NEWTON-WELLESLEY HOSPITAL

2014 Washington Street
Newton, Massachusetts 02462
(617) 243 6000
www.nwh.org

NEWTON-WELLESLEY HOSPITAL

APPLICATION FOR DETERMINATION OF NEED FOR EXPANSION OF MAGNETIC RESONANCE IMAGING

JANUARY 10, 2017

BY

NEWTON-WELLESLEY HOSPITAL
2014 WASHINGTON STREET
NEWTON, MA 02462

A. DoN Application

INTRODUCTION

The purpose of the Massachusetts Determination of Need Application Kit is twofold. First, it is to provide applicants with a clear indication of the nature, scope and depth of preparations expected of them. Second, it is to provide DoN Program staff, as well as the Public Health Council, with the information necessary for fair and thorough evaluations. The kit should contribute to the speed, consistency, and predictability of reviews while increasing public involvement.

It should be noted that many of the questions presented in this kit are organized according to the factors found in 105 CMR 100.533. The questions listed under individual factors in the kit are intended to assist applicants and reviewers by gathering relevant information in a structured and convenient manner. Although questions are grouped by factors, the completed application will be viewed and evaluated in its entirety. Questions have been categorized in order to avoid unnecessary repetition of data requests rather than to limit the use of specific information to the evaluation of any particular factor or factors.

Since no general kit can be exhaustive in its data requests, it will remain the responsibility of applicants to provide all necessary information. Currently, it is often necessary for reviewers to request information not supplied in an applicant's original submission. Use of this kit is expected to substantially reduce, although not eliminate, the need for additional data requests. Statutory and regulatory changes may take place from time to time and may not be reflected in this kit. It is the duty of the applicant to be cognizant of such changes and to file an application consonant with such changes.

GENERAL INSTRUCTIONS

Enclosed is an application form for Determination of Need. In order to complete this form, it is necessary to read and comply with the Massachusetts Determination of Need Regulation 105 CMR 100.000. An unofficial version of the regulation may be found online at the DoN website (www.mass.gov/dph/don) or the official version may be obtained from the State House Bookstore, Boston, MA 02133, Telephone: (617) 727-2834 (http://www.sec.state.ma.us/spr/sprcat/catidx.htm).

Assistance in preparing applications is available from the Determination of Need Staff (617-624-5690).

CONTENTS OF APPLICATION

Please refer to 105 CMR 100.300-100.303 and 105 CMR 100.320-100.326 regarding the required contents of the application.

Please note that 105 CMR 100.350-100.354 substantially limits the right of applicants to alter applications or to provide additional information after an application has been submitted. Therefore, applicants should not file an application unless and until all important information is included.

Please note that if a filing fee is required (See 105 CMR 100.323) it must be submitted with the application, by check, payable to the "**Commonwealth of Massachusetts**."

Please see 105 CMR 100.306 which requires documentation as to ownership and zoning. Such documentation need only be submitted with the original copy and referenced in succeeding copies.

Newspaper Notice: Every applicant for Determination of Need is required to publish a notice of application, as prescribed in 105 CMR 100.330-100.332, in the legal notice section of the appropriate newspaper and an identical notice at least once in some other section as well. Refer to the regulation for details of publication. Please note that the final day to request a public hearing or to register as a ten taxpayer group (following the publication) must be on a business day. Please attach a true copy of the notices of publication with date of publication, as required under the above-referenced section, immediately after page 3 of general instructions.

No application will be accepted if the requirements of 105 CMR 100.306 and 100.320-100.326 are not met, and no application will be accepted if all relevant parts of the application kit are not complete.

PLEASE NOTE: The Determination of Need application kit asks applicants, in some cases, to supply answers on additional sheets. Where additional sheets are used, they should be clearly labeled with the factor name, question number (and page number) to which they pertain.

GENERAL INSTRUCTIONS

DISTRIBUTION OF COPIES

(105 CMR 100.300) Applicants must submit one complete original hard copy and one electronic copy in PDF format (or one original and two additional hard copies) to:

Department of Public Health
Determination of Need Program
99 Chauncy Street
Boston, MA 02111
Dph.don@massmail.state.ma.us

Applicants must also submit one hard copy (or electronic copy in PDF format) to the offices listed below. An updated list of contact persons with phone numbers and email addresses is available at the DoN website (www.mass.gov/dph/don) in the "Applications" section.

Department of Public Health
Regional Health Office
(See 100.300 for appropriate office)

Center for Health Information and Analysis
501 Boylston Street
Boston, MA 02116

Division of Medical Assistance
Office of Acute and Ambulatory Care 100 Hancock Street
Quincy, MA 02171

Health Policy Commission 50 Milk Street, 8th Floor
Boston, MA 02109

MassHealth
1 Ashburton Place
Boston, MA 02108

If relevant under Section 100.152:

Executive Office of Elder Affairs
One Ashburton Place, 5th Floor
Boston, MA 02108

If relevant under Section 100.153:

Department of Mental Health
Division of Clinical & Professional Services/
Office of Policy Development
25 Staniford Street
Boston, MA 02114

FILING FEE AND COMPUTATION SHEET

Every applicant, other than a government agency, filing under M.G.L. c. 111, §25C is required to accompany the application with a filing fee as indicated below:

MAXIMUM CAPITAL EXPENDITURE: $6,472,562 x .0020

= $12,945.12 Filing Fee

Minimum Filing Fee is $250.00, regardless of maximum capital expenditure.

Applicant must attach a check or money order made payable to the "**Commonwealth of Massachusetts**" in the amount indicated above. If applicant claims an exemption from the filing fee, state here why the applicant is exempt, citing the applicable section of the regulation.

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
01/05/2017

000561219 1

AMOUNT
$12,945.12

PAY **Twelve Thousand Nine Hundred Forty-Five and 12/100 Dollars**

TO THE ORDER OF **COMMONWEALTH OF MASSACHUSETTS**
DETERMINATION OF NEED PROGRAM
DEPT OF PUBLIC HLTH - 99 CHAUNCY ST-2ND FL
BOSTON MA

AUTHORIZED SIGNATURE

VOID IF NOT CASHED WITHIN 90 DAYS

⑈000561219⑈ ⑆011201539⑆ 00008005697 8⑈

1. Face Sheet

FACE SHEET

1a. FILING DATE: January 10, 2017 1b. FILING FEE: $12,945.12

2. HSA: IV 3. ✓ REGULAR or □ UNIQUE APPLICATION (Check one)

4. APPLICANT NAME: Newton-Wellesley Hospital

5. ADDRESS: 2014 Washington Street, Newton, MA 02462

6. CONTACT PERSON: (Name) Elizabeth Langford, MPA (Title) Business Planning Manager

(Mailing Address): 40 William Street, Suite #100, Wellesley, MA 02481 (Telephone) (617) 243-5394

Email: Elangford@Partners.org

7a. FACILITY NAME: Newton-Wellesley Hospital

7b. LOCATION: 2014 Washington Street, Newton, MA 02462

8. FACILITY TYPE (circle one):

1) **Acute Care Hospital** 2) Nursing Facility 3) Ambulatory Surgery Center

4) Chronic Disease/Rehabilitation Hospital 5) Other _____

9. TYPE OF OWNERSHIP (circle as appropriate):

1) **Private non-profit** 3) Public
2) Private for-profit 4) Other_____

10. BRIEF PROJECT DESCRIPTION (consistent with newspaper notice):
Expand magnetic resonance imaging services through the acquisition of a third MRI unit

11. PROJECT TYPE (check one or more as appropriate):

X Substantial Change in Service – The addition or expansion of or conversion to a new technology, innovative service, or ambulatory surgery by acute care or non-acute care facilities regardless of whether the expenditure minimum is exceeded; non-acute care services provided by acute care hospitals; and any increase in bed capacity by a non-acute care facility totaling more than 12 beds to the licensed bed capacity of the entire facility.

Substantial Capital Expenditure – Any capital expenditure that is at or exceeds the DoN expenditure minimums for acute care, non-acute care (including nursing homes) facilities and clinics.

Original Licensure – Original licensure of hospitals or clinics providing ambulatory surgery. This includes an original license to be issued following a transfer of ownership.

FACE SHEET

12. BEDS INVOLVED IN THE PROJECT (select all that apply): Not Applicable

	Existing Number of Licensed Beds	Number of Additional Beds Requested	Number of Beds Replaced/Renovated
Acute			
Medical/Surgical			
Obstetrics (Maternity)			
Pediatrics			
Neonatal Intensive Care			
ICU/CCU/SICU			
Acute Rehabilitation			
Acute Psychiatric			
adult			
adolescent			
pediatric			
Chronic Disease			
Substance Abuse			
detoxification			
short-term intensive rehabilitation			
Skilled Nursing Facility			
Level II			
Level III			
Level IV			
Other (specify)			

13. MAXIMUM CAPITAL EXPENDITURE: $6,472,562

14. ANNUAL INCREMENTAL OPERATING COST: $28,729,327

15. COMMUNITY HEALTH SERVICES INITIATIVES EXPENDITURE (see Factor 9)

$323,628.10

2. Affidavit of Truthfulness

AFFIDAVIT OF TRUTHFULNESS AND PROPER SUBMISSION

Newton-Wellesley Hospital
(Name of Applicant)*

2014 Washington Street, Newton, MA 02462
(Address of Applicant, Street, City/Town and Zip Code)

hereby makes an application for a Determination of Need under M.G.L. c. 111, §§25C or 51 and 105 CMR 100.000 for

:
_____ original licensure
_____ substantial capital expenditure
__X__ substantial change in service

With respect to a:
__X__ hospital
_____ long term care facility
_____ ambulatory surgery center
_____ other (specify)_____

for the development of: Expansion of Magnetic Resonance Imaging Service
(Name of facility and/or program)

at the following address: 2014 Washington Street, Newton, MA 02462
(Street, City/Town and Zip Code)

Type of Ownership:

_____	City	_____	State
_____	County	__X__	Private Nonprofit Organization

Proprietary:

_____	Individual	_____	Partnership
__X__	Corporation		

with the following estimated capital expenditure (105 CMR 100.020)

$ 6,472,562

*All persons participating in joint venture DoN applications (e.g., applications with two or more corporations) should be aware that each person who comprises the "applicant" will have to be named on the license. In addition, any subsequent changes in ownership of any person comprising the licensee will require compliance with the relevant change of ownership procedures.

All joint venture applicants should carefully evaluate the effect these requirements will have on their future activities.

AFFIDAVIT OF TRUTHFULNESS AND PROPER SUBMISSION continued

I, the undersigned, certify that:

1. I have read 105 CMR 100.000, the Massachusetts Determination of Need Regulation.
2. I have read this application for Determination of Need including all exhibits and attachments, and the information contained therein is accurate and true.
3. I have submitted the required copies of this application to the Determination of Need Program and to all relevant agencies (see below[1]) as required.
4. I have caused notices to be published as required by 105 CMR 100.330-100.332. The notices, true copies of which are enclosed, were published in the

Boston Herald (Name of Newspaper) on 1/10/17 (Date of Publication)

_____ (Name of Newspaper) on _____ (Date of Publication)

5. The applicant is, or will be, the eventual licensee of the facility.

Signed on the 10th day of January, 2017, under the pains and penalties of perjury.

For Corporation: _____ Chief Executive Officer and _____ Chairman of the Board

Partnership: _____ All Partners

Limited Partnership: _____ General Partner

Trust: _____ All Trustees

FORM MUST BE NOTARIZED IN THE SPACE PROVIDED BELOW:

CHRISTINE A. OGINZ
Notary Public
COMMONWEALTH OF MASSACHUSETTS
My Commission Expires
September 2, 2022

Christine Oginz
Notary Signature

[1]Copies of the application have been submitted as follows:

- ✓Department of Public Health
- ✓Regional Health Office
- ✓Division of Medical Assistance (MassHealth)
- ✓Health Policy Commission
- ✓Center for Health Information and Analysis
- ☐ Executive Office of Elder Affairs*
- ☐ Department of Mental Health

3. Newspaper Notice

Public Announcement Concerning Newton-Wellesley Hospital

On or about January 10, 2017, Newton-Wellesley Hospital, with a principal place of business at 2014 Washington Street, Newton, MA 02462, intends to file an application ("Application") with the Massachusetts Department of Public Health ("Department") to obtain a Determination of Need for the expansion of its magnetic resonance imaging ("MRI") services through the acquisition of a third MRI unit ("Project"). The estimated capital expenditure for the Project is $6,472,562. The Project involves a total of 2,687 gross square feet ("GSF") including 644 GSF of new construction and 2,043 GSF of renovation. Any ten taxpayers of Massachusetts may register in connection with the Application by February 9, 2017, or thirty (30) days after the Application has been filed with the Department or notice of the same has been published in the newspaper, whichever is later. If requested, a public hearing shall be ordered on the Application at the request of any ten taxpayers made in writing, not later than January 30, 2017, or twenty (20) days after the date of filing or publication date, whichever is later. Such registrations or requests for public hearing shall be sent to the **Department of Public Health, Determination of Need Program, Attention: Program Director, 99 Chauncy Street, Boston, MA 02116**. The Application may be inspected at such address and at the Metro Boston Regional Health Office located at The Massachusetts Hospital School, 5 Randolph Street, Canton, MA 02021.

4. Applicant Information

APPLICANT INFORMATION

1. List all officers, members of the board of directors, trustees, stockholders, partners, and any other individuals who have an equity or otherwise controlling interest in the application. With respect to each of these persons, please give his or her address, principal occupation, position with respect to the applicant, and amount, if any, of the percentage of stock, share of, partnership or other equity interest. (Answer on additional sheet). **Exhibit A**

2. Have any of the individuals listed ever been convicted of any felony or ever been found in violation of any local, state or federal statue, regulation, ordinance, or other law which arises from or otherwise relates to that individual's relationship to a health care facility? **No**

3. For all individuals listed, list all other health care facilities, within or without the Commonwealth in which they are officers, directors, trustees, stockholders, partners, or in which they hold an equity interest. **Exhibit B**

4. State whether any of these individuals presently have, or intend to have, any business relationship, including but not limited to: supply company, mortgage company, etc., with the applicant. **Exhibit B**

5. If the applicant is a corporation, please attach a copy of your articles of incorporation to this section of your application. **Exhibit C**

6. Indicate here the applicant's representative in regard to this application:

Elizabeth Langford, MPA
Name

617-243-5394
Telephone

Business Planning Manager
Title

ELangford@Partners.org
Email

Newton-Wellesley Hospital
Facility/ Organization

40 William Street

Suite #100

Wellesley, MA 02481
Address (Street, Town/City, and Zip Code)

All written and oral communications will be directed accordingly.

Attachment/Exhibit

A

Newton-Wellesley Hospital
Board of Trustees

1. Name: Carolyn Beckedorff
   Address: 209 Newton Street, Weston, MA 02493
   Principal Occupation: Retired
   Position with Applicant: Trustee
   Equity Interest: 0%

2. Name: Mark Belsky, MD
   Address: 580 Washington Street, #306, Wellesley, MA 02482
   Principal Occupation: Physician
   Position with Applicant: Trustee
   Equity Interest: 0%

3. Name: Edward Bloom
   Address: 16 Standish Circle, Wellesley, MA 02481
   Principal Occupation: Business
   Position with Applicant: Trustee
   Equity Interest: 0%

4. Name: Debra Brede
   Address: 1 Bacon Street, Wellesley, MA 02482
   Principal Occupation: Investment Advisor
   Position with Applicant: Trustee
   Equity Interest: 0%

5. Name: Earl Collier, Jr.
   Address: 240 Otis Street, Newton, MA 02465
   Principal Occupation: Retired
   Position with Applicant: Trustee
   Equity Interest: 0%

6. Name: Linda Derenzo, Esq.
   Address: 238 Kenrick Street, Newton, MA 02458
   Principal Occupation: Lawyer, Civitas Solutions, Inc.
   Position with Applicant: Trustee
   Equity Interest: 0%

7. Name: William Elfers
   Address: 120 Edmunds Road, Wellesley, MA 02481
   Principal Occupation: Retired
   Position with Applicant: Vice Chairman, Board of Trustees
   Equity Interest: 0%

8. Name: Bruce Freedman
   Address: 158 Farm Road, Sherborn, MA 01770
   Principal Occupation: Real Estate Agent

Position with Applicant: Trustee
Equity Interest: 0%

9. Name: Lawrence Friedman, MD
   Address: 5 Halcyon Road, Newton, MA 02459
   Principal Occupation: Physician
   Position with Applicant: Trustee
   Equity Interest: 0%

10. Name: Ben Gomez
    Address: 55 Alban Road, Waban, MA 02468
    Principal Occupation: Investment Manager
    Position with Applicant: Trustee
    Equity Interest: 0%

11. Name: Thomas Grape
    Address: 105 Newton Street, Weston, MA 02493
    Principal Occupation: Skilled Nursing Facility Operator
    Position with Applicant: Trustee
    Equity Interest: 0%

12. Name: Alexander Hannenberg, MD
    Address: 81 Washburn Avenue, Wellesley, MA 02481
    Principal Occupation: Physician
    Position with Applicant: Trustee
    Equity Interest: 0%

13. Name: Michael Jaff
    Address: 60 Levbert Road, Newton, MA 02459
    Principal Occupation: Physician
    Position with Applicant: President, Board of Trustees
    Equity Interest: 0%

14. Name: James Kaplan
    Address: 32 Cart Path Road, Weston, MA 02493
    Principal Occupation: Investment Advisor
    Position with Applicant: Trustee
    Equity Interest: 0%

15. Name: Christopher Kelly
    Address: 65 Woodcliff Road, Wellesley, MA 02481
    Principal Occupation: Real Estate Developer
    Position with Applicant: Trustee
    Equity Interest: 0%

16. Name: Adam Koppel

Address: 70 Hundreds Road, Wellesley, MA 02481
Principal Occupation: Investor
Position with Applicant: Trustee
Equity Interest: 0%

17. Name: Steven Pestka, MD
Address: 86 Woodmere Drive, Sudbury, MA 01776
Principal Occupation: Physician
Position with Applicant: Trustee
Equity Interest: 0%

18. Name: Alan Semine, MD
Address: 337 Wellesley Street, Weston, MA 02493
Principal Occupation: Physician
Position with Applicant: Trustee
Equity Interest: 0%

19. Name: Joan Viterro-Ciccicu
Address: 182 Wayside Inn Road, Sudbury, MA 01776
Principal Occupation: Dean, Graduate School of Nursing
Position with Applicant: Trustee
Equity Interest: 0%

20. Name: Charlie Wu
Address: 25 Sewall Street, Newton, MA 02465
Principal Occupation: Investor
Position with Applicant: Trustee
Equity Interest: 0%

Attachment/Exhibit

B

Newton-Wellesley Hospital
Board of Trustees
Disclosures

1. Name: Thomas Grape
   Other Healthcare Facilities where the Trustee holds a Board Position or an Equity Interest: BSL/BH Commons, LLC d/b/a Benchmark Senior Living at the Commons

2. Name: Alexander Hannenberg, MD
   Other Healthcare Facilities where the Trustee holds a Board Position or an Equity Interest: Medical practice under contract with the Hospital

3. Name: Alan Semine, MD
   Other Healthcare Facilities where the Trustee holds a Board Position or an Equity Interest: Medical practice under contract with the Hospital

4. Name: Joan Viterro-Ciccicu
   Other Healthcare Facilities where the Trustee holds a Board Position or an Equity Interest: Ms. Viterro-Ciccicu's husband owns CounterPulsation, which is under contract with the Hospital

Attachment/Exhibit

C

FEDERAL IDENTIFICATION
NO. 04-2103611

The Commonwealth of Massachusetts

William Francis Galvin
Secretary of the Commonwealth
One Ashburton Place, Boston, Massachusetts 02108-1512

045 066
047 068
043073
014

RESTATED ARTICLES OF ORGANIZATION

(General Laws, Chapter 180, Section 7)

Name Approved

We, Michael S. Jellinek, M.D., *President / ~~XXXXXXXXXX~~,

and Elizabeth Molodovsky, *Clerk ~~XXXXXXXXXXXX~~,

of Newton-Wellesley Hospital,
(Exact name of corporation)

located at 2014 Washington Street, Newton, MA 02462,
(Street address of corporation in Massachusetts)

do hereby certify that the following Restatement of the Articles of Organization was duly adopted at a meeting

held on June 19, 20 02, by a vote of:

its sole member~~X~~ ~~XXXXXXXX~~ ~~XXXXXXXXX~~,

being at least two-thirds of its members~~XXXXXX~~ 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 name of the corporation is:

Newton-Wellesley Hospital

ARTICLE II

The purpose of the corporation is to engage in the following activities:

See Continuation Sheet 2

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 as long as each article requiring each addition is clearly indicated.

C.

180-66 4/5/00

01/11/1881

CONTINUATION SHEET 2

(i) To provide, directly or through hospital, charitable, scientific, educational, 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 "Subsidiary Organizations"), hospital and other health care services (ii) to provide for the diagnosis, treatment and prevention of illness; (iii) to conduct and support educational, research and other activities relating thereto; (iv) to improve the health and welfare of all persons; (v) to operate the Corporation and the Subsidiary Organizations as an integral part of the comprehensive, integrated health care delivery system (the "Partners System") organized and operated by Partners HealthCare System, Inc. a Massachusetts charitable corporation ("Partners"), that includes hospital, physician, charitable, scientific, educational, research and other institutions and entities that are controlled, directly or indirectly, through sole corporate membership, stock ownership or otherwise, by Partners (collectively, the "Partners Affiliated Organizations"); (vi) to assist and support Partners and the Partners Affiliated Organizations in fulfilling their respective purposes, missions and objectives in a manner consistent with the purposes, missions and objectives of Partners and the Partners System; and (vii) 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.

65255

ARTICLE III

A corporation may have one or more classes of members. If it does, the designation of such classes, the manner of election or appointment, 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:

Partners HealthCare System, Inc., acting through its Board of Directors, shall be the sole member 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 Sheet 4A

**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.

CONTINUATION SHEET 4A

4.1 The Corporation shall have in furtherance of its corporate purposes all of the powers specified in Chapter 180 and in Section 9 (except those provided on paragraph (m)) and Section 9A of Chapter 156B of the Massachusetts General Laws, as now in force or as hereafter amended, and may carry on any operation or activity referred to in Article 2 hereof either through the Corporation, any of the Subsidiary Organizations or any partly owned or controlled corporations, either alone or in a joint venture or other arrangement with others; provided, however, that no such power shall be exercised in a manner which is inconsistent with said Chapter 180 or any other Chapter of the Massachusetts General Laws or which would deprive it of any exemption from federal income tax as an organization described in Section 510(c)(3) of the Internal Revenue Code.

4.2 No part of the assets or net earnings of the Corporation shall inure to the benefit of any 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 510(h) of the Internal Revenue Code; and the Corporation shall not participate in, or intervene in (including the publishing or distributing of any statement), 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.

4.3 Upon liquidation or dissolution of the Corporation, after payment of all its liabilities or due provision therefor, all of the assets of the corporation shall be transferred pursuant to Massachusetts General Laws, Chapter 180, Section 11A, to Partners or one or more Partners Affiliated Organizations, provided that the transferee is then exempt from federal income tax as an organization described in Section 501(c)(3) of the Internal Revenue Code.

4.4 The Corporation shall not discriminate unlawfully in administering its policies and programs or in the employment of its personnel on the basis of race, color, religion, national or ethnic origin, sex, handicap or otherwise.

4.5 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 other 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.

ARTICLE V

The effective date of the Restated Articles of Organization of the corporation shall be the date approved and filed by the Secretary of the Commonwealth. If a *later* effective date is desired, specify such date which shall not be more than thirty days after the date of filing.

Effective date: September 30, 2002

ARTICLE VI

The information contained in Article VI is not a permanent part of the Articles of Organization.

a. The street address (post office boxes are not acceptable) of the principal office of the corporation *in Massachusetts* is:

2014 Washington Street, Newton, MA 02462

b. The name, residential address and post office address of each director and officer of the corporation is as follows:

	NAME	RESIDENTIAL ADDRESS	POST OFFICE ADDRESS
President:			
Treasurer:			
Clerk:			
Directors: (or officers having the powers of directors)	See Continuation Sheet 6		

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, if any, of the corporation is: N/A

****We further certify that the foregoing Restated Articles of Organization affect no amendments to the Articles of Organization of the corporation as heretofore amended, except amendments to the following articles. Briefly describe amendments below:**

Articles II, III and IV

SIGNED UNDER THE PENALTIES OF PERJURY, this 17th day of July, 20 02

Michael Feldman, *President / ~~XXXXXXXXXX~~

Judith Feldman, *Clerk ~~XXXXXXXXXX~~

**Delete the inapplicable words* ***If there are no such amendments, state "None".*

CONTINUATION SHEET 6

Officers	Name	Residential Address
President	Michael S. Jellinek, M.D.	132 Pleasant Street Newton Center, MA 02459
Treasurer	Daniel J. Gross	166 Willow Gate Rise Holliston, MA 01746
Secretary	Elizabeth Molodovsky	11 Kent Square Brookline, MA 02446

Trustees	Residential Address
Peter K. Barber	63 Windsor Road Newton, MA 02468
Mark R. Belsky, M.D.	142 Neshobe Road Newton, MA 02468
John V. Carberry	56 Woodcliff Road Wellesley, MA 02482
Robert A. Danziger	96 Temple Street Newton, MA 02465
William R. Elfers	120 Edmunds Road Wellesley, MA 02481
Mark R. Goldman, M.D.	65 Autumn Road Weston, MA 02493
Steven T. Greene, Esq.	12 Pine Needle Road Wayland, MA 01778
Michael S. Jellinek, M.D.	132 Pleasant Street Newton Centre, MA 02459
Erica E. Johnson, M.D.	3 Boulder Road Wellesley, MA 02481

CONTINUATION SHEET 6 (*cont.*)

Hon. Reginald C. Lindsay	64 Concord Street Newton Lower Falls, MA 02462
Carol C. McMullen	45 Ridgeway Road Weston, MA 02493
Gene A. Miller	25 Forest Ridge Road Weston, MA 02493
Kristine Scoon	160 Pine Street Dover, MA 02030
Roger D. Scoville	70 Fairgreen Place Chestnut Hill, MA 02467

66343

#1731

809317

THE COMMONWEALTH OF MASSACHUSETTS

RESTATED ARTICLES OF ORGANIZATION

(General Laws, Chapter 180, Section 7)

I hereby approve the within Restated Articles of Organization and, the filing fee in the amount of $ 35.00 having been paid, said articles are deemed to have been filed with me this 18th day of September, 20 02

02 SEP 19 PM 2:02

Effective Date: 9/30/2002

William Francis Galvin

WILLIAM FRANCIS GALVIN

Secretary of the Commonwealth

TO BE FILLED IN BY CORPORATION

Photocopy of document to be sent to:

Elizabeth Molodovsky, Esq.
Office of General Counsel
Partners HealthCare System, Inc.
50 Staniford Street, 10th Floor
Boston, MA 02114

Telephone 617-726-7523

Examiner

FEDERAL IDENTIFICATION NO. 04-2791990 (M)
04-2793663 (M)
04-3327735 (M)

FEDERAL IDENTIFICATION NO. 04-2103611 (S)
Fee: $35.00

The Commonwealth of Massachusetts

William Francis Galvin
Secretary of the Commonwealth
One Ashburton Place, Boston, Massachusetts 02108-1512

ARTICLES OF *CONSOLIDATION/*MERGER

(General Laws, Chapter 180, Section 10)
Domestic and Domestic Corporations

*XXXXXXXXXX merger of

Newton-Wellesley Health Care System, Inc.

Newton-Wellesley Management Services, Inc.

Newton-Wellesley Properties, Inc.

_____

_____ and

Newton-Wellesley Hospital ,

the constituent corporations, into

Newton-Wellesley Hospital ,

*one of the constituent corporations XXXXXXXXXXXXXXX

The undersigned officers of each of the constituent corporations certify under the penalties of perjury as follows:

1. The agreement of *consolidation/*merger was duly adopted in accordance and compliance with the requirements of General Laws, Chapter 180, Section 10.

2. That if any of the constituent corporations constitutes a public charity, then the resulting or surviving corporation shall be a public charity.

3. The resulting or surviving corporation shall furnish a copy of the agreement of *consolidation/ *merger to any of its members or to any person who was a stockholder or member of any constituent corporation upon written request and without charge.

4. The effective date of the *consolidation/*merger determined pursuant to the agreement of *consolidation/*merger shall be the date approved and filed by the Secretary of the Commonwealth. If a *later* effective date is desired, specify such date which shall not be more than *thirty days* after the date of filing:

September 30, 2002

5. **(For a merger)**
(a) The following amendments to the Articles of Organization of the *surviving* corporation have been effected pursuant to the agreement of merger:

Restated Articles of Organization effective September 30, 2002

C ☐
P ☐
M ☐
RA. ☐

12

P.C.

Delete the inapplicable word.

01/11/1881

180 10m 4/98

(For a consolidation)
(b) The purpose of the *resulting* corporation is to engage in the following activities:

Not Applicable

**(c) The resulting corporation may have one or more classes of members. If it does, the designation of such class or classes, the manner of election or appointment, the duration of membership and the qualification and rights, including voting rights, of the members of each class, may be set forth in the bylaws of the corporation or may be set forth below:

Not Applicable

**(d) Other lawful provisions, if any, for the conduct and regulation of the business and affairs of the resulting 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:

Not Applicable

6. The information contained in Item 6 is *not* a *permanent* part of the Articles of Organization of the XXXXXXXX/ *surviving corporation.

(a) The street address of the XXXXXXXX/ *surviving corporation in Massachusetts is: *(post office boxes are not acceptable)*

2014 Washington Street
Newton, MA 02462

**Delete the inapplicable word.* ***If there are no provisions state "None".*

(b) The name, residential address and post office address of each director and officer of the *surviving corporation is:

	NAME	RESIDENTIAL ADDRESS	POST OFFICE ADDRESS
President:			
Treasurer:		See Attachment 6(b)	
Clerk:			
Directors:			

(c) The fiscal year (i.e. tax year) of the *surviving corporation shall end on the last day of the month of:

September

(d) The name and business address of the resident agent, if any, of the */ *surviving corporation is:

None

The undersigned officers of the several constituent corporations listed herein further state under the penalties of perjury as to their respective corporations that the agreement of *merger has been duly executed on behalf of such corporations and duly approved by the members / stockholders / directors of such corporations in the manner required by General Laws, Chapter 180, Section 10.

TO BE EXECUTED ON BEHALF OF EACH CONSTITUENT CORPORATION

Michael Jellinek, *President / *Vice President

Elizabeth Molodovsky, *Clerk / *Assistant Clerk

of Newton-Wellesley Health Care System, Inc.
(Name of constituent corporation)

Michael Jellinek, *President / *Vice President

Elizabeth Molodovsky, *Clerk / *Assistant Clerk

of Newton-Wellesley Management Services, Inc.
(Name of constituent corporation)

*Delete the inapplicable words.

TO BE EXECUTED ON BEHALF OF EACH CONSTITUENT CORPORATION *(cont.)*

_____, President/~~*Vice President~~

_____, *Clerk/~~*Assistant Clerk~~

of Newton Wellesley Properties, Inc.

_____, President/~~*Vice President~~

_____, *Clerk/~~*Assistant Clerk~~

of Newton Wellesley Hospital

ATTACHMENT 6(b)

Officers	Name	Residential Address
President	Michael S. Jellinek, M.D.	132 Pleasant Street Newton Center, MA 02459
Treasurer	Daniel J. Gross	166 Willow Gate Rise Holliston, MA 01746
Secretary	Elizabeth Molodovsky	11 Kent Square Brookline, MA 02446

Trustees	Residential Address
Peter K. Barber	63 Windsor Road Newton, MA 02468
Mark R. Belsky, M.D.	142 Neshobe Road Newton, MA 02468
John V. Carberry	56 Woodcliff Road Wellesley, MA 02482
Robert A. Danziger	96 Temple Street Newton, MA 02465
William R. Elfers	120 Edmunds Road Wellesley, MA 02481
Mark R. Goldman, M.D.	65 Autumn Road Weston, MA 02493
Steven T. Greene, Esq.	12 Pine Needle Road Wayland, MA 01778
Michael S. Jellinek, M.D.	132 Pleasant Street Newton Centre, MA 02459
Erica E. Johnson, M.D.	3 Boulder Road Wellesley, MA 02481

ATTACHMENT 6(b) (*cont.*)

Hon. Reginald C. Lindsay	64 Concord Street Newton Lower Falls, MA 02462
Carol C. McMullen	45 Ridgeway Road Weston, MA 02493
Gene A. Miller	25 Forest Ridge Road Weston, MA 02493
Kristine Scoon	160 Pine Street Dover, MA 02030
Roger D. Scoville	70 Fairgreen Place Chestnut Hill, MA 02467

EXHIBIT A

to Agreement and Plan of Merger

Articles of Merger

AGREEMENT AND PLAN OF MERGER

THIS AGREEMENT AND PLAN OF MERGER, dated as of September 18, 2002 is by and among Partners HealthCare System, Inc. ("Partners"), Newton-Wellesley Health Care System, Inc. ("NWHCS"), Newton-Wellesley Hospital ("NWH"), Newton-Wellesley Management Services, Inc. ("NWMS") and Newton-Wellesley Properties, Inc. ("NWP") each a Massachusetts charitable corporation. NWHCS, NWH, NWMS and NWP are sometimes referred to herein as the "Constituent Corporations."

PRELIMINARY STATEMENT

In the case of each of NWH, NWHS and NWP, its sole Member is NWHCS. NWHCS acts through its Board of Governors to exercise its powers as the sole member of NWH, NWMA and NWP. Partners is the sole member of NWHCS. Partners acts through its Board of Directors to exercise its powers as sole member of NWHCS. The Board of Governors of NWHCS, the Board of Directors of Partners, the Boards of Trustees of NWH and NWMS, and the Board of Directors of NWP have determined that it is advisable in the best interests of the Constituent Corporations to merge with and into NWH upon the terms and conditions set forth herein and in accordance with Section 10 of Chapter 180 of the General Laws of The Commonwealth of Massachusetts ("MGL ch. 180, § 10").

NOW THEREFORE, the parties hereby agree as follows:

ARTICLE 1. THE MERGER.

Section 1.1. The Merger. In accordance with the provisions of this Agreement of Merger and MGL ch. 180, § 10, at the Effective Date (as herein defined), NWHCS, NWMS, NWP and NWH shall be merged with and into NWH, the separate existence of NWHCS, NWMS and NWP shall thereupon cease, and NWH shall continue to exist and shall be the surviving corporation (sometimes referred to herein as the "Surviving Corporation") in the merger (the "Merger").

Section 1.2. The Effective Date of the Merger. The Merger shall become effective on September 30, 2002 (the "Effective Date"), as specified in the Articles of Merger, in substantially the form of Exhibit A attached hereto (the "Articles of Merger"), to be filed with the Secretary of State of The Commonwealth of Massachusetts as provided in M.G.L. ch. 180, § 10.

Section 1.3. Effect of the Merger. On and after the Effective Date, the Surviving Corporation shall possess all of the estate, property, rights, privileges, powers and franchises of the Constituent Corporations. All of the property, real, personal and mixed, and all the debts due on whatever account to the Constituent Corporations, as well as all

other choses in action belonging to the Constituent Corporations, shall be transferred to and vested in the Surviving Corporation without further act or deed. All claims, demands, property and other interest shall be the property of the Surviving Corporation, and the title to all real estate vested in the Constituent Corporations shall not revert or be in any way impaired by reason of the Merger, but shall be vested in the Surviving Corporation. All rights of creditors of the Constituent Corporations shall not in any manner be impaired, nor shall any liability or obligations, including taxes due or to become due, or any claims or demand in any cause existing against any Constituent Corporation, or governor, director, trustee or officer thereof, be released or impaired by the Merger. The Surviving Corporation shall be deemed to have assumed, and shall be liable for, all liabilities and obligations of the Constituent Corporations in the same manner and to the same extent as if the Surviving Corporation had itself incurred such liabilities or obligations.

ARTICLE 2. THE SURVIVING CORPORATION.

Section 2.1. Name. The name of the Surviving Corporation, upon effectiveness of the Merger, shall be Newton-Wellesley Hospital.

Section 2.2. Purposes. The purposes of the Surviving Corporation shall be the purposes of NWH as set forth in the Restated Articles of Organization of NWH.

Section 2.3. Articles of Organization. The Restated Articles of Organization of NWH effective September 30, 2002 shall be the Articles of Organization of the Surviving Corporation. The Articles of Organization of the Surviving Corporation may be amended thereafter in accordance with their terms and as provided by law.

Section 2.4. ByLaws. The ByLaws of NWH as amended effective September 30, 2002 shall be the By-Laws of the Surviving Corporation. The Bylaws of the Surviving Corporation may be amended thereafter in accordance with their terms and a provided by law.

Section 2.5. Trustees and Officers. Upon effectiveness of the Merger, the trustees and officers of NWH shall be the trustees and officers of the Surviving Corporation, each to hold office in accordance with the Articles of Organization and By-Laws of the Surviving Corporation.

ARTICLE 3. GENERAL.

Section 3.1. Abandonment. At any time before the filing of the Articles of Merger, this Agreement of Merger may be terminated and the Merger may be abandoned for any reason whatsoever by any of the parties.

Section 3.2. Survival. The covenants continued in this Agreement shall survive the Merger and shall be binding upon the parties continuing in the existence after the Merger.

Section 3.3. Amendment. This Agreement and Plan of Merger may be amended or modified only by a writing signed by each of the parties hereto, to the extent they are still in existence.

Section 3.4. Governing Law. This Agreement and Plan of Merger shall in all respects be construed, interpreted and enforced in accordance with and governed by the laws of The Commonwealth of Massachusetts.

Section 3.5. Counterparts. This Agreement of Merger may be executed in any number of counterparts, each of which shall be an original, and all or which together shall constitute one and the same instrument.

EXECUTED as a sealed instrument as of the date first above written.

PARTNERS HEALTHCARE SYSTEM, INC.

By: _____

Its: Chief Executive Officer

NEWTON-WELLESLEY HEALTH CARE SYSTEM, INC.

By: _____

Its: President

NEWTON-WELLESLEY HOSPITAL

By: _____

Its: President

NEWTON-WELLESLEY MANAGEMENT SERVICES, INC.

By: Michael Jellinums

Its: President

NEWTON-WELLESLEY PROPERTIES, INC.

By: Michael Jellinums

Its: President

65231

809316

1775

THE COMMONWEALTH OF MASSACHUSETTS

ARTICLES OF ~~*CONSOLIDATION~~ / *MERGER

(General Laws, Chapter 180, Section 10)
Domestic and Domestic Corporations

I hereby approve the within Articles of *Consolidation / *Merger and, the filing fee in the amount of $ 35 00, having been paid, said articles are deemed to have been filed with me this 18th day of September, 20 02.

Effective date: 9/30/2002

William Francis Galvin

WILLIAM FRANCIS GALVIN
Secretary of the Commonwealth

TO BE FILLED IN BY CORPORATION
Photocopy of document to be sent to:

Elizabeth Molodovsky
Office of General Counsel
Partners HealthCare System, Inc.
50 Staniford Street, 10th Floor
Boston, MA 02114

Telephone: 617-726-7523

5. Standing to Make Application

STANDING TO MAKE APPLICATION

Pursuant to 105 C.M.R. 100.306 of the Department of Public Health's Determination of Need ("DoN") regulations, attached please find documentation evidencing the Applicant's standing to make this DoN Application.

Exhibit A	Evidence of Ownership
Exhibit B	Evidence of Zoning

Attachment/Exhibit

A

Extract from Chapter 185, Section 46, of the General Laws, as amended.

Every plaintiff receiving a certificate of title in pursuance of a judgment of registration, and every subsequent purchaser of registered land taking a certificate of title for value and in good faith, shall hold the same free from all encumbrances except those noted on the certificate, and any of the following encumbrances which may be existing:

First, Liens, claims or rights arising or existing under the laws or constitution of the United States or the statutes of this commonwealth which are not by law required to appear of record in the registry of deeds in order to be valid against subsequent purchasers or encumbrances of record.

Second, Taxes, within two years after they have been committed to the collector.

Third, Any highway, town way, or any private way laid out under section twenty-one of chapter eighty-two, if the certificate of title does not state that the boundary of such way has been determined.

Fourth, Any lease for a term not exceeding seven years.

Fifth, Any liability to assessment for betterments or other statutory liability, except for taxes payable to the commonwealth, which attaches to land in the commonwealth as a lien; but if there are easements or other rights appurtenant to a parcel of registered land which for any reason have failed to be registered, such easements or rights shall remain so appurtenant notwithstanding such failure, and shall be held to pass with the land until cut off or extinguished by the registration of the servient estate, or in any other manner.

Sixth, Liens in favor of the United States for unpaid taxes arising or existing under the Internal Revenue Code of 1954 as amended from time to time and any other federal lien which may be filed in the commonwealth.

Seventh, Liens in favor of the commonwealth for unpaid taxes arising or existing under the laws of the commonwealth, effective January 1, 1983.

CERTIFICATE OF TITLE

Book 141 Page 233

No. 21589

DATE OF REGISTRATION

May 12, 1926

Boston Hospital Owner

Warner + Stackpole
75 State St
Boston MA. 02109

EUGENE C. BRUNE
REGISTER OF DEEDS
ASSISTANT RECORDER
LAND COURT
MIDDLESEX SOUTH REGISTRY DISTRICT
CAMBRIDGE, MASS. 02141

IMPORTANT
— ● —
See Note on back.

IMPORTANT

★ LAND REGISTRATION OFFICE
SOUTH REGISTRY DISTRICT OF MIDDLESEX COUNTY
(EAST) CAMBRIDGE, MASSACHUSETTS.

Note

This certificate must accompany every voluntary instrument relating to this property which is presented for registration at ★ this office.

This certificate should be mailed or delivered to ★ this office upon request when an involuntary instrument affecting this property is registered, so that the same may be noted hereon.

If this certificate is lost, a petition for a new one should be filed at once in the Land Court at Boston.

When a certificate owner dies, a petition for a new certificate after death should be filed in the Land Court at Boston, if the property goes to heirs or devisees.

Owner's Duplicate Certificate

BK.141 PG.233

No. 21589

Entered pursuant to a decree of the Land Court, dated at Boston, in the County of Suffolk and Commonwealth of Massachusetts,

the eleventh day of May in the year nineteen hundred and twenty-six and numbered 11147 on the files of said Court,

Copy of Decree

COMMONWEALTH OF MASSACHUSETTS, SUFFOLK, ss. LAND COURT,

In the matter of the Petition of

Ellen M. Leland

numbered 11147 after consideration, the Court doth adjudge and decree that

Newton Hospital, substituted petitioner on motion, a duly existing corporation having a usual place of business in

Newton in the County of Middlesex and Commonwealth of Massachusetts is the owner in fee simple,

of that certain parcel of land situate in Newton

in the County of Middlesex and Commonwealth of Massachusetts, bounded and described as follows:

Northwesterly by Washington Street one hundred thirty-one and 93/100 (131.93) feet;
Northerly, three hundred nineteen and 47/100 feet (319.47) feet, and
Southeasterly, two hundred seventy and 38/100 (270.38) feet by land now or formerly of the Newton Hospital;
Southerly by the northerly line of Beacon Street one hundred two and 9/100 (102.09) feet; and
Northwesterly, one hundred twenty-three and 10/100 (123.10) feet, and
Southerly, two hundred nineteen and 7/100 (219.07) feet by land now or formerly of Waldo G. Leland et al.

All of said boundaries are determined by the Court to be located as shown on a plan drawn by George H. Watherbee Jr. Surveyor, dated Oct. 30, 1925, as modified and approved by the Court, filed in the Land Registration Office, a copy of a portion of which will be filed with the original certificate of title issued on this decree.

The above described land is subject to assessments as set forth in an order made by the Board of Aldermen of the City of Newton, dated Dec. 19, 1921, duly recorded in Book 4408, Page 287.

Certificate No. 21589 cont'd.

And the Court doth adjudge and decree that said land be brought under the operation and provisions of Chapter 185 of the General Laws, and that the title of said

Newton Hospital

to said land be confirmed and registered subject, however, to any of the encumbrances mentioned in Section forty-six of said Chapter which may be subsisting; , and subject also as aforesaid.

Witness, CHARLES THORNTON DAVIS, Esquire, Judge of the Land Court, at Boston, in said County of Suffolk

the eleventh day of May in the year nineteen hundred and twenty-six

at 10 o'clock and 30 minutes in the fore-noon,

Attest, with the Seal of said Court, CHARLES A. SOUTHWORTH, Recorder SEAL

A true copy.
Attest, with the Seal of said Court, CHARLES A. SOUTHWORTH, Recorder SEAL

Received for Transcription at Middlesex County South Registry District,

May 12, 1926 at 10 o'clock and 5 minutes AM

A true copy. Attest, with the Seal of said Court.

