwise become a part of the Final Action pursuant to 105 CMR 100.360;
13. Pursuant to 105 CMR 100.705(A), I certify that the Applicant has Sufficient Interest in the Site or facility; and
14. Pursuant to 105 CMR 100.705(A), I certify that the Proposed Project is authorized under applicable zoning by-laws or ordinances, whether or not a special permit is required; or,
    a. If the Proposed Project is not authorized under applicable zoning by-laws or ordinances, a variance has been received to permit such Proposed Project; or,
    b. The Proposed Project is exempt from zoning by-laws or ordinances.

Corporation:

Attach a copy of Articles of Organization/Incorporation, as amended

Anne Klibanski, M.D.		7/25/19
President and CEO for Corporation Name:	Signature:	Date
Scott M. Sperling		
Board Chair for Corporation Name:	Signature:	Date

* been informed of the contents of

** have been informed that

***issued in compliance with 105 CMR 100.00, the Massachusetts Determination of Need Regulation effective January 27, 2017 and amended December 28, 2018

Massachusetts Department of Public Health
Determination of Need
Affidavit of Truthfulness and Compliance with Law and Disclosure Form 100.405(B)

Version: 7-6-17

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Application Number: PHS-19072212-RE

Original Application Date: 7/25/19

Applicant Name: Partners HealthCare System, Inc.

Application Type: DoN-Required Equipment

Applicant's Business Type: (•) Corporation ( ) Limited Partnership ( ) Partnership ( ) Trust ( ) LLC ( ) Other

Is the Applicant the sole member or sole shareholder of the Health Facility(ies) that are the subject of this Application? (•) Yes ( ) No

The undersigned certifies under the pains and penalties of perjury:

1. The Applicant is the sole corporate member or sole shareholder of the Health Facility[ies] that are the subject of this Application;
2. I have ~~read~~* 105 CMR 100.000, the Massachusetts Determination of Need Regulation;
3. I understand and agree to the expected and appropriate conduct of the Applicant pursuant to 105 CMR 100.800;
4. I have ~~read~~* this application for Determination of Need including all exhibits and attachments, and ~~certify that~~** all of the information contained herein is accurate and true;
5. I have submitted the correct Filing Fee and understand it is nonrefundable pursuant to 105 CMR 100.405(B);
6. I have submitted the required copies of this application to the Determination of Need Program, and, as applicable, to all Parties of Record and other parties as required pursuant to 105 CMR 100.405(B);
7. I have caused, as required, notices of intent to be published and duplicate copies to be submitted to all Parties of Record, and all carriers or third-party administrators, public and commercial, for the payment of health care services with which the Applicant contracts, and with Medicare and Medicaid, as required by 105 CMR 100.405(C), et seq.;
8. I ~~have caused~~** proper notification and submissions to the Secretary of Environmental Affairs pursuant to 105 CMR 100.405(E) and 301 CMR 11.00;
9. If subject to M.G.L. c. 6D, § 13 and 958 CMR 7.00, I have submitted such Notice of Material Change to the HPC - in accordance with 105 CMR 100.405(G);
10. Pursuant to 105 CMR 100.210(A)(3), I certify that both the Applicant and the Proposed Project are in material and substantial compliance and good standing with relevant federal, state, and local laws and regulations, as well as with all ~~previously issued~~ Notices of Determination of Need*** ~~and the terms and Conditions attached therein;~~
11. I have read and understand the limitations on solicitation of funding from the general public prior to receiving a Notice of Determination of Need as established in 105 CMR 100.415;
12. I understand that, if Approved, the Applicant, as Holder of the DoN, shall become obligated to all Standard Conditions pursuant to 105 CMR 100.310, as well as any applicable Other Conditions as outlined within 105 CMR 100.000 or that otherwise become a part of the Final Action pursuant to 105 CMR 100.360;
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14. Pursuant to 105 CMR 100.705(A), I certify that the Proposed Project is authorized under applicable zoning by-laws or ordinances, whether or not a special permit is required; or,
    a. If the Proposed Project is not authorized under applicable zoning by-laws or ordinances, a variance has been received to permit such Proposed Project; or,
    b. The Proposed Project is exempt from zoning by-laws or ordinances.

Corporation:

Attach a copy of Articles of Organization/Incorporation, as amended

Anne Klibanski, M.D.		
President and CEO for Corporation Name:	Signature:	Date
Scott M. Sperling		July 25, 2019
Board Chair for Corporation Name:	Signature:	Date

* been informed of the contents of

** have been informed that

***issued in compliance with 105 CMR 100.00, the Massachusetts Determination of Need Regulation effective January 27, 2017 and amended December 28, 20

Attachment 18

FILING FEE

VERIFY THE AUTHENTICITY OF THIS MULTI-TONE SECURITY DOCUMENT. CHECK BACKGROUND AREA CHANGES COLOR GRADUALLY FROM TOP TO BOTTOM.

PARTNERS. HealthCare

Bank of America, N.A.
South Portland, ME

52-153
112 ME

DATE
06/26/2019

0006064766

AMOUNT
$18,952.42

PAY **Eighteen Thousand Nine Hundred Fifty-Two and 42/100 Dollars**

TO THE ORDER OF **COMMONWEALTH OF MASSACHUSETTS**
99 CHAUNCY STREET
11TH FLOOR
BOSTON MA

Peter K. Markell

AUTHORIZED SIGNATURE

VOID IF NOT CASHED WITHIN 90 DAYS