



Massachusetts Department of Public Health Determination of Need Application Form

Version: 8-15-17

Application Type: Application Date: 11/15/2017 1:55 pm

Applicant Name:

Mailing Address:

City: State: Zip Code:

Contact Person: Title:

Mailing Address:

City: State: Zip Code:

Phone: Ext: E-mail:

Facility Information

List each facility affected and or included in Proposed Project

1 Facility Name:

Facility Address:

City: State: Zip Code:

Facility type: CMS Number:

1. About the Applicant

1.1 Type of organization (of the Applicant):

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?

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

1.6 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") located at 800 Boylston Street, Suite 1150, Boston, MA 02199 is filing a Notice of Determination of Need ("Application") with the Massachusetts Department of Public Health ("Department") for a substantial capital expenditure and acquisition of new technology by Brigham and Women's Hospital ("BWH") located at 75 Francis Street, Boston, MA 02115. The project includes: (1) the renovation and expansion of the existing BWH emergency department; (2) the conversion of a research-only 7T magnetic resonance imaging modality to part-time clinical use; and (3) the acquisition of a radiation therapy-dedicated magnetic resonance imaging simulator and a magnetic resonance imaging-guided linear accelerator (collectively, the "Project").

Emergency Department Renovation, Expansion and Redesign of Services

BWH seeks to renovate and expand its existing emergency department ("ED") to address overcrowding and redesign the delivery of care to provide better patient experience and improve health outcomes. BWH has a high-volume ED as evidenced by annual patient visit volume. However, the overall ED population appears to be shifting with an increased demand for urgent and emergent high-acuity services and fewer patients seeking care for non- and less-urgent services. Consequently, high volumes, long wait and extended boarding times have led to capacity constraints within BWH's ED. The BWH ED also serves as the community ED for local residents. As a result, ED overcrowding not only impacts patients in need of tertiary services, but also effects those who rely on the BWH ED as a community hospital resource.

The reality of trying to provide care for more patients than the ED's physical space can accommodate is a major contributor to crowding. One component of alleviating ED crowding and hallway care is to expand the ED footprint. In accordance with evidence-based strategies to reduce ED crowding and improve patient throughput, BWH proposes to expand and redesign its ED as follows: (1) increase the square footage of the ED from 25,000 GSF to 51,000 GSF; (2) increase the number of private exam rooms from 49 to 69 with ten additional care initiation chairs for patient intake and rapid assessment of patients with low-acuity conditions; (3) expand the observation unit within the ED with ten additional beds; and (4) add two, larger trauma resuscitation bays to accommodate necessary equipment and team-based care. BWH also proposes to add radiology capacity, including an additional Computed Tomography ("CT") scanner, ultrasound, and portable x-ray, to reduce delays in service during peak demand.

Significantly, physical expansion alone will not completely solve overcrowding problems. While having adequate physical space helps, merely increasing square footage and the number of beds does not reduce crowding if processes within the ED are not improved. In fact, it is well-documented that poor ED design contributes to ED crowding and long wait times. Recognizing these facts, BWH proposes to complement the physical expansion of its ED with a simultaneous redesign of its ED patient throughputs, both in terms of space and activity. Although minor improvements have been made to BWH's ED over the last ten years, space constraints hinder the implementation of evolving team-based care models. To achieve this new model, physical redesign of the ED space is necessary.

BWH anticipates that the proposed Project will provide ED patients with improved health outcomes, improved quality of life and additional access to high quality ED services by redesigning the patient care experience. Through the expansion of the ED footprint, operational efficiencies will be created that will improve the patient experience and reduce overcrowding through strategic patient flow changes. Moreover, these modifications will allow more patients to receive care in the appropriate setting within the ED leading to improved privacy and an overall better care experience. When patients feel comfortable in their care setting, they are most honest with clinical staff and provide detailed information about their clinical histories, leading to improved care discussions and the initiation of sound treatment, which ultimately leads to improved health outcomes and a better quality of life. In addition, BWH will regionalize care in the ED with space designed to meet the specific and unique needs of oncology and behavioral health patients. Through the implementation of designated areas, clinical expertise may be centralized, care may be expedited and provided in an appropriate environment. Each of these changes will result in improved patient and provider satisfaction.