Eugene C. Bruce ..... Assistant Recorder

Address of owner: Newton, MA. 02158

Land Court Case No. 11147 ID#1595 DK#

No. 21989

Memoranda of Encumbrances

DOCUMENT		
83282	KIND:	Taking
	IN FAVOR OF:	City of Newton
	TERMS:	Taking of land for the relocation & widening of Washington St., N.E. from Beacon St. Plan filed with Document.
	DATE OF INSTR:	Nov. 23, 1927
	DATE OF REG:	Dec. 5, 1927 TIME OF REG: 9:40 AM
	SIGNATURE:	..... Asst. Recorder
451407	KIND:	Order of Court
	IN FAVOR OF:	Newton Hospital
	TERMS:	Order for new Owner's Duplicate Certificate in place of one lost.
	DATE OF INSTR:	Dec. 26, 1967
	DATE OF REG:	Dec. 29, 1967 TIME OF REG: 2:45 PM
	SIGNATURE:	..... Asst. Recorder
451408	KIND:	Certificate if Amendment
	IN FAVOR OF:	
	TERMS:	Certifying that the name of Newton Hospital was changed to Newton-Wellesley Hospital.
	DATE OF INSTR:	Dec. 19, 1967
	DATE OF REG:	Dec. 29, 1967 TIME OF REG: 2:45 PM
	SIGNATURE:	..... Asst. Recorder
451409	KIND:	Notice of Variance
	IN FAVOR OF:	City of Newton (Bd. of Aldermen)
	TERMS:	See Document
	DATE OF INSTR:	Nov. 20, 1967
	DATE OF REG:	Dec. 29, 1967 TIME OF REG: 2:45 PM
	SIGNATURE:	..... Asst. Recorder
462288*	KIND:	Vote and Mortgage
	IN FAVOR OF:	Charlestown Savings Bank
	TERMS:	$3,500,000. Principal and Interest payable as stated in mortgage, covering this and unregistered land.
	DATE OF INSTR:	Dec. 20, 1968
	DATE OF REG:	Dec. 31, 1968 TIME OF REG: 11:00 AM
	SIGNATURE:	..... Asst. Recorder
*		May 1, 1975 DISCHARGED BY DOCUMENT NO. 532038
	SIGNATURE:	..... Asst. Recorder
472732	KIND:	Notice of Variance
	IN FAVOR OF:	City of Newton (Board of Aldermen)
	TERMS:	See Document
	DATE OF INSTR:	Dec. 17, 1969
	DATE OF REG:	Jan. 7, 1970 TIME OF REG: 10:05 AM
	SIGNATURE:	..... Asst. Recorder
487582	KIND:	Notice of Variance
	IN FAVOR OF:	City of Newton (Board of Aldermen)
	TERMS:	See Document
	DATE OF INSTR:	June 24, 1971
	DATE OF REG:	July 19, 1971 TIME OF REG: 2:45 PM
	SIGNATURE:	..... Asst. Recorder

No. 21589

Memoranda of Encumbrances

DOCUMENT		
504045	KIND:	Notice of Variance
	IN FAVOR OF:	City of Newton (Board of Aldermen)
	TERMS:	See Document
	DATE OF INSTR:	Oct. 20, 1972
	DATE OF REG:	Oct. 25, 1972 TIME OF REG: 10:30 AM
	SIGNATURE:	..... Asst. Recorder
531616	KIND:	Notice of Written Contract
	IN FAVOR OF:	Carlson Corporation Contractor
	TERMS:	Contract dated March 25, 1975 Contractor to furnish labor and material. Contract to be completed on or before April 30, 1976.
	DATE OF INSTR:	Mar. 31, 1975
	DATE OF REG:	Apr. 16, 1975 TIME OF REG: 11:45 AM
	SIGNATURE:	..... Asst. Recorder
531617	KIND:	Certificate bond
	IN FAVOR OF:	Carlson Corporation and Travelers Indemnity Company
	TERMS:	Bond dissolving Notice of Written Contract Document No. 531616.
	DATE OF INSTR:	Mar. 25, 1975
	DATE OF REG:	Apr. 16, 1975 TIME OF REG: 11:45 AM
	SIGNATURE:	..... Asst. Recorder
531928	KIND:	Notice of Dissolution by
	IN FAVOR OF:	Carlson Corporation, contractor
	TERMS:	Dissolution of Notice of Written Contract, Document No. 531616.
	DATE OF INSTR:	- -
	DATE OF REG:	Apr. 29, 1975 TIME OF REG: 11:55 AM
	SIGNATURE:	..... Asst. Recorder
531929	KIND:	Copy of Resolution
	IN FAVOR OF:	Newton-Wellesley Hospital
	TERMS:	See Document
	DATE OF INSTR:	Mar. 25, 1975
	DATE OF REG:	Apr. 29, 1975 TIME OF REG: 11:55 AM
	SIGNATURE:	..... Asst. Recorder
531930*	KIND:	Mortgage and Agreement
	IN FAVOR OF:	Newton-Wellesley Hospital with Massachusetts Health adn Educational Facilities Authority
	TERMS:	See Document, (covering lot 2,Pl. in Bk.141,F.233 and unregistered land.)
	DATE OF INSTR:	Mar. 4, 1975
	DATE OF REG:	Apr. 29, 1975 TIME OF REG: 11:55 AM
	SIGNATURE:	..... Asst. Recorder
*		August 16, 1988 DISCHARGED BY DOCUMENT NO. 780788
	SIGNATURE:	..... Asst. Recorder

LC-SMR 4A

Memoranda of Encumbrances

DOCUMENT

331931
KIND: Financing Statement
IN FAVOR OF: Newton-Wellesley Hospital to Massachusetts Health and Educational Facilities Authority
TERMS: See Document
DATE OF INSTR: - -
DATE OF REG: Apr. 29, 1975 TIME OF REG: 11:55 AM
SIGNATURE: ..... Asst. Recorder

June 15, 1988 TERMINATED BY DOCUMENT NO. 776283
SIGNATURE: ..... Asst. Recorder

579021
KIND: Copy of Decision
IN FAVOR OF: City of Newton
TERMS: See Document
DATE OF INSTR: Oct. 10, 1978
DATE OF REG: Dec. 12, 1978 TIME OF REG: 2:15 PM
SIGNATURE: ..... Asst. Recorder

593377
KIND: Copy of Decision
IN FAVOR OF: City of Newton (Board of Appeals)
TERMS: See Document
DATE OF INSTR: Feb. 14, 1979
DATE OF REG: Jan. 3, 1980 TIME OF REG: 10:30 AM
SIGNATURE: ..... Asst. Recorder

596778
KIND: Continuation Financing Statement
IN FAVOR OF: Newton-Wellesley Hospital with Massachusetts Health and Educational Facilities Authority
TERMS: See Document, Affecting Document No. 331931.
DATE OF INSTR: - -
DATE OF REG: Apr. 22, 1980 TIME OF REG: 10:58 AM
SIGNATURE: ..... Asst. Recorder

604320
KIND: Copy of Decision
IN FAVOR OF: City of Newton
TERMS: See Document
DATE OF INSTR: - -
DATE OF REG: Nov. 26, 1980 TIME OF REG: 9:05 AM
SIGNATURE: ..... Asst. Recorder

611212
KIND: Power of Attorney and Lien Bond
IN FAVOR OF: Henry E. Wile Corp. with United Pacific Insurance Company
TERMS: See Document
DATE OF INSTR: - -
DATE OF REG: June 19, 1981 TIME OF REG: 11:25 AM
SIGNATURE: ..... Asst. Recorder

Memoranda of Encumbrances No. 21589

DOCUMENT		
610587*	KIND:	Note, Mortgage and Agreement
	IN FAVOR OF:	Massachusetts Health and Educational Facilities Authority with Newton-Wellesley Hospital and BayBank Middlesex, Tr.
	TERMS:	See Document, (Covering lot 2,Pl. in Bk.141, P.233 and unregistered land.)
	DATE OF INSTR:	June 2, 1981
	DATE OF REG:	June 8, 1981 TIME OF REG: 12:25 PM
	SIGNATURE:	Eugene L. Bruno ..... Asst. Recorder
*		June 15, 1988 DISCHARGED BY DOCUMENT NO. 776284
	SIGNATURE:	Eugene L. Bruno ... Asst. Recorder
610588*	KIND:	Financing Statement
	IN FAVOR OF:	Newton-Wellesley Hospital to BayBank Middlesex, Tr.
	TERMS:	See Document
	DATE OF INSTR:	--
	DATE OF REG:	June 8, 1981 TIME OF REG: 12:25 PM
	SIGNATURE:	Eugene L. Bruno ... Asst. Recorder
*		June 15, 1988 TERMINATED BY DOCUMENT NO. 776285
	SIGNATURE:	Eugene L. Bruno .. Asst. Recorder
680336	KIND:	Continuation
	IN FAVOR OF:	
	TERMS:	Continuation of Financing Statement Document No. 531931.
	DATE OF INSTR:	--
	DATE OF REG:	Apr. 29, 1985 TIME OF REG: 1:10 PM
	SIGNATURE:	Eugene L. Bruno ..... Asst. Recorder
711035	KIND:	Continuation
	IN FAVOR OF:	
	TERMS:	Continuation of Financing Statement Document No. 610588.
	DATE OF INSTR:	--
	DATE OF REG:	June 16, 1986 TIME OF REG: 8:16 AM
	SIGNATURE:	Eugene L. Bruno .. Asst. Recorder
758307	KIND:	Copy of Decision
	IN FAVOR OF:	City of Newton (Board of Aldermen)
	TERMS:	See Document
	DATE OF INSTR:	--
	DATE OF REG:	Oct. 15, 1987 TIME OF REG: 12:30 AM
	SIGNATURE:	Eugene L. Bruno .. Asst. Recorder
776160	KIND:	Copy of Resolution
	IN FAVOR OF:	Newton-Wellesley Hospital's Trs.
	TERMS:	See Document
	DATE OF INSTR:	June 14, 1988
	DATE OF REG:	June 14, 1988 TIME OF REG: 2:39 PM
	SIGNATURE:	Eugene L. Bruno ..... Asst. Recorder

LC-SMR 4A

Memoranda of Encumbrances

No. 21589

DOCUMENT

776161
KIND: Agreement and Mortgage
IN FAVOR OF: Massachusetts Health and Educational Facilities Authority with Newton-Wellesley Hospital and BayBank Middlesex, Tr.
TERMS: See Document, covering lots 1 and 2, Pl. in Bk. 141, P.233 and unregistered land.
DATE OF INSTR: June 7, 1988
DATE OF REG: June 14, 1988 TIME OF REG: 2:39 PM
SIGNATURE: ..... Eugene L. Bruno .. Asst. Recorder

776162
KIND: Financing Statement
IN FAVOR OF: Newton-Wellesley Hospital to Massachusetts Health and Educational Facilities Authority
TERMS: See Document
DATE OF INSTR: - -
DATE OF REG: June 14, 1988 TIME OF REG: 2:39 PM
SIGNATURE: ..... Eugene L. Bruno ..... Asst. Recorder

780788
KIND: Copy of Resolution
IN FAVOR OF: Massachusetts Health and Educational Facilities Authority
TERMS: See Document
DATE OF INSTR: Aug. 10, 1988
DATE OF REG: Aug. 16, 1988 TIME OF REG: 12:31 PM
SIGNATURE: ..... Eugene L. Bruno ..... Asst. Recorder

814629
KIND: Order of Court
IN FAVOR OF: Newton Hospital
TERMS: Order for new Owner's Duplicate Certificate in place of one lost.
DATE OF INSTR: Jan. 4, 1990
DATE OF REG: Jan. 8, 1990 TIME OF REG: 10:31 AM
SIGNATURE: ..... Eugene L. Bruno ..... Asst. Recorder

814630
KIND: Copy of Decision
IN FAVOR OF: Newton City of (Bd. of Alderman)
TERMS: See Document
DATE OF INSTR: - -
DATE OF REG: Jan. 8, 1990 TIME OF REG: 10:31 AM
SIGNATURE: ..... Eugene L. Bruno .. Asst. Recorder

841411
KIND: Order of Court
IN FAVOR OF: Newton Hospital
TERMS: Order for new Owner's Duplicate Certificate in place of one lost.
DATE OF INSTR: Apr. 5, 1991
DATE OF REG: Apr. 24, 1991 TIME OF REG: 9:25 AM
SIGNATURE: ..... Eugene L. Bruno ..... Asst. Recorder

841412
KIND: Amendment
IN FAVOR OF:
TERMS: Amending Copy of Decison Document No. 758307.
DATE OF INSTR: - -
DATE OF REG: Apr. 24, 1991 TIME OF REG: 9:25 AM
SIGNATURE: ..... Eugene L. Bruno .. Asst. Recorder

Memoranda of Encumbrances No. 21589

DOCUMENT		
841413	KIND:	Votes and Agreement
	IN FAVOR OF:	Massachusetts Health and Educational Facilities Authority with Newton-Wellesley Hospital and BayBank Middlesex, Tr.
	TERMS:	Amending Mortgage Document No. 776161.
	DATE OF INSTR:	Mar. 5, 1991
	DATE OF REG:	Apr. 24, 1991 TIME OF REG: 9:25 AM
	SIGNATURE:	..... Asst. Recorder
841414	KIND:	Amendment
	IN FAVOR OF:	
	TERMS:	Amending Financing Statement Document No. 776162.
	DATE OF INSTR:	- -
	DATE OF REG:	Apr. 24, 1991 TIME OF REG: 9:25 AM
	SIGNATURE:	..... Asst. Recorder
842806	KIND:	Copy of Decision
	IN FAVOR OF:	City of Newton (Bd. of Aldermen)
	TERMS:	See Document
	DATE OF INSTR:	- -
	DATE OF REG:	May 13, 1991 TIME OF REG: 2:37 PM
	SIGNATURE:	..... Asst. Recorder
844298	KIND:	Notice of Written Contract
	IN FAVOR OF:	Sennott Roofing Co., Inc., Sub-Cntr. Belair Restoration (Boston) Inc., Cntr.
	TERMS:	Contract dated January 28, 1991. Subcontractor to furnish labor and materials. Contract to be completed on or before June 10, 1991.
	DATE OF INSTR:	June 4, 1991
	DATE OF REG:	June 5, 1991 TIME OF REG: 2:47 PM
	SIGNATURE:	..... Asst. Recorder
844299	KIND:	Statement of Account
	IN FAVOR OF:	Sennott Roofing Co., Inc.
	TERMS:	$23,180. due for labor and materials furnished, effecting Document No. 844298.
	DATE OF INSTR:	June 4, 1991
	DATE OF REG:	June 5, 1991 TIME OF REG: 2:47 PM
	SIGNATURE:	..... Asst. Recorder
844881	KIND:	Agreement
	IN FAVOR OF:	Newton-Wellesley Hospital with City of Newton
	TERMS:	Affecting Document No. 842806. Pl. with Doc. See Doc.
	DATE OF INSTR:	May 20, 1991
	DATE OF REG:	June 13, 1991 TIME OF REG: 3:50 PM
	SIGNATURE:	..... Asst. Recorder
851687	KIND:	Copy of Decision
	IN FAVOR OF:	City of Newton (Bd. of Aldermen)
	TERMS:	See Document
	DATE OF INSTR:	- -
	DATE OF REG:	Sept. 27, 1991 TIME OF REG: 2:07 PM
	SIGNATURE:	..... Asst. Recorder

LC-SMR 4A

Memoranda of Encumbrances

No. 21589

DOCUMENT		
859070	KIND:	Notice of Lease
	IN FAVOR OF:	Newton-Wellesley Hospital with NeWell Properties, Inc.
	TERMS:	Leasing for term commencing September 5, 1991 and terminating December 31, 2031. See Doc.
	DATE OF INSTR:	Jan. 17, 1992
	DATE OF REG:	Jan. 22, 1992 TIME OF REG: 9:15 AM
	SIGNATURE:	..... Asst. Recorder
859071	KIND:	Vote, Certificates and Subordination
	IN FAVOR OF:	
	TERMS:	Subordination of Mortgage Document No. 776161 to Notice of Lease Document No. 859070.
	DATE OF INSTR:	Jan. 17, 1992
	DATE OF REG:	Jan. 22, 1992 TIME OF REG: 9:15 AM
	SIGNATURE:	..... Asst. Recorder
859072	KIND:	Notice of Lease
	IN FAVOR OF:	NeWell Properties, Inc. with Newton Wellesley Hospital
	TERMS:	Leasing for term commencing January 17, 1992 and terminating January 31, 2114, with option to renew for one additional term of ten years.
	DATE OF INSTR:	Jan. 17, 1992
	DATE OF REG:	Jan. 22, 1992 TIME OF REG: 9:15 AM
	SIGNATURE:	..... Asst. Recorder
859073	KIND:	Leasehold Mortgage
	IN FAVOR OF:	Newell Properties, Inc. to BayBank
	TERMS:	Covering leasehold interest in Document No. 859070. See Doc.
	DATE OF INSTR:	Jan. 17, 1992
	DATE OF REG:	Jan. 22, 1992 TIME OF REG: 9:15 AM
	SIGNATURE:	..... Recorder
859074	KIND:	Assignment
	IN FAVOR OF:	BayBank
	TERMS:	Assignment of rents &c. under Mortgage Document No. 859073.
	DATE OF INSTR:	Jan. 17, 1992
	DATE OF REG:	Jan. 22, 1992 TIME OF REG: 9:15 AM
	SIGNATURE:	..... Asst. Recorder
859075	KIND:	Financing Statement
	IN FAVOR OF:	NeWell Properties, Inc. to BayBank
	TERMS:	See Document
	DATE OF INSTR:	- -
	DATE OF REG:	Jan. 22, 1992 TIME OF REG: 9:15 AM
	SIGNATURE:	..... Asst. Recorder
859076	KIND:	Certificate, Vote and Assignment
	IN FAVOR OF:	
	TERMS:	Assignment of rents &c. under Notice of Lease Document No. 859070.
	DATE OF INSTR:	Jan. 17, 1992
	DATE OF REG:	Jan. 22, 1992 TIME OF REG: 9:15 AM
	SIGNATURE:	..... Asst. Recorder

No. 21589

Memoranda of Encumbrances

DOCUMENT

869434

KIND: Notice of Dissolution by
IN FAVOR OF: Bennett Roofing Company, Inc., Sub-Contr.
TERMS: Dissolutin of Notice of Written
Contract Document No. 844298.
DATE OF INSTR: - -
DATE OF REG: May 14, 1992 TIME OF REG: 3:47 PM
SIGNATURE: ..... Asst. Recorder

979930

KIND: Copy of Decision
IN FAVOR OF: City of Newton (Bd. of Alderman)
TERMS: See Document
DATE OF INSTR: - -
DATE OF REG: Aug. 11, 1993 TIME OF REG: 10:02 AM
SIGNATURE: ..... Asst. Recorder

LC-SMK 4A

Memoranda of Encumbrances

Attachment/Exhibit

B

Holland & Knight

10 St James Avenue | Boston, MA 02116 | T 617 523 2700 | F 617 523 6850
Holland & Knight LLP | www hklaw com

Frank G. Stearns
(617) 854-1406
frank.stearns@hklaw.com

August 3, 2016

John Lojek
Commissioner of Inspectional Services
Newton Inspectional Services Department
Newton City Hall
1000 Commonwealth Avenue
Newton Centre, MA 02459

Re: Newton-Wellesley Hospital MRI Project

Dear Commissioner Lojek:

BACKGROUND

Newton-Wellesley Hospital ("NWH") is located in a Single Residence 2 ("SR2") zoning district. Its campus consists of both lawful, pre-existing nonconforming structures and other structures authorized by special permits, which are used for both lawful, pre-existing nonconforming uses and those uses authorized by special permits. The City of Newton Special Permit Granting Authority (the "SPGA") has regulated NWH's buildings, parking, and uses through the special permit process.

REQUEST

We request confirmation of your zoning interpretation that the construction necessary to infill the existing ambulatory surgery building area next to its entrance as shown on the plans attached to this letter for an MRI Suite is allowed by right.

ANALYSIS

NWH is experiencing an increase in demand for its on-site MRI equipment. The existing MRI units are at capacity. It is critical that the hospital be able to accommodate patients who come to the hospital for a doctor's appointment and then require an MRI while at the hospital. The new MRI suite will allow those existing patients to be accommodated while already at the hospital rather than making another trip for the MRI. The hospital has identified an area within the existing building footprint near the entrance to the Ambulatory Surgery Center that can accommodate a new MRI suite.

The attached plans depict a small, approximately 800 square feet infill within the existing building envelope of the Ambulatory Surgery Center. This infill does not modify or affect any of the applicable zoning mass or dimensional requirements under either the Zoning Ordinance or the special permits to the hospital.

Moreover, our review of all previous special permits reveals that the SPGA has historically never regulated NWH based on the SR2 dimensional requirements. Instead, the SPGA has created a de facto NWH overlay zoning district governed by a set of regulatory criterion unique to NWH via its special permits. For example, the SPGA has consistently regulated NWH's building heights, not through the Ordinance dimensional requirements, but rather through an absolute height in relation to mean sea level (see Special Permits #128-87 and #470-04). Also, the special permits impose a buffer zone in lieu of setback limits (see Special Permits #128-87 and #470-04). Also the required minimum number of parking spaces is controlled by the special permits (see Special Permits #128-87 and #470-04). Moreover, the SPGA has prohibited growth into the delineated buffer zone and has confined new hospital building development to the area of campus encircled by the NWH "Loop Road." (see Special Permits #151-95 and #470-04). The permit history confirms that FAR requirements have not been imposed on NWH.

Following the zoning analysis done for prior NWH projects, the attached Zoning Chart demonstrates no change and continued compliance with the applicable zoning.

Zoning	Existing[1]	Proposed
Minimum Lot Size	1,127,289 sf.	No change
Front Setback	65'	No change
Side Setback	25'	No change
Rear Setback	66'	No change
Building Height	244'	No change
Max # of Stories	7	No change
Max Building Lot Coverage	29.7%	No change
Minimum Open Space	36%	No change
Parking Spaces	2,334	No change

[1] Data from Planning Department Public Hearing Memorandum on Emergency Department/Parking Garage Project (#470-04) dated January 7, 2005.

The MRI Project is consistent with the NWH "overlay" zoning and the existing special permits. There is no change to the building setbacks. The project does not increase the building height. It respects the buffer zone. Infill does not increase the hospital's FAR because none of the special permits issued to NWH impose an FAR requirement. It does not add to the parking space requirements because it is serving existing patients with existing staff.

CONCLUSION

For all the above reasons, we request your written confirmation that the MRI Project is permitted by right.

Sincerely,

Frank G. Stearns

FGS:dhb
Enclosures

cc: Howard A. Levine

The terms of this letter are acknowledged and agreed to:

By: John Lojek
Inspectional Services Department Commissioner

B. Project Summary

APPLICATION NARRATIVE
(PROJECT SUMMARY)

Please *briefly* describe the proposed project in the space indicated below. Detailed information is requested elsewhere in the application under the Factors Applied in Determination of Need. All applicants are required to provide an Application Narrative.

I. Overview

Newton-Wellesley Hospital (the "Applicant" or "Hospital") hereby submits this Determination of Need ("DoN") application ("Application") to the Department of Public Health (the "Department") to obtain approval for the expansion of Magnetic Resonance Imaging ("MRI") services at the hospital located at 2014 Washington Street in Newton. The Applicant proposes to expand such service through the addition of a fixed Magnetom Aera 48 XQ to operate full-time at the Hospital ("Project"). The gross square feet ("GSF") associated with the Project is 2,687 GSF and the total maximum capital expenditure ("MCE") is $6,472,562, which includes the MRI equipment and construction required to add a third unit at the Hospital. This Application is submitted in accordance with the Department's Guidelines for Magnetic Resonance Imaging, dated August 19, 1997 (the "Guidelines").

II. Background

The Applicant is a two hundred and sixty-five (265) bed acute care hospital and a member of Partners Healthcare System, Inc. Currently, the Applicant operates two (2) fixed MRI units, with demand for the Applicant's MRI services consistently increasing in recent years. Accordingly, to address this increased demand for services, the Applicant instituted an extended operating schedule. However, even with additional hours of operation, the Applicant's two (2) units are at capacity. To ensure patients have access to quality radiology services, the Applicant seeks to expand the number of MRI units at the hospital by implementing a third MRI unit.

III. Guideline Compliance

The Applicant's Project fully complies with the requirements of the Department's DoN Guidelines and Regulations, which ensure the provision of high quality health care and the efficient use of resources. The Project's compliance is detailed throughout this Application. Below is a brief overview of the Project's compliance with the Guidelines and applicable Regulations.

A. Health Planning Process

To ensure patients have access to a full range of quality medical care, the Applicant engages in long-term and strategic planning processes on a service-line basis. Through this process, the Applicant identified a need for additional MRI services to meet the projected demand based on historical volume trends. Throughout the development of this Project, the Applicant consulted with members of its medical staff and local providers that regularly refer patients to the Hospital for MRI scanning. These consultations confirmed the Applicant's analysis that it needs to expand its MRI capacity to continue to meet demand.

B. Health Care Requirements

The Applicant determined that significant need exists to expand MRI services at the Hospital to continue to meet the needs of its service area. The Applicant evaluated the historical demand for its MRI services, as well as the historical and projected trends in the population of the Hospital's service area and their impact on demand for MRI services. Additionally, as further detailed in Factor 2, the Applicant's existing two (2) MRI units have been operating at approximately 99% capacity, demonstrating the need to operate an additional unit. Based on these factors, the implementation and operation of a third MRI unit at the Hospital is needed.

C. Operational Objectives

The Applicant's Project fully complies with the operational objective requirements of the Guidelines. The Applicant will continue to staff its service to ensure the efficient use of resources and the provision of quality care. See Schedule C of Factor 6 for the staffing pattern of the service. Additionally, the MRI Service is under the clinical direction of a physician with the requisite experience as set forth in the Guidelines. The Applicant has more than one physician on staff who is a board-certified radiologist and will ensure that such a physician will be present at the Hospital a sufficient amount of time to regularly participate in the screening of patients for scans. Furthermore, the Applicant provides physicians with necessary support services to make diagnoses effectively and efficiently. The Applicant also provides ongoing education and training in MRI to staff, as well as to physicians in the community. Finally, the Applicant has formed a Clinical Oversight Committee.

D. Standards Compliance

With the approval of this Project, the Applicant will operate a Magnetom Aera 48 XQ fixed MRI unit. This MRI equipment is proven safe and effective for clinical use by the FDA. The related facility improvements will be fully compliant with all applicable requirements.

E. Reasonableness of Expenditures and Financial Feasibility

The Applicant's Factor 6 schedules demonstrate that the proposed Project represents a cost-effective means of providing expanded MRI services. The MCE related to the implementation of the service is $6,472,562. As detailed in the Factor 6 forms, the Project is reasonable and within the Applicant's financial capability.

F. Relative Merit

In developing this Project, the Applicant considered various alternatives to address the continued demand for increased access to MRI services at the Hospital. The Applicant evaluated taking no action. It also explored the option of adding more hours to its already expanded operating schedule. Finally, the Applicant considered adding a third full-time MRI unit. After thorough review of each alternative, the Applicant concluded that the Project as proposed represents the most cost-effective and financially feasible means of addressing the need for expanded MRI services for the residents of the service area.

IV. Conclusion

This Application details the Project's compliance with the requirements of 105 CMR 100.000 *et seq.*, as well as the requirements set forth in the Department's Guidelines and the DoN Application Kit. The Project addresses an identified need for expanded MRI services at the Hospital and meets this need in an efficient and cost-effective manner. With the Department's approval of this Project, the Applicant will be able to provide access to MRI services in line with the demand of its service area, improving the quality and effectiveness of health care in its service area.

Attachment/Exhibit

A

The Commonwealth of Massachusetts

DEPARTMENT OF PUBLIC HEALTH

HOSPITAL LICENSE

In accordance with the provisions of the General Laws, Chapter lll, Sections 51-56 inclusive, and the regulations promulgated, thereunder, a license is hereby granted to:

Newton-Wellesley Hospital
Name of Applicant

for the maintenance of **Newton-Wellesley Hospital** at **2014 Washington Street, Newton, MA 02162**

and satellites as listed below. The license is valid until **February 27, 2018** subject to revocation or suspension, either wholly or with respect to a specific service or specific services, or a part or parts thereof.

HOSPITAL SERVICES	SERVICES LICENSED TO DELIVER INDICATED BY AN X	BEDS
Medical/Surgical	X	133
Intensive Care Unit	X	12
Pediatric Service	X	24
Obstetrics Services	X	51 (Level IIB)
Psychiatric Service	X	45
TOTAL NUMBER OF BEDS		**265**
Well Infant Nursery	X	56
Special Care Nursery	X	12
Ambulatory Care Services	X	
Emergency Services	X	
Primary Stroke Services	X	
Medical Control Service	X	

Commissioner of Public Health

February 28, 2016
Date Issued

LICENSE No **2075**

POST CONSPICUOUSLY

The Commonwealth of Massachusetts

DEPARTMENT OF PUBLIC HEALTH

HOSPITAL LICENSE

In accordance with the provisions of the General Laws, Chapter 111, Sections 51-56 inclusive, and the regulations promulgated, thereunder, a license is hereby granted to:

Newton-Wellesley Hospital
Name of Applicant

for the maintenance of **Newton-Wellesley Hospital** at **2014 Washington Street, Newton, MA 02162**

and satellites as listed below. The license is valid until **February 27, 2018** subject to revocation or suspension, either wholly or with respect to a specific service or specific services, or a part or parts thereof.

SATELLITES (IF APPLICABLE)

Name of Satellite	Address	City/State	Zip Code	Type of Services	
				Outpatient	Inpatient
Newton-Wellesley Family Medicine	111 Norfolk Avenue, 1st Floor	Walpole, MA	02081	X	
Newton-Wellesley Urgent Care - Waltham	Devincent Building 9 Hope Avenue 1st Floor, Suite 150	Waltham, MA	02453	X	
Newton-Wellesley Hospital Hand Therapy at Chestnut Hill	830 Boylston Street 2nd Floor, Suite 212	Chestnut Hill, MA	02467	X	
Newton-Wellesley Ambulatory Care Center - Natick	307 West Central Street, 1st Floor	Natick, MA	01760	X	
Newton-Wellsley Sleep Center at Newton Marriott	2345 Commonwealth Avenue Building C, 1st Floor	Newton, MA	02446	X	
Newton-Wellesley Hospital Remote Radiology Unit	2000 Washington Street	Newton, MA	02462	X	
Newton-Wellesley Outpatient Surgery Center	25 Washington Street	Wellesley, MA	02481	X	
Newton-Wellesley Ambulatory Care Center - Newton	159 Wells Avenue	Newton, MA	02459	X	

LICENSE No **2075**

February 28, 2016
Date Issued

C. Factors Applied

FACTORS APPLIED IN DETERMINATIONS OF NEED

Factor 1

FACTOR 1: HEALTH PLANNING PROCESS

1.1 Please provide a brief description of the annual planning process used by your institution, including the decision to undertake the proposed project. (Answer on a separate sheet)

The Applicant is a community-based, acute care hospital located in Newton. To ensure that its patients have access to a full range of quality medical care, the Applicant engages in long-term and strategic planning processes on a service-line basis. With respect to MRI services, these activities include staff participation in routine planning sessions where data related to service needs and current demand are reviewed. This planning process ensures that service needs are met and allows for a robust evaluation of cost efficient and clinically effective options for addressing identified needs. This service-level approach also prevents unnecessary duplication of services.

Based on an analysis of the Applicant's recent patient volume for its MRI services, staff identified the need for a third MRI unit as current equipment and staffing are operating at capacity. The Applicant reviewed alternative options to purchasing a third MRI unit, such as expanding hours on current units; however, this alternative is not a feasible option for patient scheduling nor will it adequately address capacity issues as further detailed in Factor 2. Accordingly, after further evaluation by the Applicant, it was determined that it would be clinically and operationally more effective to purchase a third MRI unit. Upon identifying the need for a third unit, the Applicant engaged an architect to develop the design for the unit's location. This design provides for an effective and efficient use of space on the campus.

In developing the proposed Project, the Applicant consulted with a number of health care providers and organizations. The Applicant also discussed the Project with applicable state agencies and various members of the Department as part of its planning process. Additionally, the Applicant sought input from providers in its service area that refer patients to its MRI service. Consistent with the requirement in Factor 1 of the Guidelines, the primary objective of these consultations was to ensure that the service was needed and there was no unnecessary duplication in services. Additionally, as evidenced by letters of support found at **Exhibit: Letters of Support**, the Project has demonstrated sufficient support from area health care providers as required by the Guidelines. Through these consultations, the Applicant determined that sufficient need exists to support the addition of a third MRI unit.

FACTOR 1: HEALTH PLANNING PROCESS

1.2 Did you consult with other providers in the primary service area of this project about the relationship of this project to existing or planned operations at their institutions?

YES___X_____ NO_____

1.2a If your answer to question 1.2 was "NO", please explain below why you did not consult with other providers.

1.2b. **If your answer to question 1.2 was "YES", please supply the name and titles of persons with whom you consulted and results of the consultation. (use separate sheet if necessary)**

The Applicant consulted with various physicians including those who regularly refer patients to the Applicant's MRI service. The Applicant consulted with such individuals and providers relative to the need for an additional MRI unit at the Hospital. The following individuals are some of those consulted regarding this Project:

- Steven L. Miller, MD, Chairman, Department of Radiology, Newton Wellesley Hospital
- Jeffrey J. Greenberg, MD, Associate Chairman, Department of Radiology and Medical Director, MRI Services, Newton Wellesley Hospital
- Daniel Z. Silverstone, MD, Assistant Medical Director, MRI Services, Department of Radiology, Newton Wellesley Hospital
- Avraham Almozlino, MD, FAAN, Chief, Division of Neurology, Newton Wellesley Hospital
- Timothy E. Foster, MD, Acting Associate Medical Officer and Chairman, Orthopedic Surgery, Newton Wellesley Hospital

For further indication of support for this Project, please see the letters of support provided at **Exhibit: Letters of Support**. Through its consultations with area providers, the Applicant determined that the proposed Project will improve access to MRI services in its service area.

FACTOR 1: HEALTH PLANNING PROCESS

1.3 Since a broad range of inputs is valuable in the planning of a project, applicants are encouraged to undertake a diverse consultative process. Please indicate which, if any, of the following agencies or groups you consulted in the development of this application.

Determination of Need Program (DPH) YES X NO

Date(s) November, 2016

Contact Person(s) Nora Mann and Rebecca Rodman

Department of Mental Health (for mental health projects) YES NO N.A. X

Date(s)

Contact Person(s)

Executive Office of Elder Affairs (for projects with special significance for elders) YES NO N.A. X

Date(s)

Contact Person(s)

EOHHS Office of Acute and Ambulatory Care YES X NO N.A.

Date (s) January, 2017

Contact Person(s) Steven Sauter

Other Relevant Agencies or Parties YES X NO N.A.

Name (s) MassHealth

Date(s) January, 2017

Contact Person(s) David Garbarino

Name (s) Department of Public Health

Date(s) November and December, 2016

Contact Person(s) Ben Wood

Factor 2

2.1 How will this project affect accessibility of services for the prospective patients who are poor, medically indigent and/or Medicaid eligible?

The Applicant's expanded MRI service will enhance the accessibility of services for patients who are poor, medically indigent and/or Medicaid eligible. The Applicant will continue to treat all patients regardless of ability to pay. All patients that present for MRI services will be considered and accepted according to clinical treatment protocols, regardless of payor status. The Applicant will maintain data relative to payor and non-payor sources and maintain records of volume and care from each source annually. Such reports will be made available to the Department upon request.

2.2* Describe below and on additional sheet(s) your need analysis for this project including any special conditions for consideration. If your analysis is inconsistent with the relevant need methodology or criteria of Determination of Need Guidelines, please explain on the additional sheet(s) why you believe your methodology is more appropriate. Long-term care applications should show how they meet the criteria for bed replacement and/or substantial renovation of beds or the facility, consistent with the *May 25, 1993 Determination of Need Guidelines for Nursing Facility Replacement and Renovation.

I. Introduction

The Applicant is a two hundred sixty-five (265) bed acute care, community hospital located in Newton (See Exhibit A of the Project Summary for a copy of the Applicant's license). The Applicant provides a full range of inpatient and outpatient services to the residents of its primary service area. These services include acute medical and emergency care, comprehensive cancer diagnosis and treatment, obstetric and gynecological services, as well as general and specialty surgical services. MRI is regularly utilized by practitioners of these services to provide diagnoses. Access to MRI services at the Hospital is an important component of the care that patients receive in the local community. The Applicant's current MRI service is now experiencing demand beyond what its two (2) MRI units can reasonably meet. Thus, the Hospital seeks to provide additional capacity in order to meet its patients' MRI diagnostic needs in a timely manner.

II. Need Analysis

In recent years, the Applicant's MRI has experienced steadily increasing demand for its MRI service. As evidenced by the following chart, the Applicant performed in excess of 12,000 MRI scans on its two (2) MRI units each year for the three most recent fiscal years. Currently, depending on scan type, there is a 6-10 day wait period for single time slot appointments and an 8-12 day waiting period for two consecutive time slot appointments.

Fiscal Year	Scans
2013	12,427
2014	12,607
2015	12,973

In order to accommodate this demand, the Applicant operates an extended schedule for MRI scanning. Its hours of operation are Monday – Friday 7:00 A.M. to 11:30 P.M. and 7:00 A.M. to

7:30 P.M. on weekends. Even with this schedule, the Applicant operates at 99% capacity as further discussed below. Despite operating an extended schedule, the Applicant has found through patient and referral source feedback that further extending its hours of operation is not preferred. Patients prefer scan times during daytime hours, particularly the elderly. As a result, the Applicant determined that there is need for a third unit at the Facility that can provide needed daytime scanning capacity.

The Applicant determined its current operating capacity by considering its average scan time and annual hours of operation per unit. The Applicant's MRI scan times average approximately fifty (50) minutes per scan, including room-turnover and related administrative functions. The average scan time is based on the following sub-specialty scan and turnover times: orthopedic scans average forty-five (45) minutes; cardiology scans average sixty (60) minutes; neurology scans average forty-eight (48) minutes and all other scans are approximately forty-five (45) minutes. A detailed summary of the calculation used to determine the Applicant's operating capacity for fiscal 2015 is provided in the following table.

Percent Operating Capacity (2015)

	Total
A. Actual Number of Scans	12,973
B. Average Hours per Scan	.83
C. Annual Scan Hours (**BxA**)	10,768
D. Average Available Hours per Year	10,884
E. % Operating Capacity (**C/D**)	99%

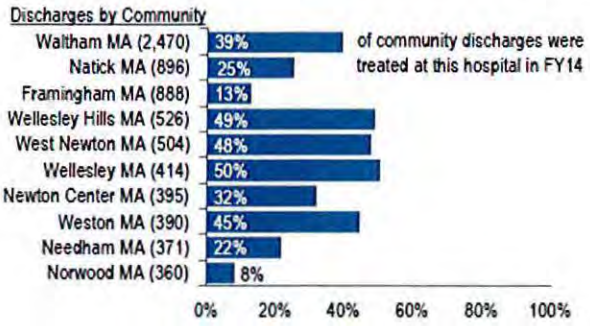
*107.5 hours of operation a week times 52 weeks = 5,590 hours times 2 MRI units = 11,180 hours, reduced by 132 hours per machine for holidays (264 hours total) and 16 hours per year per machine (32 hours total) for maintenance = 10,884 available hours

Based on this calculation, the Applicant concluded that its MRI service is in operation 99% of the time. Accordingly, the Applicant's operating capacity exceeds the Guideline requirement for expansion that existing units be operating in excess of 90% capacity.

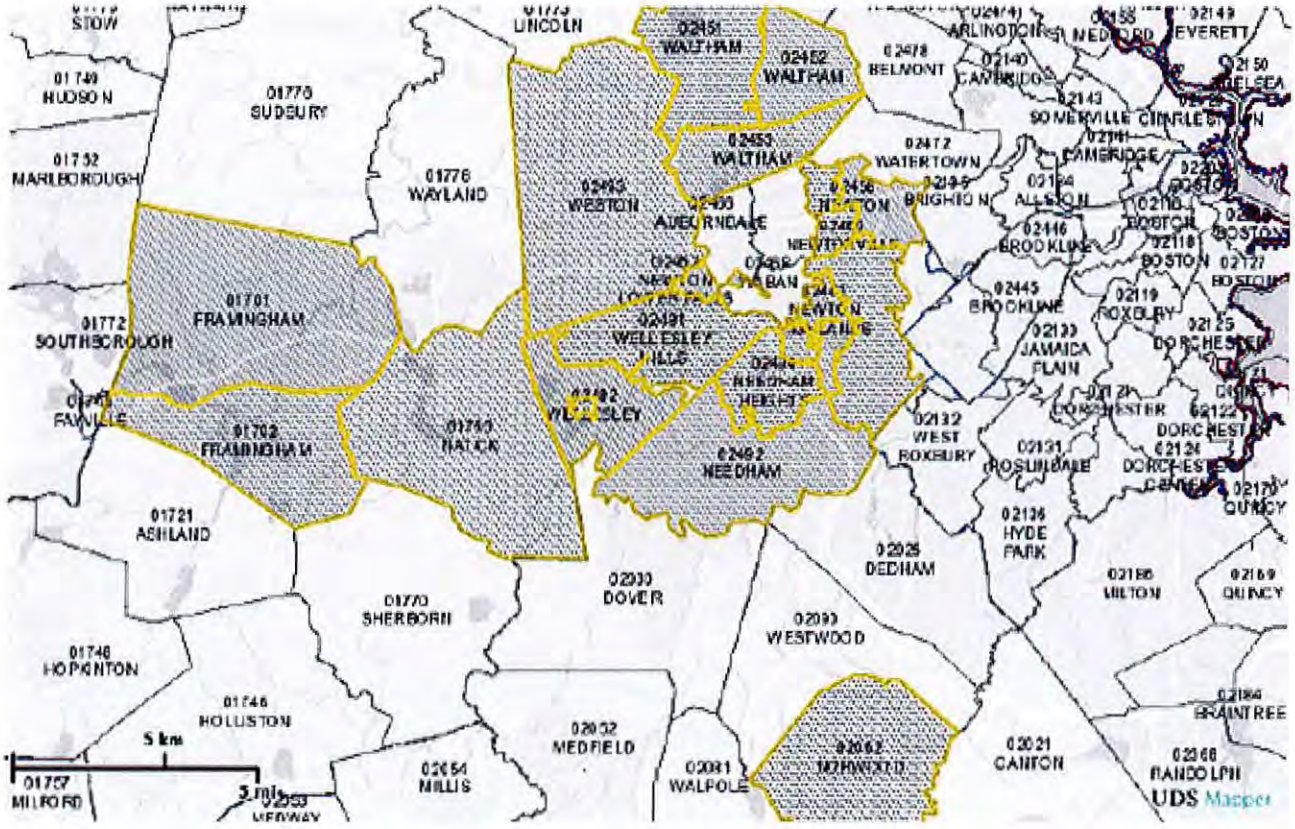
In addition to historical volume indicative of the need for a 3rd MRI unit, the historical and projected population for the Applicant's service area also support demand for another MRI unit at the Hospital. After identifying the need to operate a third fixed unit at the Facility, the Applicant reviewed population trends for its service area. Utilizing the Applicant's primary service area ("PSA") as defined by the Massachusetts Center for Health Information Analysis, the PSA encompasses ten (10) areas in eight (8) different towns. [1] The following chart lists the cities and towns in the Applicant's PSA along with the number of discharges per town, as well as the hospital dependence rate of each city and town.

[1] CHIA Hospital Profile FY 2014.

Newton-Wellesley Hospital
Primary Service Area[2]



The geographic distribution of these ten (10) communities center around Newton and Wellesley, as shown in the following map.



As part of its analysis of the need for the additional MRI capacity at the Hospital, the Applicant reviewed population trend data for its PSA Census data indicate that the Applicant's PSA

[2] Table copied from CHIA Hospital Profile for Newton-Wellesley Hospital FY 2104

population historically experienced growth This population growth is projected to continue in the future. The 2015 U.S. Census indicated that there were 358,529 residents in the Applicant's PSA.[3] This represents a 4.27% increase in population from the 2010 census.[4] When this same population segment is projected for 2020, such projections indicate that the adult population will be 365,733.[5] This is a 2.01%% increase over 2015. Moreover, projections for PSA population for 2025 represent growth, resulting in a projected population of 370,397. This is a 1.28% increase over 2020.[6] This trend continues in 2030, with a PSA population of 372,071.[7] This is a 0.45% increase from 2025 as more clearly illustrated in the following chart.[8]

PSA Population Growth Trends

County	2010 Population	2015 Population	Percent Increase 2010-2015	2020 Projection	Percent Increase 2015-2020	2025 Projection	Percent Increase 2020-2025	2030 Projection	Percent Increase 2025-2030
Waltham	60,632	63,376	4.53%	66,354	4.70%	69,608	4.90%	72,228	3.76%
Natick	33,006	34,638	4.94%	34,823	0.53%	35,020	0.57%	35,171	0.43%
Framingham	68,318	72,481	6.09%	73,070	0.81%	74,084	1.39%	75,027	1.27%
Wellesley	27,982	28,844	3.08%	29,647	2.78%	29,323	-1.09%	28,340	-3.35%
Newton	85,146	88,215	3.60%	91,144	3.32%	92,790	1.81%	92,541	-0.27%
Weston	11,261	11,213	-0.43%	10,811	-3.59%	10,192	-5.73%	9,770	-4.14%
Needham	28,886	29,628	2.57%	29,610	-0.06%	28,974	-2.15%	28,539	-1.50%
Norwood	28,602	30,134	5.36%	30,274	0.46%	30,406	0.44%	30,455	0.16%

Source: UMass Donahue Institute Vintage 2015 Population Projections. October, 2016

Although there are subtle increases in the overall PSA population, there are large increases projected for the over 65 population. The projected growth for the 65+ cohort of the Applicant's PSA is nearly 20%. The 2015 U.S. Census indicated that there were 58,905 residents that were 65 years and older in the Applicant's PSA.[9] This represents a 18.07% increase in population from the 2010 census.[10] When this same population segment is projected for 2020, such projections indicate that the over 65 population will be 67,613.[11] This is a 14.78% increase over 2015. Moreover, projections for the over 65 population in the PSA for 2025 represent growth, resulting in a projected population of 75,481. This is a 11.64% increase over 2020.[12] This trend continues in 2030, with an over 65

[3] See University of Massachusetts Donahue Institute Vintage 2015 Population Projections. August, 2016, at http://pep.donahue-institute.org/
[4] Id.
[5] Id.
[6] Id.
[7] Id.
[8] Id.
[9] See University of Massachusetts Donahue Institute Vintage 2015 Population Projections. August, 2016, at http://pep.donahue-institute.org/
[10] Id.
[11] Id.
[12] Id.

population of 82,541.[13] This is a 9.23% increase from 2025 as more clearly illustrated in the following chart.[14]

PSA Population Growth Trends – Age 65+

County	2010 Population	2015 Population	Percent Increase 2010-2015	2020 Projection	Percent Increase 2015-2020	2025 Projection	Percent Increase 2020-2025	2030 Projection	Percent Increase 2025-2030
Waltham	7,453	8,486	13.86%	9,510	12.07%	10,647	11.96%	11,588	8.84%
Natick	4,624	5,424	17.30%	6,335	16.80%	7,319	15.53%	8,172	11.65%
Framingham	9,308	11,169	19.99%	12,658	13.33%	13,831	9.27%	14,922	7.89%
Wellesley	3,865	4,583	18.58%	5,195	13.35%	5,772	11.11%	6,423	11.28%
Newton	12,979	15,900	22.51%	18,871	18.69%	21,096	11.80%	22,920	8.65%
Weston	2,000	2,344	17.20%	2,635	12.41%	2,895	9.87%	3,198	10.47%
Needham	4,700	5,374	14.34%	6,075	13.04%	6,884	13.32%	7,663	11.32%
Norwood	4,960	5,625	13.41%	6,334	12.60%	7,037	11.10%	7,655	8.78%

Source: UMass Donahue Institute Vintage 2015 Population Projections. November, 2016

The high rate of population growth projections for the elderly population residing in the Applicant's PSA is additional evidence of the need for expanded MRI services at the Hospital. MRI is an important and highly utilized diagnostic tool for the senior population due to the higher prevalence of medical conditions for which MRI is an adjunct for diagnosis.

