Docket No. GMCB-005-15con

Certificate of Need Application
Replacement Linear Accelerator
Mary Hitchcock Memorial Hospital/
Norris Cotton Cancer Center - North
February 2, 2015

Document prepared by:
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February 1, 2015

Donna Jerry, Health Care Administrator
Green Mountain Care Board
89 Main Street, Third Floor, City Center
Montpelier, VT 05620

RE: Docket No. GMCB-005-15con
CON for replacement Linear Accelerator at Norris Cotton Cancer Center – North in St. Johnsbury, VT

Dear Ms. Jerry:

This application is pursuant to Certificate of Need (CON) statute 18 V.S.A. 9440(c)(2)(A). Mary Hitchcock Memorial Hospital (MHMH) is applying for a certificate of need to replace the linear accelerator in the Norris Cotton Cancer Center – North facility in St. Johnsbury, VT. Replacing the linear accelerator requires a CON because the project cost is estimated to be $4,807,365 and exceeds the threshold for invoking CON jurisdiction per statute.

MHMH requests approval to replace the linear accelerator for the following reasons;

- The current linear accelerator is 10 years old, beyond its useful life of 7 years.
- The replacement linear accelerator technology has advanced capabilities that deliver more precise tumor targeting, better outcomes, and an enhanced patient experience.

MHMH's Norris Cotton Cancer Center (NCCC) proposes to replace its existing Varian 2100 EX linear accelerator in the NCCC-North location (NCCC-N) in St. Johnsbury, VT with a Varian TrueBeam at a total estimated project cost of $4,807,365. The existing Varian 2100 EX linear accelerator currently at the NCCC-North facility will subsequently be maintained in its current location as a "backup" unit.

MHMH will fund the entire project from operations; no debt financing expenses will be incurred. In accordance with the CON statute, all expenses associated with the project have been considered as part of the linear accelerator replacement project and are reported in this CON application.

We thank the Green Mountain Care Board for considering this important project.

Jason Aldous, Director of Business Planning
(603) 653-6825 | jason.e.aldous@hitchcock.org

Verification Under Oath

STATE OF VERMONT
GREEN MOUNTAIN CARE BOARD

In re: Submission of CON application for replacement linear accelerator at Norris Cotton Cancer Center in St. Johnsbury Vermont	)))))	Docket No. GMCB-005-15con

Verification Under Oath to file with Certificate of Need Application, correspondence and additional information subsequent to filing an Application.

[Officer or other deponent], being duly sworn, states on oath as follows:

1. My name is **Daniel P. Jantzen**. I am the **Chief Operating Officer of Mary Hitchcock Memorial Hospital**. I have reviewed the identify information/document subject to verification.

2. Based on my personal knowledge and after diligent inquiry, I attest that the information contained in **the certificate of need application for a replacement linear accelerator** is true, accurate and complete, does not contain any untrue statement of a material fact, and does not omit to state a material fact.

3. My personal knowledge of the truth, accuracy and completeness of the information contained in **the certificate of need application for a replacement linear accelerator** is based upon either my actual knowledge of the subject information or upon information reasonably believed by me to be true and reliable and provided to me by the individuals identified below in paragraph 4. Each of these individuals has also certified that the information they have provided is true, accurate and complete, does not contain any untrue statement of a material fact and does not omit to state a material fact.

4. The following individuals have provided information or documents to me in connection with **the certificate of need application for a replacement linear accelerator** and each individual has certified, based either upon his or her actual knowledge of the subject

information or, where specifically identified in such certification, based on information reasonably believed by the individual to be reliable, that the information or documents provided are true, accurate and complete, do not contain any untrue statement of a material fact, and do not omit to state a material fact:

Jason Aldous, Director of Business Planning
David Nalepinski, Director, Oncology Service Line & Business Operations
David Gladstone, Chief of Clinical Physics, Radiation Oncology
Nirav S. Kapadia, Staff Physician, Radiation Oncology
Jeffrey F. O'Brien, Vice President, Oncology Services
Lily Samin, Financial Analyst
David L. Stiger, Director of Construction Project Management

5. In the event that the information contained in the **certificate of need application for a replacement linear accelerator** becomes untrue, inaccurate or incomplete in any material respect, I acknowledge my obligation to notify the Green Mountain Care Board and to supplement the **certificate of need application for a replacement linear accelerator** as soon as I know, or reasonably should know, that the information or document has become untrue, inaccurate or incomplete in any material respect.

_____

Daniel P. Jantzen

On (Date) _____ **Daniel P. Jantzen** appeared before me and swore to the truth, accuracy and completeness of the foregoing.

_____

Notary public

My commission expires _____

Division of Health Care Administration
89 Main Street, Drawer 20, Montpelier, Vermont 05620-3601

Certificate of Need Application Form

Name of Applicant: Mary Hitchcock Memorial Hospital
Date of Application: February 2, 2016
Project Title: Mary Hitchcock Memorial Hospital (NCCC) Linear Accelerator
Address Street 1: One Medical Center Drive
Street 2:
City/Town: Lebanon
State: NH
Zip Code: 03756-
Telephone number: (603) 653-6825
FAX: (603) 650-7440
E-mail address: jason.e.aldus@hitchcock.org

Project Type & Amount (indicate ☑ project category below)

Non-Hospital Categories

- ☑ Construction, development, purchase, renovation, or other establishment of a health care facility, or any capital expenditure by or on behalf of a health care facility, for which the capital cost exceeds $1,500,000.
- ☐ A change from one licensing period to the next in the number of licensed beds of a health care facility through addition or conversion, or through relocation from one physical facility or site to another.
- ☐ Offering any home health service.
- ☑ The purchase, lease, or other comparable arrangement of a single piece of diagnostic or therapeutic equipment for which the cost, or in the case of a donation, the value, is in excess of $1,000,000.[1]
- ☐ Offering of a health care service or technology having an annual operating expense which exceeds $500,000 for either of the next two budgeted fiscal years, if the service or technology was not offered or employed by the health care facility within the previous three fiscal years.
- ☐ A project which is exempt from the requirements above solely because the cost or value does not exceed financial thresholds, if the cost or value is greater than $750,000 or, in the case of medical equipment, $500,000 and if the commissioner finds that the proposed development:
  1. may be inconsistent with the health resource allocation plan;
  2. has the potential for significantly increasing utilization or rates; or
  3. may substantially change the type, scope or volume of service.