Conversion of a 7T MRI from Research Use to Part-Time Clinical Use

BWH seeks to convert its 7T magnetic resonance imaging ("MRI") modality from full-time research use to part-time clinical use. Research studies have demonstrated that images produced by a 7T MRI provide exceptional value in assessing and treating diseases of the brain and the musculoskeletal system, such as multiple sclerosis, Parkinson's disease, Alzheimer's disease, brain tumors, epilepsy, cerebrovascular diseases, traumatic brain injury, as well as tendon and soft-tissue conditions. With the availability of a 7T MRI for clinical

use, clinicians at BWH will have the potential to improve early diagnosis and monitor responses to therapy for neurological and musculoskeletal conditions. This will lead to expedited quality care as better imaging information allows clinicians to determine the best treatment course for an individual patient; thereby, leading to improved health outcomes.

Acquisition of a Radiation Therapy-Dedicated MRI Simulator and a MRI-Guided Linear Accelerator

BWH patient panel data demonstrate the increased prevalence of cancers that may be treated with radiation therapy ("RT") and thus would benefit from more targeted RT services. In order to address this need, BWH seeks to acquire a RT-dedicated MRI simulator ("RT-MRI simulator") and a MRI-guided linear accelerator ("MRI-LINAC"). The RT-MRI simulator provides improved visualization of certain cancers, including cancers of the brain, head and neck, prostate, as well as gynecological cancers. This enhanced capability leads to less radiation exposure to tissue and organs around a tumor. The MRI-LINAC also enhances quality care and leads to improved patient outcomes by precisely delivering radiation that can improve disease control while reducing toxicity. Better quality outcomes are achieved through the integrated MR imager that provides pre-treatment and real-time soft tissue visualization that is not possible with current state-of-the-art conventional LINACs. As these technologies are currently not offered in New England, the acquisition of the units by BWH will bring advanced RT treatment capabilities to the region.

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

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

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: Hospital/Clinic Substantial Capital Expenditure

12.1 Total Value of this project:	\$73,186,747.00
12.2 Total CHI commitment expressed in dollars: (calculated)	\$3,659,337.35
12.3 Filing Fee: (calculated)	\$146,373.49
12.4 Maximum Incremental Operating Expense resulting from the Proposed Project:	\$4,222,760.00
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.	\$998,226.00

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.

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.

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.

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.

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.

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.

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.

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.

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.

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.

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".

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.

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.

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.

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
<input type="checkbox"/> + <input type="checkbox"/> -				

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.													
Add/Del Rows	Functional Areas	Present Square Footage		Square Footage Involved in Project				Resulting Square Footage		Total Cost		Cost/Square Footage	
		Net	Gross	Net	Gross	Net	Gross	Net	Gross	New Construction	Renovation	New Construction	Renovation
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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)			
<input type="checkbox"/> + <input type="checkbox"/> -				
	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)			
<input type="checkbox"/> + <input type="checkbox"/> -				
	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:

See Attached Narrative

Quality:

See Attached Narrative

Efficiency:

See Attached Narrative

Capital Expense:

See Attached Narrative

Operating Costs:

See Attached Narrative

List alternative options for the Proposed Project:

Alternative Proposal:

See Attached Narrative

Alternative Quality:

See Attached Narrative

Alternative Efficiency:

See Attached Narrative

Alternative Capital Expense:

See Attached Narrative

Alternative Operating Costs:

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.

See Attached Narrative

Factor 6: Community Based Health Initiatives

F6 Does your existing CHNA/CHIP meet the minimum standards outlined in the Community Engagement Standards for Community health Planning Guideline?

Yes No

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

- Copy of Notice of Intent
- Affidavit of Truthfulness Form
- Scanned copy of Application Fee Check
- Affiliated Parties Table Question 1.9
- Change in Service Tables Questions 2.2 and 2.3
- Certification from an independent Certified Public Accountant
- Articles of Organization / Trust Agreement
- Current IRS Form, 990 Schedule H CHNA/CHIP and/or Current CHNA/CHIP submitted to Massachusetts AGO's Office
- Community Engagement Stakeholder Assessment form
- 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: 11/15/2017 1:55 pm

E-mail submission to
Determination of Need

Application Number: PHS-17111513-HE

Use this number on all communications regarding this application.

Community Engagement-Self Assessment form