III. Service Projections

Having established the need for a 3rd MRI unit at the Hospital, the Applicant developed projections to ensure that there is sufficient future demand to warrant the capital expenditure on a new MRI unit. Through an examination of historical volume statistics, the Applicant found that scan volume has steadily increased 5.93% between 2013 and 2015. Based on these findings, the Applicant developed the following projections for MRI scans for the four (4) year period of fiscal year 2018 to 2021.

Year	Scans	% Increase
2018	15,118	-
2019	15,610	3%
2020	15,748	1%
2021	15,887	1%

With the addition of a third unit, the Applicant will be able to offer patients more convenient scan times during day time hours. By FY2018, the Applicant plans to operate the third MRI unit full time.

[13] Id.
[14] Id.

The existing units will continue to operate on the current schedule when the new unit comes online to maximize access for patients. This will allow the Applicant to continue extended hours on the existing units while offering patients additional scan hours during peak or preferred times of day.

Moreover, patients in the service area will have continued access to MRI services close to home and at convenient hours. Accordingly, the approval of this DoN is consistent with the Department's Guidelines and allocates MRI technology to meet the needs of the Applicant's service area while assuring maximum efficiency.

IV. Conclusion

Through this analysis, the Applicant demonstrates the need for the addition of a third MRI unit to its service. The Applicant's historical level of demand meets the Guideline requirements for expansion of MRI services. The Applicant expects the demand for its services to continue to increase consistent with its historical trends. These projections are supported by the increases in the projected population growth in the service area.

The Applicant's Project also is in full compliance with the Guidelines. The Applicant's MRI service has operated in excess of 90% capacity for more than one year as required by the Guidelines. The service is already operating extended hours for both of its current MRI units. Consequently, the only option for addressing the high demand is to expand the service through the addition of a third MRI unit. Finally, the Applicant has formed a Clinical Oversight Committee in conformance with the Guideline requirements. A list of the members of the committee is provided at Exhibit A. Accordingly, the Applicant's service meets the requirements for expansion under Factor 2 of the Guidelines.

2.3: Statistical Data--Routine Inpatient Services **NOT APPLICABLE**

Complete only for those routine inpatient cost centers, as specified by the *Hospital Uniform Reporting Manual***, in which you are requesting a change.

	(1) Cost Center	(2) Licensed Weighted Average Bed Capacity	(3) Occupancy Rate	(4) Average Length of Stay	(5) Number of Discharges	(6) Number of Patient Days
1						
2	20 Actual (A)					
3	20 (A)					
4	20 (A)					
5						
6	20 (P_1)*					
7	20 (P_1)					
8	20 (P_1)					
9	20 (P_1)					
10						
11	20 (P_2)*					
12	20 (P_2)					
13	20 (P_2)					
14	20 (P_2)					
15						
16						
17	20 Actual (A)					
18	20 (A)					
19	20 (A)					
20						
21	20 (P_1)*					
22	20 (P_1)					
23	20 (P_1)					
24	20 (P_1)					
25						
26	20 (P_2)*					
27	20 (P_2)					
28	20 (P_2)					
29	20 (P_2)					
30						
31						
32	20 Actual (A)					
33	20 (A)					
34	20 (A)					
35						
36	20 (P_1)*					
37	20 (P_1)					
38	20 (P_1)					
39	20 (P_1)					
40						
41	20 (P_2)*					
42	20 (P_2)					
43	20 (P_2)					
44	20 (P_2)					

*Note: P_1 assumes project is approved and P_2 assumes project is denied.

**Hospital Uniform Reporting Manual is available at http://www.mass.gov/chia/docs/p/hospital-reports/hospital-uniform-reporting-manual.pdf.

FACTOR 2: HEALTH CARE REQUIREMENTS

2.4: Statistical Data--Routine Inpatient Services **NOT APPLICABLE**

Complete only for those routine inpatient cost centers, as specified by the Division of Health Care Finance and Policy Uniform Reporting Manual**, in which you are requesting a change.

	(1) Cost Center	(2) Licensed Weighted Average Bed Capacity	(3) Occupancy Rate	(4) Average Length of Stay	(5) Number of Discharges	(6) Number of Patient Days
1						
2	20 Actual (A)					
3	20 (A)					
4	20 (A)					
5						
6	20 (P_1)*					
7	20 (P_1)					
8	20 (P_1)					
9	20 (P_1)					
10						
11	20 (P_2)*					
12	20 (P_2)					
13	20 (P_2)					
14	20 (P_2)					
15						
16						
17	20 Actual (A)					
18	20 (A)					
19	20 (A)					
20						
21	20 (P_1)*					
22	20 (P_1)					
23	20 (P_1)					
24	20 (P_1)					
25						
26	20 (P_2)*					
27	20 (P_2)					
28	20 (P_2)					
29	20 (P_2)					
30						
31						
32	20 Actual (A)					
33	20 (A)					
34	20 (A)					
35						
36	20 (P_1)*					
37	20 (P_1)					
38	20 (P_1)					
39	20 (P_1)					
40						
41	20 (P_2)*					
42	20 (P_2)					
43	20 (P_2)					
44	20 (P_2)					

*Note: P1 assumes project is approved and P2 assumes project is denied.

**Hospital Uniform Reporting Manual is available at http://www.mass.gov/chia/docs/p/hospital-reports/hospital-uniform-reporting-manual.pdf.

2.5: Statistical Data--Major Ancillary Services

Complete only for those routine inpatient cost centers, as specified by the *Hospital Uniform Reporting Manual*** , in which you are requesting a change.

	(1) Service	(2) Standard Units of Measure	
1	**Surgical Services**	*	
2	20 Actual (A)		
3	20 (A)		
4	20 (A)		
5			
6	20 (P_1)*		
7	20 (P_1)		
8	20 (P_1)		
9	20 (P_1)		
10			
11	20 (P_2)*		
12	20 (P_2)		
13	20 (P_2)		
14	20 (P2)		
15			
16	**Radiology Diagnostic**	* Scans	
17	2013 Actual (A)	12,427	
18	2014 (A)	12,607	
19	2015 (A)	12,973	
20			
21	2018 (P_1)*	15,118	
22	2019 (P_1)	15,610	
23	2020 (P_1)	15,748	
24	2021 (P_1)	15,887	
25			
26	2018 (P_2)*	13,855	
27	2019 (P_2)	13,924	
28	2020 (P_2)	13,994	
29	2021 (P2)	14,064	
30			
31	**Laboratory**		
32	20 Actual (A)		
33	20 (A)	*	
34	20 (A)		
35			
36	20 (P_1)*		
37	20 (P_1)		
38	20 (P_1)		
39	20 (P_1)		
40			
41	20 (P_2)*		
42	20 (P_2)		
43	20 (P_2)		
44	20 (P2)		

* On this line, column 2, state the standard unit of measure as specified by the *Hospital Uniform Reporting Manual.* Note: Use copies of this sheet as needed.

**Hospital Uniform Reporting Manual is available at http://www.mass.gov/chia/docs/p/hospital-reports/hospital-uniform-reporting-manual.pdf.

Attachment/Exhibit

A

Factor 2 – Exhibit A
Newton Wellesley Hospital Primary Service Area Discharges
By City and Town[1]

City/Town	State	Frequency	Percentage of Community Discharges in FY 14
Waltham	MA	2,470	39%
Natick	MA	896	25%
Framingham	MA	888	13%
Wellesley Hills	MA	526	49%
West Newton	MA	504	48%
Wellesley	MA	414	50%
Newton Center	MA	395	32%
Weston	MA	390	45%
Needham	MA	371	22%
Norwood	MA	360	8%

[1] Massachusetts Center for Health Information Analysis, "Newton-Wellesley Hospital Profile, 2014." Accessed on September 30, 2016 via http://www.chiamass.gov/massachusetts-acute-hospital-profiles/.

Attachment/Exhibit

B

Newton-Wellesley Hospital

Clinical Oversight Committee

Members

Dr. Revati Rao, Oncology, Newton-Wellesley Hospital and The Massachusetts General Hospital

Dr. Chrissy Kournioti, Oncology, Newton-Wellesley Hospital and The Massachusetts General Hospital

Dr. Omar Nadeem, Oncology, Newton-Wellesley Hospital and The Massachusetts General Hospital

Dr. Marla Polger, Radiology, Newton-Wellesley Hospital

Dr. Matthew Hoimes, Radiology, Newton-Wellesley Hospital

Dr. Joseph Ferrucci, Radiology, Newton-Wellesley Hospital

Dr. Daniel Silverstone, Radiology, Newton-Wellesley Hospital

Dr. Jeffrey Greenberg, Radiology, Newton-Wellesley Hospital

Dr. Avraham Almozlino, Neurology, Newton-Wellesley Hospital

Dr. Herbert Cares, Neurosurgery, Newton-Wellesley Hospital

Dr. Karen Dudich, Neurology, Newton-Wellesley Hospital

Dr. Eduardo Garcia, Neurology, Newton-Wellesley Hospital

Dr. Marcus Yountz, Neurology, Newton-Wellesley Hospital

Dr. Richard Toran, Neurology, Newton-Wellesley Hospital

Schedule

Meetings of the Neurology-Radiology Conference are bi-weekly

Meetings of the Tumor Conference are monthly

Factor 3

3.1 **If this application proposes establishment of a new health service at your institution, do you have evidence of the clinical effectiveness of this new service? Please provide relevant documentation.**

The Applicant does not propose the establishment of a new service. Currently, the Hospital provides MRI services on two MRI units.

3.2 **Briefly describe quality assurance mechanisms that will be used to assess the appropriateness of the health service proposed in this project.**

The Applicant maintains a quality assurance program that includes a variety of mechanisms to assess the appropriateness and quality of its MRI services. These mechanisms include ensuring that staffing levels and support services result in the efficient and effective use of resources. In addition, the Applicant fulfills the role of a Clinical Oversight Committee, as further described below, to review clinical protocols and perform case reviews. The Applicant plans to acquire a third MRI unit that has FDA approval and is safe and effective for clinical use. Finally, the Applicant hosts MRI training and education programming for staff and the clinical community. Additional information regarding the Applicant's quality assurance mechanisms is described in further detail below.

Staffing

In compliance with the DoN Guidelines, the Applicant's MRI service is staffed to ensure that quality care is provided in an efficient manner. As such, the Applicant's MRI service complies with the applicable Guideline requirements. The following discussion provides an overview of the Applicant's staffing and conformance with the requirements of the Guidelines.

Specifically, the Hospital's MRI service operates under the direction of a Medical Director, who supervises the clinical operation of the MRI service, including the taking and interpretation of scans. The Applicant's Medical Director is a radiologist who has the requisite experience in physics instrumentation and MRI clinical applications as required by Measure 1 of the Guidelines. Attached as Exhibit A is the Medical Director's resume.

The MRI service is staffed to ensure that the screening of requests for MRI scans and their interpretation is performed by qualified radiologists in compliance with Measure 2 of the Guidelines. All radiologists on the Hospital's MRI service are board-certified and have appropriate training and familiarity with the diagnostic use and interpretation of the MRI. These radiologists are present at the Hospital a sufficient amount of time in order to take part in patient screening. Moreover, a radiologist is on-site at least fifty percent (50%) of the time when patients are being scanned as required by Measure 3.

In addition to medical oversight, the clinic's MRI service utilizes fully trained and credentialed technical staff. The staffing pattern for the Hospital's MRI service is provided at Factor 6, Schedule C and complies with Measure 5 of the Guidelines. MRI staff attend ongoing training and education opportunities to maintain competency in providing quality services. Furthermore, technical staff are trained and qualified in the

use of the Applicant's MRI equipment and procedural protocols, as well as certified in CPR procedures as required by Measure 4 of the Guidelines.

Support Services

In order to ensure patients of the MRI service receive comprehensive diagnosis and treatment services, the Applicant makes a full range of support services available to patients. As required by Measure 1 of the Guidelines, these services include nuclear medicine, ultrasound, CT scanning, and angiography. All support services are available at the Hospital.

As required by the Guidelines, the Applicant's MRI service is subject to review by a Clinical Oversight Committee. At the Hospital, the functions of this Committee are fulfilled through a number of subspecialty committees that convene on a regular basis. As part of their duties, these Committee conferences perform the roles and responsibilities required by the Guidelines with respect to the MRI service. Specifically, the Hospital's Tumor Conference and the Neurology-Radiology Conference Committees regularly perform the following MRI responsibilities: (1) review appropriateness and quality of clinical scans; (2) review clinical protocols; (3) supervise data collection and evaluation activities; and (4) develop educational programs for staff members. As the Applicant is a community hospital, the Committee has representatives from the Massachusetts General Hospital, an academic medical center. None of the Committee members have an equity interest in the Applicant, as it is a non-profit organization. A list of the individual members and their subspecialties is provided at Exhibit B.

Equipment

As required by Measure 1 of the Guidelines, all of the Applicant's units are proven safe and effective for clinical use and hold pre-market approval from the U.S. Food and Drug Administration. The new unit proposed for operation at the Hospital is a Siemens Magnetom Aera 48 XQ MRI. See Exhibit A of Factor 5 for further details on this equipment. The new unit also has pre-market approval from the U.S. Food and Drug Administration.

Education and Training

The Applicant offers a variety of education and training programs to staff members of the MRI service, including case conferences. Additionally, the Applicant requires all MRI technologists to be certified by the American Registry of Radiologic Technologists ("ARRT"), which requires continuing education on a bi-annual basis.

3.3 **Does your institution have written referral arrangements pertaining to services covered in this application with other health care providers in the primary service area of this project? (Nursing and rest homes' applicants should have an agreement with at least one acute care hospital and one home health organization).**

YES _____(Please give brief descriptions of these referral arrangements)

NO __X__(Please explain why you do not have referral arrangements)

The Applicant does not have written referral arrangements for its MRI service. The Applicant accepts patients for MRI scanning based on its screening criteria.

Note: In addition to the above measures, all projects must meet the operational objectives of relevant service-specific guidelines.

Attachment/Exhibit

A

CURRICULUM VITAE

Name: Jeffrey John Greenberg

Address: 35 Westland Road, Weston, Massachusetts 02493

Date of Birth: January 19, 1956

Place of Birth: Waterbury, Connecticut

Education:

1978 A.B.	Brown University
1982 M.D.	University of Rochester School of Medicine

Postdoctoral Training:

Internship and Residencies:

1982-1983	Intern in Internal Medicine, Lankenau Hospital, Philadelphia, Pennsylvania
1983-1985	Resident in Diagnostic Radiology, Beth Israel Hospital, Boston, Massachusetts
1985-1986	Chief Resident in Diagnostic Radiology, Beth Israel Hospital, Boston, Massachusetts

Fellowships:

1986-1987	Clinical Fellow in Neuroradiology, Department of Radiology, Massachusetts General Hospital, Boston, Massachusetts

Licensure and Certification:

1982	Limited Pennsylvania License Registration
1983	Limited Massachusetts License Registration
1982	Diplomate of National Board of Medical Examiners
1986	American Board of Radiology, Diplomate in Diagnostic Radiology
1986-	Massachusetts License Registration
1988-	Ohio License Registration
1996	The American Board of Radiology, Diplomate in Diagnostic Radiology with Certificate of added Qualifications in Neuroradiology
2006	Recertified by The American Board of Radiology, Diplomate in Diagnostic Radiology with Subspecialty Certification in Neuroradiology

Academic Appointments:

1983-1985	Clinical Fellow in Radiology, Harvard Medical School, Boston, Massachusetts at Beth Israel Hospital
1986-1987	Clinical Fellow in Radiology, Neuroradiology Section, Harvard Medical School, Boston, Massachusetts at Massachusetts General Hospital
1987-1988	Instructor of Radiology, Harvard Medical School, Boston, Massachusetts
1993-1995	Clinical Instructor of Radiology, Tufts University School of Medicine, Boston, Massachusetts
1995-	Assistant Clinical Professor of Radiology, Tufts University School of Medicine, Boston, Massachusetts

Hospital and Facility Appointments:

1987-1988	Radiologist, Beth Israel Hospital, Boston, Massachusetts Primary subspecialty responsibilities – Angiography, Interventional Radiology and Neuroradiology
1988-1992	Radiologist, Grant Medical Center, Columbus, Ohio
1988-1993	Directory of Neuroradiology, Grant Medical Center, Columbus, Ohio
1988-1992	Medical Director of Magnetic Resonance Imaging, Columbus Health Imaging Center, Columbus, Ohio
1990-1992	Director of Angiography and Interventional Radiology, Grant Medical Center, Columbus, Ohio
1992-	Radiologist, Newton-Wellesley Hospital, Newton, Massachusetts
1992 -	Section Chief of Magnetic Resonance Imaging and Neuroradiology, Newton-Wellesley Hospital, Newton, Massachusetts
2000-	Associate Chairman, Department of Radiology, Newton-Wellesley Hospital, Newton, Massachusetts
2006-2008	Medical Director of MRI, Newton Wellesley Imaging PC, Newton-Wellesley Hospital, Newton, Massachusetts

2008-	Medical Director of MRI Services, NWOA MRI, Wellesley, Massachusetts
2008-	Medical Director of MRI, Newton Wellesley Hospital, Newton, Massachusetts

Major Hospital Committee Assignments:

1989-1991	Cardiovascular Surgery Committee, Grant Medical Center
1991	Trauma Service Review Committee, Grant Medical Center
1992-	Stroke Team, Newton-Wellesley Hospital
1993	Trauma Task Force, Newton-Wellesley Hospital
1995-1998	Critical Care Committee, Newton-Wellesley Hospital
1995	Radiology Committee on Quality Improvement, Newton-Wellesley Hospital
1999	Search Committee for Chief of Urology, Newton-Wellesley Hospital
2000-	Bylaws Committee, Newton-Wellesley Hospital
2000	Nominating Committee, Newton-Wellesley Hospital
2002	Search Committee for Chief of Neurosurgery, Newton Wellesley Hospital
2002-2005	Executive Committee of the Medical Staff, Newton-Wellesley Hospital
2006	Search Committee for Chief of Neurology, Newton-Wellesley Hospital
2009	Newton-Wellesley Hospital Leadership Development Program, Harvard Business School, Boston, Massachusetts
2009-	Newton-Wellesley Physician Hospital Organization Finance Committee
2011	Nominating Committee, Newton-Wellesley Hospital
2013	Newton-Wellesley Physician Hospital Organization Medical Specialty Council
2014	Chairman, Bylaws Committee, Newton Wellesley Hospital
2016	Member, Board of Overseers, Newton Wellesley Hospital

Other Committee:

2011-2012	Executive Committee - At Large Member, Massachusetts Radiological Society
2013-	Executive Committee – Alternate Councilor Massachusetts Radiological Society

Awards and Honors:

1978	Phi Beta Kappa, Brown University
1978	Sigma Xi, Brown University
1978	Magna Cum Laude, Brown University
1979	Letter of Commendation for Academic Achievement, University of Rochester School of Medicine
2005	Partners in Excellence Award – Stroke Task Force, Newton-Wellesley Hospital
2007	Partners in Excellence Award – Stroke Committee, Newton-Wellesley Hospital
2008	Partners in Excellence Award – MRI Implementation Committee, Newton-Wellesley Hospital
2012	Partners in Excellence Team Award – Stroke Task Force: ED Subcommittee
2014	Partners in Excellence Team Award – ED Stroke Committee

Memberships in Professional Societies:

1984-	The Radiological Society of North America
1987-	The American College of Radiology
1987-1988	The New England Society of Cardiovascular and Interventional Radiology
1978-	The American Society of Neuroradiology, Senior Member
1988-1992	The Central Ohio Radiological Society
1990-	The American Roentgen Ray Society
1991-1998	The Society of Cardiovascular and Interventional Radiology
1992-	The Massachusetts Radiological Society
1998-	The Massachusetts Medical Society

Bibliography:

Abstracts:

1. Greenberg JJ and Orton CG. Film Dosimetry and Cancer Radiotherapy. Thirty-first Annual Eastern Colleges Science Conference Manual 1997; 113.

2. Greenberg JJ, Oot RF, Wismer GL, Davis KR, Weber AL, Goodman ML, Montgomery WW. Cholesterol Granuloma of The Petrous Apex: MR and CT Evaluation. AJNR 1987. 8: 963.

3. Sacks BA, Porter DH, Greenberg JJ, Kim DS, Orron DE, Percutaneous Transgastric Cystgastrostomy Using an Internalized Double-J Catheter. Radiology 1989; 170: 1110

Original Reports:

1. Greenberg JJ, Oot RF, Wismer GL, Davis KR, Weber AL, Goodman ML, Montgomery WW. Cholesterol Granuloma of The Petrous Apex: MR and CT Evaluation. American Journal of Neuroradiology 1988; 9: 1205-1214.

2. Orron DE, Greenberg JJ, Kim DS, Skillman JJ. Pseudoaneurysm of the Lingual Artery. Computerized Medical Imaging and Graphics 1988; Vol. 12, No. 6: 349-352.

3. Sacks BA, Greenberg JJ, Porter DH, Capobianco A, Painter M, Kim R, Orron DE, Kim DS. An Internalized Double –J Catheter for Percutaneous Transgastric Cystgastrostomy. American Journal of Roentgenology 1989; 152: 523-526.

4. Thedinger BA, Nadol JB, Montgomery WW, Thedinger BS, Greenberg JJ. Radiographic Diagnosis, Surgical Treatment, and Long Term Follow-up of Cholesterol Granulomas of the Petrous Apex Laryngoscope 1989; Vol. 99, No. 9: 896-907.

5. Janis LR, Wagner JT, Kravitz RD, Greenberg JJ, Posterior Tibial Tendon Rupture: Classification, Modified Surgical Repair, and Retrospective Study. The Journal of Foot and Ankle Surgery 1993; Vol. 32, No. 1: 2-13.

Reviews:

1. Greenberg JJ, Turkel D, Kleefield J, Hicks R. Chapter – Brain: Indications, Technique, and Atlas. In : Edelman RR, Hesselink JR, eds. Clinical Magnetic Resonance Imaging. Philadelphia: WB Saunders, 1990: 379-412.

Presentations:

1. "Cholesterol Granuloma of the Petrous Apex: MR and CT Evaluation." Presentation at the American Society of Neuroradiology Meeting in N.Y., N.Y. on May 13, 1987.

2. "Clinical Indications for MRI." Presentation at the Family Practice Monthly Meeting, Grant Medical Center, Columbus, Ohio on October 18, 1988.

3. "MRI versus CT Scanning." Presentation at the Central Ohio Academy of Family Physicians Annual Meeting, Embassy Suites Hotel, Columbus, Ohio on November 6, 1988.

4. "MRI of Spinal Disorders." Presented at the Physical Medicine Monthly Conference, Grant Medical Center, Columbus, Ohio on November 17, 1988.

5. "Interesting Applications of MRI in Neuroradiology." Invited Lecturer at Bagels Conference at the Department of Radiology, Beth Israel Hospital, Boston, MA on December 6, 1988.

6. "Musculoskeletal MRI." Presentation at the Orthopedic Department Monthly Meeting, Grant Medical Center, Columbus, Ohio on January 19, 1989

7. "MRI of Disorders of the Knee, Shoulder, and Hip Joint." Presentation at the Physical Medicine Monthly Conference, Grant Medical Center, Columbus, Ohio on May 1989.

8. "MRI of Disorders of the Lower Leg, Ankle and Feet." Presentation at the Central Ohio Podiatric Medical Association Annual Meeting, Grant Medical Center, Columbus, Ohio on September 27, 1989.

9. "The Use of MRI and Arthroscopy in Sports Medicine: The Knee and Shoulder in Focus". A one day symposium presented at Grant Medical Center, Columbus, Ohio on April 21, 1990. Course Co-Director.

10. "Computed Tomography of the Brain – Difficult Cases." Presentation at the Emergency Medicine Conference, Grant Medical Center, Columbus, Ohio on April 25, 1991.

11. "MRI of the Ankle." Presented at a one day symposium entitled "Management of Acute and Chronic Ankle Problems" at Grant Medical Center, Columbus, Ohio on January 18, 1992. Course Co-Director.

12. "MRI of the Practicing Physician." Medical Grand Rounds at the Newton-Wellesley Hospital, Newton, Massachusetts on September 9, 1992.

13. "MRI of the Shoulder." Orthopedic Grand Rounds at the Newton-Wellesley Hospital, Newton, Massachusetts on October 21, 1992.

14. "MR Imaging of the Foot and Ankle." Educational Seminar, Newton-Wellesley Hospital, Newton, Massachusetts on March 15, 1994.

15. "Magnetic Resonance Imaging of Ankle and Foot Injuries." Quarterly Massachusetts Podiatric Society Meeting at Newton-Wellesley Hospital, Newton, Massachusetts on April 25, 1995.

16. "New Advance in MRI." Surgical Grand Rounds at Newton-Wellesley Hospital, Newton, Massachusetts on September 10, 1997.

17. "Current Clinical Applications: Cranial MRI and CT." Nursing Staff Lecture at Newton-Wellesley Hospital, Newton, Massachusetts on December 6, 2000.

18. "Imaging of the Lumbar Spine." Practical Office-Based Management of Low Back Pain. Primary Care Physician One Day Symposium at Newton-Wellesley Hospital, Newton, Massachusetts on May 6, 2005

Research Activity:

1. Co-Investigator: Magnetic Resonance Imaging at 1.5 Tesla.
   The Joint Center for Magnetic Resonance Imaging at the Beth Israel Hospital , Boston, MA 1987-1988.

2. Principal Investigator: Clinical Evaluation of the Simon Nitinol Inferior Vena Cava Filter at Grant Medical Center, Columbus, Ohio 1988-1989.

Public Interviews:

1. Television interview on the program "Your Health." Channel GT Cable 3, Columbus, Ohio. The interview topic was "Magnetic Resonance Imaging." The program was broadcasted seven times during the week of November 17, 1991.

Factor 4

FACTOR 4: STANDARDS COMPLIANCE

If this project involves renovation or new construction, please submit schematic line drawings for that construction.

Please consult the Determination of Need Program staff if you require guidance in completion of this section.

See "Square Footage" under DEFINITIONS, FACTOR 5.

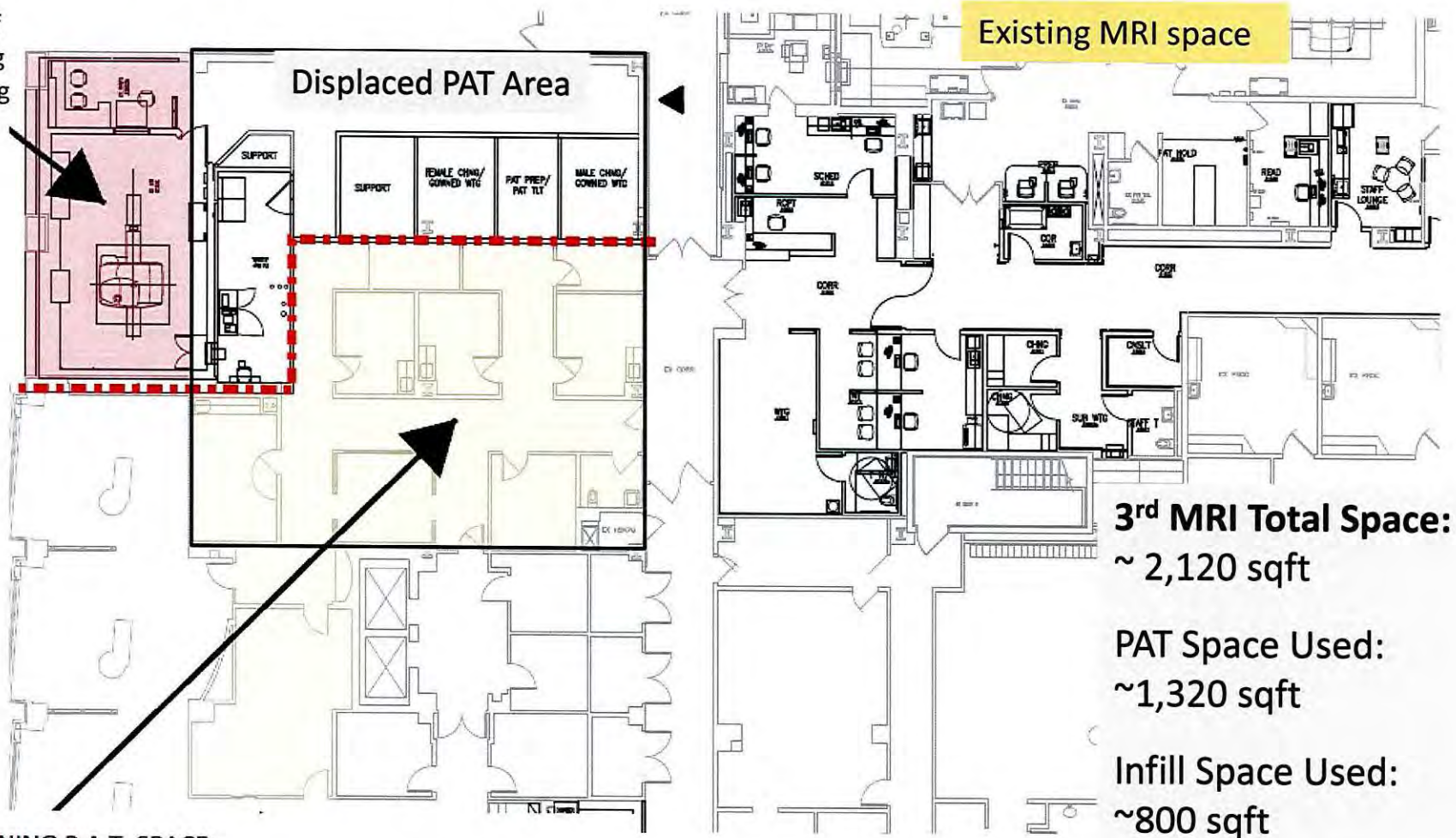
Exhibit A: Schematics

Attachment/Exhibit

A

Floor Plan Option

Infill
Area of
Existing
Building



3rd MRI Total Space:
~ 2,120 sqft

PAT Space Used:
~1,320 sqft

Infill Space Used:
~800 sqft

REMAINING P.A.T. SPACE;

- (3) EXAM ROOMS
- (1) TREATMENT
- (1) OFFICE
- SOILED HOLD
- (1) PATIENT TOILET
- NURSE STATION
- SUB-WAITING/NOURISHMENT
- CLEAN SUPPLY

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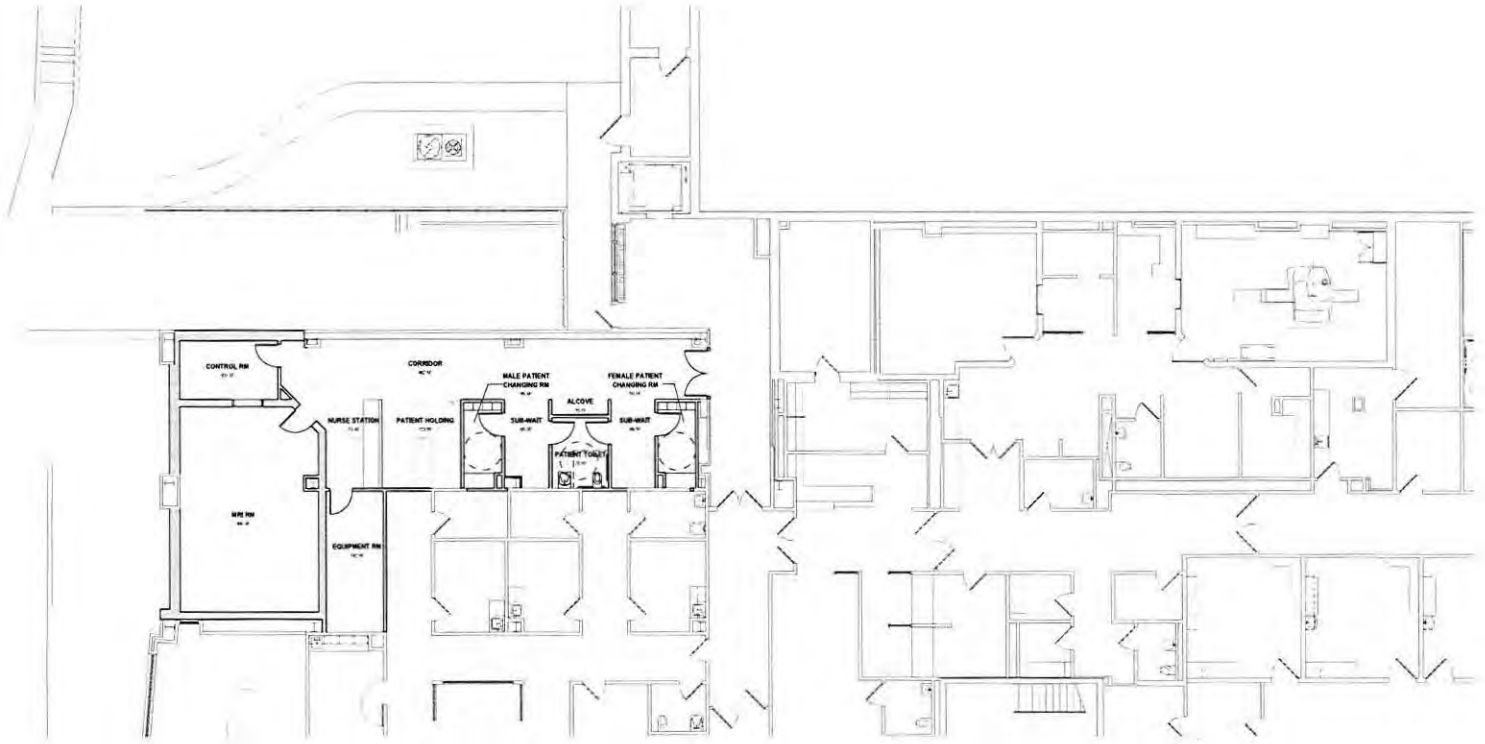
NEWTON-WELLESLEY HOSPITAL

NEWTON WELLESLEY HOSPITAL MRI RENOVATION



FIRST FLOOR MRI SUITE

09/21/16

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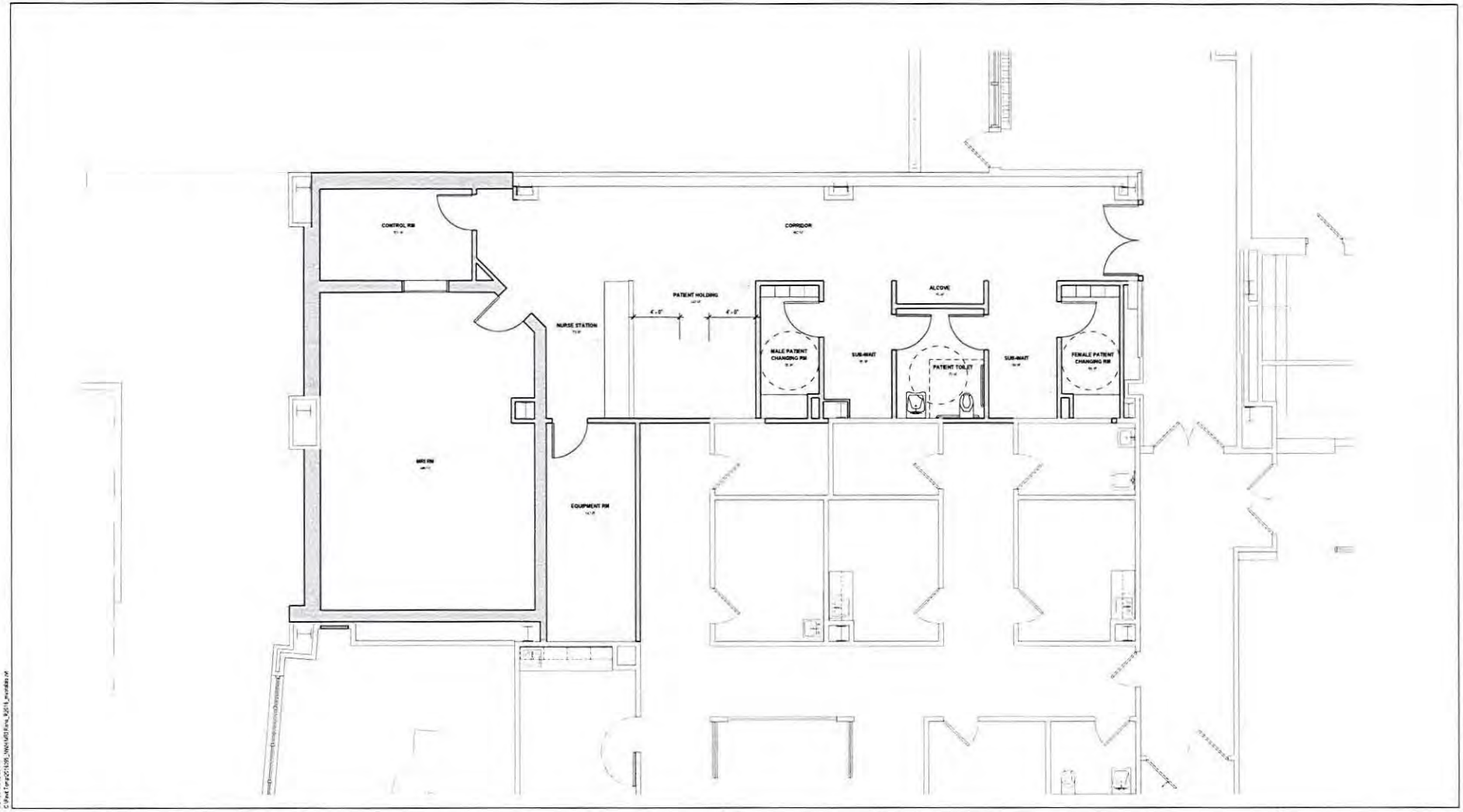
NEWTON-WELLESLEY HOSPITAL

NEWTON WELLESLEY HOSPITAL MRI RENOVATION



FIRST FLOOR ENLARGED PLAN

09/21/16

Factor 5

FACTOR 5: REASONABLENESS OF EXPENDITURES AND COSTS

Definitions

1. Capital Expenditure

   Cost of the project expressed in a dollar amount as of the filing date (i.e., assuming the project were to commence on the filing date). (See discussion in Factor 6, Schedule D.)

2. Functional Areas
   Unit of space directly related to a particular service (e.g., nursing unit, laboratory, radiology, dietary and admissions) or a space common to the operation of the entire facility (e.g., lobby, mechanical, major circulation, exterior wall).

3. Square Footage

   Net Square Feet (NSF): The space associated with a particular department. It includes all functional space within a department; e.g., the interior of exam rooms, closets, utility rooms and waiting areas. Also, toilet rooms, walk-in refrigerators, and storage areas should be included if they are specifically for that department. It does not include allowances for internal partitions, departmental circulation, major circulation, shafts, ductways, general mechanical space and exterior walls.

   Gross Square Feet (GSF): Includes the NSF of a Department plus circulation within the department, partitions within the department, and dedicated mechanical space (e.g., pump room for a surgical suite). The GSF for a specific functional department excludes major general mechanical space, ductwork, elevator shafts, and stairwells located within the department's boundaries; these components should instead be assigned to the GSF of a non- departmental- functional area such as "Elevators and Shafts," if they are significant.

   If a department's perimeter is an interior wall, half of the thickness of the wall is allocated to the department. If the perimeter is an exterior wall, only 3 inches (i.e., half of a standard partition) of that wall's thickness is assigned to the department; the remainder belongs to the functional area "Exterior Wall."

   Using these definitions, a facility's overall GSF is the sum total of the GSF of each functional area; that is, the total of the departmental GSF figures plus the area allocated to Major Circulation and Exterior Walls (i.e., the non-departmental areas.)

4. Cost per Gross Square Footage

   In calculating the cost/GSF, the DoN Program adds construction contract, fixed equipment not in contract, site survey and soil investigation, and architectural and engineering costs and divide by the proposed gross square footage. However, the specific costs for these components should be included separately in Schedule D.

Schedule 5.1 Square Footage and Cost Per Square Foot

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
		Present Square Footage		Square Footage Involved in Project			
	Functional Areas	Net [a]	Gross [a]	New Construction Net	New Construction Gross	Renovation Net	Renovation Gross
1	Corridor	0	0	0	0	444	468
2	Exam	800	820	0	0	800	820
3	Patient Support (Sub-Wait, Toilet)	573	597	0	0	573	597
4	MRI Support – Control	0	0	101	115	0	0
5	MRI Support - Equipment	142	158	0	0	142	158
6	MRI Treatment	0	0	487	529		
7							
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40	Total	1,515	1,575	588	644	1959	2043

[a] See the definitions on page 23.

Schedule 5.1 Square Footage and Cost Per Square Foot, continued

		(8)	(9)	(10)	(11)	(12)	(13)
		Resulting Square Footage[a]		Total Cost		Cost/Square Footage	
	Functional Areas	Net	Gross	New Construction	Renovation	New Construction	Renovation
1	Corridor	444	468	$0	$439,581	$0	$939.28
2	Exam	800	820	$0	$787,028	$0	$959.79
3	Patient Support	573	597	$0	$567,297	$0	$950.25
4	MRI Support	101	115	$307,520		$2,674.09	
5	MRI Support	142	158	$0	$140,587		$889.79
6	MRI Treatment	487	529	$4,172,530		$7,887.58	
7							
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40	Total	2,547	2,687	$4,480,050	$1,934,493	$6,956.60	$946.89

[a] Column 8 does not necessarily equal Columns 4 plus 6 or Columns 2 plus 4 plus 6; Column 9 does not necessarily equal Columns 5 plus 7 or Columns 3 plus 5 plus 7. This is because, for example, a) there may be demolition and b) department A may be reassigned to department. B.

[b] If this does not equal the sum of Lines 3,9,10 and 11 of Schedule D, please reconcile the difference (for example, do the costs include site survey and soil investigation, fixed equipment not in contract, and architectural and engineering costs which are not figured into Line 9 of Schedule D)

Schedule 5.2 Project Implementation

6.2 Anticipated Project Schedule

Construction/ Renovation or Installation	Start Date	Completion Date
• Phase One	April 1, 2017	September 1, 2017
• Phase Two		
• Phase Three		
• Phase Four		
Etc.		

Operations	Start Date	Reach Normal Volume
• Phase One	November 1, 2017	February 1, 2018
• Phase Two		
• Phase Three		
• Phase Four		

Please *briefly* describe the phrases cited above:

Phase One will include construction for all areas.

Phase Two_____

Phase Three_____

Phase Four_____

6.3 If you have not already provided a listing and description of the equipment requirements (if any) of this project please do so in the space below or on an additional sheet.

The only equipment for this project is the MRI and any associated equipment related to the scanner.

6.4 Do you have any additional information, which you would like to supply concerning the reasonableness of the expenditures and costs associated with this project?

YES__ NO_X__

If "YES", please supply this information on an additional sheet or sheets.

The MRI Treatment and MRI support spaces calculations include related site work and HVAC work.

Attachment/Exhibit

A

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PRELIMINARY PROPOSAL

Customer Number: 0000008560

Date: 7/18/2016

NEWTON WELLESLEY HOSPITAL
2014 WASHINGTON ST
NEWTON LOWER FALLS, MA 02462

Magnetom Aera 48 XQ

This quote is based upon standard delivery terms and conditions (e.g., standard work hours, first floor delivery, etc.), basic rigging, mechanical installation and calibration. Siemens Medical Solutions USA, Inc., Project Management shall perform a site-specific assessment to ascertain any variations that are out of scope and not covered by the standard terms (examples such as, but not limited to: larger crane, nonstandard work hours, removal of existing equipment, etc.). Any noted variations identified by Siemens Project Management shall remain the responsibility of the customer and will be subject to additional fees.

Quote Nr: **1-9U893V Rev. 1**

MAGNETOM Aera

All items listed below are included for this system:

Qty	Part No.	Item Description
1	14416900	**MAGNETOM Aera - System** MAGNETOM Aera is designed to provide you the versatility you need to meet the increasing demands in healthcare. Maximize 1.5T with its core technologies Tim(r) 4G and Dot(r), along with its comprehensive application portfolio and experience unique functionalities to increase patient comfort. Every case. Every day. System Design - Short and open appearance (145 cm system length and 70 cm Open Bore Design) to reduce patient anxiety and claustrophobia - Whole-body superconductive Zero Helium Boil-Off 1.5T magnet - Actively Shielded water-cooled Siemens gradient system for maximum performance - TrueForm Magnet and Gradient Design Tim 4G (Total imaging matrix in the 4th generation) for excellent image quality and speed - Siemens unique DirectRF(tm) technology enabling the all digital-in/ digital-out design - Dual-Density Signal Transfer Technology - Head/Neck 20 DirectConnect - Spine 32 DirectConnect - Body 18 - Flex Large 4 - Flex Small 4 - Flex Coil interface - Tim Coil Interface Dot (Day optimizing throughput) for higher consistency, flexibility and efficiency

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PRELIMINARY PROPOSAL

Qty	Part No.	Item Description

- Dot Display
- Dot Control Centers
- Brain Dot Engine

Tim Application Suite allowing excellent head-to-toe imaging
- Neuro Suite
- Angio Suite
- Cardiac Suite
- Body Suite
- Onco Suite
- Breast Suite
- Ortho Suite
- Pediatric Suite
- Scientific Suite

Further included
- High performance host computer and measurement and reconstruction system
- Siemens uniqueTimCT FastView localizer and CAIPIRINHA
- syngo MR software including
- 1D/2D PACE
- BLADE
- iPAT²
- Phoenix
- Inline Diffusion
- WARP
- MDDW (Multiple Direction Diffusion Weighting)
- CISS
- DESS

The system (magnet, electronics and control room) can be installed in 30sqm space. For system cooling either the Eco Chiller options or the Separator is required.

1 14416902

Tim [204x48] XQ Gradients #Ae

Tim [204x48] XQ-gradients performance level Tim 4G with it's newly designed RF system and innovative coil architecture enables high resolution imaging and increased throughput. Up to 204 simultaneously connected coil elements in combination with the standard 48 independent RF channels, allow for more flexible parallel imaging. Maximum SNR through the new Tim 4G matrix coil technolgy. This option includes also Advanced High Order Shim. XQ - gradients The XQ- gradients are designed combining high performance and linearity to support clinical whole body imaging at 1.5T. The force compensated gradient system minimizes vibration levels and accoustic noise. The XQ gradients combine 45 mT/m peak amplitude with a slew rate of 200 T/m/s.

1 08464872

PC Keyboard US english #Tim

Standard PC keyboard with 101 keys.

1 14416914

Pure White Design #T+D

The MAGNETOM Aera / MAGNETOM Skyra design is available in different light and appealing variants which perfectly integrates into the different environments. The color of the main face plate cover of the Pure White Design Variant with the integrated Dot Control Centers and the unique Dot Display is brilliant white surrounded by a brilliant silver trim. The asymetrical deco area on the left side is colored white matte and also with a brilliant surrounding silver trim.

The table cover is presented also in the same color and material selection.

1 14416906

Tim Dockable Table #Ae

The Tim Dockable Table is designed for maximum patient comfort and smooth patient preparation. Tim Dockable Table can support up to 250 kg (550 lbs) patients without restricting the vertical or horizontal movement.

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PRELIMINARY PROPOSAL

Qty	Part No.	Item Description
		The one step docking mechanism and the innovative multi-directional navigation wheel ensure easy maneuvering and handling. Critically ill or immobile patients can now be prepared outside the examination room for maximum patient care, flexibility and speed.
1	14446650	**SW syngo MR E11C** syngo MR E11C software with new features and applications. GOBrain protocols (for Aera and Skyra with 48 or more rf-channels).
1	14441748	**Quiet Suite #T+D** Quiet Suite enables complete, quiet examinations for neurology and orthopedics with at least 70% reduction in sound pressure levels.
1	14430396	**Spine Dot Engine #T+D** The Spine Dot Engine provides optimized cervical, thoracic and lumbar spine imaging. Amongst various features to support streamlined spine workflow is Labeling of the vertebrae suggested by the system, Tim Planning Suite and In-line Composing. syngo WARP with View Angle Tilting (VAT) technique is provided for reducing in-plane geometric distortions syngo WARP can be used throughout the body.
1	14426310	**Angio Dot Engine** The timing of contrast injection and scan is widely considered the most challenging part of an angiographic exam. Angio Dot guides the user through angiographic single or multi station examinations by providing semi-automatic detection of arterial and venous timing windows using a test bolus technique. This information is fed back into the next planning steps automatically adapting scan parameters to the individual patient and patient's condition. Where needed, AutoVoiceCommands support the communication with the patient and ensure optimal timing of breathing, scanning and contrast media. All steps of contrast injection are presented in a simple, automated graphic on the monitor. syngo Inline Composing and the Tim Planning Suite are included.
1	14409198	**Native syngo #Tim** Integrated software package with sequences and protocols for non-contrast enhanced 3D MRA with high spatial resolution. syngo NATIVE particularly enables imaging of abdominal and peripheral vessels and is an alternative to MR angiography techniques with contrast medium, especially for patients with severe renal insufficiency.
1	14416923	**Abdomen Dot Engine #T+D** The Abdomen Dot Engine: Personalized Exam Strategies - Guidance - Automatic sequence scaling - Auto Navigator - Auto-FoV - Timeline setup and monitoring - Automatic Voice Commands - Auto Bolus Detection - Inline radial range calculation for MRCP - Inline Subtraction - Inline Registration
1	14441761	**LiverLab #T+D** LiverLab is a system guided workflow to examine the hepatic fat and iron status, as part of the Abdomen Dot Engine.
1	14441759	**FREEZEit Body MRI Package #T+D** FREEZEit Body Package contains two robust sequences for advanced body imaging: TWIST VIBE and StarVIBE. - TWIST VIBE is a new fast, high-resolution 4D imaging sequence for multi-arterial liver imaging. - StarVIBE is a motion insensitive VIBE sequence using a stack-of-stars trajectory.
1	08464740	**Flow Quantification #Tim** Special sequences for quantitative assessment of flow.
1	07365419	**Argus Flow**
1	14416929	**Advanced Cardiac Package #T+D** This package contains special sequences and protocols for advanced cardiac imaging including 3D and 4D syngo BEAT functionalities. It supports advanced techniques for ventricular function imaging, dynamic imaging, tissue characterization, coronary imaging, and more.
1	14441747	**MyoMaps #T+D** This package contains special sequences and protocols for inline T1,T2 and T2* calculation at the heart. The generation of T1 and T2 parametric maps is enhanced by the use of motion correction. T1,T2 and T2* parametric maps could be used to support assessment of cardiovascular disease.

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Qty	Part No.	Item Description
1	14407334	**Argus 4D Ventr.Function syngo #Tim** syngo Argus 4D Ventricular Function software processes MR cine images of the heart and generates quantitative results for physicians in the diagnostic process.
1	14441766	**Large Joint Dot Engine E11 #T+D** Large Joint Dot Engine optimizes image quality of knee, hip and shoulder scans by proposing the most appropriate protocols according to the examination strategy chosen for the specific patient. It ensures reproducible image quality and streamlines large joint examinations to the greatest extent. Large Joint Dot Engine features AutoAlign and AutoCoverage for knee, hip and shoulder. Susceptibility artifact reduction functionality can be used on knee and hip examinations. The WARP technique enables susceptibility artifact reduction functionality, optimized protocols are provided. With syngo MR E11, the Advanced WARP option is also included. Inline MPR (Multi Planar Reconstruction) calculations provide increased efficiency, reproducibility and ease of use.
1	14405341	**Mapit syngo #Tim** Based on the T1, T2 or T2* properties of the cartilage syngo ParametricMap allows the early detection of osteoarthritic break down of cartilage structures even before morphological changes occur. The method supports therapeutic decisions in individual patients and can be used to control treatments non-invasively, replacing surgeries or biopsies. The assessment of T1, T2 and T2* properties of tissues in other body regions is also possible. syngo ParametricMap provides very fast 2D and 3D high resolution imaging sequences and the inline calculation of parametric maps for the T1, T2 and T2* properties of the imaged tissue.
1	07365484	**Image Fusion syngo** This application provides a dedicated evaluation software for spatial alignment (matching) and visualization of image data either from different modalities (CT,MR,NM,PET) or from the same modality but from multiple examinations of the same patient. It supports optimal diagnostic outcome (fusion of morphological and functional information) and therapy planning.
1	14416946	**Neuro Perfusion Package #T+D** The Neuro Perfusions Package helps to streamline the clinical workflow by inline post-processing in dynamic susceptibility contrast (DSC) based perfusion imaging. This makes it possible to see perfusion maps immediately. Perfusion parameter maps are based on a Local Arterial Input function. A corrected relCBV map calculation and motion correction is provided.
1	14426290	**Neuro Perfusion Eval #T+D** Neuro Perfusion Evaluation syngo provides a task card for detailed post-processing of brain perfusion data sets. Color display of the relative Mean Transit Time (relMTT), relative Cerebral Blood Volume (relCBV), corrected rel CBV, and relative Cerebral Blood Flow (relCBF) is supported. Flexible selection of the Arterial Input Function (AIF) for more reliable analysis taking into account the dynamics over time of the contrast agent enhancement. Furthermore a calculation of maps using automatically selected local Arterial Input Functions (AIF) is provided to reduce the amount of user interactions. The detailed evaluation of brain perfusion data sets generates parameter maps for TTP and PBP and for the hemodynamic parameters relMTT, relCBV, rel CBVcor and relCBF. These may show perfusion deficits and assist in the diagnosis and grading of e.g. vascular deficiencies and brain tumors.
1	14416944	**DTI Package #T+D** The DTI Package is a bundle of: - Diffusion Tensor Imaging - DTI Evaluation and - DTI Tractography syngo The bundle comprehends all acquisition and postprocessing tools for comprehensive DTI exams.
1	14446591	**Advanced Diffusion #T+D** Advanced Diffusion is a package consisting of the diffusion-weighted, readout-segmented EPI sequence RESOLVE and the noise reduced QuietX DWI sequence.

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Qty	Part No.	Item Description
1	14446558	**SMS EPI #T+D** Simultaneous Multi-Slice (SMS) EPI enables accelerated imaging for diffusion-weighted (DWI/DTI) and BOLD functional MR imaging. With SMS EPI, scan times for DWI can be reduced by up to 68% and/or images with higher spatial/diffusion resolution can be acquired. For BOLD imaging, SMS EPI can enable increased temporal sampling of BOLD data acquisitions and/or improved slice coverage/resolution.
1	14402527	**SWI #Tim** Susceptibility Weighted Imaging is a high-resolution 3D imaging technique for the brain with ultra-high sensitivity for microscopic magnetic field inhomogeneities caused by deoxygenated blood, products of blood decomposition and microscopic iron deposits. Among other things, the method allows for the highly sensitive proof of cerebral hemorrhages and the high-resolution display of venous cerebral blood vessels.
1	14416941	**Spectroscopy Package #T+D** The Spectroscopy Package is a comprehensive software package which bundles Single Voxel Spectroscopy, 2D Chemical Shift Imaging, 3D Chemical Shift Imaging and syngo Spectroscopy Evaluation. Sequences and protocols for proton spectroscopy, 2D and 3D proton chemical shift imaging (2D CSI and 3D CSI) to examine metabolic changes in the brain (e.g. in tumors and degenerative diseases) and in the prostate are included. Furthermore included is the comprehensive syngo Spectroscopy Evaluation Software which enables fast evaluation of spectroscopy data on the syngo Acquisition Workplace.
1	14416908	**Tim Whole Body Suite #T+D** Tim Whole Body Suite puts it all together. This suite enables table movement for imaging of up to 205 cm (6' 9") FoV without compromise. In combination with Tim's newly designed ultra highdensity array higher spatial and temporal resolution can be achieved along with unmachted flexibility of any coverage up to Whole Body. For faster exams and greater diagnostic confidence.
1	14405328	**TWIST syngo #Tim** This package contains a Siemens unique sequence and protocols for time-resolved (4D) MR angiographic and dynamic imaging in general with high spatial and temporal resolution. syngo TWIST supports comprehensive dynamic MR angio exams in all body regions. It offers temporal information of vessel filling in addition to conventional static MR angiography, which can be beneficial in detecting or evaluating malformations such as shunts. In case of general dynamic imaging, for example an increase in spatial resolution by a factor of up to 2 at 60 seconds temporal resolution (compared to conventional dynamic imaging) is possible due to intelligent k-space sampling strategies. Alternatively, increased temporal resolution at constant spatial resolution is possible.
1	14426320	**MR Elastography #T+D** MR Elastography offers a new diagnostic tool for all Tim+Dot systems that allows identifying variations in liver tissue stiffness. The MR Elastography package consists of new protocols and sequences, new reconstruction algorithms and inline reconstruction.
1	14405316	**fMRI Trigger Converter** An optical trigger signal is available to trigger external stimulation devices in fMRI experiments. With the "fMRI Trigger Converter" this signal can be converted to an electrical signal (TTL/BNC and RS 232 interface for PC; modes: toggle or impulse).
1	14418521	**syngo Expert-i #T+D** This software application enables remote access to the system (connected via local area network) for planning and processing.
1	14430458	**Breast Dot Engine, USA #T+D** A set of predefined Breast Dot Engines are provided for lesion detection, implant evaluation and breast biopsy. The Engines offer a comprehensive set of user guidance, workflow automation and personalization towards the individual patient so that excellent image quality and increased consistency for breast diagnosis and

PRELIMINARY PROPOSAL

Qty	Part No.	Item Description
		intervention can be achieved. The following Breast Dot Engine configurations will be provided: - 16ch AI FatSat - 16ch AI NonFatSat - 4ch BI FatSat - 4ch BI NonFatSat - 8ch Sentinelle FatSat - 8ch Sentinelle NonFatSat - Biopsy Sentinelle 4/2ch - Biopsy 4ch BI They include: - Patient View for fast adaptation to patient conditions - Evaluation of patients implant situation - Guidance View with image and text guidance - Auto-Coverage - Auto Bolus Detection - Inline MPR Planning - Display of Biopsy Target Coordinates at Dot Display if a Siemens' planning software is used.
1	14436665	**2/10/16ch Sentinelle BreastCoil #Ae** The 2/10/16-channel Sentinelle Breast Coil can be used as a breast imaging coil, a bilateral biopsy coil, as well as a unilateral biopsy coil providing large biopsy access This coil consists of a positioning frame with exchangeable coils with different numbers of channels as described in detail in the E text. The preamplifiers are integrated into the coil. The coil is iPAT-compatible.
1	14416972	**Tim Coil Interface 1.5T** Coil adapter plug for up to 8 receive and 1 transmit channels, in order to connect existing dedicated knee and breast coils (Tx/Rx 15-channel Knee Coil, CP Extremity Coil, 4-channel BI Breast Coil, 16-channel AI Breast Coil, (2/4)/8-channel Sentinelle BreastCoil and (2/10)/16-channel Sentinelle BreastCoil) with all MAGNETOM 1.5T Systems using Tim 4G-technology.
1	14416958	**Peripheral Angio 36 #Ae** The new Tim 4G coil technology with Dual Density Signal Transfer and SlideConnect Technolgy combines key imaging benefits: excellent image quality, high patient comfort, and unmatched flexibility: - 36 channels - Dual Density Signal Transfer - Ultra light-weight - SlideConnect Technology The 36-channel coil includes 36 integrated pre-amplifiers for excellent signal-to-noise ratio. The single SlideConect Plug allows for fast and easy patient preparation. The Peripheral Angio 36 features: - 36-element design with 36 integrated preamplifiers, distributed over 6 planes with 6 elements each - Operates in an integrated fashion with Body 18 coils and with the Spine 32 . For Whole-Body examinations also with the Head/ Neck 20 - Automatic table feed and active coil switch

PRELIMINARY PROPOSAL

Qty	Part No.	Item Description
		- Can be utilized head and feet first - Both legs are independently covered with coil elements, maximizing the coil filling factor and the signal-to-noise ratio - No coil tuning - iPAT-compatible - Dual-Density Signal Transfer enables ultra-high density coil designs by integrating key RF components into the local coil - SlideConnect technology for easy coil set up - One cable only for easy handling - Includes special non-ferromagnetic coil cart for safe, user-friendly storage Applications: - High-resolution angiography of both legs incl. Pelvis (by additional use of the Body 18) with highest signal-to-noise ratio - Visualization of the iliac arteries and aorta in combinaton with Body 18 - Bilateral examinations of long bones of the legs Typically combined with: Head/ Neck 20, Body 18, Spine 32, and all flexible coils such as Flex Large 4 or Flex Small 4
1	14416960	**Shoulder 16 Coil Kit #Ae** The new Tim 4G coil technology with Dual Density Signal Transfer and SlideConnect Technolgy combines key imaging benefits: excellent image quality, high patient comfort, and unmatched flexibility. The Shoulder 16 Coil Kit for examinations of the left or right shoulder consists of a base plate and two different sized iPAT compatible 16 channel coils (Shoulder Large 16 and Shoulder Small 16). These will be attached and can be relocated on the base plate.The 16-element coils with 16 integrated pre-amplifiers ensure maximimum signal-to-noise ratio. Shoulder Large 16 and Shoulder Small 16 will be connected via a SlideConnect plug for fast and easy coil set-up and patient preparation.
1	14416961	**Hand/Wrist 16 #Ae** The new Tim 4G coil technology with Dual Density Signal Transfer and SlideConnect Technology combines key imaging benefits: excellent image quality, high patient comfort, and unmatched flexibility. Hand/Wrist 16 for examinations of the left or right hand and wrist region consists of a base plate and an iPAT compatible 16-channel coil and allows high resolution imaging of the wrist and the hand within one examination. Hand/Wrist 16 will be connected via a SlideConnect plug for fast and easy patient preparation.
1	14416962	**Foot/Ankle 16 #Ae** The new Tim 4G coil technology with Dual Density Signal Transfer and DirectConnect Technolgy combines key imaging benefits: excellent image quality, high patient comfort, and unmatched flexibility. Foot/Ankle 16 for examinations of the left or right foot and ankle region consists of a base plate and an iPAT compatible 16-channel coil and allows high resolution imaging of the foot and ankle within one examination. Foot/Ankle 16 is a cable-less coil and will be connected via DirectConnect for fast and easy patient preparation.
1	14430403	**Tx/Rx 15-channel Knee Coil DDST #Ae** New 15-channel transmitter/receiver coil for joint examinations in the area of the lower extremities. Main features : - 15-element design (3x5 coil elements) with 15 integrated preamplifiers, - iPAT-compatible - SlideConnect Technology
1	14416955	**Body 18 #Ae** The Tim 4G coil technology with Dual Density Signal Transfer and SlideConnect Technolgy combines key imaging benefits: excellent image quality, high patient comfort, and unmatched flexibility: - 18 channels (inherent) or up to 30 (in combination with the Spine 32) - Dual Density Signal Transfer - Ultra light-weight

PRELIMINARY PROPOSAL

Qty	Part No.	Item Description
		- SlideConnect Technology The Body 18 is part of the standard configuration. The 18-channel coil with its 18 intergrated pre-amplifiers ensures excellent signal-to-noise ratio. The 18 coil elements provide extensive coverage in all directions. The single SlideConnect plug allows for fast and easy patient preparation. The light-weight coil ensures highest patient comfort. The Body 18 Coil features: - 18-element design with 18 integrated preamplifiers (3 clusters of 6 elements each) - Operates in an integrated fashion with the Spine 32 as an 30 channel body coil - Can be combined with further Body 18 coils for larger coverage - Can be positioned in different orientations (0°, 90°, 180°, 270°) for patient specific adaptations - No coil tuning - iPAT compatible in all directions The highly flexible design enables a wide variety of applications including: - Thorax (incl. heart) - Abdomen - Pelvis - Hip Typically combined with: - Head / Neck 20 - Spine 32 - Additional Body 18 coil(s) (optional) - Peripheral Angio 36 (optional) - Flex Large 4 - Flex Small 4 - Loop coils (optional) - Endorectal coil (optional)
1	14407258	**MR Workplace Table 1.2m** Table suited for syngo Acquisition Workplace and syngo MR Workplace based on syngo Hardware.
1	14407261	**MR Workplace Container, 50cm** 50 cm wide extra case for the syngo host computer with sliding front door to allow change of storage media (CD/DVD/USB).
1	08857828	**UPS Cable #Tim** Power cable for connecting the UPS Powerware PW 9130-3000i (14413662) to the ACC of MAGNETOM Tim and MAGNETOM Tim+Dot systems for backing up the computer. Standard cable length: 9 m.
1	14413662	**UPS Powerware PW9130G-3000T-XLEU** UPS system Eaton PW9130G-3000T-XLEU for MAGNETOM Tim, MAGNETOM Tim+Dot and MAGNETOM Symphony systems for safeguarding computers. Power output: 3.0 kVA / 2.7 kW Bridge time: 5 min full load / 14 min half load Input voltage: 230 VAC
1	14413663	**UPS Battery module** UPS battery module Eaton PW 9130N-3000T-EBM for all MAGNETOM Tim, MAGNETOM Tim+Dot and MAGNETOM Symphony systems for safeguarding computers. Extension for: PW9130i-3000T Battery type: Closed, maintenance-free Extension of the bridge time to: 24 minutes with a module

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PRELIMINARY PROPOSAL

Qty	Part No.	Item Description
		Dimensions (H x W x D): Battery module: 346 x 214 x 412 mm incl. bracket set Weight: approx. 50 kg
1	MR_STD_RIG_INST	**MR Standard Rigging and Installation** MR Standard Rigging and Installation This quotation includes standard rigging and installation of your new MAGNETOM system Standard rigging into a room on ground floor level of the building during standard working hours (Mon. - Fri./ 8 a.m. to 5 p.m.) It remains the responsibility of the Customer to prepare the room in accordance with the SIEMENS planning documents Any rigging requiring a crane over 80 tons and/or special site requirements (e.g. removal of existing systems, etc.) is an incremental cost and the responsibility of the Customer. All other "out of scope" charges (not covered by the standard rigging and installation) will be identified during the site assessment and remain the responsibility of the Customer.
1	MR_BTL_INST ALL	**MR Standard Rigging & Install**
1	MR_PREINST_DOCK	**T+D Preinstall kit for dockable table**
1	MR_CRYO	**Standard Cryogens**
1	MR_PM	**MR Project Management** A Siemens Project Manager (PM) will be the single point of contact for the implementation of your Siemen's equipment. The assigned PM will work with the customer's facilities management, architect or building contractor to assist you in ensuring that your site is ready for installation. Your PM will provide initial and final drawings and will coordinate the scheduling of the equipment, installation, and rigging, as well as the initiation of on-site clinical education.
1	MR_INITIAL_32	**Initial onsite training 32 hrs** MR_INITIAL_32 Up to (32) hours of on-site clinical education training, scheduled consecutively (Monday - Friday) during standard business hours for a maximum of (4) imaging professionals. Training will cover agenda items on the ASRT approved checklist. Uptime Clinical Education phone support is provided during the warranty period for specified posted hours. This educational offering must be completed (12) months from install end date. If training is not completed within the applicable time period, Siemens obligation to provide the training will expire without refund.
1	MR_INT_DOT_BCLS	**MR Dot Training Class** Tuition for (1) imaging professional to attend Classroom Course at Siemens Training Center. The objectives of this class are to introduce the user interface of the common syngo platform, including Dot, and instructions on building protocols, demonstration of software functions, and hands-on sessions. This class includes lunch, economy airfare, and lodging for (1) imaging professional. All arrangements must be arranged through Siemens designated travel agency. This educational offering must be completed (12) months from install end date. If training is not completed within the applicable time period, Siemens obligation to provide the training will expire without refund.
1	MR_ADD_32	**Additional onsite training 32 hours** Up to (32) hours of on-site clinical education training, scheduled consecutively (Monday - Friday) during standard business hours for a maximum of (4) imaging professionals. Training will cover agenda items on the ASRT approved checklist if applicable.This educational offering must be completed (12) months from install end date. If training is not completed within the applicable time period, Siemens obligation to provide the training will expire without refund.
1	MR_ADD_CLASS	**Additional Training Class** Tuition for (1) attendee for a customer classroom course of choice at one of the Siemens training centers. Includes economy airfare and lodging for (1) attendee. All arrangements must be arranged through Siemens designated travel agency. This educational offering must be completed (12) months from install end date. If training is not completed within the applicable time period, Siemens obligation to provide the training will expire without refund.

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PRELIMINARY PROPOSAL

Qty	Part No.	Item Description
1	MR_FOLLOWUP_24	**Follow-up training 24 hrs** Up to (24) hours of follow-up on-site clinical education training, scheduled consecutively (Monday - Friday) during standard business hours for a maximum of (4) imaging professionals. Uptime Clinical Education phone support is provided during the warranty period for specified posted hours. This educational offering must be completed (12) months from install end date. If training is not completed within the applicable time period, Siemens obligation to provide the training will expire without refund.
1	MR_CARD_NWP1	**Northwestern Cardiac Tech SMaRT** This 4-day Cardiac Phase 1 Introductory Program is for (1) imaging professional and is provided by Northwestern University Department of Radiology. This program consists of hands-on scanning sessions, technical discussions, and demonstrations. NOTE: Expenses for travel and lodging are not included. Offering and scheduling availability is subject to change. Workshop must be scheduled consecutively (Monday - Friday) during standard business hours. This educational offering must be completed (12) months from install end date. If training is not completed within the applicable time period, Siemens obligation to provide the training will expire without refund.
1	MR_CARD_NWP2	**Northwestern Cardiac CMR** This Cardiac Phase 2 Program is for (1) imaging professional and is provided by Northwestern University Department of Radiology.The program incorporates didactic instruction with practical, hands-on scanning. Cardiovascular imaging basics will be presented, including CMR imaging physics and protocols. Clinical application will be emphasized through lectures ranging from normal anatomy through various states of cardiovascular pathology. NOTE: Expenses for travel and lodging are not included. Offering and scheduling availability is subject to change. Workshop must be scheduled consecutively (Monday - Friday) during standard business hours. This educational offering must be completed (12) months from install end date. If training is not completed within the applicable time period, Siemens obligation to provide the training will expire without refund period, Siemens obligation to provide the training will expire without refund
1	MR_TECH_SYMP	**Siemens Technologists Symposium** This accredited annual imaging professional symposium will provide multi-modality clinical education tracks for (1) attendee. Registration, economy airfare, and lodging will is included for (1) attendee. All arrangements must be arranged through Siemens designated travel agency. This event is held in various locations throughout the U.S. This educational offering must be completed (12) months from install end date. If training is not completed within the applicable time period, Siemens obligation to provide the training will expire without refund.
1	MR_ELEARN	**e.learning CEU subscription (12 mths)** This (12) month multi-modality e.learning subscription will provide access for (10) imaging professionals at the customer site to utilize up to (50 CEUs). This educational offering must be completed (12) months from install end date. If training is not completed within the applicable time period, Siemens obligation to provide the training will expire without refund.
1	MR_ADVNEUR_NW	**NW Univ 3 day Advanced Neuro Wrkshp** This course 3 day physician or technologist advanced neuroimaging workshop held at Northwestern University, Department of Radiology, Feinberg School of Medicine, focuses on imaging physics, functional MRI (acquisition, stimulus presentation, experiment design, data analysis, and interpretation), perfusion imaging (ASL and DSC), diffusion imaging (analysis and tractography), and MR spectroscopy. Topics will be presented through lectures and hands-on sessions, followed by hands-on data analysis sessions. Emphasis will be placed on the clinical application for all of the methods discussed. Attendees will be given copies of the experiments and protocols used during the course to take back to their institution. *NOTE: Expenses for travel and lodging are not included. Tuition is for one attendee only, additional attendees may purchase separately. **NOTE: Siemens and/or other vendors' workstations may be used. ***NOTE: Third party training offerings are subject to change and availability at time of scheduling. Workshop must be scheduled consecutively (Monday - Friday) during standard business hours. This educational offering must be completed (12) months from install end date. If training is not completed within the applicable time period, Siemens obligation to provide the training will expire without refund.
1	4MR5142869	**Armrest #MR**
1	KKTECOMR_60	**KKT ECOCHILLER 133L** The KKT ECO 133 -L chiller is a dedicated 20°C cooling system for MAGNETOM Aera and MAGNETOM Skyra which automatically adapts to the different cooling requirements (e.g. system in operation, standby, ...) to reduce the energy consumption for cooling. The cooling system must be used in combination with the IFP (Interface Panel), if there is no on-site chilled water supply at all.

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PRELIMINARY PROPOSAL

Qty	Part No.	Item Description
		The IFP is included in the scope of supply.
1	CHILINST_AVT	**Chiller Start-up and Warranty for TIM**
1	IECMR480V250A	**IEC Main Disconnect Panel - MR** Integrated Electrical Cabinet/Main Disconnect Panel for MR. Components supplied: The IEC Main Disconnect Panel This Operations & Maintenance Manual (4) sets of Emergency Power Off pushbuttons and installation instructions Drawings and electrical schematics DOES NOT INCLUDE installation. Customer is responsible for the installation of the cabinet. Includes one year warranty.
1	M3SSMREPICBC	**Spectris Solaris EP Injector iCBC** Includes Spectris Solaris EP injector and Integrated Continuous Battery Charger (ICBC). - Optimized color touch screen with few keystrokes. - Six user-programmable phases for added flexibility. - Independent Keep Vein Open (KVO) allows more time to focus on patient. - Large 115 mL saline syringe allows for longer KVO and multiple flushes. - Design of low pressure tubing eliminates dead space in the "T" connection that can waste contrast. - The clear barrel design with molded FluidDots help detect the presence of air in a syringe. - Pressure Limit Setting control software enables user to select from one to six preset maximum pressure limits, ranging from 100-300 psi, and to view current pressure during injection next to the pre-selected maximum value on the Solaris display. Installation, applications and one year warranty provided by Medrad. Not for mobile use, refer to Siemens part number M3SSMR300EPM for the Solaris injector used in a mobile environment. This product has been tested and verified for compatibility with the following Siemens' products: MAGNETOM Trio, Espree, Essenza, Verio, Avanto, Symphony, Aera, Skyra and Biograph mMR. Compatibility with other products cannot be guaranteed and use with any other products may void service contracts and/or system warranties.
1	RESY3002	**Elastography hardware** RESOUNDANT Hardware starter set for Elastography The hardware components of the MR Elastography option create, conduct and introduce mechanical waves into the human body. They are designed to be used in conjunction with imaging systems. The set includes these major specific components of the MR Elastography option: The active driver, which creates the mechanical waves Two (2) passive drivers, which applies the mechanical waves to the patient's body Long and short plastic tubing for mechanical wave transfer from active to passive driver - one 30 foot tube and an additional 9 foot section. For maximum performance use only the 30 foot hose or both the 30 foot and 9 foot hoses. Additional 9 foot hoses can be ordered if site restrictions make it necessary, but doing so may require power setting adjustments. Applicator belt for securing the passive driver to the patient's body Cords and cables for connecting the trigger box with the active driver and the components with the scanner electronics. Cable connecting active driver to fMRI trigger box is 50 feet. DO NOT TAKE THE ACTIVE DRIVER OR TRIGGER BOX INTO THE MAGNET ROOM. Customer is responsible for hardware installation.

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Qty	Part No.	Item Description
		Requires minimum software version syngo MR D13A or syngo MR B19.
		The system price includes two years parts warranty.
1	MR_BUDG_ADDL_RIG	**Budgetary Add'l/Out of Scope Rigging $25,000**
1	14441813	**QISS #T+D** Software package with QISS sequence, protocols and Dot AddIn for non-contrast enhanced peripheral MRA. QISS particularly enables higher reproducibility than existing methods and is an alternative to MR angiography techniques with contrast medium, especially for patients with severe renal insufficiency.

System Total: $2,684,729

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PRELIMINARY PROPOSAL

FINANCING: The equipment listed above may be financed through Siemens. Ask us about our full range of financial products that can be tailored to meet your business and cash flow requirements. For further information, please contact your local Sales Representative.

Siemens Healthcare is pleased to submit this Preliminary Pricing Proposal. A Preliminary Pricing Proposal is provided for planning purposes only; it is not contractually binding. To receive a contractually binding proposal for the Products listed above, inclusive of Terms, Conditions, and Warranty coverage, please contact your Siemens Healthcare Sales Representative.

Siemens Healthcare

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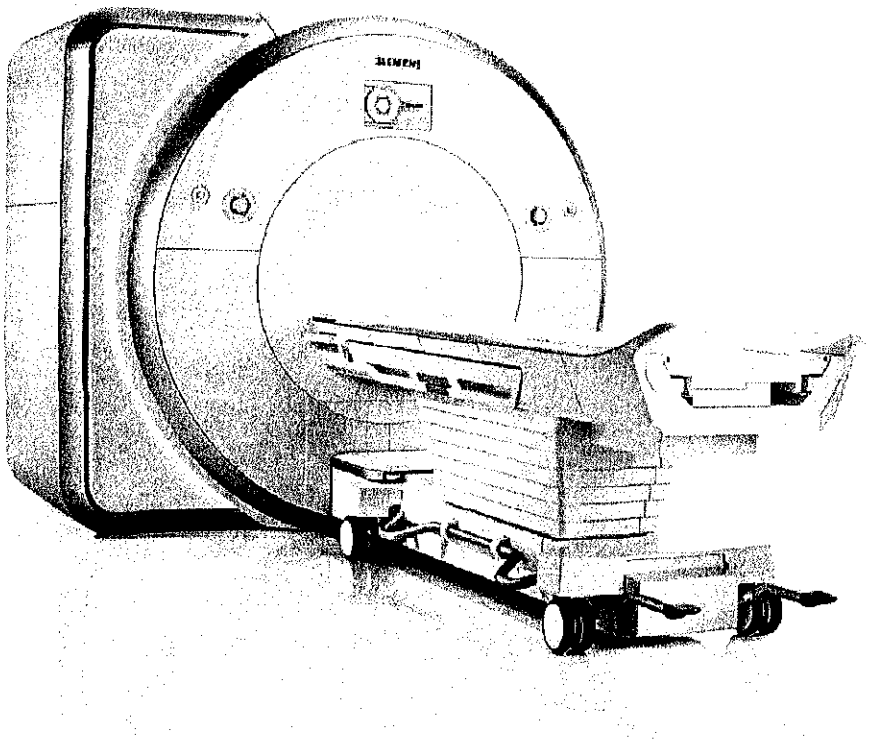
MAGNETOM AERA 1.5T

TYPICAL ROOM PLAN



The intended use for this Cut Sheet is to communicate the spatial requirements as well as the basic architectural, electrical, structural, and mechanical requirements for this piece of imaging equipment. The information provided in this document is for reference only, during the pre-planning stage, and therefore does not contain any site specific detailed requirements. This information is subject to change without notice. Federal, state and/or local requirements may impact the final placement of the components. It is the customer's responsibility to ensure that the final layout and placement of the equipment complies with all applicable requirements.

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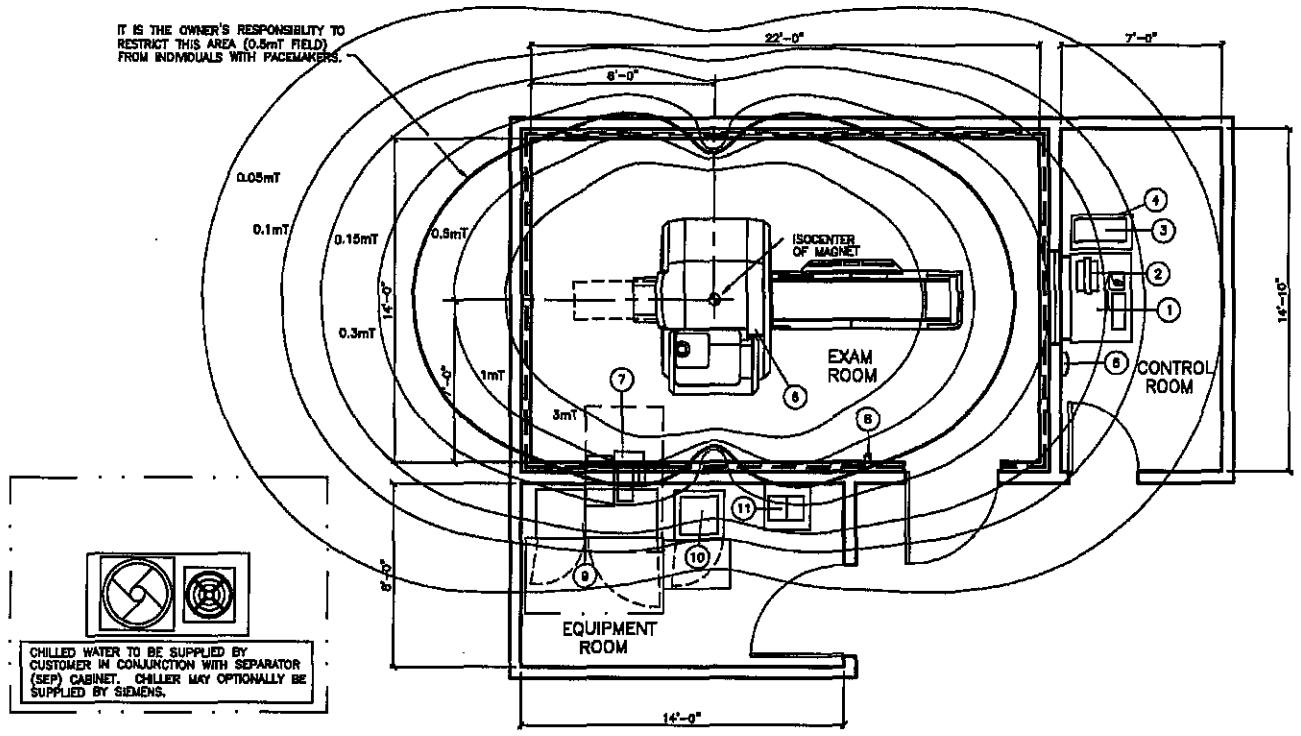
MAGNETOM AERA 1.5T

TYPICAL ROOM PLAN



TYPICAL PLAN SCALE: 1/8" = 1'-0"

EQUIPMENT LEGEND

NO	DESCRIPTION	SMS SYM	WEIGHT (LBS)	BTU/HR TO AIR	DIMENSIONS (INCHES) W	D	H	REMARKS
1	MRC OPERATING CONSOLE AND KEYBOARD	MK	132	---	45 11/16	35 1/4	28 3/8	
2	COLOR MONITOR FOR MRC	M	22	239	18 5/16	16 15/16	4 3/4	ON CONSOLE/COUNTER
3	HOST PC MRC	PC	49	2,389	11	27	18 1/8	
4	CONTAINER FOR HOST 500	C	238	---	19 5/8	31 1/2	28 3/8	
5	ALARM BOX	AB	2	---	9	4	9	
6	1.5T MAGNET WITH COVERS AND PATIENT TABLE	B	10,093	3,415	91	170	86	
7	RF-FILTER PLATE	FI	285	853	46 1/2	21 3/4	21 1/2	
8	MAGNET STOP	MS	1	---	3	5	3	
9	ELECTRONICS CABINET (GPA/EPC CABINET)	GPA	3,307	13,649	61 1/2	26	77 1/2	
10	SEP CABINET	SEP	750	3,415	25 5/8	25 5/8	73 5/8	
11	POWERWARE 9130 UPS WITH EBM (OPTION)	UPS	166	1,257*	16 7/8	12 7/8	16 1/4	*1,755 ON BATTERIES

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MAGNETOM AERA 1.5T
SPECIFICATIONS

POWER REQUIREMENTS

VOLTAGE RANGE: 480 VAC ±10% FOR ALL LINE AND LOAD CONDITIONS.
VOLTAGE BALANCE: 2% MAXIMUM DIFFERENCE BETWEEN PHASES

FREQUENCY:	60 Hz ± 1.0 Hz
LINE IMPEDENCE:	95 mOHMS
STAND BY POWER CONSUMPTION	9.0 kW
TYPICAL POWER CONSUMPTION DURING EXAM	20.1 KW
CONNECTION VALUE (LESS THAN 5 MINUTES)	110 KVA
MOMENTARY POWER	140 KVA
RECOMMENDED TRANSFORMER	150 KVA
MR SYSTEM OVERCURRENT PROTECTION	150 AMPS
RECOMMENDED UPS	160 KVA
UPS SYSTEM OVERCURRENT PROTECTION	250 AMPS
MAX. ALLOWABLE VOLTAGE DROP AT MAX. POWER	6.0%

POWER REQUIREMENTS

DEMAND AND CAPACITY REQUIREMENTS NOTES

1) IF EQUIPMENT UPGRADE IS ANTICIPATED, INSTALLING ELECTRICAL POWER TO MEET THE REQUIREMENTS OF THE HIGHER POWER GRADIENT PACKAGE AT THE TIME OF INITIAL INSTALLATION WILL REDUCE THE COST TO UPGRADE THE ELECTRICAL SYSTEM LATER.

2) RECOMMENDED TRANSFORMER SIZE (SYSTEM WITHOUT UPS) IS BASED ON INDUSTRY STANDARD ISOLATION TRANSFORMER KVA RATINGS. SOURCE IMPEDANCE FEEDING THE MAGNETOM SYSTEM, INCLUDING ANY ISOLATION TRANSFORMERS, MUST MEET EQUIPMENT REQUIREMENTS AS LISTED HERE. SIEMENS RECOMMENDS A TRANSFORMER WITH COPPER WINDINGS, AN ELECTRO-STATIC SHIELD, AND A LOW IMPEDANCE (<3%) TO ENSURE THAT SOURCE IMPEDANCE REQUIREMENTS ARE MET.

3) OVERCURRENT PROTECTION IS SPECIFIED FOR SYSTEMS WITHOUT AN UNINTERRUPTIBLE POWER SUPPLY (UPS). ADDITION OF A UPS REQUIRES A HIGHER CAPACITY MAINS CONNECTION (DEPENDENT UPON UPS MODEL AND SIZE).
MAXIMUM FAULT CURRENT IS DEPENDENT UPON THE IMPEDANCE OF THE FACILITY ELECTRICAL SYSTEM. CUSTOMER'S ARCHITECT OR ELECTRICAL CONTRACTOR TO SPECIFY AIC RATING OF OVERCURRENT PROTECTION BASED ON FACILTY IMPEDANCE CHARACTERISTICS.

4) MOMENTARY POWER IS BASED ON A MAXIMUM RMS VALUE FOR A PERIOD NOT TO EXCEED FIVE (5) SECONDS, AS DEFINED IN NEC 517.2. STAND-BY AND AVERAGE CURRENT ARE SUBSTANTIALLY LOWER.

5) THE CONDUCTOR SIZE SHOULD BE SELECTED TO MEET THE VOLTAGE DROP REQUIREMENTS, TAKING INTO CONSIDERATION THE MAINS CAPACITY, RUN LENGTH, AND ANY ADDITIONAL TRANSFORMERS USED TO OBTAIN THE PROPER EQUIPMENT VOLTAGE LEVEL. NEMA STANDARD XR-9-1989 (R1994,R2000) PROVIDES GENERAL GUIDELINES FOR SIZING CONDUCTORS, TRANSFORMERS, AND ELECTRICAL SYSTEMS FOR MEDICAL IMAGING SYSTEMS.

6) LONG-TIME POWER IS BASED ON THE HIGHEST AVERAGE RMS VALUES FOR A PERIOD EXCEEDING 5 MINUTES DURING CLINICAL SYSTEM OPERATION, AS DEFINED IN NEC 517.2.

7) A CIRCUIT BREAKER WITH A HIGH INRUSH RATING (>8x RATED CURRENT) IS REQUIRED TO PERMIT SWITCH-ON OF THE UPS SYSTEM WITHOUT SPURIOUS TRIPPING. CIRCUIT BREAKERS WITH AN ADJUSTABLE MAGNETIC TRIP (SIEMENS FD6 SERIES OR SIMILAR) ARE HIGHLY RECOMMENDED.

NOISE LEVELS

SYSTEM ROOM	NOISE LEVEL / dB(A)
CONTROL ROOM	<55
EXAMINATION ROOM	86.1 dB(A) – 8 HOUR AVERAGE 108.2 dB(A) MAXIMUM
EQUIPMENT ROOM	<65

IT IS THE CUSTOMER'S RESPONSIBILITY TO ENSURE THAT ALL LOCAL/STATE/OSHA NOISE REGULATIONS ARE ADHERED TO. ADDITIONAL NOISE DATA MAY BE PROVIDED BY SIEMENS PROJECT MANAGER UPON REQUEST.

CEILING HEIGHTS

EXAM ROOM 7'-11" MINIMUM
CONTROL ROOM 6'-11 MINIMUM
EQUIPMENT ROOM 7'-3" MINIMUM

REMOTE SYSTEM DIAGNOSTICS

SIEMENS REMOTE SERVICES (SRS) REQUIRES A CONNECTION BETWEEN THE SRS REMOTE SERVER AND SIEMENS SYSTEMS VIA REMOTE LOCAL AREA NETWORK ACCESS, TO ENSURE THE UPTIME OF YOUR SYSTEM.

THIS SERVICE REQUIRES ONE OF THE FOLLOWING CONNECTION METHODS:
1. (PREFERRED) VPN – WHERE THE CUSTOMER HAS AVAILABLE A VPN CAPABLE FIREWALL OR OTHER VPN APPLIANCE.
2. (OPTIONAL) *SRS ROUTER* – CONNECTED TO ANALOG PHONE LINE VIA *ANALOG MODEM*, ETHERNET CONNECTION TO CUSTOMER'S LAN, AND A POWER OUTLET. NOTE: = *SUPPLIED BY SIEMENS*

FOR MORE INFORMATION

FOR MORE DETAILED PLANNING REQUIREMENTS FOR THIS SYSTEM, SEE THE TYPICAL FINAL DRAWING SET NUMBER: 10023

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MAGNETOM AERA 1.5T

SPECIFICATIONS

CHILLED WATER SUPPLY

A CHILLED WATER SUPPLY IS REQUIRED TO THE MRI SYSTEM 24 HOURS A DAY, YEAR ROUND FOR THE COLD HEAD AND GRADIENT SYSTEMS. THIS CAN BE PROVIDED BY A CENTRAL CHILLED WATER SUPPLY OR A SEPARATE STAND ALONE CHILLER THAT MEETS THE STATED REQUIREMENTS. THE CHILLED WATER CAN ALSO BE SUPPLIED BY A DEDICATED KRAUS ECO CHILLER AND INTERFACE PANEL.

WITHOUT THE USE OF A DEDICATED KRAUS CHILLER, A SEP (SYSTEM SEPARATOR CABINET), MUST BE INCLUDED WITH THE SIEMENS ORDER. THE PIPE SIZE BETWEEN THE KRAUS CHILLER AND INTERFACE PANEL, OR BETWEEN THE WATER SUPPLY AND SEP MUST BE 2 INCH UP TO 82 FEET, 2-1/2 INCH UP TO 148 FEET, CONSULT FOR LONGER PIPE. PERMISSIBLE MATERIALS THAT CAN BE USED FOR THE PIPING ARE: STAINLESS STEEL (V2A, V4A), NON-FERROUS METAL (COPPER, BRASS), SYNTHETIC MATERIAL, PLASTICS, BRAZING SOLDER, HARD SOLDER, OR FITTING SOLDER TYPE 3 AND 4. THERE ARE MATERIALS THAT MAY CAUSE DAMAGE TO THE COOLING SYSTEM AND CANNOT BE USED, THESE MATERIALS ARE ALUMINUM, IRON, CARBON STEEL, ZINC, ZINC PLATED STEEL, OR STANDARD STEEL PIPES.

THESE REQUIREMENTS ARE REQUIRED FOR NEW INSTALLATIONS, IF EXISTING WATER PIPES COMPLY WITH SIEMENS WATER SPECIFICATIONS, THEY DO NOT NEED TO BE REPLACED.

NORMAL TAP WATER MUST BE AVAILABLE FOR FILLING THE SECONDARY WATER CIRCUIT. THERE SHALL BE A HOSE BIB LOCATED WITHIN 65' OF THE SEP, IFP, ACC OR THE KRAUS CHILLER.

THE SUPPLY AND RETURN CHILLED WATER PIPES MUST BE LABELED. THE LOCATION OF THE LABELS MUST BE AT ALL CONNECTION AND REFILLING POINTS AND MUST CONTAIN FLOW DIRECTION AND CONTENTS.

ENVIRONMENTAL REQUIREMENTS

1) AIR CONDITIONING IS TO PROVIDE A TEMPERATURE OF 70°F ±5°F IN THE EXAM ROOM, 70°F±10°F IN THE EQUIPMENT & CONTROL AREAS, RELATIVE HUMIDITY OF 40-60% (NON-CONDENSING) IS REQUIRED EXAMINATION ROOM AND 40-80% (NON-CONDENSING) IN ALL OTHER AREAS WHERE SIEMENS EQUIPMENT IS INSTALLED. THESE CONDITIONS ARE TO BE MET AT ALL TIMES; 24 HOURS A DAY, 7 DAYS A WEEK.

2) A DEDICATED AIR CONDITIONING AND HUMIDIFICATION SYSTEM IS RECOMMENDED FOR THE EXAM ROOM. A MINIMUM AIR EXCHANGE RATE OF 6 TIMES PER HOUR FOR THE EXAM ROOM IS REQUIRED. IT IS RECOMMENDED TO INSTALL A FRESH AIR SYSTEM WITH 30%-50% FRESH AIR INTAKE.

AIR SUPPLY AND RETURN ABOVE THE FINISHED CEILING IN THE EXAM ROOM IS RECOMMENDED. EACH ROOM SHOULD HAVE A DEDICATED CONTROL AND SENSOR TO MONITOR AND ADJUST THE AIR.

3) THE HEAT INTO THE EXAM ROOM IS LESS THAN 10,236 BTU/HR. THE HEAT INTO THE EQUIPMENT ROOM IS LESS THAN 3,412 BTU/HR. THIS HEAT DISSIPATION IS FROM THE SIEMENS EQUIPMENT ONLY, AUXILIARY SUPPORT EQUIPMENT (ie UPS) AND LIGHTING MUST BE CONSIDERED FOR TOTAL HEAT LOADS.

4) IT IS IMPORTANT FOR FRESH AIR INTAKE SYSTEMS TO EXHAUST AIR DIRECTLY OUT OF THE BUILDING. THE EXHAUST AIR MUST NOT BE DEFLECTED INTO ANOTHER ROOM. THE MAGNET ROOM EXHAUST AIR SHOULD BE INSTALLED AT LEAST 6'-6" ABOVE FINISHED FLOOR.

5) THE AIR INTAKE OF THE AIR CONDITIONING SYSTEM MUST NOT BE LOCATED IN THE VICINITY OF THE QUENCH VENT EXHAUST.

6) IF THE INPUT DRAWS UPON AIR FROM OUTSIDE THE BUILDING, IT IS RECOMMENDED TO INSTALL AN ON-SITE FILTER TO REMOVE DUST PARTICLES GREATER THAN 10 MICRONS.

7) DO NOT LOCATE ANY HVAC DIFFUSERS ABOVE THE MAGNET. THERE SHALL NOT BE AIR BLOWING DIRECTLY ON THE MAGNET.

CHILLED WATER REQUIREMENTS

WATER REQUIREMENTS TO BE MEASURED AT THE SEP CABINET.

FLOW RATE:	23.78-29.05 GPM
WATER TEMPERATURE:	48°F ±4°F
BTU DISCHARGE TO THE WATER	204,729 BTU/HR
WATER PRESSURE	MAXIMUM 87 PSI
LOSS OF PRESSURE FOR SEP CABINET	14.5 PSI MAXIMUM
CHILLED WATER ACIDITY RANGE	6 pH TO 8 pH
CHILLED WATER HARDNESS	<250 ppm CALCIUM CARBONATE
CHLORINE GAS CONCENTRATION	<200 ppm
FILTRATION	500 µm

FOR INSTALLATION OF A KRAUS KSC 215 CHILLER, IT IS THE RESPONSIBILITY OF THE CUSTOMER/MECHANICAL CONTRACTOR TO PROVIDE A MIXTURE OF WATER WITH 35%-38% ETHYLENE GLYCOL PRIOR TO CHILLER START UP. DO NOT USE PROPYLENE GLYCOL OR AUTOMOTIVE ANTI-FREEZE.

THE AMOUNT OF THE MIXTURE MUST FILL THE CHILLER, MR SYSTEM AND PIPING (SUPPLY AND RETURN), SEE EXAMPLES BELOW.

(1) GALLON OF UNDILLUTED GLYCOL, OR (2) GALLONS OF WATER/GLYCOL MIXTURE MUST REMAIN ON SITE FOR USE AFTER START UP.

MIXTURE VOLUME INCLUDING SUPPLY & RETURN+15 GAL. CHILLER & MR

PIPE DIAMETER	TOTAL LENGTH	MIXTURE VOLUME	GLYCOL NEEDED
2"	100'	31.3 GALLONS	11.9 GALLONS
2"	200'	47.6 GALLONS	18.1 GALLONS
2.5"	100'	40.5 GALLONS	15.4 GALLONS
2.5"	200'	66.0 GALLONS	25.1 GALLONS

MIXTURE VOLUME = 3.14 x (PIPE RADIUS)^2 x PIPE LENGTH + 15 GALLONS.
GLYCOL AMOUNT = 35-38% OF MIXTURE VOLUME.

QUENCH VENT NOTES

LIQUID AND GASSEOUS HELIUM ARE USED IN THE OPERATION OF A SUPERCONDUCTING MRI SYSTEM. THE MECHANICAL CONTRACTOR SHALL PROVIDE A VENT, ACCORDING TO SIEMENS SPECIFICATIONS, TO EXHAUST GASSEOUS HELIUM FROM THE MAGNET TO OUTSIDE THE BUILDING. PLEASE SEE THE SIEMENS TYPICAL DRAWINGS FOR DETAILS.

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MAGNETOM AERA 1.5T
SPECIFICATIONS

PROTECTING THE ENVIRONMENT

PROTECTING THE IMMEDIATE ENVIRONMENT FROM THE EFFECT OF THE MAGNETIC FIELD REQUIRES CONSIDERATION. INFORMATION STORED ON MAGNETIC DATA CARRIERS SUCH AS DISKS, TAPES, AND CREDIT CARDS MAY BE ERASED IF IN CLOSE PROXIMITY. CAUTION WITH REGARD TO HEART PACEMAKERS MUST BE EXERCISED. MOST PACEMAKER UNITS EMPLOY A REED RELAY WHICH MAY CHANGE OPERATING MODE WHEN EXPOSED TO AN EXTERNAL MAGNETIC FIELD. THEREFORE, PACEMAKER USERS MUST BE KEPT AT A SPECIFIED DISTANCE FROM THE MAGNET WHICH IS DETERMINED BY THE MAGNETIC FIELD STRENGTH.

PROTECTING THE MAGNETIC FIELD

THE SIEMENS MAGNETOM UTILIZES A SUPERCONDUCTIVE MAGNET WITH AN EXTREMELY HOMOGENEOUS FIELD WITHIN THE MAGNET TO PROVIDE DISTORTION-FREE IMAGING. THE PRESENCE OF FERROMAGNETIC MATERIAL WITHIN THE VICINITY OF THE MAGNET CAN ADVERSELY AFFECT THE UNIFORMITY OF THE USEFUL MAGNETIC FIELD. THIS APPLIES TO STATIONARY FERROUS MATERIAL (STRUCTURAL STEEL) WHICH IS TO BE MINIMIZED. STATIONARY STEEL COMPENSATION MAY BE ACHIEVED BY MAGNET POSITIONING AND SELECTIVE USE OF SHIMS. FIELD DISTORTION ENCOUNTERED BY MOVING FERROMAGNETIC OBJECTS IS MORE DIFFICULT TO COMPENSATE AND MAY REQUIRE THE USE OF MAGNETIC SHIELDING.

MAGNETIC FRINGE FIELDS

MAGNETIC FIELDS MAY AFFECT THE FUNCTION OF DEVICES IN THE VICINITY OF THE MAGNET. THESE DEVICES MUST BE OUTSIDE CERTAIN MAGNETIC FIELDS. THE DISTANCES LISTED ARE FROM THE MAGNET ISOCENTER AND DO NOT CONSIDER ANY MAGNETIC ROOM SHIELDING.

X/Y AND Z AXIS	DEVICES
6'-1" / 9'-2" 3.0mT	SMALL MOTORS, WATCHES, CAMERAS, CREDIT CARDS, MAGNETIC DATA CARRIERS (SHORT-TERM EXPOSURE)
7'-3" / 11'-6" 1.0mT	COMPUTERS, MAGNETIC DISK DRIVES, OSCILLOSCOPES, PROCESSORS
8'-3" / 13'-2" 0.5mT	CARDIAC PACEMAKERS, X-RAY TUBES, INSULIN PUMPS, B/W MONITORS, MAGNETIC DATA CARRIERS (LONG-TERM STORAGE)
9'-9" / 16'-1" 0.2mT	SIEMENS CT SCANNERS
10'-4" / 17'-1" 0.15mT	COLOR MONITORS, SIEMENS LINEAR ACCELERATORS
13'-1" / 22'-3" 0.05mT	X-RAY IMAGE INTENSIFIERS, GAMMA CAMERAS, PET/CYCLOTRON, ELECTRON MICROSCOPES, LINEAR ACCELERATORS

THE OWNER/USER IS TO VERIFY THE LOCATION OF THE 0.5mT FIELD AND ENSURE THAT IT IS MAINTAINED AS A RESTRICTED AREA.

MAGNET SITING REQUIREMENTS

IT MUST BE ENSURED THAT THE MAGNET IS LOCATED SO THAT THE STABILITY AND HOMOGENEITY OF THE MAGNETIC FIELD ARE NOT ADVERSELY AFFECTED BY EXTRANEOUS FIELDS AND STATIC OR DYNAMIC FERROMAGNETIC OBJECTS.

X/Y AND Z AXIS	SOURCE OF INTERFERENCE
3'-6"	STEEL REINFORCEMENT RODS IN FLOOR - MAXIMUM 20 LBS/SQ. FT.
18'-1" / 21'-4"	STRETCHERS UP TO 110 LBS.
13'-1"	A/C CHILLERS
19'-9" / 23'-0"	TRANSPORT DEVICES UP TO 440 LBS.
21'-4 / 26'-3"	VEHICLES UP TO 2,000 LBS.
23'-0" / 31'-3"	ELEVATORS, TRUCKS UP TO 10,000 LBS.
39'-4"/26'-2"	AC TRANSFORMERS LESS THAN 100 KVA
41'-0"/32'-9"	AC TRANSFORMERS LESS THAN 250 KVA
42'-7"/39'-4"	AC TRANSFORMERS LESS THAN 650 KVA
45'-11"/49'-3"	AC TRANSFORMERS LESS THAN 1600 KVA
9'-10"/6'-6"	AC CABLES, MOTORS LESS THAN 100 AMPS
22'-11"/9'-10"	AC CABLES, MOTORS LESS THAN 250 AMPS
131'-2"	ELECTRIC RAILWAY SYSTEMS

FOR IRON OBJECTS LOCATED UP TO 45° FROM THE Z AXIS, THE DISTANCES FOR THE Z AXIS MUST BE USED.
REDUCTION IS POSSIBLE WITH STEEL SHIELDING.

MAXIMUM CABLE LENGTH

THERE ARE 3 DIFFERENT LENGTHS OF CABLE THAT ARE AVAILABLE FOR THE MRI SYSTEM DIFFERENTIATED BY MAXIMUM LENGTHS FROM THE MAGNET TO THE FILTER PANEL (INSIDE) AND FROM THE FILTER PANEL TO THE ELECTRONICS (OUTSIDE).

INSIDE	OUTSIDE
20'	4'
20'	32'
20'	39'

THE VERTICAL DISTANCE FOR CABLE TRAVEL FROM THE FILTER PANEL TO THE CABLE TRAY, AND FROM THE CABLE TRAY TO THE MAGNET MUST BE CONSIDERED.

THE MAXIMUM DISTANCE FROM THE ACC CABINET TO THE CONTROL CONSOLE IS 75 FEET.

SIEMENS

FOR REFERENCE ONLY,
NOT FOR CONSTRUCTION.

MAGNETOM AERA 1.5T

SPECIFICATIONS

RF SHIELDING

THE EXAMINATION AREA MUST BE SHIELDED TO PROVIDE A REDUCTION OF RADIO FREQUENCY WAVES EMANATING FROM EXTERNAL TRANSMITTERS. THE REQUIRED ATTENUATION IS 90dB IN THE FREQUENCY RANGE OF 15–128 MHz. IF CO–SITING TWO SYSTEMS EACH ROOM SHOULD BE 100 dB. THE RF SHIELD MUST BE TESTED BEFORE AND AFTER MAGNET PLACEMENT IN THE RF ROOM AND AFTER THE SIEMENS RF FILTER PANEL IS INSTALLED.

THE RF–SHIELDING MUST BE INSULATED FROM ALL GROUNDS SUCH THAT THE ONLY GROUND IS THE SINGLE POINT GROUND ON THE OUTSIDE OF THE RF–ROOM WALL. RESISTANCE ≥ 100 OHMS.

ALL ELECTRICAL LINES INTO THE RF ROOM MUST BE ROUTED THROUGH RF FILTERS (PROVIDED BY RF SHIELDING SUPPLIER).
ALL ELECTRICALLY NON–CONDUCTIVE SUPPLY LINES (E.G. FIBER OPTIC CABLES, OR HOSES) INTO THE RF ROOM MUST BE ROUTED THROUGH RF SEALED WAVEGUIDES (PROVIDED BY RF SHIELDING SUPPLIER).

FOR PRESSURE EQUALIZATION PURPOSES THE RF DOOR SHOULD OPEN TO THE OUTSIDE OF THE RF ROOM. AS AN ALTERNATIVE A 24"X24" OPENING IN THE RF ROOM FOR PRESSURE EQUALIZATION IS REQUIRED.

BUILDING VIBRATIONS

VIBRATION OF THE SITE HAS THE ABILITY TO AFFECT THE STABILITY AND HOMOGENEITY OF THE MAGNETIC FIELD. THEREFORE EXTERNAL VIBRATIONS OR SHOCKS AFFECTING THE MAGNET MAY DEGRAGE IMAGE QUALITY. IN THE THREE SPATIAL ORITENTATIONS THE BUILDING MUST NOT EXCEED ACCELERATION OF 0.001m/s or −80dB(g) g=9.81 m/s²

THE REQUIREMENT FOR a_{max} IS MEASURED AS MAXIMUM RMS VALUE PER FREQUENCY COMPONENT <0.5Hz IN THE FOURIER TRANSFORMATION OF THE RECORDED SIGNAL (SPECTRUM).
THE VIBRATION LEVEL OF CONTINUOUS VIBRATIONS (CAUSED BY AIR CONDITIONER, COMPRESSOR, ETC.) AT THE LOCATION OF THE MAGNET MUST NOT EXCEED THE SPECIFED VALUES.
FOR ALL NON–CONTINOUS TRANSIENT VIBRATIONS THE FIGURES SHOULD BE MULTIPLIED BY 4 (OR 12dB).

CONTACT SIEMENS PROJECT MANAGER FOR MORE DETAILS.

TRANSPORTING REQUIREMENTS

LARGEST ITEM – MAGNET – 9,566 LBS.

MINIMUM MAGNET DIMENSIONS WITH TRANSPORT WHEELS UNDER MAGNET:

7'–7" HIGH X 7'–7" WIDE X 5'–2" DEEP WITHOUT TABLE SUPPORT, 6'–0" DEEP WITH TABLE SUPPORT.

THE ROOF HATCH/DELIVERY OPENING SHOULD BE 4" LARGER.

TO TRANSPORT THE GPA/EPC CABINET (3,307 POUNDS) A MINIMUM ROOM HEIGHT OF 8'–9" IS REQUIRED, 8'–3" WITH WHEELS REMOVED, 6'–1" WITH WHEELS AND MAINS CONNECTION REMOVED.

Factor 6

FACTOR 6: FINANCIAL FEASIBILITY

LIST OF SCHEDULES FOR FACTOR SIX

SCHEDULE A:	Statement of Revenues and Expenses
*SCHEDULE B:	Statistical/Financial Data - Revenue Producing Cost Centers
SCHEDULE C:	Staffing Patterns
SCHEDULE D:	Estimated Capital Expenditure
SCHEDULE E:	Depreciation Expense
SCHEDULE F:	Proposed Funds for Estimated Capital Expenditure
SCHEDULE F1:	Features of Permanent Financing of Estimated Capital Expenditure
SCHEDULE F2:	Application of Permanent Financing Proceeds
SCHEDULE G:	Fixed Charges Covered
SCHEDULE H:	Revenue by Payer

The purpose of "Factor Six - Financial Feasibility" of the DoN Application is to: (1) collect evidence regarding the ability of the applicant to finance and support the operation of the proposed project; and (2) highlight the probable effects of the project, in cost and statistical terms.

It may be useful as a conceptual aid to think of the schedules that comprise "Factor Six- Financial Feasibility" as sorting into these categories:

1) Schedules A-C - information about the likely impact of the proposed project on operations of the applicant (institution).

2) Schedules D-G - information about the capital cost and the method of financing for the proposed project; and

3) Schedule H - information about the applicant's recent payer mix.

The schedules request the most recent annual historical data plus two sets of three-year projections for single service projects and the most recent three years historical data plus two sets of four-year projections for capital expenditure projects. "P1" is the projection of the likely future course of operations, assuming the project under consideration is approved by the Department. "P2" is the projection of the likely future course of operations, assuming the project under consideration is not approved by the Department.

The first projection year should be the first year following the last actual. The second, third, or fourth year projection should be the point in time when the project reaches normal volume.

The applicant must clearly explain its assumptions about costs (both operating and capital) on separate sheets to be attached to Schedule A.

Factor 6 FINANCIAL FEASIBILITY

Consistency is a key to the fairness and usability of "Factor Six- Financial Feasibility." If assumptions about unit costs, occupancies, or similar items differ between P1 and P2, explain the reasons for these differences on separate sheets. Since it is obvious that the approval or denial of this application will not alter demographic or economic trends in the applicant's area, it is expected that assumptions for P1 and P2 will be uniform for these items. This section uses Schedule A, the operating statement, to link the various other schedules together. This interlocking system will ensure that all comparisons of P1 and P2 will be made using consistent data, which fit smoothly into the broader financial situation of the applicant.

In order to obtain forecasts or financial and statistical impacts, it is necessary to consider the interrelationship of determination of need projects filed by an individual applicant. Therefore, if the applicant's institution has more than one DoN application pending, or expects to file additional applications within one year of the date of this application, please note the application numbers and dates of the pending applications and the nature and scope of expected applications on the "assumptions" sheet attached to Schedule A. "P1" and "P2" projections must assume approval of all pending (rather than anticipated or expected) DoN applications. For example, an institution that has one application pending consideration, by the Department, and which is now filing another application, should:

- note the first application in the assumption section of Schedule A of the new application; and
- assume approval of the first application in both the "P1" and "P2" projections of the new application.

The new application should, in effect, show the combined projections if the first application were, in fact, to be implemented on the applicant's proposed schedule.

On some schedules, hospitals are required to report financial and statistical data according to the specifications of the *Hospital Uniform Reporting Manual.*** Of course, this requirement does not apply to non-hospital applicants.

These schedules will provide necessary information about the probable impacts of determination of need actions on individual applicants. Schedules A, G, and H should be completed for the whole facility and not only for the project's revenue producing cost center(s).

**Hospital Uniform Reporting Manual is available at http://www.mass.gov/chia/docs/p/hospital-reports/hospital-uniform-reporting-manual.pdf.

Factor 6 FINANCIAL FEASIBILITY

Notes:

1. The financial and statistical information requested in Factor Six must be submitted on the schedules provided or on copies thereof.

2. Copies of audited financial statements for the most recent year must be filed with this application.

3. Assumptions used in projecting capital and operating costs, revenues, and demographic factors must be clearly explained on a separate sheet attached to the beginning of Factor 6.

4. Statistical data and projections provided in Factor Two are important for the Factor Six data and projections. Please review both Factor Two and Factor Six carefully to ensure overall consistency between them.

5. It is permissible to round dollar amounts to the nearest thousand, as long as such rounding does not materially affect the results. If you do so, please clearly indicate this on each page on which such rounding is done.

6(a) Use constant dollars for the projection years (that is, do not include inflation). Do not restate actual dollars.

6(b) In general, use the last complete fiscal year as the basis for constant dollars (e.g., an applicant filing May 2014 with a fiscal year ending September 2014 would state project costs in 2014 dollars).

Schedule A: Statement of Revenues and Expenses

The data presented here must tie to later schedules and **should be for the entire institution and not only for the project's cost center**. Explain all variances. Should your institution have another application pending (i.e. accepted and under review by the Determination of Need Program), the projections made in these schedules must assume *approval* of all pending applications.

	(1)	(2)	(3)	(4)
		Actual 2013	Actual 2014	Actual 2015
1	Gross Patient Service Revenue*	1,159,859,000	1,232,545,000	1,259,932,00
2	Less: Contractuals	747,560,000	809,940,000	819,888,000
3	Provision for Doubtful Accounts	7,700,000	8,553,000	8,228,000
4	Free Care	11,574,000	8,889,000	8,885,000
5	Other (Specify)			
6	Net Patient Service Revenue	393,025,000	405,163,000	422,931,000
7				
8	Other Operating Revenue*	17,036,000	15,752,000	15,492,000
9				
10	Net Operating Revenue	410,061,000	420,915,000	438,423,000
11				
12	Operating Expenses			
13a	Salaries, Wages* and Fringe Benefits (Exclude Pension)*	216,034,000	223,338,000	221,630,000
13b	Purchased Services	13,877,000	14,964,000	16,636,000
14	Supplies and Other Expenses	125,505,000	133,356,000	139,774,000
15	Depreciation	22,808,000	23,373,000	25,632,000
16	Interest	5,870,000	5,335,000	4,329,000
17	Pension	8,162,000	8,348,000	8,452,000
18				
19	Total Operating Expenses*	392,256,000	408,714,000	416,453,000
20				
21	Gain (Loss) from Operations	17,805,000	12,201,000	21,970,000
22				
23	Total Non-operating Revenue	970,000	(432,000)	(2,778,000)
24				
25	Excess of Revenues Over Expenses	18,775,000	11,769,000	19,192,000
26				
27				
28				
29				
30				

Note: For a single service project, complete the most recent year actual data and for a capital expenditure project by a hospital complete the most recent three years actual data.

Schedule A: Statement of Revenues and Expenses

		Assuming Project Approval				Assuming Project Denial			
		Projection 2018_(P1)	Projection 2019_(P1)	Projection 2020_(P1)	Projection 2021_(P1)	Projection FY18	Projection FY19	Projection FY20	Projection FY21
1	Gross Patient Service Revenue*	$ 1,378,850,873	$ 1,420,970,237	$ 1,463,798,785	$ 1,507,914,664	$ 1,376,761,715	$ 1,418,064,566	$ 1,460,606,503	$ 1,504,424,698
2	Less: Contractuals	$ 895,913,755	$ 922,791,167	$ 950,474,902	$ 978,989,149	$ 895,913,755	$ 922,791,167	$ 950,474,902	$ 978,989,149
3	Provision for Doubtful Accounts	$ 8,990,958	$ 9,260,686	$ 9,538,507	$ 9,824,662	$ 8,990,958	$ 9,260,686	$ 9,538,507	$ 9,824,662
4	Free Care	$ 9,708,879	$ 10,000,146	$ 10,300,150	$ 10,609,155	$ 9,708,879	$ 10,000,146	$ 10,300,150	$ 10,609,155
5	Other (Specify)								
6	Net Patient Service Revenue	$ 464,237,281	$ 478,918,237	$ 493,485,225	$ 508,491,697	$ 462,148,123	$ 476,012,567	$ 490,292,944	$ 505,001,732
7									
8	Other Operating Revenue*	$ 16,928,526.68	$ 17,436,382.48	$ 17,959,473.96	$ 18,498,258.18	$ 16,928,527	$ 17,436,382	$ 17,959,474	$ 18,498,258
9									
10	Net Operating Revenue	$ 481,165,808	$ 496,354,620	$ 511,444,699	$ 526,989,956	$ 479,076,650	$ 493,448,949	$ 508,252,417	$ 523,499,990
11									
12	Operating Expenses	$ 445,182,327	$ 455,864,187	$ 466,744,057	$ 477,824,661	$ 441,943,255	$ 450,782,120	$ 459,797,763	$ 468,993,718
13	Salaries, Wages* and Fringe Benefits (Exclude Pension)*	$ 236,990,313	$ 241,244,734	$ 246,620,281	$ 252,119,859	$ 235,195,529	$ 239,899,440	$ 244,697,428	$ 249,591,377
13	Purchased Services	$ 17,654,256	$ 18,007,341	$ 18,367,488	$ 18,734,838	$ 17,654,256.29	$ 18,007,341.41	$ 18,367,488.24	$ 18,734,838
14	Supplies and Other Expenses	$ 148,522,512	$ 151,643,252	$ 154,830,914	$ 158,086,975	$ 148,329,286.99	$ 151,295,872.73	$ 154,321,790.19	$ 157,408,226
15	Depreciation	$ 28,841,762	$ 30,230,913	$ 31,647,847	$ 33,093,120	$ 27,200,883.46	$ 27,744,901.13	$ 28,299,799.15	$ 28,865,795
16	Interest	$ 5,204,153	$ 5,589,231	$ 5,945,834	$ 6,271,544	$ 4,593,969.43	$ 4,685,848.82	$ 4,779,565.80	$ 4,875,157
17	Pension	$ 8,969,330	$ 9,148,717	$ 9,331,691	$ 9,518,325	$ 8,969,330.02	$ 9,148,716.62	$ 9,331,690.95	$ 9,518,325
18									
19	Total Operating Expenses*	$ 445,182,327	$ 455,864,187	$ 466,744,057	$ 477,824,661	$ 441,943,255	$ 450,782,120	$ 459,797,763	$ 468,993,718
20									
21	Gain (Loss) from Operations	$ 35,983,481	$ 40,490,433	$ 44,700,643	$ 49,165,295	$ 37,133,394	$ 42,666,829	$ 48,454,655	$ 54,506,272
22									
23	Total Non-operating Revenue	$ (2,614,631.38)	$ (2,562,338.75)	$ (2,511,091.97)	$ 2,460,870.13	$ (2,614,631.38)	$ (2,562,338.75)	$ (2,511,091.97)	$ 2,460,870
24									
25	Excess of Revenues Over Expenses	$ 33,368,850	$ 37,928,094	$ 42,189,551	$ 51,626,165	$ 34,518,763	$ 40,104,490	$ 45,943,563	$ 56,967,142

*For each of these items state on a separate and attached sheet the assumptions you made in arriving at P1 (assuming project approval, columns 5-8) and P2 (assuming project denial, columns 9-12) figures.

Schedule B: Statistical/Financial Data - Revenue Producing Cost Centers

Complete in detail for each revenue producing cost center affected by the project. Data for revenue-producing cost centers not affected by the project should be presented in aggregate under "Other Revenue-Producing Cost Centers". Under Other it is expected that P1 and P2 will be identical. The cost centers and standard units of measure must be those required by *Hospital Uniform Reporting Manual.* (http://www.mass.gov/chia/docs/p/hospital-reports/hospital-uniform-reporting-manual.pdf

	(1) Cost Center	(2) Standard Unit of Measure	(3) Gross Patient Service Revenue	(4) Major Movable Equipment Depreciation
	a	b		
1	2013 Actual (A)	12,427	$57,850,965	
2	2014 (A)	12,607	$57,208,852	
3	2015 (A)	12,937	$60,482,494	
4	2018 (P1)	15,118	$72,092,590	$50,000
5	2019 (P1)	15,610	$75,927,545	$50,000
6	2020 (P1)	15,748	$78,130,757	$50,000
7	2021 (P1)	15,887	$80,396,787	$50,000
8	2022 (P2)	13,855	$66,065,004	
9	2023 (P2)	13,924	$67,726,787	
10	2024 (P2)	13,994	$69,423,653	
11	2025 (P2)	14,064	$71,166,364	
12				
13				
14	20 Actual (A)			
15	20 (A)			
16	20 (A)			
17	20 (P1)			
18	20 (P1)			
19	20 (P1)			
20	20 (P1)			
21	20 (P2)			
22	20 (P2)			
23	20 (P2)			
24	20 (P2)			
25				
26				
27	20 Actual (A)			
28	20 (A)			
29	20 (A)			
30	20 (P1)			
31	20 (P1)			
32	20 (P1)			
33	20 (P1)			
34	20 (P2)			
35	20 (P2)			
36	20 (P2)			
37	20 (P2)			
38				

[a] On this line state the name of the cost center (Column 1)
[b] On this line indicate the standard unit of measure (column 2) and number of units for Actual, P_1 and P_2

Note: Use copies of this sheet for additional cost centers

Schedule B: Statistical/Financial Data - Revenue Producing Cost Centers, continued

	(5) Cost Center	(6) Physician Compensation & Benefits*	Direct Expenses Excluding Physician Compensation & Benefits & MME Depreciation	(7) Total Direct Expenses (Cols. 4+5+6)	(8) Allocated Expenses	(9) Total Expenses (Cols. 7+8)
	a					
1	2013 MRI	$0	$2,180,361		$0	$2,180,361
2	2014 (A)	$0	$2,339,577		$0	$2,339,577
3	2015 (A)	$0	$2,339,577		$0	$2,339,577
4	2016	$0	$2,418,325		$0	$2,418,325
5	2017 (P1)	$0	$3,815,290	$3,865,290	$0	$3,865,290
6	2018 (P1)	$0	$3,866,226	$3,916,226	$0	$3,916,226
7	2019 (P1)	$0	$3,526,166	$3,576,166	$0	$3,576,166
8	2020 (P1)	$0	$3,612,987	$3,662,987	$0	$3,662,987
9	2021 (P2)	$0	$3,701,687	$3,751,687	$0	$3,751,687
10	2022 (P2)	$0	$3,792,308	$3,842,308	$0	$3,842,308
11	2023 (P2)	$0	$3,884,911	$3,934,911	$0	$3,934,911
12	2024	$0	$3,979,527	$4,029,527	$0	$4,029,527
13						
14	20 Actual (A)					
15	20 (A)					
16	20 (A)					
17	20 (P1)					
18	20 (P1)					
19	20 (P1)					
20	20 (P1)					
21	20 (P2)					
22	20 (P2)					
23	20 (P2)					
24	20 (P2)					
25						
26						
27	20 Actual (A)					
28	20 (A)					
29	20 (A)					
30	20 (P1)					
31	20 (P1)					
32	20 (P1)					
33	20 (P1)					
34	20 (P2)					
35	20 (P2)					
36	20 (P2)					
37	20 (P2)					
38						

* Include in this column fringe benefits.
Note: The difference between P_1 and P_2 Schedule A, Line 19 "Total Operating Expenses" must tie to the difference between P_1 and P_2 " Schedule B, Column 9, "Total Expenses"

Schedule B: Statistical/Financial Data - Revenue Producing Cost Centers, continued

Not Applicable

	(10) Cost Center	(11) Standard Unit of Measure	(12) Gross Patient Service Revenue	(13) Major Movable Equipment Depreciation
	a	b		
1	20 Actual (A)			
2	20 (A)			
3	20 (A)			
4	20 (P1)			
5	20 (P1)			
6	20 (P1)			
7	20 (P1)			
8	20 (P2)			
9	20 (P2)			
10	20 (P2)			
11	20 (P2)			
12				
13	Other Revenue Producing Cost Centers			
14	20 Actual (A)			
15	20 (A)			
16	20 (A)			
17	20 (P1)			
18	20 (P1)			
19	20 (P1)			
20	20 (P1)			
21	20 (P2)			
22	20 (P2)			
23	20 (P2)			
24	20 (P2)			
25				
26	Total Revenue Producing Cost Centers			
27	20 Actual (A)			
28	20 (A)			
29	20 (A)			
30	20 (P1)			
31	20 (P1)			
32	20 (P1)			
33	20 (P1)			
34	20 (P2)			
35	20 (P2)			
36	20 (P2)			
37	20 (P2)			
38				
39				
40				

[a] On this line state the name of the cost center, Column 10.

[b] On this line indicate the standard unit of measure, Column 11, and number of units for Actual, P_1 and P_2

Schedule C: Staffing Patterns

Complete in detail the staffing level of the service(s) that will be affected by the proposed project.

	(1)	(2)	(3)	(4)
		Number of FTEs*		
		2017[a] Actual Year	2018[b] P1 Year	2018[b] P2 Year
1	Service (specify):			
2	Personnel category			
3	Administrative	7	7	7
4	Technologists	11	16.6	11
5				
6				
7				
8	Service (specify):			
9	Personnel category			
10				
11				
12				
13				
14				
15	Service (specify):			
16	Personnel category			
17				
18				
19				
20				
21				
22	Service (specify):			
23	Personnel category			
24				
25				
26				
27				
28				
29	Service (specify):			
30	Personnel category			
31				
32				
33				
34				
35				
36	Service (specify):			
37	Personnel category			
38				
39				
40				
41				
42				
43	All Personnel	18	23.6	18

*A FTE is a full-time equivalent employee. See the *Hospital Uniform Reporting Manual* for the computation of full-time equivalent.

[a] For the fiscal year most recently completed.

[b] The year when normal operating volume is achieved.

Schedule D: Estimated Capital Expenditure

Outlined below is a comprehensive list of all components of Estimated Capital Expenditures. Capital Expenditure as defined in the Regulations includes the site acquisition cost of land and buildings or **fair market value of land and buildings if leased (capital or operating) or donated**, the total cost of construction including all site improvements, the cost of all capital equipment or **fair market value if leased (capital or operating) or donated**, the cost of all professional fees associated with the development of the project, including fees for architectural, engineering, legal, accounting, feasibility, planning and financing services, any fee associated with financing including any bond discount, and the interest cost to be incurred on funds borrowed during construction (but not including the on-going interest expense of permanent financing).

The estimate to be computed below must be based on costs and interest rates, which assume commencement and/or implementation of the project as of the date of application; therefore, the estimate should *not* include inflation up to the *anticipated actual* commencement and/or implementation date. (Where appropriate, an inflationary allowance is applied later during the DoN Staff's monitoring of the approved project.)

Because the inflation allowance is an important factor in large, costly construction projects, prospective applicants for such projects should consult the DoN Office for technical advice regarding completion of Schedule D. Do not include a special provision for contingency.

	(1) Category of Expenditure	(2) New Construction	(3) Renovation
1	Land Costs:	$0	$0
2	Land Acquisition Cost	$0	$0
3	Site Survey and Soil Investigation	$0	$0
4	Other Non-Depreciable Land Development [a]	$0	$0
5	Total Land Costs (Lines 2 through 4)	$0	$0
6	Construction Costs:		
7	Depreciable Land Development Cost [b]		$0
8	Building Acquisition Cost		$0
9	Construction Contract (including bonding cost)	$1,614,240	$1,739,374
10	Fixed Equipment Not in Contract	$2,684,729	
11	Architectural Cost (including fee, printing, supervision etc.) and Engineering Cost	$181,081	$195,119
12	Pre-filing Planning and Development Costs	$27,927	$30,092
13	Post-filing Planning and Development Costs		$0
14	Other (specify):		$0
15	Other (specify):		$0
16	Net Interest Expense During Construction [c]		
17	Major Movable Equipment [d]		
18	Total Construction Costs (Lines 7 through 17)		
19	Financing Costs:		
20	Cost of Securing Financing (legal, administrative, feasibility studies, mortgage insurance, printing, etc.)		$0
21	Bond Discount		$0
22	Other (specify):		$0
23	Total Financing Costs (Lines 20 through 22)		$0
24	Estimated Total Capital Expenditure (Line 5 + Line 18 + Line 23)	$4,507,977	$1,964,585

Footnotes:

a. *Examples of Other Non-Depreciable Land Development Costs:* commissions to agents for purchase of land, attorney fees related to land, demolition of old buildings, clearing and grading, streets, removal of ledge, off-site sewer and water lines, public utility charges necessary to service the land, zoning requirements, and toxic waste removal.

b. *Examples of Depreciable Land Development Costs*: construction of parking lots, walkways and walls; on-site septic systems; on-site water and sewer lines; and reasonable and necessary landscaping.

c. *Describe assumptions used in calculating interest rates and costs.*

d. *Acute care hospitals need not include equipment expenditure unless for DoN regulated device* (see 105 CMR 100.022, definition of Expenditure Minimum).

Schedule E: Depreciation Expense

Complete for project's estimated capital expenditure (including the fair market value for capital lease), which will be depreciated. For a given category and cost center show in aggregate the data for assets with the same useful lives. Include in the basis the asset's appropriate share of construction interest and professional fees. Use the estimates from Schedule D.

	(1)	(2)	(3)	(4)
	Description of Asset	Basis for Depreciation	Useful Life	Annual Depreciation Expense
1	Building: Addition to Hospital campus	$1,823,248	10 years	$182,325
2				
3				
4				
5				
6				
7	Land Improvements:	$0		$0
8				
9				
10				
11				
12				
13	Building Improvements:	$1,964,585	10 years	$196,459
14				
15				
16				
17				
18				
19	Parking Facilities:	$0		$0
20				
21				
22				
23				
24				
25	Fixed Equipment:	$2,684,729	7 years	$383,533
26				
27				
28				
29				
30				
31	Major Movable Equipment:	$350,000	7 years	$50,000
32				
33				
34				
35				
36				
37	Total	$6,822,562		$812,316

Note: For simplicity assume first year of depreciation is a full year depreciation not one half year of depreciation. Also, if project is to be gradually phased in do not adjust for such phasing unless it significantly affects this Schedule. Explain such adjustments.

Schedule F: Proposed Funds for Estimated Capital Expenditure

Show only those funds, which are intended to finance the estimated capital expenditure.

	(1)	(2)
	Funds Available as of Application Filing Date:	
1	Plant Replacement and Expansion Fund	$
2	Unrestricted Fund	$6,822,562
3	Endowment Fund	
4	Specific Purpose Fund	
5	Other (specify):	
6	Subtotal	
		$6,822,562
	Funds to be Generated/Raised:	
	Internal Sources:	
7	Accumulated Gain from Operations	
8	Accumulated Non-operating Revenue [a]	
9	External Sources: Long Term Debt Proceeds [b] (available_____/_____) [c] month year	$0
10	Grants (available_____/_____) month year	$0
11	Unrestricted Gifts/ Bequests (available_____/_____) month year	$0
12	Plant Fund Drive (available_____/_____) month year	$0
13	Capital Lease (terms)_____/_____ rate years	$0
14	Subtotal	$0
15	**Total Funds** (Line 6 - Line 14)	$6,822,562

[a] Exclude unrestricted gifts and bequests. Show these on Line 11.
[b] Complete Schedule F1.
[c] Provide date when total amount will be available.

Schedule F1: Features of Permanent Financing of Estimated Capital Expenditure [a]

NOT APPLICABLE

1. a) Loan principal_____b) Interest rate_____c) Term_____yrs.

2. Does the proposed debt service require even periodic payments, which include interest and principal?
   [ ] Yes [ ] No

   If *No*, attach a separate sheet outlining the required schedule of payments of interest and principal over the term of the loan.

3. Check anticipated source of permanent financing.[b]
   [ ] Lending Institution (specify)_____
   [ ] Massachusetts Health and Educational Facilities Authority
   [ ] Federal Housing and Urban Development Administration Insured Mortgage
   [ ] Public or Private Sale Bonds
   [ ] Other (specify) _____

4. Check anticipated debt instrument.
   [ ] Mortgage
   [ ] Mortgage Bonds
   [ ] Notes
   [ ] Taxable Bonds
   [ ] Tax-exempt Bonds
   [ ] Bond Anticipation Note
   [ ] Other (specify) _____

5. Specify the loan covenants (such as required sinking fund payments, and compensating balances) associated with the proposed financing.

   _____
   _____
   _____
   _____

6. Indicate specific extent of mortgagee's proposed collateral interest in real property, gross receipts, etc.

   _____
   _____
   _____
   _____

7. Will the proposed long term loan refinance a construction loan? [ ] Yes [ ] No

8. If *Yes*, complete the following:
   a) Source of construction loan_____
   b) Maximum principal outstanding_____
   c) Terms of interest rate_____

9. Anticipated date for the delivery of the long-term loan proceeds_____

[a] If appropriate complete for internal as well as external loans.

[b] If uncertain, use "1", "2", etc. to indicate order of likelihood. Explain effect on cost in going from source number 1 to source number 2, etc.

Complete question 8 only if the project includes refinancing of existing debt

Schedule F2: Application of Permanent Financing Proceeds

Not Applicable

Complete only for the estimated capital expenditures of projects requiring debt financing.

	(1)	(2)
1	Total Estimated Land and Construction Costs (from Schedule D, Columns 2 and 3, Line 5 + Line 18)	$
2	Debt Service Fund Requirement	
3	Total Financing Costs (from Schedule D, Columns 2 and 3, Line 23)	
4	Refinancing of Existing Debt	
5	Other (specify):	
6	Other (specify):	
7	Subtotal	
8	Less:	
9	Project Costs met by Internal Sources (from Schedule F, Column 2, Lines 6 + 7 + 8)	
10	Interest Income Earned During Construction	
11	Premium on Sale of Bonds	
12	Project Costs Met by External Sources Other than Debt (from Schedule F, Column 2, Lines 10 + 11 + 12)	
13	Total Deductions (Lines 9+10 + 11 + 12)	
14	Loan Principal Required (Line 7 - Line 13)	$

Schedule G: Fixed Charges Covered

NOT APPLICABLE

Complete for the entire institution if the estimated capital expenditure for the project requires debt financing, including capital lease.

	(1)	(2)	(3)	(4)
		Actual 20	Actual 20	Actual 20
1	Gain (Loss) from Operations [a]			
2	Add: Interest Expense [a]			
3	Depreciation Expense [a]			
4	Lease Payments			
5	Cash from Operations Available for Debt Service (Lines 1 + 2 + 3 + 4)			
6	Debt Service Required:			
7	Interest on Long Term Debt (LTD)			
8	Interest on Certain Short Term Debt [b]			
9	Principal Payments – LTD			
10	Reduction in Short Term Debt [b]			
11	Lease Payments			
12	Net Sinking Fund Payment [c]			
13	Total Debt Service Required (Lines 7 + 8 + 9 + 10 + 11 + 12)			
14	Ratio: Fixed Charges Covered (Line 5 ÷ Line 13)			

[a] Must tie to Schedule A data. Explain any variances.

[b] Include only short-term debt that will be rolled over or refinanced with long-term debt and any interest expense on inter-fund loans.

[c] Required payment to sinking fund less payment from sinking fund.

Schedule G: Fixed Charges Covered, continued

Complete for the entire institution if the estimated capital expenditures for the project requires debt financing, including capital lease.

	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
	Assuming Project Approval				Assuming Project Denial			
	Projection 20___(P1)	Projection 20___(P1)	Projection 20____(P1)	Projection 20____(P1)	Projection 20___(P2)	Projection 20___(P2)	Projection 20___(P2)	Projection 20___(P2)
1								
2								
3								
4								
5								
6								
7								
8								
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16								
17								
18								
19								

Schedule H: Revenue by Payer

Complete for the entire institution: Actual for the two fiscal years most recently completed and Projected (P1 and P2) for first full year of proposed project operation.

	(1)		(2)	(3)	(4)
			Routine Inpatient		
		Payer	Total Patient Days	Gross Patient Service Revenue	Net Patient Service Revenue
1	**2014**	**Actual (A)**			
2		Medicare	28,273	190,468,000	62,866,000
3		MA Medicaid	6,615	31,283,000	7,845,000
4		Other Government	2,223	12,322,000	4,977,000
5		Private Insurers	39,554	184,723,000	103,700,000
6		Self Pay	439	2,717,000	1,377,000
7		Other	603	6,007,000	1,412,000
8		TOTAL	77,707	427,520,000	182,177,000
9					
10					
11	**2015**				
12		Medicare	34,052	197,438,000	69,302,000
13		MA Medicaid	6,442	33,042,000	7,806,000
14		Other Government	1,593	8,048,000	4,293,000
15		Private Insurers	31,157	174,977,000	115,363,000
16		Self Pay	867	2,012,000	429,000
17		Other	649	5,035,000	1,481,000
18		TOTAL	74,760	420,552,000	198,674,000
19					
20					
21	**2018**	**Projected (P1)**			
22		Medicare	32,688	202,087,870	66,770,340
23		MA Medicaid	4,335	26,868,600	7,203,840
24		Other Government	1,530	6,507,000	3,541,720
25		Private Insurers	27,487	172,287,720	112,635,270
26		Self Pay	2,252	1,357,100	412,580
27		Other	249	2,112,500	621,400
28		TOTAL	68,541	411,220,790	191,185,150
29					
30					
31	**2018**	**Projected (P2)**			
32		Medicare	32,688	202,087,870	66,770,340
33		MA Medicaid	4,335	26,868,600	7,203,840
34		Other Government	1,530	6,507,000	3,541,720
35		Private Insurers	27,487	172,287,720	112,635,270
36		Self Pay	2,252	1,357,100	412,580
37		Other	249	2,112,500	621,400
38		TOTAL	68,541	411,220,790	191,185,150
39					
40					
41					
42					
43					
44					
45					
46					
47					
48					

Factor 7

FACTOR 7: RELATIVE MERIT

7.1 Please describe below and on additional sheet (if necessary) any alternatives that you have considered in the development of this project. Please also give your reasons for rejecting these alternatives.

The Applicant considered a variety of alternatives to this Project. As described in Factor 1, the Applicant conducted an extensive planning process related to addressing its need for expanded capacity of its MRI service. This evaluation occurred over the past year, during which time the volume of patients in need of services continued to increase. Among these alternatives, the Applicant evaluated the possibility of not seeking DoN approval for the proposed Project, expanding hours of operation, and acquisition of a third MRI unit through the proposed Project. Each option was considered based on its potential to provide patients with timely access to high quality services in a cost-effective manner. After a thorough review of each option, the Applicant determined that the acquisition of a third MRI unit represented the optimal means of addressing patient access issues at the Hospital.

First, the Applicant considered not seeking DoN approval for the proposed Project and continuing to operate the existing service with two (2) units. However, given increased patient volume over the past year, maintaining the status quo will exacerbate already long wait times for patients requiring MRI diagnostic services impacting timely diagnosis and treatment. Accordingly, the Applicant concluded that it can no longer meet demand on its two (2) MRI units.

Next, the Applicant explored increasing the hours of operation for its two (2) MRI units. Currently, the Hospital's MRI service operates sixteen and a half (16.5) hours per day on weekdays and twelve and a half (12.5) hours per day on weekends. As the service already performs scans at extended hours, the Hospital determined that an increase in service hours may be detrimental to patients, staff and the equipment. Expanding hours of operation would mean that patients may be coming very early in the morning or late into the evening, which is less than optimal for patients. Additionally, an expansion of hours or days would mean increased hours for staff and increased operation of the two existing machines, which are taxed by the high number of treatments performed annually. Based on physician feedback and considering patient preference and the need to preserve existing units for long-term use, the Applicant determined this was not a reasonable or cost-effective option.

After rejecting these alternatives, the Applicant determined that an expansion of its MRI services through the implementation of a third MRI unit was the superior alternative. This option will provide for increased access to timely quality MRI services for patients as the acquisition of a third unit will preserve the existing units and address increased demand. Consequently, the Applicant decided to pursue approval for a third MRI unit for its MRI service.

Factor 8

FACTOR 8: ENVIRONMENTAL IMPACT

I. Compliance with Massachusetts Environmental Protection Act ("MEPA")

The Massachusetts Environmental Protection Act or "MEPA" (M.G.L. c. 30 §§ 61, 62-62H) requires that state agencies take into account the environmental consequences of their actions. The issuance of a Determination of Need by the Department of Public Health is a state action subject to MEPA. MEPA regulations (301 CMR 11.00 et seq.) require environmental review of all DoN applications for projects exceeding the review thresholds set forth at 301 CMR 11.03.

DoN Applicants should familiarize themselves with the MEPA review thresholds to determine whether MEPA review will be required. MEPA regulations may be viewed online at http://www.env.state.ma.us/mepa/regs/11-03.aspx and may be obtained through the State House Bookstore (http://www.sec.state.ma.us/spr/sprcat/catidx.htm). Review thresholds are divided into the following categories:

(1) Land.
(2) State-listed Species under M.G.L. c. 131A
(3) Wetlands, Waterways and Tidelands.
(4) Water.
(5) Wastewater.
(6) Transportation.
(7) Energy.
(8) Air.
(9) Solid and Hazardous Waste.
(10) Historical and Archaeological Resources.
(11) Areas of Critical Environmental Concern.
(12) Regulations.

Projects that are subject to MEPA review must circulate and file an Environmental Notification Form (ENF). A 20-day comment period ensues from publication of the ENF in the MEPA Monitor (appears bi-weekly). The proposal and site plans are reviewed, and within a total of 30 days from publication, a decision will be made on whether an environmental impact report (EIR) is required.

If an EIR is required, a "scope" will be issued, identifying items which the EIR must address. Draft and Final EIR's each go through a 37-day review and comment period.

Certain projects that exceed specified size thresholds (301 CMR 11.03) require a mandatory EIR. The MEPA regulations allow the Secretary of Environmental Affairs to waive a mandatory EIR, or to allow a single EIR, following review of an expanded ENF. See 301 CMR 11.05(7), 11.06(8) and 11.11, and consult with the MEPA Office to discuss whether this approach would be appropriate.

Applicants are advised to consult with the MEPA Office to determine if an Environmental Notification Form must be filed for a DoN project. Address all inquiries to:

MEPA Office
Executive Office of Energy and Environmental Affairs
100 Cambridge Street, Suite 900, 9th Floor
Boston, MA 02114
Tel: (617) 626-9031

Please note that final approval of a DoN as well as architectural plans and specifications for a project is contingent upon compliance with MEPA regulations.

Every Applicant for Determination of Need is required to certify compliance with MEPA regulations by completing section the form provided in Section 8.1 of this Application Kit.

8.1 Certification of MEPA Compliance

After careful review of the MEPA regulations (301 CMR 11.00 et seq.) in effect at the time of filing this application for Determination of Need, the status of the project as proposed relative to MEPA requirements is as follows:

[Please check one of the following boxes]

☒ The proposed project neither meets nor exceeds any of the thresholds for MEPA review.

☐ The proposed project meets one or more of the MEPA review thresholds and an Environmental Notification Form (ENF) was filed on__/____/__. A copy of the ENF is attached to the DoN application. (*mm dd yyyy*)

☐ The proposed project meets one or more of the MEPA review thresholds requiring both an Environmental Notification Form (ENF) and a mandatory Environmental Impact Report (EIR). A completed EIR was submitted to MEPA on____/____/_____and a copy of the EIR is submitted with this DoN application. (mm dd yyyy)

Name of DoN Applicant: **Newton Wellesley Hospital**

Brief Description of DoN Project: **Please see attached MEPA applicability memo**

Signature and Printed Name of Authorized Official:

(*Signature*)

Sean M. Mannion

(*Printed Name*)

Title: Principal

Date: 9/13/2016 (mm dd yyyy)

Factor 8: DoN GREEN GUIDELINES

II. Compliance with Determination of Need Guidelines for Environmental and Human Health Impact

Effective January 1, 2009 for hospitals and clinics and July 1, 2009 for long term care facilities, all Determination of Need applications involving new construction and/or gut renovation projects are required to demonstrate compliance with the Determination of Need Guidelines for Environmental and Human Health Impact ("DoN Green Guidelines"). Gut renovation is defined as construction within an existing building that requires complete demolition of all non-structural building components (After demolition, only the floor, deck above, outside walls, and structural columns would remain).

Compliance requires achievement of all of the prerequisites and at least 50% of all the possible points for the Leadership in Energy and Environmental Design – Health Care ("LEED-HC") or, with the Department's approval, its current equivalent nationally-accepted best practice standard.

Documentation of compliance with DoN Green Guidelines must be included in the submission of DoN Factor 8.

8.2 In this section, provide complete documentation of how the project, upon its implementation, will achieve compliance with the Determination of Need Guidelines for Environmental and Human Health Impact ("DoN Green Guidelines"). A completed project scorecard based upon the most current version of LEED-HC or its equivalent, as approved by the DoN Program prior to application submission, should accompany a description of the plans for compliance.

The Applicant has pre-selected an architectural firm for this project – TRO Boston. TRO Boston is an architecture, engineering and interior design firm with extensive experience in designing and renovating healthcare facilities. For this Project, TRO Boston will manage the Green Guidelines compliance portion of the Project and work closely with the construction team on minimizing the impact to the environment. The team is committed to working collaboratively with consultants to create a project that will be environmentally responsible, energy efficient and sustainable.

The Green Guidelines apply to this Project based on needed renovations for the implementation of a third MRI unit. Accordingly, this Project will be registered with the Green Guide for Health Care ("GGHC") and will complete at least the required minimum of 50% of the total credits. Moreover, this Project contemplates using the self-certification process. The initial evaluation of the GGHC's credits, with respect to the design of the affected portions of the Project, is reflected in the attached GGHC checklist. The areas of the Project where the majority of credits will be focused are in Materials and Resources, Environmental Quality and Sustainable Sites. The use of sustainable materials, as well as the reuse of the existing building and its materials will be a primary focus. The Applicant also expects to maximize sustainable construction practices in a way that will maintain the building site and create less waste. As previously stated, the Project team will complete the minimum threshold of 50% of possible credits. The attached GGHC checklist indicates the identified credits that the Applicant anticipates are achievable.

Please find attached at Exhibit A, a copy of the Applicant's GGHC checklist.

Attachment/Exhibit

A

Project architects, project managers and/or hospital facilities staff have ready access to the GGHC, the USGBC LEED-HC, and similar documents. In many cases a green team or individual routinely use these documents for investigating options and tracking progress in addressing green and healthy project goals. Pursuant to the DoN guidelines for environmental and human health impact, an applicant shall utilize Leadership in Energy and Environmental Design-Health Care (LEED-HC), the Construction section of the Green Guide for Healthcare listed below (or with the approval of the Department the equivalent current nationally accepted best practice standard) in all DoN applications as one of their Factor 8 Environmental Impact requirements.

Applicants shall submit to the Department as part of their DoN application a provisional green and healthy building strategy assessment (as referenced in LEED-HC, GGHC or other Department approved equivalent current nationally accepted best practice standard) based on the most current plans for the project to indicate the likely strategies to be employed to meet the applicable percentage threshold. Applicants will then submit a completed certifiable green and healthy strategy credit point assessment as part of the plan review. DoN application approval will consider but not be contingent upon the information included in the provisional assessment, and plan review approval will be contingent on the final credit assessment meeting the applicable percentage threshold.

To avoid the common failings of a "checklist" approach to design and DoN guidelines, and to achieve optimum public health and environmental benefits from these strategy assessments, the Department recommends the use of American National Standards Institute, ANSI/MTS (2007) 1.0 *Whole Systems Integrated Process Guide (WSIP)-2007 for Sustainable Buildings & Communities* or other Department approved, equivalent current nationally accepted best practice standard.

The purpose of the form below is to better enable the healthcare institution to protect the public health in the design, development, construction and operation of its facilities, and to provide a nationally accepted methodology as a framework for interactions between applicants and the Department.

Construction

Achievable	Percent Likely or Unknown*	Not Achievable	Not Applicable	

For provisional strategy assessment in DoN applications, applicants are encouraged to estimate the percent likelihood of adoption on credits for which there is significant uncertainty. Such provisional estimates will be used strictly as indicators of intent and/or areas requiring additional design work. If such an estimate is not practical, insert "U" for "Unknown" in the second column. For certifiable plan review approval, the "Percent Likely or Unknown" column cannot be used.

Integrated Design

Y				Prereq 1	Integrated Design Process
Y				Prereq 2	Health Mission Statement & Program

Sustainable Sites

Y				Prereq 1	Construction Activity Pollution Prevention
Y				Credit 1	Site Selection
Y				Credit 2	Development Density & Community Connectivity
			NA	Credit 3.1	Brownfield Redevelopment: Basic Remediation Level
			NA	Credit 3.2	Brownfield Redevelopment: Residential Remediation Level

			NA	Credit 3.3	Brownfield Redevelopment: Minimizing Future Hazards
Y				Credit 4.1	Alternative Transportation: Public Transportation Access
Y				Credit 4.2	Alternative Transportation: Bicycle Storage & Changing Rooms
Y				Credit 4.3	Alternative Transportation: Low-Emitting & Fuel Efficient Vehicles
Y				Credit 4.4	Alternative Transportation: Parking Capacity
		N		Credit 5.1	Site Development: Protect or Restore Open Space or Habitat
Y				Credit 5.2	Site Development: Reduce Development Footprint
		N		Credit 5.3	Site Development: Structured Parking
		N		Credit 6.1	Stormwater Design: Quantity Control
		N		Credit 6.2	Stormwater Design: Quality Control
Y				Credit 7.1	Heat Island Effect: Non-Roof
Y				Credit 7.2	Heat Island Effect: Roof
		N		Credit 8	Light Pollution Reduction
		N		Credit 9.1	Connection to the Natural World: Outdoor Places of Respite
		N		Credit 9.2	Connection to the Natural World: Exterior Access for Patients
		N		Credit 10.1	Community Contaminant Prevention: Airborne Releases
		N		Credit 10.2	Community Contaminant Prevention: Leaks & Spills

Water Efficiency

Y				Prereq 1	Potable Water Use for Medical Equipment Cooling
		N	NA	Credit 1	Water Efficient Landscaping: No Potable Water Use or No Irrigation
		N		Credit 2.1	Potable Water Use Reduction: Measurement & Verification
		N		Credit 2.2	Potable Water Use Reduction: Domestic Water
		N		Credit 2.3	Potable Water Use Reduction: Domestic Water
Y		N		Credit 2.4	Potable Water Use Reduction: Process Water & Building System Equipment
Y		N		Credit 2.5	Potable Water Use Reduction: Process Water & Building System Equipment

Energy & Atmosphere

Y				Prereq 1	Fundamental Commissioning of the Building Energy Systems
Y				Prereq 2	Minimum Energy Performance
Y				Prereq 3	Fundamental Refrigerant Management
Y				Credit 1.1	Optimize Energy Performance: 3.5%/10.5%
Y				Credit 1.2	Optimize Energy Performance: 7%/14%
Y				Credit 1.3	Optimize Energy Performance: 10.5%/17.5%
		N		Credit 1.4	Optimize Energy Performance: 14%/21%
		N		Credit 1.5	Optimize Energy Performance: 17.5%/24.5%
		N		Credit 1.6	Optimize Energy Performance: 21%/28%
		N		Credit 1.7	Optimize Energy Performance: 24.5%/31.5%
		N		Credit 1.8	Optimize Energy Performance: 28%/35%
		N		Credit 1.9	Optimize Energy Performance: 31.5%/50.5%
		N		Credit 1.10	Optimize Energy Performance: 35%/42%
		N		Credit 2.1	
		N		Credit 2.2	

		N		Credit 2.3	
		N		Credit 3	Enhanced Commissioning
Y				Credit 4	Enhanced Refrigerant Management
		N		Credit 5	Measurement & Verification
			NA	Credit 6.1	Green Power: 20%
			NA	Credit 6.2	Green Power: 50%
			NA	Credit 6.3	Green Power: 80%
			NA	Credit 6.4	Green Power: 100%
Y				Credit 7	Equipment Efficiency

Materials & Resources

Y				Prereq 1	Storage & Collection of Recyclables
Y				Prereq 2	Mercury Elimination
Y				Credit 1.1	Building Reuse: Maintain 40% of Existing Walls, Floors & Roof
Y				Credit 1.2	Building Reuse: Maintain 80% of Existing Walls, Floors & Roof
Y				Credit 1.3	Building Reuse: Maintain 50% of Interior Non-Structural Elements
Y				Credit 2.1	Construction Waste Management: Divert 50% from Disposal
		N		Credit 2.2	Construction Waste Management: Divert 75% from Disposal
		N		Credit 2.3	Construction Practices: Site & Materials Management
		N		Credit 2.4	Construction Practices: Utility & Emissions Control
Y				Credit 3.1	Sustainably Sourced Materials: 10%
Y				Credit 3.2	Sustainably Sourced Materials: 20%
		N		Credit 3.3	Sustainably Sourced Materials: 30%
		N		Credit 3.4	Sustainably Sourced Materials: 40%
		N		Credit 3.5	Sustainably Sourced Materials: 50%
Y				Credit 4.1	PBT Elimination: Dioxins
Y				Credit 4.2	PBT Elimination: Mercury
Y				Credit 4.3	PBT Elimination: Lead & Cadmium
Y				Credit 5.1	Furniture & Medical Furnishings: Resource Reuse
		N		Credit 5.2	Furniture & Medical Furnishings: Materials
		N		Credit 5.3	Furniture & Medical Furnishings: Manufacturing, Transportation & Recycling
		N		Credit 6	Copper Reduction
		N		Credit 7.1	Resource Use: Design for Flexibility
Y				Credit 7.2	Resource Use: Design for Durability

Environmental Quality

Y				Prereq 1	Minimum IAQ Performance
Y				Prereq 2	Environmental Tobacco Smoke Control (ETS)
Y				Prereq 3	Hazardous Material Removal or Encapsulation
Y				Credit 1	Outdoor Air Delivery Monitoring
		N		Credit 2	Natural Ventilation
		N		Credit 3.1	Construction EQ Management Plan: During Construction
		N		Credit 3.2	Construction EQ Management Plan: Before Occupancy
Y				Credit 4.1	Low-Emitting Materials: Interior Adhesives & Sealants
Y				Credit 4.2	Low-Emitting Materials: Wall & Ceiling Finishes
Y				Credit 4.3	Low-Emitting Materials: Flooring Systems

Y				Credit 4.4	Low-Emitting Materials: Composite Wood & Insulation
		N		Credit 4.5	Low-Emitting Materials: Furniture & Medical Furnishings
Y				Credit 4.6	Low-Emitting Materials: Exterior Applied Products
		N		Credit 5.1	Chemical & Pollutant Source Control: Outdoor
		N		Credit 5.2	Chemical & Pollutant Source Control: Indoor
Y				Credit 6.1	Controllability of Systems: Lighting
Y				Credit 6.2	Controllability of Systems: Thermal Comfort
			NA	Credit 7	Thermal Comfort
			NA	Credit 8.1a	Daylight & Views: Daylight for Occupied Spaces: 6% above 'square-root base' daylit area
			NA	Credit 8.1b	Daylight & Views: Daylight for Occupied Spaces: 12% above 'square-root base' daylit area
			NA	Credit 8.1c	Daylight & Views: Daylight for Occupied Spaces: 18% above 'square-root base' daylit area
			NA	Credit 8.1d	Daylight & Views: Daylight for Occupied Spaces: 75% of regularly occupied spaces
			NA	Credit 8.1e	Daylight & Views: Daylight for Occupied Spaces: 90% of regularly occupied spaces
			NA	Credit 8.2	Daylight & Views: Connection to the Natural World: Indoor Places of Respite
			NA	Credit 8.3	Daylight & Views: Lighting & Circadian Rhythm
			NA	Credit 9.1	Acoustic Environment: Exterior Noise, Acoustical Finishes, & Room Noise Levels
			NA	Credit 9.2	Acoustic Environment: Sound Isolation, Paging & Call System, & Building Vibration

Innovation & Design Process

		N	Credit 1.1	Innovation in Design:
		N	Credit 1.2	Innovation in Design
		N	Credit 1.3	Innovation in Design
		N	Credit 2	Documenting Health, Quality of Care & Productivity Performance Impacts: Research Initiatives

Operations

Integrated Operations

Y				Prereq 1	Ongoing Self-Certification
Y				Prereq 2	Integrated Operations & Maintenance Process
Y				Prereq 3	Environmental Tobacco Smoke Control
Y				Prereq 4	Outside Air Introduction & Exhaust Systems
Y				Credit 1.1	Building Operations & Maintenance: Staff Education
Y				Credit 1.2	Building Operations & Maintenance: Building Systems Maintenance
Y				Credit 1.3	Building Operations & Maintenance: Building Systems Monitoring
Y				Credit 2.1	IAQ Management: Maintaining Indoor Air Quality
Y				Credit 2.2	IAQ Management: Reduce Particulates in Air Distribution

Transportation Operations

Y				Credit 1.1	Alternative Transportation: Public Transportation Access
	?			Credit 1.2	Alternative Transportation: Low Emitting & Fuel Efficient Vehicles
Y				Credit 1.3	Alternative Transportation: Carpool Programs

Energy Efficiency

Y				Prereq 1	Existing Building Commissioning
Y				Prereq 2	Minimum Building Energy Performance
Y				Prereq 3	Ozone Protection
		N		Credit 1.1	Optimize Energy Performance: Energy Star score of 63
		N		Credit 1.2	Optimize Energy Performance: Energy Star score of 67
		N		Credit 1.3	Optimize Energy Performance: Energy Star score of 71
		N		Credit 1.4	Optimize Energy Performance: Energy Star score of 75
		N		Credit 1.5	Optimize Energy Performance: Energy Star score of 79
		N		Credit 1.6	Optimize Energy Performance: Energy Star score of 83
		N		Credit 1.7	Optimize Energy Performance: Energy Star score of 87
		N		Credit 1.8	Optimize Energy Performance: Energy Star score of 91
		N		Credit 1.9	Optimize Energy Performance: Energy Star score of 95
		N		Credit 1.10	Optimize Energy Performance: Energy Star score of 99
		N		Credit 2.1	On-Site & Off-Site Renewable Energy: 1% on or 5% off
		N		Credit 2.2	On-Site & Off-Site Renewable Energy: 2% on or 10% off
		N		Credit 2.3	On-Site & Off-Site Renewable Energy: 5% on or 25% off
		N		Credit 2.4	On-Site & Off-Site Renewable Energy: 10% on or 50% off
Y				Credit 3	Energy Efficient Equipment
				Credit 4	Refrigerant Selection
Y		N		Credit 5.1	Performance Measurement: Enhanced Metering
		N		Credit 5.2	Performance Measurement: Emission Reduction Reporting

Water Conservation

Y				Prereq 1	Minimum Water Efficiency
			NA	Credit 1.1	Water Efficient Landscaping: Reduce potable water use by 50%
			NA	Credit 1.2	Water Efficient Landscaping: Eliminate potable water use
			NA	Credit 2.1	Building Water Use Reduction: Reduce 10%
			NA	Credit 2.2	Building Water Use Reduction: Reduce 20%
			NA	Credit 2.3	Building Water Use Reduction: Reduce 30%
			NA	Credit 2.4	Building Water Use Reduction: Reduce 40%
			NA	Credit 2.5	Building Water Use Reduction: Reduce 50%
			NA	Credit 3	Performance Measurement: Enhanced Metering

Chemical Management

Y				Prereq 1	Polychlorinated Biphenyl (PCB) Removal
		N		Credit 1.1	Community Contaminant Prevention: Airborne Releases
		N		Credit 1.2	Community Contaminant Prevention: Leaks & Spills
		N		Credit 2.1	Indoor Pollutant Source Control & Other Occupational Exposures: Chemical Management & Minimization
		N		Credit 2.2	Indoor Pollutant Source Control & Other Occupational Exposures: High Hazard Chemicals
Y				Credit 3	Chemical Discharge: Pharmaceutical Management & Disposal

Waste Management

Y				Prereq 1	Waste Stream Audit
Y				Credit 1.1	Total Waste Reduction: 15%
		N		Credit 1.2	Total Waste Reduction: 25%
		N		Credit 1.3	Total Waste Reduction: 35%
Y				Credit 2.1	Regulated Medical Waste Reduction: <10%
Y				Credit 2.2	Regulated Medical Waste Reduction: Minimize incineration
		N		Credit 3	Food Waste Reduction

Environmental Services

		N		Credit 1.1	Outdoor Grounds & Building Exterior Management : Implement 4 strategies
		N		Credit 1.2	Outdoor Grounds & Building Exterior Management : Implement 8 strategies
Y				Credit 2	Indoor Integrated Pest Management
Y				Credit 3	Environmentally Preferable Cleaning Policy
Y				Credit 4.1	Sustainable Cleaning Products & Materials: 30% of annual purchases
Y				Credit 4.2	Sustainable Cleaning Products & Materials: 60% of annual purchases
Y				Credit 4.3	Sustainable Cleaning Products & Materials: 90% of annual purchases
Y				Credit 5	Environmentally Preferable Janitorial Equipment

Environmentally Preferable Purchasing

		N		Credit 1.1	Food: Organic or Sustainable
		N		Credit 1.2	Food: Antibiotics
		N		Credit 1.3	Food: Local Production / Food Security
Y				Credit 2	Janitorial Paper & Other Disposable Products
Y				Credit 3	Electronics Purchasing & End of Life Management
Y				Credit 4.1	Toxic Reduction: Mercury
Y				Credit 4.2	Toxic Reduction: DEHP
Y				Credit 4.3	Toxic Reduction: Natural Rubber Latex
		N		Credit 5	Furniture & Medical Furnishings
		N		Credit 6.1	IAQ Compliant Products: 45% of annual purchases
		N		Credit 6.2	IAQ Compliant Products: 90% of annual purchases

Innovation in Operation

		N	Credit 1.1	Innovation in Operations
		N	Credit 1.2	Innovation in Operations
		N	Credit 1.3	Innovation in Operations
		N	Credit 1.4	Innovation in Operations
		N	Credit 2	Documenting Sustainable Operations: Business Case Impacts
		N	Credit 3.1	Documenting Productivity Impacts: Absenteeism & Health Care Cost Impacts
		N	Credit 3.2	Documenting Productivity Impacts: Research Initiatives

Factor 9

FACTOR 9: COMMUNITY HEALTH SERVICE INITIATIVES

The Determination of Need primary and preventive health care services and community contributions review factor is required under 105 CMR 100.533(B)(9) and described under 105 CMR 100.551(J) as follows:

(1) the holder [of an approved DoN] shall expend, over a five-year period (or other period approved by the Department) an amount reasonably related to the cost of the project, for the provision of primary and preventive health care services necessary for underserved populations in the project's service area (or other area approved by the Department) and reasonably related to the project, in accordance with a plan submitted as part of the application process (see 105 CMR 100.533(B)(9)) and approved by the Department; and

(2) the holder shall file reports with the Department detailing compliance with its approved plan, and to the extent practicable, an evaluation of the health effects thereof. The frequency, content and format of such reports shall be established by the Department.

1.1 The plan for provision of primary and preventive health services shall be developed in consultation with the Community Health Network Areas (CHNAs) and Department of Public Health's Office of Community Health Planning to identify health issues in the service areas and the community initiatives that should be directed toward them. To identify the CHNAs in your service areas please contact the Office of Community Health Planning.

The Applicant is committed to contributing an amount reasonably related to this Project for programs that provide primary and preventative health services to underserved populations in its service area. As such, the Applicant will contribute five percent (5%) of the MCE upon project implementation for the Factor 9 requirements. The community benefit contribution will be **$323,628.10** allocated over five (5) years at **$64,725.62 per year**.

As stated in Newton-Wellesley Hospital's ("NWH's") community health needs assessment, mental health and substance use are the areas of greatest need in the hospital's service area – Waltham and Newton. This is supported in the community health needs assessment with the following qualitative and quantitative data:

- Assessment participants expressed many concerns regarding substance use in their communities, including alcohol use and community acceptance of use, an increase in prescription drug and heroin use, and the link between substance use and mental health issues.
- Among NWH communities, Waltham reported the highest Rate of Admission to DPH Funded Treatment Programs at 821 per 100,000 populations for all causes, and 238.4 per 100,000 for admissions due to intravenous drug use.
- Waltham is the exception with 10% more youth having reported lifetime alcohol use than their peers across the state (30.4% vs. 20%). Waltham middle school youth also reported the highest rate of current alcohol use (14.5%) among towns in the NWH service area.
- Opiate use and overdoses were noted as pressing issues among assessment participants in several towns.

- Waltham high school students again were the exception, with 17% reporting lifetime drug misuse, which is slightly higher than the statewide rate (15%).
- Participants emphasized the connection between substance use and mental health issues as the most pressing health concern within the NWH service area.
- Participants noted that the community still struggles to accept and discuss substance use. This stigma was often viewed as a barrier to community residents actively seeking existing substance use services.
- NWH data (2013) provide for young adults ages 18-24 years, the top two emergency department diagnoses were alcohol use and depressive disorders. Affective psychosis and depressive disorders were the top two inpatients diagnoses among the same age group. Among middle aged adults (45-64 years), behavioral health diagnoses represent 3 of the top 10 inpatient diagnoses, and include depressive disorders, affective psychosis, and schizophrenia. Waltham is unique in having 2 of its top 5 inpatient diagnosis related to behavioral health-affective psychosis and depressive disorders.
- Participants shared concerns that communities in NWH's service area are not as open to community dialogue about mental health issues.
- Youth, seniors and immigrant populations are disproportionately affected by mental health issues in NWH's service area. Newton and Waltham have large immigrant populations and adolescent children of immigrant parents have a significantly higher risk for substance use and mental health issues than non-immigrant children.

As such, and due to the size of this DoN ($64,725.62/year), which does not permit many grant awards nor is there staff capacity to conduct an extensive request for response ("RFR") process, the Applicant is proposing a modified RFR process targeted to mental health and substance use services in Newton and Waltham. The objective of this modified RFR process is to identify organizations that are interested in working to address substance use and mental health issues.

Currently, the Applicant has a Community Benefits Committee ("Committee") that advises NWH on community initiatives. The Committee is comprised of members from the health and school departments, as well as non-profit agencies that focus on low-income housing, behavioral health issues, children and elders. Committee members also have expertise in finance, human resource management and health policy. Accordingly, given the Committee's expertise, the Applicant will seek to develop a subcommittee of its members who can facilitate a modified RFR process. This subcommittee will consist of individuals who represent a cross-section of community interests, including NWH, as well as participants from diverse agencies. Utilizing a subcommittee to evaluate proposals and allocate funding fosters community involvement, adds valued input and enhances the Committee's involvement in addressing community needs.

The role of the subcommittee is to identify organizations in the community that meet the criteria discussed below and subsequently select organizations for funding. As previously discussed, there is strong interest from the community to support the prevention of

substance use and address mental health issues. Consequently, agencies/organizations will need to meet the following criteria to be considered for funding:

- A focus on substance use and/or mental health
- A focus on those communities in NWH's catchment area where data show the greatest need for services
- A focus on the most at risk populations in communities, i.e., youth, homeless
- A focus on addressing stigma associated with substance use and mental health
- A focus on supportive mechanisms that go beyond the crisis of these issues

Based on the proposed criteria, the subcommittee will identify organizations/agencies that may apply for funding. Moreover, the subcommittee will evaluate proposals and allocate funding to approximately three agencies/organizations. The subcommittee will also determine grantee milestones and obtain data on the utilization and impact of funding. Additionally, the Applicant will consult with CHNAs 17 and 18 to discuss the overall modified RFR process to determine if they have any suggestions and/or changes.

D. Other Exhibits

1. Letters of Support

NEWTON-WELLESLEY
HOSPITAL

2014 Washington Street
Newton, Massachusetts 02462
(617) 243 6000
www.nwh.org

July 27, 2016

Darrell Villaruz, Interim Program Director
Determination of Need Program
Department of Public Health
99 Chauncy Street
Boston, MA 02111

Dear Mr. Villaruz:

I am writing to express my support of Newton-Wellesley Hospital's pursuit of Determination of Need approval to add a third magnetic resonance imaging (MRI) unit at the hospital.

As Chairman of the Radiology Department, I am reminded every day how essential high quality MRI examinations are for the diagnosis and treatment of many patients who are being treated by the excellent medical staff at Newton-Wellesley. Proper diagnosis requires timely access to MRI services and we currently are operating at full capacity on our two MRI units, leading to great challenges for our department to accommodate urgent requests by our many specialist physicians. More concerning is the difficulty in processing requests for certain MRI examinations from our very busy Emergency Room. Accordingly, expansion of MRI services at Newton Wellesley Hospital is necessary for patients to receive quality MRI services in their own community, with shorter appointment wait times.

I strongly support this application and encourage the Department's approval of the hospital's request to add a third MRI unit in Newton.

Sincerely,

Steven L. Miller, MD
Chairman, Department of Radiology
Newton Wellesley Hospital
slmiller@partners.org
617-243-6046

NEWTON-WELLESLEY
HOSPITAL

2014 Washington Street
Newton, Massachusetts 02462
T: (617) 243-6000
www.nwh.org

August 5, 2016

Darrell Villaruz, Interim Program Director
Determination of Need Program
Department of Public Health
99 Chauncy Street
Boston, MA 02111

Dear Mr. Villaruz:

I am writing to express my support of Newton Wellesley Hospital's pursuit of Determination of Need approval to add a third magnetic resonance imaging (MRI) unit at the hospital.

As Associate Chairman of the Department of Radiology and Medical Director of the Newton Wellesley MRI Service since 2007, I have observed tremendous expansion of the use of this crucial imaging technique in the care of patients in our community. Due to improvement in this technology, MR imaging has become critical in a wider variety of applications for patients. Also, since this technology does not utilize ionizing radiation which other techniques such as CT scanning require, MR exams have become an extremely useful alternative to those exams, especially in children and those with chronic ailments needing repeat scans for monitoring.

Currently and for several years now, the two hospital based magnets at Newton Wellesley Hospital have been operating at full capacity. As a hospital based MR Service, we tend to perform more complex MR examinations than those performed in typical outpatient centers. Our wait times have continued to lengthen and some of our patients who could not wait have had to go to outside facilities for their studies. Some of our inpatients, often our sickest patients, had to be scanned at suboptimal times during the day to accommodate emergencies and other scheduled patients. Also, due to increased demand in the face of limited capacity, we have been restricted in developing new state of the art applications which our referring clinicians request, such a Cardiac MR, because we simply do not have the time on our two magnets.

To provide better access for our patients and to continue to improve our service by employing new state of the art applications, I strongly support the Determination of Need application which Newton Wellesley Hospital is submitting to add a third magnet to our existing MR services.

Sincerely,
Jeffrey J. Greenberg MD

Jeffrey J. Greenberg, MD
Associate Chairman, Department of Radiology
Medical Director, MRI Services
Department of Radiology
Newton Wellesley Hospital
jjgreenberg@partners.org
617 243 6162

NEWTON-WELLESLEY HOSPITAL

2014 Washington Street
Newton, Massachusetts 02462
(617) 243 6000
www.nwh.org

Darrell Villaruz, Interim Program Director
Determination of Need Program
Department of Public Health
99 Chauncy Street
Boston, MA 02111

July 27, 2016

Dear Mr. Villaruz:

I am writing to express my support of Newton Wellesley Hospital's pursuit of Determination of Need approval to add a third magnetic resonance imaging (MRI) unit at the hospital.

As Assistant Medical Director of the Newton Wellesley Hospital's MRI service since 2007, I have witnessed great expansion in the scope, volume and sophistication of MRI studies performed in the community setting of this Hospital. The MRI service has grown to support many crucial Clinical Service lines upon which the Hospital expects future expansion. There has been marked expansion in referrals from Community based Sports Medicine, Oncology and Neurology and considerable demand for the utilization of MRI as a non-ionizing radiation alternative to CT scans in the diagnosis and monitoring of GI disease in adult, pediatric and pregnant patients (i.e. inflammatory bowel disease, acute appendicitis). There is also great demand in using MRI as a primary method to evaluate and monitor newly developed treatments in MS, inflammatory bowel disease, Prostate Cancer and in the the screening of Breast CA (as per new "dense breast" MA imaging legislation).

The total MRI capacity at NWH has been fixed at its operational capacity of 2 magnets since 2005. In the past 11 years, the MRI service has implementing and introduced many contemporary applications of MRI which have been widely accepted among the clinical communities we serve. But, ironically, the very success of these MRI programs now sharply undermines our capacity to schedule the wide array of MRI studies requested of us in a timely manner. To the chagrin of patients and referring clinicans at NWH, the persistent appointment scheduling backlog can occasionally exceed to 7-10 days. Despite expanded daily and weekend hours of operation 6am-11pm, our overall MR capacity has reached its limit and has created an unfortunate "zero-sum game" in which our MR referring clinicians and user groups are forced to clamor and compete for the next available imaging slot. Time sensitive diagnostic studies on our sickest and most compelling patients from the ED, same day urgent Orthopedic offices or from various NWH-inpatient services, must compete with one another for the next available onsite exam, or displace an already scheduled outpatient who has come to NWH expecting to receive the reliable and convenient community hospital imaging their physician has requested.

At the current level of demand, the core mission of our MR service is severely undermined when MR demand out-strips MR capacity and we are unable to deliver the timely and convenient imaging upon which our referring physicians and their patients depend.

I strongly support this application and encourage the Department's approval of a 3rd MRI Unit at Newton-Wellesley Hospital in order to accommodate the expanded demand for community based MRI services in Boston's western suburbs.

Sincerely,

Daniel Z. Silverstone, MD
Assistant Medical Director, MRI services
Department of Radiology/Newton Wellesley Hospital
dsilverstone@partners.org 617-243-6162

NEWTON-WELLESLEY HOSPITAL

2014 Washington Street
Newton, Massachusetts 02462
(617) 243 6000
www.nwh.org

Tufts School of Medicine
UNIVERSITY

Avraham Almozlino, MD
Chief, Neurology Division
Associate Clinical Professor,
Tufts University School of Medicine

T: (617) 928 1500
F: (617) 630 0860
www.nwneurology.com

Darrell Villaruz, Interim Program Director
Determination of Need Program
Department of Public Health
99 Chauncey Street
Boston, MA 02111

July 18, 2016

Dear Mr. Villaruz:

I am writing to express my support of Newton Wellesley Hospital's pursuit of Determination of Need approval to add a third magnetic resonance imaging (MRI) unit at the hospital.

As a Neurologist, MRI is an essential tool to properly diagnosing my patients. Proper diagnosis requires timely access to MRI services. Accordingly, expansion of MRI services at Newton Wellesley Hospital will allow my patients to continue to receive quality MRI services close to home with shorter wait times for an appointment.

I strongly support this application and encourage the Department's approval of the hospital's request to add a third MRI unit in Newton.

Sincerely,

Avraham Almozlino, MD, FAAN
Chief, Division of Neurology, NWH
Associate Clinical Professor, TUSM

NEWTON-WELLESLEY
HOSPITAL

2014 Washington Street
Newton, Massachusetts 02462
(617) 243 6000
www.nwh.org

July 27, 2016

Darrell Villaruz, Interim Program Director
Determination of Need Program
Department of Public Health
99 Chauncy Street
Boston, MA 02111

Dear Mr. Villaruz:

I am writing to express my support of Newton Wellesley Hospital's pursuit of Determination of Need approval to add a third magnetic resonance imaging (MRI) unit at the hospital.

As a Orthopedic Surgeon, MRI is an essential tool to properly diagnosing my patients. Proper diagnosis requires timely access to MRI services. Accordingly, expansion of MRI services at Newton Wellesley Hospital will allow my patients to continue to receive quality MRI services close to home with shorter wait times for an appointment.

I strongly support this application and encourage the Department's approval of the hospital's request to add a third MRI unit in Newton.

Sincerely,

Timothy E. Foster, MD,
Acting Associate Chief Medical Officer and Chairman Orthopaedic Surgery
Newton-Wellesley Hospital
2014 Washington Street, Administration Suite
Newton, MA 02462
p: 617-243-6993
f: 617-243-6954

2. Audited Financial Statements

Partners HealthCare System, Inc. and Affiliates

Consolidated Financial Statements
September 30, 2015 and 2014

Partners HealthCare System, Inc. and Affiliates
Index
September 30, 2015 and 2014

pwc

Independent Auditor's Report

To the Board of Directors of
Partners HealthCare System, Inc. and Affiliates

We have audited the accompanying consolidated financial statements of Partners HealthCare System, Inc. and Affiliates (Partners HealthCare), which comprise the consolidated balance sheets as of September 30, 2015 and 2014 and the related consolidated statements of operations, changes in net assets and of cash flows for the years then ended.

Management's Responsibility for the Consolidated Financial Statements

Management is responsible for the preparation and fair presentation of the consolidated financial statements in accordance with accounting principles generally accepted in the United States of America; this includes the design, implementation and maintenance of internal control relevant to the preparation and fair presentation of consolidated financial statements that are free from material misstatement, whether due to fraud or error.

Auditor's Responsibility

Our responsibility is to express an opinion on the consolidated financial statements based on our audits. We conducted our audits in accordance with auditing standards generally accepted in the United States of America. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the consolidated financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the consolidated financial statements. The procedures selected depend on our judgment, including the assessment of the risks of material misstatement of the consolidated financial statements, whether due to fraud or error. In making those risk assessments, we consider internal control relevant to Partners HealthCare's preparation and fair presentation of the consolidated financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of Partners HealthCare's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Opinion

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of Partners HealthCare System, Inc. and Affiliates at September 30, 2015 and 2014, and the results of their operations, their changes in net assets and their cash flows for the years then ended in accordance with accounting principles generally accepted in the United States of America.

PricewaterhouseCoopers LLP

December 11, 2015

PricewaterhouseCoopers LLP, 101 Seaport Boulevard, Suite 500, Boston, MA 02210
T: (617) 530 5000, F: (617) 530 5001, www.pwc.com/us

Partners HealthCare System, Inc. and Affiliates
Consolidated Balance Sheets
September 30, 2015 and 2014

(in thousands of dollars)	2015	2014
Assets		
Current assets		
Cash and equivalents	$ 621,568	$ 457,244
Investments	1,354,636	1,474,058
Current portion of investments limited as to use	1,590,203	2,120,057
Patient accounts receivable, net of allowance for bad debts (2015 - $112,630; 2014 - $117,212)	878,033	876,214
Research grants receivable	121,775	115,786
Other current assets	447,188	381,517
Receivable for settlements with third-party payers	60,374	39,082
Total current assets	5,073,777	5,463,958
Investments limited as to use, less current portion	2,832,744	2,927,360
Long-term investments	1,061,176	1,026,538
Pledges receivable, net and contributions receivable from trusts, less current portion	209,064	197,975
Property and equipment, net	5,328,782	4,615,908
Other assets	564,898	499,353
Total assets	$ 15,070,441	$ 14,731,092
Liabilities and Net Assets		
Current liabilities		
Current portion of long-term obligations	$ 398,990	$ 238,204
Accounts payable and accrued expenses	646,355	645,999
Accrued medical claims and related expenses	232,268	254,480
Accrued compensation and benefits	710,929	677,957
Current portion of accrual for settlements with third-party payers	53,066	55,918
Unexpended funds on research grants	202,137	183,222
Total current liabilities	2,243,745	2,055,780
Accrual for settlements with third-party payers, less current portion	34,725	58,899
Accrued professional liability	482,640	455,463
Accrued employee benefits	1,705,287	1,066,840
Interest rate swaps liability	404,062	295,656
Accrued other	153,146	157,029
Long-term obligations, less current portion	3,994,034	3,697,938
Total liabilities	9,017,639	7,787,605
Commitments and contingencies		
Net assets		
Unrestricted	4,707,662	5,623,759
Temporarily restricted	765,562	855,954
Permanently restricted	579,578	463,774
Total net assets	6,052,802	6,943,487
Total liabilities and net assets	$ 15,070,441	$ 14,731,092

The accompanying notes are an integral part of these consolidated financial statements.

Partners HealthCare System, Inc. and Affiliates
Consolidated Statements of Operations
Years Ended September 30, 2015 and 2014

(in thousands of dollars)	2015	2014
Operating revenue		
Net patient service revenue, net of provision for bad debts (2015 - $129,051; 2014 - $129,492)	$ 7,317,918	$ 7,042,558
Premium revenue	2,034,420	1,622,392
Direct academic and research revenue	1,316,283	1,225,782
Indirect academic and research revenue	354,942	352,911
Other revenue	642,082	662,410
Total operating revenue	11,665,645	10,906,053
Operating expenses		
Employee compensation and benefit expenses	5,655,073	5,428,352
Supplies and other expenses	2,325,085	2,226,663
Medical claims and related expenses	1,652,538	1,463,972
Direct academic and research expenses	1,316,283	1,225,782
Depreciation and amortization expenses	493,505	463,039
Interest expense	116,703	119,849
Total operating expenses	11,559,187	10,927,657
Income (loss) from operations	106,458	(21,604)
Nonoperating gains (expenses)		
(Loss) income from investments	(37,258)	227,357
Change in fair value of interest rate swaps	(110,315)	(109,275)
Gifts and other, net of fundraising and other expenses	(39,468)	(67,242)
Academic and research gifts, net of expenses	(11,406)	90,609
Total nonoperating gains (expenses), net	(198,447)	141,449
(Deficit) excess of revenues over expenses	(91,989)	119,845
Other changes in net assets		
Change in net unrealized appreciation on marketable investments	(224,616)	(3,309)
Change in fair value of hedging interest rate swaps	-	45,624
Funds utilized for property and equipment	38,288	39,058
Change in funded status of defined benefit plans	(639,167)	(387,698)
Other	1,387	5,173
Decrease in unrestricted net assets	$ (916,097)	$ (181,307)

The accompanying notes are an integral part of these consolidated financial statements.

Partners HealthCare System, Inc. and Affiliates
Consolidated Statements of Changes in Net Assets
Years Ended September 30, 2015 and 2014

(in thousands of dollars)	Unrestricted	Temporarily Restricted	Permanently Restricted	Total
Net assets at October 1, 2013	$ 5,805,066	$ 792,769	$ 412,209	$ 7,010,044
Increases (decreases)				
Loss from operations	(21,604)	-	-	(21,604)
Income from investments	227,357	36,897	30	264,284
Gifts and other	(67,242)	51,250	49,877	33,885
Academic and research gifts, net of expenses	90,609	-	-	90,609
Change in net unrealized appreciation on marketable investments	(3,309)	(11,209)	1,706	(12,812)
Change in fair value of interest rate swaps				
Nonhedging	(109,275)	-	-	(109,275)
Hedging	45,624	-	-	45,624
Funds utilized for property and equipment	39,058	(12,814)	-	26,244
Change in funded status of defined benefit plans	(387,698)	-	-	(387,698)
Other	5,173	(939)	(48)	4,186
Change in net assets	(181,307)	63,185	51,565	(66,557)
Net assets at September 30, 2014	5,623,759	855,954	463,774	6,943,487
Increases (decreases)				
Income from operations	106,458	-	-	106,458
(Loss) income from investments	(37,258)	(46,460)	55	(83,663)
Gifts and other	(39,468)	8,029	116,449	85,010
Academic and research gifts, net of expenses	(11,406)	-	-	(11,406)
Change in net unrealized appreciation on marketable investments	(224,616)	(36,351)	(2,313)	(263,280)
Change in fair value of interest rate swaps	(110,315)	-	-	(110,315)
Funds utilized for property and equipment	38,288	(17,151)	-	21,137
Change in funded status of defined benefit plans	(639,167)	-	-	(639,167)
Other	1,387	1,541	1,613	4,541
Change in net assets	(916,097)	(90,392)	115,804	(890,685)
Net assets at September 30, 2015	$ 4,707,662	$ 765,562	$ 579,578	$ 6,052,802

The accompanying notes are an integral part of these consolidated financial statements.

Partners HealthCare System, Inc. and Affiliates
Consolidated Statements of Cash Flows
Years Ended September 30, 2015 and 2014

(in thousands of dollars)	2015	2014
Cash flows from operating activities		
Change in net assets	$ (890,685)	$ (66,557)
Adjustments to reconcile change in net assets to net cash provided by operating activities		
Change in funded status of defined benefit plans	639,167	387,698
Loss on refunding of debt	9,649	1,002
Change in fair value of interest rate swaps	110,315	63,651
Depreciation and amortization	493,505	463,039
Provision for bad debts	129,051	129,492
Loss (gain) on disposal of property	196	(13,275)
Net realized and change in unrealized appreciation on investments	307,782	(342,608)
Restricted contributions and investment income	(172,749)	(102,660)
Cash premium upon issuance of bonds	39,969	14,337
Increases (decreases) in cash resulting from a change in		
Patient accounts receivable	(127,108)	(192,322)
Research grants receivable	(5,989)	(6,078)
Other current assets	(71,428)	(51,716)
Pledges receivable and contributions receivable from trusts	(3,987)	(35,930)
Other assets	(34,545)	(6,433)
Accounts payable and accrued expenses	(10,101)	(44,947)
Accrued medical claims and related expenses	(22,212)	132,647
Accrued compensation and benefits	25,006	53,005
Settlements with third-party payers	(48,318)	20,750
Unexpended funds on research grants	18,915	22,554
Accrued employee benefits and other	23,922	42,902
Net cash provided by operating activities	410,355	468,551
Cash flows from investing activities		
Purchases of property and equipment	(1,198,031)	(835,019)
Proceeds from sale of property	182	13,713
Purchase of investments	(2,772,478)	(3,145,588)
Proceeds from sales of investments	3,173,950	2,921,288
Purchases of businesses, net of cash acquired	(23,343)	-
Net cash used for investing activities	(819,720)	(1,045,606)
Cash flows from financing activities		
Borrowings under line of credit	-	45,000
Repayments under line of credit	-	(45,000)
Payments on long-term obligations	(71,353)	(60,031)
Proceeds from long-term obligations, net of financing costs	612,359	783,348
Decrease in auction rate securities holdings	-	23,830
Deposits into refunding trusts	(140,066)	(286,830)
Restricted contributions and investment income	172,749	102,660
Net cash provided by financing activities	573,689	562,977
Net increase (decrease) in cash and equivalents	164,324	(14,078)
Cash and equivalents		
Beginning of year	457,244	471,322
End of year	$ 621,568	$ 457,244

The accompanying notes are an integral part of these consolidated financial statements.

(in thousands of dollars)

1. Organization and Community Benefit Commitments

Partners HealthCare System, Inc. (PHS) is the sole member of The Massachusetts General Hospital (MGH), Brigham and Women's Health Care, Inc. (BWHC), NSMC HealthCare, Inc. (NSMC), Newton-Wellesley Health Care System, Inc. (NWHCS), Partners Continuing Care, Inc. (PCC), Partners HealthCare International, LLC (PHI) and Neighborhood Health Plan, Incorporated (NHP). The two physicians who serve as the President and Chief Executive Officer of PHS (PHS CEO) and the Chief Clinical Officer of PHS are the members of Partners Community Physicians Organization, Inc. (PCPO) formerly known as Partners Community HealthCare, Inc. The individual serving as the PHS CEO is the sole member of Partners Medical International, Inc. (PMI). PHS, together with all of its affiliates, is referred to as "Partners HealthCare."

Partners HealthCare currently operates two tertiary and seven community acute care hospitals in Massachusetts, 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 physician organizations and practices, a home health agency, nursing homes and a graduate level program for health professions. Partners HealthCare provides services to patients primarily from the Greater Boston area as well as New England and beyond. In addition, Partners HealthCare is a nonuniversity-based nonprofit private medical research enterprise and is a principal teaching affiliate of the medical and dental schools of Harvard University. Partners HealthCare also operates a licensed, not-for-profit managed care organization that provides health insurance products to the Medical Assistance Program (Medicaid), Commonwealth Care (a series of health insurance plans for adults who meet income and other eligibility requirements) and commercial populations.

PHS and substantially all of its affiliates are tax-exempt organizations under Section 501(c)(3) of the Internal Revenue Code (IRC). NHP is a tax-exempt organization under Section 501(c)(4) of the IRC. Accordingly, no provision for income taxes related to these tax-exempt entities has been made. PCPO applied to become a tax-exempt organization under Section 501(c)(3) of the IRC on October 1, 2015. As a result of this anticipated conversion, PCPO recognized income tax expense of $1,200 within supplies and other expenses.

Community Benefit

Partners HealthCare's community benefit programs include working with communities to address a number of public health issues including racial disparities, alcohol and substance abuse among young people, infant mortality, domestic violence and cancer. Partners HealthCare provides economic opportunity for low income Boston residents by helping people advance into nursing and other healthcare careers through its public school partnerships and workforce development programs. In addition, twenty community health centers are licensed by or affiliated with Partners HealthCare entities and provide high quality, culturally competent primary care and access to Partners HealthCare's hospitals. Partners HealthCare invests in these health centers' infrastructure, programming and operation and also helps with relocation, renovation and other capital requirements.

(in thousands of dollars)

The Massachusetts Attorney General's Community Benefits Guidelines direct nonprofit acute care hospitals and health maintenance organizations to prepare annual reports documenting the status and level of their community benefit programs and initiatives. These annual reports serve the important purpose of providing the public with access to useful information about these programs and initiatives. Partners HealthCare files its report annually with the Massachusetts Attorney General. The report summarizes community benefit activities on a system-wide basis. In addition, each of the acute care hospitals within Partners HealthCare has a community benefit planning and service delivery structure and files separate community benefit reports. NHP also files a community benefit report annually.

Uncompensated Care
Partners HealthCare provides care to all patients regardless of their ability to pay. The cost of providing that care is reflected in the statements of operations. The cost related to those patients for which Partners HealthCare receives either partial or no reimbursement for healthcare services provided is summarized as follows:

State Programs
Charity care services are partially reimbursed to acute care hospitals through the statewide Health Safety Net Trust Fund (HSN) established by the Massachusetts Health Care Reform Law (Chapter 58 of the Acts of 2006 or Chapter 58). A portion of the funding for the HSN is paid by hospitals through a statewide acute care hospital assessment that has been set by the Massachusetts Legislature, beginning in 2014, at $160,000 plus 50% of the estimated cost of administering the HSN and related assessments, as determined by the Secretary of Administration and Finance. All acute care hospitals in the state are assessed their share of this total statewide hospital assessment amount ($165,000 in 2015 and $164,708 in 2014) based on each hospital's charges for private sector payers. Partners HealthCare's acute care hospitals report this assessment as a deduction from net patient service revenue.

Acute care hospitals are reimbursed for charity care based on claims for eligible patients and eligible services that are submitted to and adjudicated by the HSN. Rates of payment are based on Medicare rates and payment policies. The HSN was under-funded by approximately $41,327 and $86,836 in 2015 and 2014, respectively. This shortfall is allocated to hospitals based on their share of total statewide patient care costs with approximately $10,881 and $25,571 in 2015 and 2014, respectively, allocated to Partners HealthCare's acute care hospitals. Each hospital's share of the overall state shortfall cannot exceed its total charity care reimbursement. Hospitals with a high proportion of charity care and government funding receive more favorable reimbursement, including limiting their shortfall allocation to no more than 15% of their payments for charity care. In aggregate, Partners HealthCare's acute care hospitals received uncompensated care funding covering 68% of the estimated cost of charity care provided in 2015 and 47% of the estimated cost of charity care provided in 2014, excluding the assessment.

Medicaid
Medicaid is a means-tested health insurance program jointly funded by state and federal governments. States administer the program and set rules for eligibility, benefits and provider payments within broad federal guidelines. The program provides health care coverage to low-income children and families, pregnant women, long-term unemployed adults, seniors and persons with disabilities. Eligibility is determined by a variety of factors, which include income relative to the federal poverty line, age, immigrant status and assets.

(in thousands of dollars)

Medicaid payments to Partners HealthCare providers do not cover the full cost of services provided. In aggregate, reimbursement from Medicaid covered 62% and 61% of the estimated cost of services provided in 2015 and 2014, respectively. In addition, Medicaid premium revenue paid to NHP for the care of Medicaid patients enrolled in NHP did not cover the medical expense and administrative costs of care for these enrollees. In aggregate, the premium revenue paid to NHP by Medicaid, excluding the impact of premium deficiency reserves, was $72,549, or 4.6%, less than the cost of care in 2015, and $108,655, or 8.6%, less than the cost of care in 2014.

Federal Program

Medicare

Medicare is a federally sponsored health insurance program for people age 65 or older, under age 65 with certain disabilities and any age with End-Stage Renal Disease. For many years, Medicare payments have not kept pace with increases in the cost of care provided at many hospitals. Additionally, payments to physicians have seen little or no increases over the past several years. Compounding this shortfall in payments is the shift of care from higher paying inpatient services to lower paying outpatient services.

Consequently, Medicare payments to Partners HealthCare providers do not cover the full cost of services provided. In aggregate, reimbursement from Medicare covered approximately 73% and 74% of the estimated cost of services provided in 2015 and 2014, respectively.

(in thousands of dollars)

For charity care, Medicaid and Medicare, the total estimated cost of services provided by Partners HealthCare exceeded the net reimbursement received under these programs by $1,229,790 and $1,148,200 for the years ended September 30, 2015 and 2014, respectively. The estimated cost of services provided is either obtained directly from a costing system or based on an entity specific ratio of cost to gross charges. In the latter case, cost is derived by applying this ratio to gross charges associated with providing care to charity care, Medicaid and Medicare patients. The following summarizes, by program, the cost of services provided, net reimbursement and cost of services in excess of reimbursement for each year:

	Years Ended September 30,	
	2015	2014
Cost of services provided		
Charity care, including assessment payments to HSN of $56,716 and $60,372 in 2015 and 2014, respectively	$ 136,276	$ 140,641
Medicaid	1,008,882	886,706
Medicare	2,824,890	2,634,533
	$ 3,970,048	$ 3,661,880
Net reimbursement		
Charity care	$ 40,906	$ 29,808
Medicaid	625,761	542,078
Medicare	2,073,591	1,941,794
	$ 2,740,258	$ 2,513,680
Cost of services in excess of reimbursement		
Charity care	$ 95,370	$ 110,833
Medicaid	383,121	344,628
Medicare	751,299	692,739
	$ 1,229,790	$ 1,148,200

Bad Debts
In addition to charity care and inadequate funding from the Medicaid and Medicare programs, there are significant losses related to self-pay patients who fail to make payment for services rendered or insured patients who fail to remit co-payments and deductibles as required under the applicable health insurance arrangement. The provision for bad debts represents charges for services provided that are deemed to be uncollectible and was $129,051 and $129,492 in 2015 and 2014, respectively. The estimated cost of providing these services was approximately $48,347 and $48,699 for 2015 and 2014, respectively.

2. Summary of Significant Accounting Policies

Basis of Accounting
The accompanying consolidated financial statements have been prepared on the accrual basis of accounting and include the accounts of PHS and its affiliates. Significant interaffiliate accounts and transactions have been eliminated.

(in thousands of dollars)

Use of Estimates
The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates. Significant estimates are made in the areas of patient accounts receivable, research grants receivable, investments, receivables and accruals for settlements with third-party payers, accrued medical claims and related expenses, accrued professional liability, accrued compensation and employee benefits, interest rate swaps and accrued other.

Fair Value of Financial Instruments
The fair value of financial instruments approximates the carrying amount reported in the consolidated balance sheets for cash and equivalents, certain investments and investments limited as to use, patient accounts receivable, research grants receivable, accounts payable and accrued expenses and interest rate swaps. More information can be found in Note 6, Fair Value Measurements.

Cash and Equivalents
Cash and equivalents represent cash, registered money market funds and highly liquid debt instruments with a maturity at the date of purchase of three months or less. Partners HealthCare's banking cash and equivalents are maintained with several national banks and from time to time cash deposits exceed federal insurance limits. It is Partners HealthCare's policy to monitor these banks' financial strength on an ongoing basis and no losses have been experienced to date.

Investments
Investments in equity securities with readily determinable fair values and all investments in debt securities (marketable investments) are measured at fair value based on quoted market prices. The change in net unrealized appreciation on these marketable investments is excluded from excess of revenues over expenses.

Alternative investments, including hedge funds and private equities, do not have readily ascertainable market values. Investments in securities sold short or traded on a national securities exchange are valued based on quoted market prices. Investments in securities that are not traded and restricted securities of public companies are valued based on amounts reported by the fund manager and evaluated by management. The reported value of these investments represents the amount Partners HealthCare would expect to receive if it liquidated its investments at the balance sheet date on a nondistressed basis. Investments in hedge funds, private equity, private debt and other private partnerships (collectively, private partnerships) for which Partners HealthCare owns more than 5% of the overall investment are generally recorded as equity method investments. The change in value of equity method investments is included in excess of revenues over expenses as a component of income from investments. All other investments, including alternative investments, are recorded at cost.

Income from investments (including realized gains and losses, change in value of equity method investments, interest, dividends and endowment income distributions) is included in excess of revenues over expenses unless the income or loss is restricted by donor or law. Income from investments is reported net of investment-related expenses.

(in thousands of dollars)

Investments whose cost exceeds fair value are reviewed each quarter to determine whether these investments are other-than-temporarily impaired. Externally managed marketable investments with fair value below cost are considered to be other-than-temporarily impaired and, accordingly, the unrealized depreciation is recognized as realized losses through a write-down in the cost basis of these investments. All other investments are subject to a further review, which considers factors including the anticipated holding period for the investment and the extent and duration of below cost valuation. A similar write-down is recorded when the impairment on these investments has been judged to be other-than-temporary.

Depending on any donor-imposed restrictions on the underlying investments, the amount of the write-down is reported as a realized loss in either temporarily restricted net assets or in excess of revenues over expenses as a component of income from investments, with no adjustment in the cost basis for subsequent recoveries.

Partners HealthCare has an endowment spending policy for pooled endowment funds. A fixed distribution rate for spending is determined each year which will come from either income and/or net accumulated appreciation.

Investments Limited as to Use
Investments limited as to use primarily includes assets whose use is contractually limited by external parties as well as assets set aside by the boards (or management) for identified purposes and over which the boards (or management) retain control such that the boards (or management) may, at their discretion, subsequently use such assets for other purposes. Certain investments corresponding to deferred compensation are accounted for such that all income and appreciation (depreciation) is recorded as a direct addition (reduction) to the asset and corresponding liability.

Derivative Instruments
Derivatives are recognized on the balance sheet at fair value. As of September 30, 2014, Partners HealthCare elected to stop applying hedge accounting treatment for interest rate swap contracts (swap contracts). As a result of the election to stop applying hedge accounting treatment, changes in the fair value are recorded in excess of revenue over expenses. Previously, Partners HealthCare designated at inception whether the swap contracts were considered hedging or nonhedging for accounting purposes. For hedges, Partners HealthCare formally documented at inception all relationships between hedging instruments and hedged items, as well as its risk management objectives and strategies for undertaking various accounting hedges. Partners HealthCare uses its swap contracts as cash flow hedges. Changes in the fair value of swap contracts designated for hedging activities that were highly effective as hedges were excluded from excess of revenues over expenses. Hedge ineffectiveness, if any, was recorded in excess of revenues over expenses.

Patient Accounts Receivable
Partners HealthCare receives payments for services rendered from federal and state agencies (under the Medicare and Medicaid programs), managed care payers, commercial insurance companies and patients. Patient accounts receivable are reported net of contractual allowances and reserves for denials, uncompensated care and doubtful accounts. The level of reserves is based upon management's assessment of historical and expected net collections, business and economic conditions, trends in federal and state governmental and private employer health care coverage and other collection indicators.

(in thousands of dollars)

Research Grants Receivable
Partners HealthCare receives research funding from departments and agencies of the U.S. Government, industry and other foundation sponsors. Research grants receivable include amounts due from these sponsors of externally funded research. These amounts have been billed or are billable to the sponsor, or in limited circumstances, represent accelerated spending in anticipation of future funding. Research grants receivable are reported net of reserves for uncollectible accounts.

Other Current Assets
Other current assets include prepaids, nonpatient receivables, current portion of pledges receivable, premiums receivable and reinsurance recoveries.

Property and Equipment
Property and equipment is reported on the basis of cost less accumulated depreciation. Donated items are recorded at fair value at the date of contribution. All research grants received for capital are recorded in the year of expenditure as a change in unrestricted net assets. Property and equipment is reviewed for impairment whenever events or changes in circumstances indicate that its carrying amount may not be recoverable. Depreciation of property and equipment is calculated by use of the straight-line method at rates intended to depreciate the cost of assets over their estimated useful lives, which generally range from three to fifty years. Interest costs incurred on borrowed funds during the period of construction of capital assets are capitalized, net of any interest earned, as a component of the cost of acquiring those assets.

Asset Retirement Obligations
Asset retirement obligations, reported in accrued other, are legal obligations associated with the retirement of long-lived assets. These liabilities are initially recorded at fair value and the related asset retirement costs are capitalized by increasing the carrying amount of the related assets by the same amount as the liability. Asset retirement costs are subsequently depreciated over the useful lives of the related assets. Partners HealthCare records changes in the liability resulting from the passage of time and revisions to either the timing or the amount of the original liability estimate. Partners HealthCare reduces these liabilities when the related obligations are settled.

Other Assets
Other assets consist of long-term receivables, deferred financing costs, intangible assets, prepaid ground rent, malpractice insurance receivables (Note 14), investments in healthcare related limited partnerships and benefit assets for over-funded defined benefit plans. Deferred financing costs are amortized over the terms of the related obligations. The carrying value of other assets is evaluated for impairment if the facts and circumstances suggest that the carrying value may not be recoverable.

Compensated Absences
In accordance with formal policies concerning vacation and other compensated absences, accruals of $259,470 and $254,803 were recorded as of September 30, 2015 and 2014, respectively.

Unexpended Funds on Research Grants
Research grants received in advance of corresponding grant expenditures are accounted for as a direct addition to investments limited as to use and unexpended funds on research grants.

(in thousands of dollars)

Self-Insurance Reserves
Partners HealthCare is generally self-insured for employee healthcare, disability, workers' compensation and certain other employee benefits. These costs are accounted for on an accrual basis to include estimates of future payments for claims incurred prior to year end.

Net Assets
Permanently restricted net assets include the historical dollar amounts of gifts and the income and gains on such gifts which are required by donors to be permanently retained. Temporarily restricted net assets include gifts and the income and gains on permanently restricted net assets which can be expended but for which restrictions have not yet been met. Such restrictions include purpose restrictions where donors have specified the purpose for which the net assets are to be spent, or time restrictions imposed by donors or implied by the nature of the gift (capital projects, pledges to be paid in the future, life income funds) or by interpretations of law (gains available for appropriation but not appropriated in the current period). Unrestricted net assets include all of the remaining net assets of Partners HealthCare. More information can be found in Note 16, Net Assets.

Realized gains and losses are classified as unrestricted net assets unless they are restricted by the donor or law. Unless permanently restricted by the donor, realized gains and net unrealized appreciation on permanently restricted gifts are classified as temporarily restricted until appropriated for spending by Partners HealthCare in accordance with policies established by Partners HealthCare and the Massachusetts Uniform Prudent Management of Institutional Funds Act (UPMIFA). Net losses on permanently restricted endowment funds are classified as a reduction to unrestricted net assets until such time as the fair value of these funds exceeds historical cost.

Gifts
Unconditional promises to give cash and other assets to Partners HealthCare are reported at fair value at the date the promise is received. Conditional promises to give are recognized when the conditions are substantially met. Gifts are reported as either temporarily or permanently restricted support if they are received with donor stipulations that limit the use of the donated assets. Donor-restricted contributions whose restrictions are met within the same year as received are reported as unrestricted gifts in the accompanying financial statements.

Gifts of long-lived assets with explicit restrictions that specify use of assets and gifts of cash or other assets that must be used to acquire long-lived assets are reported as additions to temporarily restricted net assets if the assets are not placed in service during the year.

Grants
Grants and contracts normally provide for the recovery of direct and indirect costs, subject to audit. Partners HealthCare recognizes revenue associated with direct and indirect costs as direct costs are incurred. The recovery of indirect costs is based on predetermined rates for U.S. Government grants and contracts and negotiated rates for other grants and contracts.

(in thousands of dollars)

Contributed Securities
Partners HealthCare's policy is to sell securities contributed by donors upon receipt, unless prevented from doing so by donor request. For the years ended September 30, 2015 and 2014, contributed securities of $36,742 and $45,058, respectively, were received and liquidated. Donors restricted the proceeds received from the sale of these contributed securities of $14,163 and $8,737 for long-term purpose for the years ended September 30, 2015 and 2014, respectively.

Statement of Operations
All activities of Partners HealthCare deemed by management to be ongoing, major and central to the provision of healthcare services, teaching, research activities and health insurance are reported as operating revenue and expenses. Other activities are deemed to be nonoperating and include unrestricted gifts (net of fundraising expenses), external community benefit program support, net change in unexpended academic and research gifts, change in fair value of interest rate swaps, substantially all income (loss) from investments and interest on advanced borrowings. Academic and research gifts largely consist of donor contributions (and the related investment income including realized gains and losses) designated to support the clinical, teaching or research efforts of a physician or department as directed by the donor. These gifts are reported as unrestricted, net of related support expenses, when donor restrictions are of a general nature that are inherent in the normal activities of the organization.

Partners HealthCare recognizes changes in third-party payer settlements and other estimates in the year of the change in estimate. For the years ended September 30, 2015 and 2014, adjustments to prior year estimates resulted in an increase to income from operations of $22,381 and $14,642, respectively.

Effective October 1, 2007, the Centers for Medicare and Medicaid Services (CMS) adopted the MS-DRG patient classification system (MS-DRGs) for inpatient services to better recognize severity of illness in Medicare payment rates for acute care hospitals. The adoption of MS-DRGs resulted in the expansion of the number of diagnosis related groups (DRGs), a system of classifying patients for purposes of inpatient reimbursement. By increasing the number of DRGs and more fully taking into account patients' severity of illness in Medicare payment rates for acute care hospitals, the use of MS-DRGs encourages hospitals to improve their documentation and coding of patient diagnoses. CMS has determined that the adoption of the MS-DRGs has increased aggregate payments to hospitals due to additional documentation and coding without a corresponding increase in actual patient severity of illness.

CMS is required by its enabling statute to maintain budget neutrality by prospectively adjusting the Medicare payment rate to eliminate the effect of changes in DRG classification that do not reflect real changes in case-mix. CMS requires Congressional authority, however, to recoup any overpayments made in prior years. In 2007, Congress granted CMS the authority to recoup overpayments made to hospitals in 2008 and 2009 resulting from increased coding and documentation, which CMS did through rate reductions in 2011 and 2012. Subsequently, under the American Taxpayer Relief Act of 2012, Congress granted CMS the authority to recoup overpayments made to hospitals in 2010 through 2012 through rate reductions in 2014 through 2017.

(in thousands of dollars)

In 2013, Partners HealthCare recorded the estimated overpayment amounts received in 2010 through 2012 of $79,020 as deferred revenue to be amortized into net patient service revenue in 2014 through 2017 to offset the rate reductions. Management believes this accounting treatment better reflects the financial impact of this rate methodology and more accurately presents the recognition of revenue. For the years ended September 30, 2015 and 2014, amortization of these overpayments amounted to $15,192 and $6,893, respectively. Partners HealthCare anticipates amortizing the remaining overpayments in 2016 of $23,900 and in 2017 of $33,035.

The statement of operations includes excess of revenues over expenses. Changes in unrestricted net assets, which are excluded from excess of revenues over expenses, include change in net unrealized appreciation on marketable investments, change in fair value of effective hedging interest rate swaps (prior to the change in accounting policy), contributions of long-lived assets (including assets acquired using contributions which by donor restriction were to be used for acquisition of such assets) and change in funded status of defined benefit plans.

Net Patient Service Revenue

Partners HealthCare maintains agreements with CMS of the United States Department of Health and Human Services under the Medicare program, the Commonwealth of Massachusetts (the Commonwealth) under the Medicaid program and various managed care payers that govern payment for services rendered to patients covered by these agreements. The agreements generally provide for per case or per diem rates or payments based on discounted charges for inpatient care and discounted charges or fee schedules for outpatient care. Certain contracts also provide for payments that are contingent upon meeting agreed upon quality and efficiency measures.

Partners HealthCare recognizes patient service revenue associated with services provided to patients who have third-party payer coverage on the basis of contractual rates for the services rendered. For uninsured patients that do not qualify for charity care, Partners HealthCare recognizes revenue on the basis of its standard rates (subject to discounts) for services provided. On the basis of historical experience, a significant portion of Partners HealthCare's uninsured patients are unable or fail to pay for the services provided. Consequently, Partners HealthCare records a provision for bad debts related to uninsured patients in the period the services are provided. For the years ended September 30, 2015 and 2014, patient service revenue net of contractual allowances and discounts (before the provision for bad debts) is as follows:

	2015	2014
Patient service revenue (net of contractual allowances and discounts)		
Third-party payers	$ 7,156,435	$ 6,906,051
Uninsured patients	290,534	265,999
Total all payers	$ 7,446,969	$ 7,172,050

(in thousands of dollars)

Net patient service revenue includes estimated retroactive revenue adjustments due to future audits, reviews and investigations. Retroactive adjustments are considered in the recognition of revenue on an estimated basis in the period the related services are rendered, and such amounts are adjusted in future periods as adjustments become known or as years are no longer subject to such audits, reviews and investigations. Contracts, laws and regulations governing the Medicare, Medicaid and uncompensated care programs (Note 1) and managed care payer arrangements are complex and subject to interpretation. As a result, there is at least a reasonable possibility that recorded estimates will change by a material amount in the near term. A portion of the accrual for settlements with third-party payers has been classified as long-term because such amounts, by their nature or by virtue of regulation or legislation, will not be paid within one year.

Partners HealthCare provides either full or partial uncompensated care to patients who cannot afford to pay for their medical services based on income and family size. Uncompensated care is generally available to qualifying patients for medically necessary services. Partners HealthCare reports certain bad debts related to emergency services as uncompensated care. Uncompensated care is reported at gross charges with an offsetting allowance, as there is no expectation of collection. Accordingly, there is no net patient service revenue related to uncompensated care.

Medical Claims and Related Expenses
NHP contracts with various community health centers, hospital-based primary care physician practices and other health care providers for the delivery of services to its members and compensates these providers on a capitated, fee-for-service or per diem basis.

The cost of contracted health care services is accrued in the period in which services are provided and include certain estimated amounts. The estimated liability for medical claims and related expenses is actuarially determined based on analysis of historical claims-paid experience, modified for changes in enrollment, inflation and benefit coverage. The liability for medical claims and related expenses represents the anticipated cost of claims incurred but unpaid at the balance sheet date. The estimates for claims expense may be more or less than the amounts ultimately paid when claims are settled. Such changes in estimates are reflected in the current period in the consolidated statements of operations.

In the normal course of business, NHP identifies and recoups overpayments through reductions in future payments made to providers and hospitals. Such overpayments are the result of, among other things, coordination of benefits and provider claim audits. For the years ended September 30, 2015 and 2014, NHP identified approximately $53,396 and $44,100, respectively, of recoveries related to claim overpayments made for both current-year and prior-year paid claims, which are reflected as a reduction to medical claims and related expenses in the consolidated statements of operations. As of September 30, 2015 and 2014, NHP's accounts receivable include $1,723 and $2,049, respectively, related to such overpayments.

Premium Revenue
Premiums are due monthly and recorded as earned during the period in which members are eligible to receive services. Premiums received prior to the first day of the coverage period are recorded as unearned premiums in accounts payable and accrued expenses.

Reinsurance
Reinsurance premiums are reported in medical claims and related expenses and reinsurance recoveries are reported as reductions in medical claims and related expenses.

(in thousands of dollars)

Settlements
NHP contracts with the Executive Office of Health and Human Services (EOHHS) and certain providers based on historical and anticipated experience. These methods of reimbursement result in settlements based on actual versus anticipated experience which could result in either payments due from (to) these providers. Settlements receivable of $78,969 and $21,197 were recorded as of September 30, 2015 and 2014, respectively. Settlements payable of $3,697 and $14,654 were recorded as of September 30, 2015 and 2014, respectively. The settlements are intended to include both reported and unreported incurred claims as of September 30, 2015 and 2014.

In 2014, the Affordable Care Act introduced new settlements related to a risk adjustment program, risk corridor program and reinsurance program designed to mitigate the transitional impact on insurers for new members. NHP's estimated net receivable due from the federal government for these programs was $23,687 and $5,761 at September 30, 2015 and 2014, respectively. Similar to the federal program, EOHHS has a risk corridor program and NHP's estimated net receivable due from EOHHS is $75,910 and $17,842 at September 30, 2015 and 2014, respectively.

Premium Deficiency Reserve
Premium deficiency reserves are assessed and recognized on a product line basis based upon expected premium revenue, medical expense and administrative expense levels, and remaining contractual obligations using historical experience. As of September 30, 2015 and 2014, premium deficiency reserves total approximately $32,636 and $91,555, respectively, and are included in accrued medical claims and related expenses in the accompanying consolidated financial statements.

Claims Adjustment Expenses
Claims adjustment expenses (CAE) are those costs expected to be incurred in connection with the adjustment and recording of health claims. NHP has recorded an estimate of unpaid CAE associated with incurred but unpaid claims, which is included in medical claims and related expenses in the accompanying consolidated statements of operations. Management believes the amount of the liability for unpaid CAE as of September 30, 2015, is adequate to cover NHP's cost for the adjustment and recording of unpaid claims; however, actual expenses may differ from those established estimates. Adjustments to the estimates for unpaid CAE are reflected in operating results in the period in which the change in estimate is identified (Note 9).

Other Revenue
Other revenue includes institutional revenue (for example, billing for services provided to other healthcare providers), parking, nonpatient pharmacy and tuition revenue.

Recent Accounting Pronouncements
Partners HealthCare adopted ASU 2015-07, Disclosures for Certain Entities That Calculate Net Asset Value per Share (or its Equivalent), which removes the requirement to categorize within the fair value hierarchy all investments for which fair value is measured using net asset value per share as the practical expedient. The adoption of ASU 2015-07 did not have a material effect on Partners HealthCare's financial statements.

(in thousands of dollars)

3. Acquisitions

Multiple physician practices were acquired during the year ended September 30, 2015 for a combined purchase price of $46,917. In accordance with accounting standards, the purchase price was allocated first to tangible assets, then identifiable intangible assets and the remaining allocated to goodwill.

Assets, liabilities, and net assets assumed as of the acquisition dates are as follows:

Assets	
Cash and cash equivalents	$ 5,257
Patient accounts receivable, net	3,762
Property plant and equipment	3,201
Other assets	34,697
Total assets acquired	$ 46,917
Liabilities	
Note payable	$ 2,693
Accounts payable and accrued expenses	10,457
Accrued compensation and benefits	5,087
Accrued professional liability	80
Total liabilities assumed	18,317
Net assets	
Unrestricted	28,600
Total net assets	28,600
Total liabilities and net assets	$ 46,917

A summary of the financial results of the acquired physician practices from the respective dates of acquisition is included in the consolidated statements of operations and changes in net assets is as follows:

Total operating revenue	$ 88,325
Total operating expenses	103,431
Loss from operations	(15,106)
Nonoperating gains (expenses), net	2
Deficit of revenues over expenses	(15,104)
Other changes	1,000
Decrease in unrestricted net assets	$ (14,104)

(in thousands of dollars)

A summary of the consolidated financial results of Partners HealthCare for the year ended September 30, 2015, as if the transactions had occurred on October 1, 2014 is as follows (unaudited):

Total operating revenue	$ 11,696,236
Total operating expenses	11,592,219
Income from operations	104,017
Nonoperating gains (expenses), net	(198,447)
Deficit of revenues over expenses	(94,430)
Pension related changes	(639,167)
Other changes	(186,096)
Decrease in unrestricted net assets	$ (919,693)

4. Levels of Capital and Surplus

Risk-based capital (RBC) is a methodology adopted by the National Association of Insurance Commissioners (NAIC) for determining the minimum level of capital and surplus deemed necessary for an insurer based upon the types of assets held and business written. Pursuant to a guaranty entered into by PHS when it acquired NHP in 2012 (the RBC Guaranty), PHS has committed to maintain NHP' s capital and surplus at a specified minimum level, measured quarterly in accordance with an RBC methodology permitted by the Massachusetts Division of Insurance (DOI). The RBC Guaranty may be enforced by the DOI. PHS provided capital to NHP of $117,100 and $86,000 in 2015 and 2014, respectively.

In accordance with accounting guidance, NHP recognized premium deficiency reserves of $32,636 and $91,555 at September 30, 2015 and 2014, respectively. The premium deficiency reserves are estimates of anticipated losses in fiscal 2016 and 2015, respectively, related to NHP's MassHealth and CommCare contracts. In order to comply with its obligations under the RBC Guaranty PHS transferred $40,300 to NHP in November 2015.

NHP's current contract with EOHHS requires NHP to maintain a minimum net worth and/or financial insolvency insurance in an amount equal to the Minimum Net Worth calculation as defined in Massachusetts General Law 176G, Section 25. At December 31, 2014 and 2013 (NHP's fiscal and statutory year end), the minimum net worth requirement, as determined in accordance with EOHHS guidelines, was $114,300 and $78,800, respectively. NHP's statutory net worth was $128,700 and $97,200 at December 31, 2014 and 2013, respectively, and thus exceeded the EOHHS requirements by $14,400 and $18,400, respectively.

(in thousands of dollars)

5. Investments and Investments Limited as to Use

Investments are either separately invested or included in pooled investment funds within the Partners HealthCare System Pooled Investment Accounts (Partnership). The Partnership is structured as a single general partnership composed of three investment pools, with PHS and substantially all of its affiliates participating in the pools as partners. Each partner's interest in the Partnership is based on its underlying investments in one or more of the three separate pools. Amounts included in the investment pools are accounted for using the fair value method whereby each partner is assigned a number of units based on the fair value of the assets of a pool at the time of entry of the funds into the pool. Current fair value is used to determine the number of units allocated to additional amounts placed in a pool and to value withdrawals from a pool. Income from investments of the pools, including realized gains and losses, is allocated on a unitized basis to a partner based on the partner's share of units in a pool.

Among other investments, the Partnership invests in private partnerships whose assets include equity, fixed income and other investments. As of September 30, 2015, the Partnership has unfunded commitments of approximately $470,498 which will be drawn down by the various general partners over the next several years. The maximum annual drawdown is expected to be less than 2% of investments and investments limited as to use.

Investments and investments limited as to use are recorded in the balance sheet as follows:

	September 30, 2015	September 30, 2014
Current assets		
Investments	$ 1,354,636	$ 1,474,058
Current portion of investments limited as to use	1,590,203	2,120,057
	2,944,839	3,594,115
Long-term assets		
Investments limited as to use, less current portion	2,832,744	2,927,360
Long-term investments	1,061,176	1,026,538
	$ 6,838,759	$ 7,548,013

(in thousands of dollars)

Investments limited as to use consist of the following:

	September 30, 2015		September 30, 2014	
	Current Portion	Long-Term Portion	Current Portion	Long-Term Portion
Internally designated funds				
Reserved for capital expenditures	$ 863,703	$ -	$ 1,010,371	$ -
Unexpended academic and research gifts	-	2,311,685	-	2,449,470
Deferred compensation	-	226,627	-	216,553
Other	394,756	263,764	863,371	224,310
	1,258,459	2,802,076	1,873,742	2,890,333
Externally limited funds				
Unexpended funds on research	202,137	-	183,222	-
Contributions held for others	1,269	-	3,991	-
Professional liability trust fund	-	30,668	-	37,027
Held by trustees under debt and other agreements	128,338	-	59,102	-
	331,744	30,668	246,315	37,027
	$ 1,590,203	$ 2,832,744	$ 2,120,057	$ 2,927,360

Investments and investments limited as to use are reported at either fair value or on the equity or cost methods of accounting. The composition of these investments, segregated between pooled investments and those that are separately invested, is as follows:

	September 30, 2015			
	At Fair Value	On Equity Method	On Cost Method	Total
Pooled investments				
Invested cash equivalents	$ 34,049	$ -	$ -	$ 34,049
Separately managed investments	1,834,357	-	-	1,834,357
Mutual funds	365,035	-	-	365,035
Commingled funds	1,157,965	-	-	1,157,965
Private partnerships	-	744,139	1,991,206	2,735,345
	3,391,406	744,139	1,991,206	6,126,751
Separately invested				
Invested cash equivalents	135,640	-	16	135,656
Equities	6,247	-	46,237	52,484
U.S. Government and domestic fixed income securities	32,330	-	-	32,330
Mutual funds	397,539	-	-	397,539
Other	17,416	-	76,583	93,999
	589,172	-	122,836	712,008
	$ 3,980,578	$ 744,139	$ 2,114,042	$ 6,838,759

(in thousands of dollars)

Separately managed investments include cash and equivalents of $212,882, equities of $612,948 and fixed income securities of $1,008,527 as of September 30, 2015.

	September 30, 2014			
	At Fair Value	On Equity Method	On Cost Method	Total
Pooled investments				
Invested cash equivalents	$ 43,396	$ -	$ -	$ 43,396
Separately managed investments	2,301,880	-	-	2,301,880
Mutual funds	549,948	-	-	549,948
Commingled funds	1,151,708	-	-	1,151,708
Private partnerships	-	804,445	2,013,552	2,817,997
	4,046,932	804,445	2,013,552	6,864,929
Separately invested				
Invested cash equivalents	127,785	-	741	128,526
Equities	14,062	-	23,937	37,999
U.S. Government and domestic fixed income securities	32,427	-	-	32,427
Mutual funds	360,417	-	-	360,417
Other	47,018	-	76,697	123,715
	581,709	-	101,375	683,084
	$ 4,628,641	$ 804,445	$ 2,114,927	$ 7,548,013

Separately managed investments include cash and equivalents of $193,406, equities of $930,884 and fixed income securities of $1,177,590 as of September 30, 2014.

For the private partnerships reflected in the balance sheet at cost, the difference (unrecorded net unrealized appreciation) between the value reported by the investment managers and the cost for these investments was $863,084 and $883,174 as of September 30, 2015 and 2014, respectively.

(in thousands of dollars)

The fair value and gross unrealized depreciation of investments and investments limited as to use, with a fair value less than cost, that are not deemed to be other-than-temporarily impaired as of September 30, 2015 are as follows:

	Less than 12 Months		12 Months or Greater	
	Fair Value	Gross Unrealized Depreciation	Fair Value	Gross Unrealized Depreciation
Pooled investments				
Separately managed investments	$ 1,051	$ (137)	$ 189	$ (9)
Mutual funds				
Commingled funds	734,450	(84,501)	169,374	(45,212)
	735,501	(84,638)	169,563	(45,221)
Separately invested				
Equities	-	-	10	(4)
Fixed income securities	-			
Mutual funds	104,407	(7,866)	27,628	(5,113)
External trusts	-	-	93	(12)
	104,407	(7,866)	27,731	(5,129)
	$ 839,908	$ (92,504)	$ 197,294	$ (50,350)

In addition, for certain private partnerships recorded at cost, gross unrealized depreciation amounted to $23,118 as of September 30, 2015, with $20,478 of that amount unrealized for 12 months or greater.

Based on management's quantitative and qualitative assessment, investments whose cost exceeds fair value are not considered to be other-than-temporarily impaired as of September 30, 2015. Management believes these investments will recover their values and there is no intention to liquidate these positions.

(in thousands of dollars)

Investment income and gains (losses) from cash and equivalents, investments, investments limited as to use and beneficial interests in perpetual trusts are comprised of the following:

	Years Ended September 30, 2015	2014
Unrestricted		
Dividends, interest and other income	$ 59,941	$ 62,576
Endowment income distributions, net of reinvested gains	39,059	35,564
Net realized gains (losses) on investments		
Realized gains	158,402	313,244
Other-than-temporary impairment	(139,474)	(55,636)
Change in value of equity method investments	(46,860)	33,832
Recovery on endowment funds	(11,045)	91
Total investment activity included in excess of revenues over expenses	60,023	389,671
Change in net unrealized appreciation on marketable investments	(224,616)	(3,309)
Total unrestricted investment activity	(164,593)	386,362
Temporarily restricted		
Dividends and interest income	5,286	14,857
Endowment income distributions	(47,133)	(41,823)
Net realized gains (losses) on investments		
Realized gains	31,890	63,595
Other-than-temporary impairment	(24,558)	(10,468)
	(34,515)	26,161
Change in value of equity method investments	(11,945)	10,736
Change in net unrealized appreciation on marketable investments	(47,396)	(11,118)
Recovery on endowment funds	11,045	(91)
	(48,296)	(473)
Total temporarily restricted investment activity	(82,811)	25,688
Permanently restricted		
Dividends and interest income	(3)	4
Net realized gains on investments	58	26
Change in net unrealized appreciation on marketable investments	(2,313)	392
Change in value of beneficial interests in perpetual trusts	(970)	1,314
Total permanently restricted investment activity	(3,228)	1,736
	$ (250,632)	$ 413,786

(in thousands of dollars)

Investment income included in operating results and excess of revenues over expenses is comprised of the following:

	Years Ended September 30, 2015	2014
Investment income included in operations and reported in other revenue	$ 11,841	$ 13,692
Investment income included in nonoperating gains and reported in		
(Loss) income from investments	(37,258)	227,357
Academic and research gifts, net of expenses	85,440	148,622
Total investment activity included in excess of revenues over expenses	$ 60,023	$ 389,671

6. Fair Value Measurements

Fair value is defined as the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date (also referred to as exit price). Therefore, a fair value measurement should be determined based on the assumptions that market participants would use in pricing the asset or liability. In determining fair value, the use of various valuation approaches, including market, income and cost approaches, is permitted.

Fair Value Hierarchy

A fair value hierarchy has been established based on whether the inputs to valuation techniques are observable or unobservable. Observable inputs reflect market data obtained from independent sources, while unobservable inputs reflect the reporting entity's assumptions about the inputs market participants would use. The fair value hierarchy requires the reporting entity to maximize the use of observable inputs and minimize the use of unobservable inputs when measuring fair value. In addition, for hierarchy classification purposes, the reporting entity should not look through the form of an investment to the nature of the underlying securities held by an investee.

The hierarchy is described below.

Level 1 Valuations using quoted prices in active markets for identical assets or liabilities. Valuations of these products do not require a significant degree of judgment. Level 1 assets and liabilities primarily include debt and equity securities that are traded in an active exchange market.

Level 2 Valuations using observable inputs other than Level 1 prices such as quoted prices in active markets for similar assets or liabilities; quoted prices for identical or similar assets or liabilities in markets that are not active; broker or dealer quotations; or other inputs that are observable or can be corroborated by observable market data for substantially the full term of the assets or liabilities. Level 2 assets and liabilities primarily include debt securities with quoted prices that are traded less frequently than exchange-traded instruments as well as debt securities and derivative contracts whose value is determined using a pricing model with inputs that are observable in the market or can be derived principally from or corroborated by observable market data.

(in thousands of dollars)

Level 3 Valuations using unobservable inputs that are supported by little or no market activity and are significant to the fair value of the assets or liabilities. Level 3 includes assets and liabilities whose value is determined using pricing models, discounted cash flow methodologies, or similar techniques reflecting the reporting entity's assumptions about the assumptions market participants would use as well as those requiring significant management judgment.

Valuation Techniques

Pooled investments (except for private partnerships, which are reported on either the equity method or cost method of accounting), separately invested cash equivalents and debt and equity securities are classified within Level 1 or Level 2 of the fair value hierarchy as they are valued using quoted market prices, broker or dealer quotations, or other observable pricing sources. Certain types of investments are classified within Level 3 of the fair value hierarchy because they have little or no market activity and therefore have little or no observable inputs with which to measure fair value.

The valuation of interest rate swaps is determined using widely accepted valuation techniques, including discounted cash flow analysis on the expected cash flows of each derivative. This analysis reflects the contractual terms of the derivatives, including the period to maturity, and uses observable market-based inputs, including interest rate curves and implied volatilities.

The following tables summarize fair value measurements as of September 30, 2015 and 2014 for financial assets and liabilities measured at fair value on a recurring basis:

	Fair Value Measurements Using			
	Quoted Prices in Active Markets for Identical Items (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)	Fair Value at September 30, 2015
Assets				
Pooled investments				
Invested cash equivalents	$ 33,027	$ 1,021	$ -	$ 34,048
Separately managed investments	1,331,564	502,793	-	1,834,357
Mutual funds	365,034	-	-	365,034
Commingled funds	-	1,157,967	-	1,157,967
	1,729,625	1,661,781	-	3,391,406
Separately invested				
Invested cash equivalents	135,640	-	-	135,640
Equities	6,247	-	-	6,247
U.S. Government and domestic fixed income securities	32,330	-	-	32,330
Mutual funds	397,539	-	-	397,539
Other	-	-	17,416	17,416
	571,756	-	17,416	589,172
	$ 2,301,381	$ 1,661,781	$ 17,416	$ 3,980,578
Liabilities				
Interest rate swaps		$ 404,062		$ 404,062

(in thousands of dollars)

	Fair Value Measurements Using			
	Quoted Prices in Active Markets for Identical Items (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)	Fair Value at September 30, 2014
Assets				
Pooled investments				
Invested cash equivalents	$ 9,702	$ 33,694	$ -	$ 43,396
Separately managed investments	1,700,305	601,575	-	2,301,880
Mutual funds	549,948	-	-	549,948
Commingled funds	-	1,151,708	-	1,151,708
	2,259,955	1,786,977	-	4,046,932
Separately invested				
Invested cash equivalents	127,785	-	-	127,785
Equities	9,708	4,354	-	14,062
U.S. Government and domestic fixed income securities	17,224	15,203	-	32,427
Mutual funds	360,417	-	-	360,417
Other	-	36,280	10,738	47,018
	515,134	55,837	10,738	581,709
	$ 2,775,089	$ 1,842,814	$ 10,738	$ 4,628,641
Liabilities				
Interest rate swaps		$ 295,656		$ 295,656

As of and for the years ended September 30, 2015 and 2014, the fair value of the assets and change in the value of the assets measured using significant unobservable inputs (Level 3) were related to beneficial interests in perpetual assets.

(in thousands of dollars)

7. Pledges Receivable and Contributions Receivable From Trusts

Pledges receivable represent unconditional promises to give and are net of allowances for uncollectible amounts. Pledges are recorded at the present value of their estimated future cash flows. Pledges collectible within one year are classified as other current assets, net of allowances, and total $87,229 and $94,331 as of September 30, 2015 and 2014, respectively. Estimated cash flows due after one year are discounted using published treasury bond and note yields that are commensurate with estimated collection risks. The blended discount rate was 1.0% and 0.8% for 2015 and 2014, respectively. Pledges are expected to be collected as follows:

	September 30, 2015	September 30, 2014
Amounts due		
Within one year	$ 108,865	$ 110,668
In one to five years	138,411	161,764
In more than five years	56,120	19,300
Total pledges receivable	303,396	291,732
Less: Unamortized discount	6,840	5,348
	296,556	286,384
Less: Allowance for uncollectibles	26,711	23,460
Net pledges receivable	269,845	262,924
Contributions receivable from trusts	26,448	29,382
	$ 296,293	$ 292,306

8. Property and Equipment

Property and equipment consists of the following:

	September 30, 2015	September 30, 2014
Land and land improvements	$ 179,954	$ 172,924
Buildings and building improvements	5,955,908	5,558,974
Equipment	1,826,766	1,427,800
Construction in progress	1,098,134	900,180
	9,060,762	8,059,878
Accumulated depreciation	(3,731,980)	(3,443,970)
Property and equipment, net	$ 5,328,782	$ 4,615,908

Depreciation expense for the years ended September 30, 2015 and 2014 was $487,980 and $454,512, respectively. Interest costs, net of interest earned, aggregating $35,063 and $30,744 were capitalized in 2015 and 2014, respectively.

(in thousands of dollars)

For the years ended September 30, 2015 and 2014, fully depreciated assets with an original cost of $199,970 and $235,966, respectively, were written off.

9. Accrued Medical Claims and Related Expenses

Liabilities for accrued medical claims and related expenses include estimates of expected trends in claims severity, frequency, and other factors, which could vary as the claims are ultimately settled and are based principally upon historical experience. As a result of changes in estimates of insured events in prior years and recoveries, the liability on claims existing on October 1, 2014 and 2013, (decreased) increased ($27,221) and $13,332, respectively, in the years ended September 30, 2015 and 2014, respectively. Increases (decreases) of this nature occur as the result of claim settlements and recoveries during the current year and as additional information is received regarding individual claims, causing changes from the original estimates of the cost of these claims. Ongoing analysis of the recent loss development trends is also taken into account in evaluating the overall adequacy of the reserves.

	2015	2014
Balance at beginning of year	$ 254,480	$ 121,833
Less:		
Premium deficiency reserve	(91,555)	(6,494)
Medical loss ratio rebate payable	(611)	(4,701)
Accrual for claims adjustment expenses	(4,381)	(2,855)
Claim recoveries	(7,567)	(1,991)
Plus: Settlements payable, net	22,020	23,555
Net balance at beginning of year	172,386	129,347
Incurred related to		
Current year	2,007,380	1,597,866
Prior years	(27,221)	13,332
Total incurred	1,980,159	1,611,198
Paid related to		
Current year	1,822,513	1,431,205
Prior years	144,996	136,954
Total paid	1,967,509	1,568,159
Net balance at end of year	185,036	172,386
Plus:		
Premium deficiency reserve	32,636	91,555
Medical loss ratio rebate payable	-	611
Accrual for claims adjustment expenses	4,877	4,381
Accrued medical payables - other	14,477	-
Claims recoveries	8,300	7,567
Less: Settlements payable, net	(13,058)	(22,020)
Balance at end of year	$ 232,268	$ 254,480

(in thousands of dollars)

Medical claims and related expenses in the accompanying consolidated statements of operations include these amounts along with other nonclaims related costs. These nonclaims related expenses were for directly delivered services and medical cost risk sharing and incentives, totaling approximately $17,422 and $14,792 for the years ended September 30, 2015 and 2014, respectively.

10. Long-Term Obligations

Long-term obligations issued by PHS and its affiliates consist of the following:

	September 30, 2015	September 30, 2014
Massachusetts Health and Educational Facilities Authority (Authority) Revenue Bonds		
Partners HealthCare System Series D, issued in multiple subseries, variable interest rate of 0.01% and 0.02% at September 30, 2015 and 2014, respectively, final maturity in 2017	$ 1,940	$ 11,490
Partners HealthCare System Series F, issued in multiple subseries, average fixed interest rate of 5.00%, variable interest rate of 0.29% and 0.24% at September 30, 2015 and 2014, respectively, final maturity in 2040	246,209	273,458
Partners HealthCare System Series G, issued in multiple subseries, average fixed interest rate of 4.93%, variable interest rate of 0.24% at September 30, 2015 and 2014, final maturity in 2047	319,614	438,054
Partners HealthCare System Series H, issued in multiple subseries, variable interest rate of 0.08% and 0.08% at September 30, 2015 and 2014, respectively, final maturity in 2042	171,170	171,165
Partners HealthCare System Series I, issued in multiple subseries, average fixed interest rate of 4.80%, variable interest rate of 0.01% and 0.03%, at September 30, 2015 and 2014, respectively, final maturity in 2044	168,686	171,996
Partners HealthCare System Series J, issued in multiple subseries, average fixed interest rate of 5.00%, final maturity in 2039	442,110	456,746
Partners HealthCare System Series P, issued in multiple subseries, variable interest rate of 0.01% and 0.04% at September 30, 2015 and 2014, respectively, final maturity in 2027	150,000	150,000
Massachusetts Development Finance Agency (Agency) Revenue Bonds		
Partners HealthCare System Series K, issued in multiple subseries, average fixed interest rate of 4.86%, variable interest rate of 0.02% and 0.04% at September 30, 2015 and 2014, respectively, final maturity in 2046	342,219	352,836
Partners HealthCare System Series L, average fixed interest rate of 4.94%, final maturity in 2041	340,347	351,264
Partners HealthCare System Series M, issued in multiple subseries, average fixed interest rate of 4.95%, variable interest rate of 0.34% and 0.36% at September 30, 2015 and 2014, respectively, final maturity in 2048	507,533	509,100
Partners HealthCare System Series N, issued in multiple subseries, variable interest rate of 0.65% and 0.62% at September 30, 2015 and 2014, respectively, final maturity in 2044	139,400	141,350
Partners HealthCare System Series O, issued in multiple subseries, average fixed rate of 4.60%, variable interest rate of 0.50% at September 30, 2015, final maturity in 2050	356,517	-
Partners HealthCare System Series 2007 taxable bonds, fixed interest rate of 6.26%, final maturity in 2037	100,000	100,000
Partners HealthCare System Series 2011 taxable bonds, fixed interest rate of 3.44%, final maturity in 2021	250,000	250,000
Partners HealthCare System 2012 Taxable Senior Notes, fixed interest rate of 4.11%, final maturity in 2052	400,000	400,000
Partners HealthCare System 2014 Taxable Senior Notes, fixed interest rate of 4.73%, final maturity in 2044	150,000	150,000
Partners HealthCare System Series 2015 taxable bonds, fixed interest rate of 4.12%, final maturity in 2055	300,000	-
Other obligations	6,092	6,454
Capital lease obligations	1,187	2,229
Total long-term obligations including unamortized discounts and premiums	4,393,024	3,936,142
Less: Current portion	398,990	238,204
	$ 3,994,034	$ 3,697,938

(in thousands of dollars)

Aggregate maturities and payments of long-term obligations during the next five years and thereafter, and other amounts classified as current liabilities, are as follows:

	Scheduled Maturities	Bonds Supported by Partners HealthCare Liquidity	Bonds Supported by Bank Facilities	Total
2016	$ 64,860	$ 246,780	$ 87,350	$ 398,990
2017	61,979	-	-	61,979
2018	68,162	-	-	68,162
2019	69,392	-	-	69,392
2020	71,959	-	-	71,959
Thereafter	3,722,542	-	-	3,722,542
	$ 4,058,894	$ 246,780	$ 87,350	$ 4,393,024

The scheduled maturities represent annual payments as required under debt repayment schedules. The current portion of long-term obligations includes the payments scheduled to be made in 2016 along with bonds supported by Partners HealthCare liquidity and bonds supported by bank facilities (standby bond purchase agreements or letters of credit) with financial institutions that expire prior to September 30, 2016. The bonds supported by Partners HealthCare liquidity provide the bondholder with an option to tender the bonds to Partners HealthCare. Accordingly, these bonds are classified as a current liability. The bonds supported by bank facilities provide the bondholder with an option to tender the bonds to the liquidity provider. Generally accepted accounting principles require bonds backed by bank facilities expiring within one year of the balance sheet date to be classified as a current liability.

The fair value of long-term obligations was $4,611,382 and $4,152,828 as of September 30, 2015 and 2014, respectively, and would be classified as Level 2. The carrying amount of the variable rate debt is a reasonable estimate of its fair value. The fair value of the fixed rate debt is estimated based on quoted market prices for the same or similar issues.

Interest expense paid during the years ended September 30, 2015 and 2014 was $165,844 and $149,942, respectively.

Taxable Bonds and Notes
In March 2014, PHS issued $150,000 of Partners HealthCare System Taxable Senior Notes. Proceeds from the notes were used to finance certain capital projects.

In January 2015, PHS issued $300,000 of Partners HealthCare System Taxable Bonds. Proceeds from the bonds were used to finance certain capital projects.

Revenue Bonds
In January 2014, PHS issued $496,040 of Partners HealthCare System Series M Revenue Bonds, plus bond premium of $14,337. The bond proceeds, net of issuance costs of $4,042, were used to refund portions of Series D Bonds ($71,665) and Series K Bonds ($73,815) and to finance certain capital projects ($360,855).

(in thousands of dollars)

In August 2014, PHS issued $141,350 of Partners HealthCare System Series N Revenue Bonds. The Series N Bonds were privately placed with two banks. The bond proceeds were used to refund portions of Series F Bonds ($91,350) and Series I Bonds ($50,000).

In January 2015, PHS issued $317,615 of Partners HealthCare System Series O Revenue Bonds, plus bond premium of $39,969. The bond proceeds, net of issuance costs of $2,814, were used to refund portions of Series F Bonds ($20,865) and Series G Bonds ($119,201) and to finance certain capital projects ($214,704).

Partners HealthCare bonds are general obligations of PHS supported by guarantees from BWHC, The Brigham and Women's Hospital, Inc. (BWH), MGH and The General Hospital Corporation (the General) which may be suspended under certain conditions.

PHS bond agreements contain certain covenants, including a minimum debt service coverage ratio and limitations on additional indebtedness and asset transfers.

Credit Agreement
Partners HealthCare maintains a $150,000 Credit Agreement (the Agreement) that provides access to same day funds. Advances under the Agreement bear a variable rate of interest based on the London Interbank Offered Rate (LIBOR). As of September 30, 2015, there were no amounts outstanding under the Agreement. The Agreement expires in June 2017.

11. Derivatives

Interest Rate Swaps
Partners HealthCare utilizes swap contracts to manage fluctuations in cash flows resulting from interest rate risk on certain of its variable rate bonds. These bonds expose Partners HealthCare to variability in interest payments due to changes in interest rates. Management believes that it is prudent to limit the variability of its interest payments. To meet this objective and to take advantage of low interest rates, Partners HealthCare entered into various swap contracts involving the exchange of fixed rate payments by Partners HealthCare for variable rate payments from several counterparties based on a percentage of LIBOR.

By using swap contracts to manage the risk of changes in interest rates, Partners HealthCare exposes itself to credit risk and market risk. Credit risk is the failure of the counterparty to perform under the terms of the swap contracts. When the fair value of a swap contract is positive, the counterparty has a liability to Partners HealthCare, which creates credit risk. Partners HealthCare minimizes its credit risk by entering into swap contracts with several counterparties and requiring the counterparty to post collateral for the benefit of Partners HealthCare based on the credit rating of the counterparty and the fair value of the swap contract. When the fair value of a swap contract is negative, Partners HealthCare has a liability to the counterparty and, therefore, it does not possess credit risk, but under certain circumstances, Partners HealthCare may be required to post collateral for the benefit of the counterparty and the counterparty. Market risk is the adverse effect on the value of a financial instrument that results from a change in interest rates. The market risk associated with interest rate changes is managed by establishing and monitoring parameters that limit the types and degree of market risk that may be undertaken.

(in thousands of dollars)

The following is a summary of the outstanding positions under these swap contracts as of September 30, 2015:

Effective Date	Notional Amount	Maturity	Rate Paid	Rate Received
5/1/03	$ 150,000	7/1/35	4.40 %	67% 1-month LIBOR
7/1/05	150,000	7/1/40	3.63 %	67% 1-month LIBOR
7/1/05	38,600	7/1/25	5.11 %	67% 6-month LIBOR
7/1/07	150,000	7/1/42	3.46 %	67% 1-month LIBOR
7/1/09	100,000	7/1/44	3.71 %	67% 1-month LIBOR
7/1/11	100,000	7/1/46	3.74 %	67% 1-month LIBOR
7/1/13	100,000	7/1/48	3.80 %	67% 1-month LIBOR
7/1/15	50,000	7/1/50	3.80 %	67% 1-month LIBOR
4/1/16	50,000	7/1/50	3.93 %	67% 1-month LIBOR
4/1/16	50,000	7/1/52	3.59 %	67% 1-month LIBOR
7/1/17	50,000	7/1/52	3.74 %	67% 1-month LIBOR

As of September 30, 2014, Partners HealthCare elected to stop applying hedge accounting treatment for its swap contracts; accordingly, changes in the fair value of interest rate swaps are recognized as nonoperating gains (expenses). As a result of this election and in accordance with accounting guidance for derivative instruments, losses of $81,600 which were previously recognized as a change in unrestricted net assets were reclassed to nonoperating gains (expenses) in the consolidated statement of operations.

Previously, for swap contracts designated as cash flow hedges, the change in fair value of the effective portion of the hedge was reflected as a change in unrestricted net assets and the ineffective portion of the hedge was reflected as a component of nonoperating gains (expenses) in the consolidated statements of operations. For nonhedging swap contracts, the change in fair value was recorded as a component of nonoperating gains (expenses) in the consolidated statements of operations.

The fair value of swap contracts is recorded in the interest rate swap liability.

(in thousands of dollars)

The effects of swap contracts on the consolidated statements of operations are as follows:

	Amount of Gain (Loss) Recognized in Changes in Unrestricted Net Assets Years Ended September 30,		Amount of Gain (Loss) Recognized in Excess of Revenues Over Expenses Years Ended September 30,	
	2015	2014	2015	2014
Statement of operations location				
Swap contracts designated as hedging instruments				
Change in fair value of hedging interest rate swaps	$ -	$ 44,806	$ -	$ -
Amortization of swaption premiums	-	-	-	1,112
Hedge ineffectiveness	-	-	-	771
Swap contracts not designated as hedging instruments				
Change in fair value of nonhedging interest rate swaps	-	-	(110,315)	(110,340)
Amortization of net asset balance upon hedge de-designation	-	818	-	(818)
	$ -	$ 45,624	$ (110,315)	$ (109,275)

Partners HealthCare's swap contracts contain provisions that require collateral to be posted if the fair value of the swap exceeds certain thresholds. The collateral thresholds reflect the current credit ratings issued by major credit rating agencies on Partners HealthCare's and the counterparty's debt. Declines in Partners HealthCare's or the counterparty's credit ratings would result in lower collateral thresholds and, consequently, the potential for additional collateral postings by Partners HealthCare or the counterparty. As of September 30, 2015 and 2014, Partners HealthCare had posted collateral of $128,208 and $58,944, respectively. Partners HealthCare has established procedures to ensure that liquidity and securities are available to meet collateral posting requirements.

Upon the occurrence of certain events of default or termination events identified in the swap contracts, either Partners HealthCare or the counterparty could terminate the contracts in accordance with their terms. Termination results in the payment of a termination amount by one party that attempts to compensate the other party for its economic losses. If interest rates at the time of termination are lower than those specified in the swap contract, Partners HealthCare would make a payment to the counterparty. Conversely, if interest rates at such time are higher, the counterparty would make a payment to Partners HealthCare.

Derivatives - Other
Partners HealthCare also enters into options and futures primarily as hedges on securities and indices primarily related to foreign currency. Forward contracts are used as currency hedges. These agreements are limited in use and generally do not exceed one year and are included in separately invested investments.

(in thousands of dollars)

12. Commitments

Leases

Partners HealthCare has capital and noncancelable operating leases for certain buildings and equipment. Minimum future lease commitments under noncancelable leases for the next five years and thereafter are as follows:

	Capital Leases	Operating Leases
2016	$ 437	$ 239,337
2017	437	172,736
2018	396	145,392
2019	-	103,959
2020	-	83,541
Thereafter	-	382,176
Total lease payments	1,270	$ 1,127,141
Less: Amount representing interest	83	
Capital lease obligations at September 30, 2015	$ 1,187	

Rental expense under operating leases approximated $196,946 in 2015 and $190,827 in 2014.

Construction Projects

BWH is constructing a building (the Brigham Building for the Future or BBF). The BBF will expand research and clinical space on the BWH campus, with a focus on the Neuroscience and Musculoskeletal programs, and increase flexibility for future campus redevelopment while allowing for lease consolidation. The associated land is leased to BWH by the Commonwealth through 2105. Phase 1 of the project, which involved the construction of two smaller facilities to be used by the Commonwealth, was completed in 2012. Phase 2 of the project, which involves the site preparation and construction of BBF, is ongoing. As of September 30, 2015, accumulated costs incurred related to the BBF approximated $284,830 with approximately $77,605 in outstanding construction contracts. Phase 2 costs are expected to be approximately $511,500, with occupancy scheduled for late 2016.

Partners HealthCare is constructing a building and parking garage as part of the mixed-use development project at Assembly Row in Somerville, MA. This building will primarily be administrative space and allow for consolidation of multiple locations into a single cost- effective location. As of September 30, 2015, accumulated costs incurred related to the new administrative project are approximately $127,392 with approximately $182,500 in outstanding commitments. The total cost of the project is expected to be approximately $467,000, with occupancy scheduled for summer 2016.

(in thousands of dollars)

13. Pension and Postretirement Healthcare Benefit Plans

Substantially all employees of Partners HealthCare are covered under various noncontributory defined benefit pension plans and various defined contribution pension plans. In addition, certain affiliates provide subsidized healthcare benefits for retired employees on a self-insured basis, with the benefit obligation being partially funded. These retiree healthcare benefits are administered through an insurance company and are accounted for on the accrual basis, which includes an estimate of future payments for claims incurred.

Total expense for these plans consists of the following:

	Years Ended September 30,	
	2015	2014
Defined benefit plans	$ 233,670	$ 181,748
Defined contribution plans	150,745	144,747
Postretirement healthcare benefit plans	4,368	7,029
	$ 388,783	$ 333,524

Information regarding benefit obligations, plan assets, funded status, expected cash flows and net periodic benefit cost follows within this footnote.

Benefit Obligations

	Defined Benefit Pension Plans		Postretirement Healthcare Benefit Plans	
	2015	2014	2015	2014
Change in benefit obligations				
Benefit obligations at beginning of year	$ 5,102,117	$ 4,260,555	$ 136,502	$ 138,329
Service cost	267,328	221,631	5,059	5,373
Interest cost	231,953	221,702	4,966	5,777
Plan amendments	5,045	1,825	-	-
Actuarial (gain) loss	204,937	507,350	7,622	(15,438)
Benefits paid	(126,127)	(105,475)	(5,301)	(5,077)
Expenses paid	(6,565)	(5,672)	-	-
Employee contributions	187	201	8,027	7,538
Benefit obligations at end of year	$ 5,678,875	$ 5,102,117	$ 156,875	$ 136,502

(in thousands of dollars)

The accumulated benefit obligation for all defined benefit pension plans at the end of 2015 and 2014 was $5,371,220 and $4,806,399, respectively.

	Defined Benefit Pension Plans		Postretirement Healthcare Benefit Plans	
	2015	2014	2015	2014
Weighted-average assumptions used to determine end of year benefit obligation				
Discount rate	4.50%	4.40%	3.00% - 4.55%	3.05% - 4.40%
Rate of compensation increase				
Professional staff	4.45%	4.45%	N/A	N/A
Other than professional staff	3.00% - 3.50%	3.00% - 4.00%	N/A	N/A
Healthcare cost trend rate for next year	N/A	N/A	7.00%	7.00%
Rate to which the cost trend rate is to decline	N/A	N/A	5.00%	5.00%
Year that rate reaches the ultimate trend rate	N/A	N/A	2020	2020

Assumed healthcare cost trend rates have a significant effect on the amounts reported for the healthcare plans. A one-percentage-point change in assumed healthcare cost trend rates would have the following effect:

	One-Percentage-Point Increase	One-Percentage-Point Decrease
Effect on postretirement benefit obligation	$ 986	$ (914)

Plan Assets

	Defined Benefit Pension Plans		Postretirement Healthcare Benefit Plans	
	2015	2014	2015	2014
Change in plan assets				
Fair value of plan assets at beginning of year	$ 4,365,566	$ 3,925,818	$ 68,438	$ 56,761
Actual return on plan assets	(147,938)	366,240	(3,003)	5,212
Employer contributions	246,972	184,454	5,044	4,004
Employee contributions	187	201	8,027	7,538
Benefits paid	(126,127)	(105,475)	(5,301)	(5,077)
Expenses paid	(6,565)	(5,672)	-	-
Fair value of plan assets at end of year	$ 4,332,095	$ 4,365,566	$ 73,205	$ 68,438

The assets of the defined benefit pension plans are aggregated in a single master trust (Master Trust) and managed as one asset pool. The investment objective for the Master Trust is to achieve the highest reasonable total return after considering (i) plan liabilities, (ii) funding status and projected cash flows, (iii) projected market returns, valuations and correlations for various asset classes and (iv) Partners HealthCare's ability and willingness to incur market risk.

Oversight of the management of Partners HealthCare's investable assets, including the Master Trust, is provided by the Investment Committee of the PHS Board of Directors which seeks to add incremental returns by manager selection and asset allocation (increasing/decreasing allocations within allowable ranges based on current and projected valuations). The Committee is supported by a professional staff, an outside investment consultant and a pension actuarial consultant.

(in thousands of dollars)

Partners HealthCare utilizes a target allocation policy that balances projected returns, correlations and volatility of various asset classes within the overall risk tolerance. Asset allocations are managed based on relative valuations among and within asset classes and the perceived ability of managers to outperform passive benchmarks. Exposure by asset class is the sum of the net exposures reported by each manager. Asset allocation can and will deviate from target exposures and is regularly monitored for rebalancing opportunities.

The following table presents the capital allocations, reported exposures of the allocations and policy benchmarks by manager mandate within the Master Trust. Some managers, particularly real assets and less market sensitive managers, invest allocated capital among multiple policy benchmark asset classes.

	September 30, 2015			September 30, 2014		
	Dollars	Reported Exposures	Policy Benchmark	Dollars	Reported Exposures	Policy Benchmark
Global equity	$ 205,596	4 %	7 %	$ 204,952	4 %	4 %
Traditional U.S. equity	537,524	12	10	610,856	14	13
Traditional foreign developed equity	585,803	14	12	601,744	14	13
Traditional emerging markets equity	552,140	13	11	571,868	13	13
Private equity	388,336	9	8	329,329	8	8
Real assets	284,808	7	7	334,631	8	8
Less: Market sensitive managers	1,502,556	35	36	1,404,996	32	31
Fixed income managers	275,332	6	9	307,190	7	10
	$ 4,332,095	100 %	100 %	$ 4,365,566	100 %	100 %

Within the Master Trust, assets are allocated to managers with investment mandates that may range from a single sub-asset class to very broad mandates; with restrictions that range from long-only to unconstrained; and with management structures ranging from separately managed funds to mutual/commingled funds to private partnerships. Less market sensitive managers employ absolute return, long/short equity and diversified strategies, which in the aggregate are expected to generate positive returns on a consistent basis. Other exposures include currency and volatility based strategies. Inflation defensive strategies include investments in real estate assets, commodities, timber and inflation protection bonds. Investment risks (concentration, correlation, valuation, liquidity, leverage, mandate compliance, etc.) are measured at the manager level as well as the pool level.

The postretirement healthcare benefit plans assets are commingled funds, with the objective of achieving returns to satisfy plan obligations and with a level of volatility commensurate with Partners HealthCare's overall financial profile.

(in thousands of dollars)

The following table presents plan assets, by form of ownership, as of September 30, 2015 and 2014 measured at fair value on a recurring basis using the fair value hierarchy defined in Note 6:

	Fair Value Measurements Using			
	Quoted Prices in Active Markets for Identical Items (Level 1)	Significant Other Observable Inputs (Level 2)	Investments Valued Using NAV as a Practical Expedient	Fair Value at September 30, 2015
Defined benefit pension plans				
Invested cash equivalents	$ 43,315	$ -	$ -	$ 43,315
Separately managed investments	366,713	201,603	-	568,316
Mutual funds	257,734	-	-	257,734
Commingled funds	-	1,072,581	-	1,072,581
Private partnerships	-	-	2,390,149	2,390,149
	667,762	1,274,184	2,390,149	4,332,095
Postretirement healthcare benefit plans				
Commingled funds	9,980	56,325	6,900	73,205
Total plan assets	$ 677,742	$ 1,330,509	$ 2,397,049	$ 4,405,300

	Fair Value Measurements Using			
	Quoted Prices in Active Markets for Identical Items (Level 1)	Significant Other Observable Inputs (Level 2)	Investments Valued Using NAV as a Practical Expedient	Fair Value at September 30, 2014
Defined benefit pension plans				
Invested cash equivalents	$ 2,169	$ -	$ -	$ 2,169
Separately managed investments	536,940	221,807	-	758,747
Mutual funds	419,479	-	-	419,479
Commingled funds	-	977,778	-	977,778
Private partnerships	-	-	2,207,393	2,207,393
	958,588	1,199,585	2,207,393	4,365,566
Postretirement healthcare benefit plans				
Commingled funds	671	60,892	6,875	68,438
Total plan assets	$ 959,259	$ 1,260,477	$ 2,214,268	$ 4,434,004

In evaluating the Level at which Partners HealthCare's private partnerships have been classified within the fair value hierarchy, management has assessed factors including, but not limited to price transparency, the ability to redeem these investments at net asset value at the measurement date, and the existence or absence of certain restrictions at the measurement date. Investments in private partnerships generally have limited redemption options for investors and, subsequent to final closing, may or may not permit subscriptions by new or existing investors. These entities may also have the ability to impose gates, lockups and other restrictions on an investor's ability to readily redeem out of their investment interest in the fund. As of September 30, 2015 and 2014, Partners HealthCare has excluded all assets from the fair value hierarchy for which fair value is measured at net asset value per share using the practical expedient.

(in thousands of dollars)

Funded Status

The funded status of the plans recognized in the balance sheet and the amounts recognized in unrestricted net assets follows:

	Defined Benefit Pension Plans		Postretirement Healthcare Benefit Plans	
	2015	2014	2015	2014
End of year				
Fair value of plan assets at measurement date	$ 4,332,095	$ 4,365,566	$ 73,205	$ 68,438
Benefit obligations at measurement date	(5,678,875)	(5,102,117)	(156,875)	(136,502)
Funded status	$ (1,346,780)	$ (736,551)	$ (83,670)	$ (68,064)
Amounts recognized in the balance sheet consist of				
Noncurrent assets	$ -	$ -	$ -	$ 348
Current liabilities	(2,116)	(4,272)	(3,586)	(3,299)
Long-term liabilities	(1,344,664)	(732,279)	(80,084)	(65,113)
	$ (1,346,780)	$ (736,551)	$ (83,670)	$ (68,064)
Amounts not yet recognized in net periodic benefit cost and included in unrestricted net assets consist of				
Actuarial net loss (gain)	$ 1,850,126	$ 1,227,732	$ 11,730	$ (4,551)
Prior service cost (credit)	9,852	9,360	-	-
	$ 1,859,978	$ 1,237,092	$ 11,730	$ (4,551)
Amounts recognized in unrestricted net assets consist of				
Current year actuarial (gain) loss	$ 698,377	$ 449,880	$ 15,746	$ (16,404)
Amortization of actuarial gain (loss)	(75,983)	(44,183)	535	33
Current year prior service cost (credit)	4,402	1,354	-	-
Amortization of prior service (cost) credit	(3,910)	(3,002)	-	20
	$ 622,886	$ 404,049	$ 16,281	$ (16,351)

At the end of 2015 and 2014, the projected benefit obligation, accumulated benefit obligation and fair value of plan assets for pension plans with an accumulated benefit obligation in excess of plan assets were as follows:

	2015	2014
Accumulated benefit obligation in excess of plan assets		
Projected benefit obligation	$ 5,678,875	$ 5,102,117
Accumulated benefit obligation	5,371,220	4,806,399
Fair value of plan assets	4,332,095	4,365,566

(in thousands of dollars)

Expected Cash Flows

Information about the expected cash flows for the defined benefit and postretirement healthcare benefit plans is as follows:

	Defined Benefit Pension Plans	Postretirement Healthcare Benefit Plans	
Expected employer contributions			
2016	$ 287,515	$ 6,739	
			Medicare Subsidy
Expected benefit payments (receipts)			
2016	$ 226,494	$ 6,997	$ (258)
2017	253,603	7,997	(239)
2018	267,380	9,002	(222)
2019	283,947	10,036	(204)
2020	308,479	11,084	(185)
2021-2025	1,779,566	70,975	(654)

Net Periodic Benefit Cost

	Defined Benefit Pension Plans		Postretirement Healthcare Benefit Plans	
	2015	2014	2015	2014
Service cost	$ 267,328	$ 221,631	$ 5,059	$ 5,373
Interest cost	231,953	221,702	4,966	5,777
Expected return on plan assets	(345,504)	(308,770)	(5,123)	(4,247)
Amortization of				
Prior service cost (credit)	3,910	3,002	-	(20)
Actuarial net (gain) loss	75,983	44,183	(534)	146
Net periodic benefit cost	$ 233,670	$ 181,748	$ 4,368	$ 7,029

Amounts expected to be amortized from unrestricted net assets into net periodic benefit cost during the year ending September 30, 2015 are as follows:

	Defined Benefit Pension Plans	Postretirement Healthcare Benefit Plans
Actuarial net loss (gain)	$ 90,109	$ 1,266
Prior service cost (credit)	3,566	-

(in thousands of dollars)

	Defined Benefit Pension Plans		Postretirement Healthcare Benefit Plans	
	2015	2014	2015	2014
Weighted-average assumptions used to determine net periodic pension and postretirement cost				
Discount rate	4.40 %	5.05 %	3.05 % - 4.40 %	3.15 % - 5.05 %
Expected return on plan assets	8.00 %	8.00 %	7.50 %	7.50 %
Rate of compensation increase				
Professional staff	4.45 %	4.45 %	N/A	N/A
Other than professional staff	3.00 % - 3.50 %	3.00 % - 4.00 %	N/A	N/A
Healthcare cost trend rate for this year	N/A	N/A	7.00 %	6.50 %
Rate to which the cost trend rate is to decline	N/A	N/A	5.00 %	5.00 %
Year that rate reaches the ultimate trend rate	N/A	N/A	2021	2017

Partners HealthCare uses a long-term return assumption which is validated annually by obtaining long-term asset return, volatility and correlation projections for relevant asset class indexes; modifying volatility and correlations to reflect the actual historical experience of the active managers; calculating the expected return using benchmark weights and indexes; and comparing the return assumption to the sum of the expected return and the historical outperformance of the actual return versus the benchmark. Partners HealthCare regularly monitors the active risk of the Master Trust by a statistical regression of the return series of the actual portfolio to that of the policy benchmark.

Assumed healthcare cost trend rates have a significant effect on the amounts reported for the healthcare plans. A one-percentage-point change in assumed healthcare cost trend rates would have the following effect:

	One-Percentage-Point	
	Increase	Decrease
Effect on service and interest cost	$ 40	$ (37)

14. Professional Liability Insurance

Partners HealthCare insures substantially all of its professional and general liability risk on a claims-made basis in cooperation with other healthcare organizations in the Greater Boston area through a captive insurance company, Controlled Risk Insurance Company Ltd. (CRICO). PHS owns 10% of CRICO. The investment is accounted for on the cost basis of accounting. The policies cover claims made during their respective terms, but not those occurrences for which claims may be made after expiration of the policy, except for certain tail liabilities which CRICO has assumed on an occurrence basis through December 31, 2015. Management intends to renew its coverage on a claims-made basis and has no reason to believe that it will be prevented from such renewal. During 2015, CRICO announced and paid a dividend to member organizations. As a result, Partners HealthCare recognized a dividend of $54,779 as a nonoperating gain.

(in thousands of dollars)

Partners HealthCare follows the accounting policy of establishing reserves to cover the ultimate costs of medical malpractice claims, which include costs associated with litigating or settling claims. The liability also includes an estimated tail liability, established to cover all malpractice claims incurred but not reported to the insurance company as of the end of the year. The total malpractice liability of $482,640 and $455,463 as of September 30, 2015 and 2014, respectively, is presented as an accrued professional liability in the consolidated balance sheets. These reserves have been recorded on a discounted basis using an interest rate of 3.50% and 3.25% as of September 30, 2015 and 2014, respectively.

Partners HealthCare also recognizes an insurance receivable from CRICO, at the same time that it recognizes the liability, measured on the same basis as the liability, subject to the need for a valuation allowance for uncollectible amounts. The insurance receivable of $397,958 and $370,311 as of September 30, 2015 and 2014, respectively, is reported as a component of other assets in the consolidated balance sheets.

Management is not aware of any claims against Partners HealthCare or factors affecting CRICO that would cause the expense for professional liability risks to vary materially from the amount provided.

15. Concentration of Credit Risk

Financial instruments that potentially subject Partners HealthCare to concentration of credit risk consist of patient accounts receivable, research grants receivable, pledges receivable, premiums receivable, certain investments and interest rate swaps.

Partners HealthCare receives a significant portion of its payments for services rendered from a limited number of government and commercial third-party payers, including Medicare, Medicaid, Blue Cross and Blue Shield of Massachusetts, Harvard Pilgrim Health Care and Tufts Health Plan. Research funding is provided through many government and private sponsors. NHP receives a significant portion of its premium revenue from the Commonwealth. Pledges receivable are due from multiple donors. Partners HealthCare assesses the credit risk for pledges based on history and the financial wherewithal of donors, most of which are individuals or organizations well known to Partners HealthCare.

Investments, which include government and agency securities, stocks and corporate bonds, and private partnerships and other investments are not concentrated in any corporation or industry or with any single counterparty. Alternative investments are less liquid than Partners HealthCare's other investments. The reported values of the alternative investments may differ significantly from the values that would have been used had a ready market for those securities existed. These instruments may contain elements of both credit and market risk. Such risks include, but are not limited to, limited liquidity, absence of oversight, dependence upon key individuals, emphasis on speculative investments and nondisclosure of portfolio composition.

Partners HealthCare minimizes the credit risk it is exposed to under interest rate swap agreements by utilizing several counterparties and requiring the counterparties to post collateral for the benefit of Partners HealthCare when the fair value of the swap is positive. Partners HealthCare minimizes its counterparty risk by contracting with six counterparties, none of which accounts for more than 30% of the aggregate notional amount of the swap contracts.

(in thousands of dollars)

16. Net Assets

Restricted net assets are available for the following purposes:

	September 30, 2015	September 30, 2014
Temporarily restricted		
Charity care	$ 89,032	$ 98,170
Buildings and equipment	89,990	102,109
Clinical care, research and academic	586,540	655,675
	$ 765,562	$ 855,954
Permanently restricted		
Charity care	$ 20,550	$ 19,763
Buildings and equipment	2,444	2,433
Clinical care, research and academic	556,584	441,578
	$ 579,578	$ 463,774

Endowment
Partners HealthCare's endowment consists of numerous individual funds established for a variety of purposes. The endowment includes both donor-restricted endowment funds and funds designated by the boards to function as endowment.

Partners HealthCare has interpreted UPMIFA as requiring the preservation of the value of the original gift of the donor-restricted endowment funds absent explicit donor stipulations to the contrary. As a result of this interpretation, Partners HealthCare classifies as permanently restricted net assets (a) the original value of gifts donated to the permanent endowment, (b) the original value of subsequent gifts donated to the permanent endowment, and (c) accumulations to the permanent endowment made in accordance with the direction of the applicable donor gift instrument at the time the accumulation is added to the fund. The remaining portion of the donor-restricted endowment that is not classified in permanently restricted net assets is classified as temporarily restricted net assets until those amounts are appropriated for expenditure by Partners HealthCare in a manner consistent with the standard of prudence prescribed by UPMIFA. In accordance with UPMIFA, Partners HealthCare considers several factors in making a determination to appropriate or accumulate donor-restricted endowment funds. These factors include: the duration and preservation of the fund; the purposes of the organization and the donor-restricted endowment fund; general economic conditions; the possible effect of inflation and deflation; the expected total return from income and the appreciation of investments; other resources of the organization; and the investment policies of the organization.

Endowment Funds with Deficits
From time to time, the value of assets associated with individual donor-restricted endowment funds may fall below the value of the initial and subsequent donor gift amounts. When such endowment deficits exist, they are classified as a reduction to unrestricted net assets. Deficits of this nature reported in unrestricted net assets were $11,292 and $247 as of September 30, 2015 and 2014, respectively. These deficits resulted from unfavorable market fluctuations that occurred after the investment of new permanently restricted contributions or subsequent endowment additions.

(in thousands of dollars)

The following presents the endowment net asset composition by type of fund as of September 30, 2015 and 2014 and the changes in endowment assets for the years ended September 30, 2015 and 2014:

	Unrestricted	Temporarily Restricted	Permanently Restricted	Total
Endowment net asset composition by type of fund as of September 30, 2015				
Donor-restricted endowment funds	$ (11,292)	$ 410,816	$ 558,507	$ 958,031
Board-designated endowment funds	885,380	-	-	885,380
Total funds	$ 874,088	$ 410,816	$ 558,507	$ 1,843,411

	Unrestricted	Temporarily Restricted	Permanently Restricted	Total
Changes in endowment net assets				
Endowment net assets at September 30, 2014	$ 942,119	$ 498,238	$ 447,607	$ 1,887,964
Investment return				
Investment income	3,856	4,588	(1)	8,443
Net realized and unrealized appreciation (depreciation)	(51,213)	(40,005)	(30)	(91,248)
Total investment return	(47,357)	(35,417)	(31)	(82,805)
Contributions	5,898	(172)	116,449	122,175
Appropriation of endowment assets for expenditure	(40,515)	(49,813)	-	(90,328)
Other changes	13,943	(2,020)	(5,518)	6,405
Total changes	(68,031)	(87,422)	110,900	(44,553)
Endowment net assets at September 30, 2015	$ 874,088	$ 410,816	$ 558,507	$ 1,843,411

	Unrestricted	Temporarily Restricted	Permanently Restricted	Total
Endowment net asset composition by type of fund as of September 30, 2014				
Donor-restricted endowment funds	$ (247)	$ 498,238	$ 447,607	$ 945,598
Board-designated endowment funds	942,366	-	-	942,366
Total funds	$ 942,119	$ 498,238	$ 447,607	$ 1,887,964

(in thousands of dollars)

	Unrestricted	Temporarily Restricted	Permanently Restricted	Total
Changes in endowment net assets				
Endowment net assets at October 1, 2013	$ 903,255	$ 468,273	$ 397,472	$ 1,769,000
Investment return				
Investment income	4,894	14,570	13	19,477
Net realized and unrealized appreciation (depreciation)	76,199	51,383	291	127,873
Total investment return	81,093	65,953	304	147,350
Contributions	8,509	5,566	49,877	63,952
Appropriation of endowment assets for expenditure	(39,258)	(41,234)	-	(80,492)
Other changes	(11,480)	(320)	(46)	(11,846)
Total changes	38,864	29,965	50,135	118,964
Endowment net assets at September 30, 2014	$ 942,119	$ 498,238	$ 447,607	$ 1,887,964

Conditional Pledge

During 2009, the General signed an agreement (Ragon Agreement) with The Massachusetts Institute of Technology (MIT), The President and Fellows of Harvard College (Harvard) and The Phillip T. and Susan M. Ragon Foundation (Ragon Foundation) to establish the Phillip T. and Susan M. Ragon Institute (Ragon Institute) as a joint research center of the General, MIT and Harvard with the purpose of harnessing the potential of the immune response to combat and conquer human diseases, integrating biomedical research with emerging engineering technologies (with the main initial focus being the development of an AIDS vaccine) and educating and training scientists. The Ragon Foundation committed to provide funding for the Ragon Institute of $100,000 over ten years through the General (as the administrative home for the Ragon Institute), beginning retroactively on January 1, 2008. The Ragon Foundation has the ability to slow, suspend or eliminate funding based on restrictions described in the Ragon Agreement. Additionally, any funding not paid by December 31, 2017 would no longer be due by the Ragon Foundation. In February 2014, an amendment was signed (Ragon Amendment) that noted that the current agreement would be completed by December 2018 and that an additional $50,000 of funding would be committed by the Ragon Foundation over five years beginning in 2019. Due to the conditions within the Ragon Agreement, funding is recognized when received, with no pledge receivable recorded for the balance of the amended commitment.

Through September 30, 2015, total funding of $84,891 was received, with $10,891 received for the year ended September 30, 2015 (including $891 of endowment earnings distributed), and total net expenses of $70,912 were incurred, including $10,417 for the year ended September 30, 2015. As of September 30, 2015, unspent funding of $13,979 has been recorded as temporarily restricted net assets, to be released to unrestricted net assets after qualifying expenses have been incurred.

(in thousands of dollars)

17. Functional Expenses

Total operating expenses by function are as follows:

	Years Ended September 30, 2015	2014
Healthcare services	$ 7,167,823	$ 6,852,795
Research and academic	1,671,225	1,578,693
Medical claims and related expenses	1,652,538	1,463,972
General and administrative	1,067,601	1,032,197
	$ 11,559,187	$ 10,927,657

18. Contingencies

Partners HealthCare is subject to complaints, claims and litigation which arise in the normal course of business. In addition, Partners HealthCare is subject to reviews and investigations by various federal and state government agencies to assure compliance with applicable laws, some of which are subject to different interpretations. Governmental review of compliance by healthcare institutions, including Partners HealthCare, has increased.

19. Subsequent Events

Partners HealthCare has assessed the impact of subsequent events through December 11, 2015, the date the audited financial statements were issued. During this period, there were no subsequent events that require adjustment to the audited financial statements.