[1] For purposes of this subdivision, the purchase or lease of one or more articles of medical equipment which are necessarily interdependent in the performance of their ordinary functions or which would constitute any health care facilityas determined by the commissioner, are considered together in calculating the amount of an expenditure.

Project Type & Amount, continued

Hospital Categories

- ☐ Construction, development, purchase, renovation, or other establishment of a health care facility, or any capital expenditure by or on behalf of a health care facility, for which the capital cost exceeds $3,000,000.
- ☐ The purchase, lease, or other comparable arrangement of a single piece of diagnostic or therapeutic equipment for which the cost, or in the case of a donation, the value, is in excess of $1,000,000.[2]
- ☐ Offering a health care service or technology having an annual operating expense which exceeds $500,000 for either of the next two budgeted fiscal years, if the service or technology was not offered or employed by the hospital within the previous three fiscal years.
- ☐ Change from one licensing period to the next in the number of licensed beds of a health care facility through addition or conversion, or through relocation from one physical facility or site to another.

Proposed Capital Expenditure (Total from Table 1 in application) $ 4,807,365

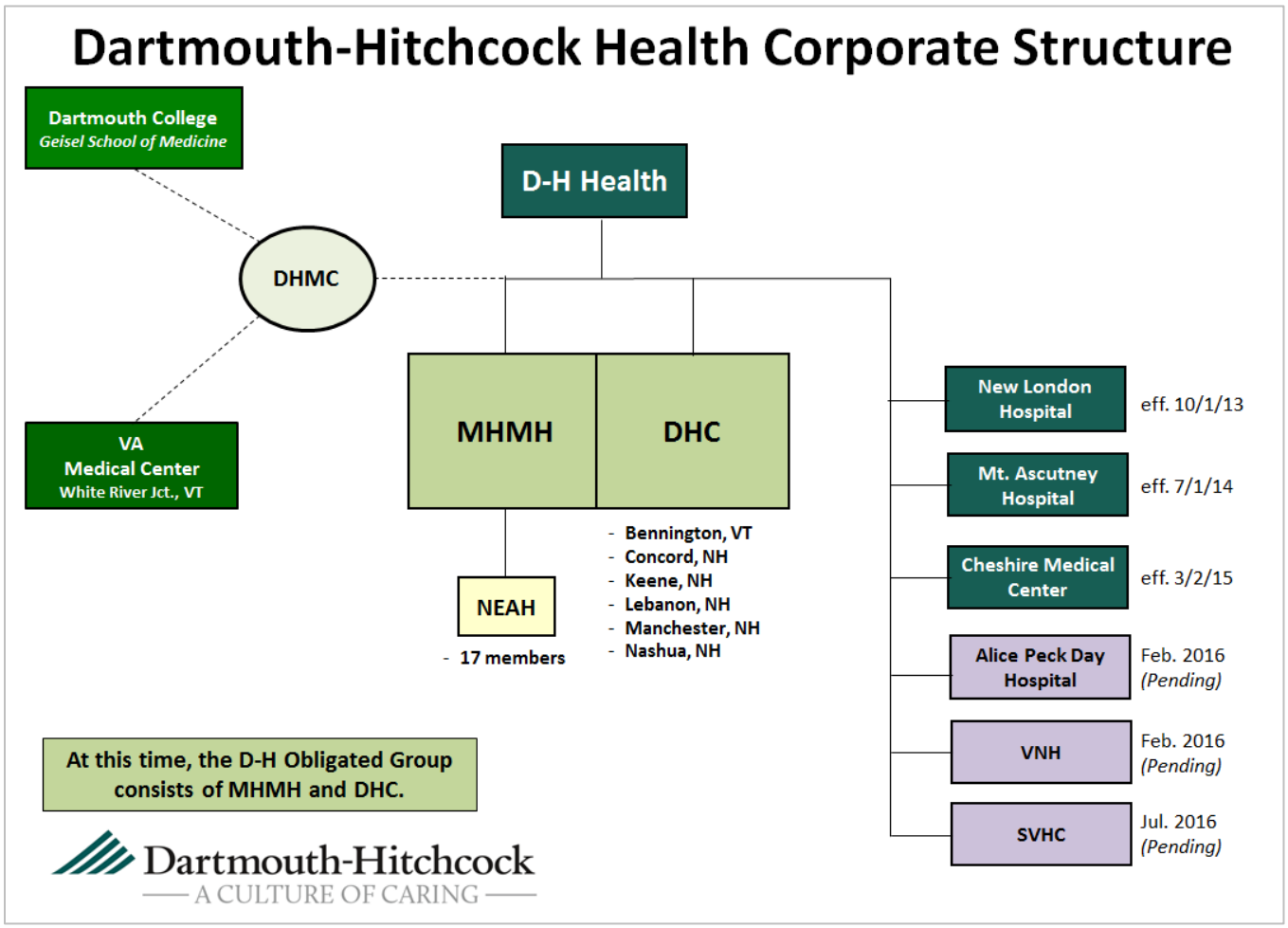
Proposed Lease Amount (payment times term) $ —

Please note:

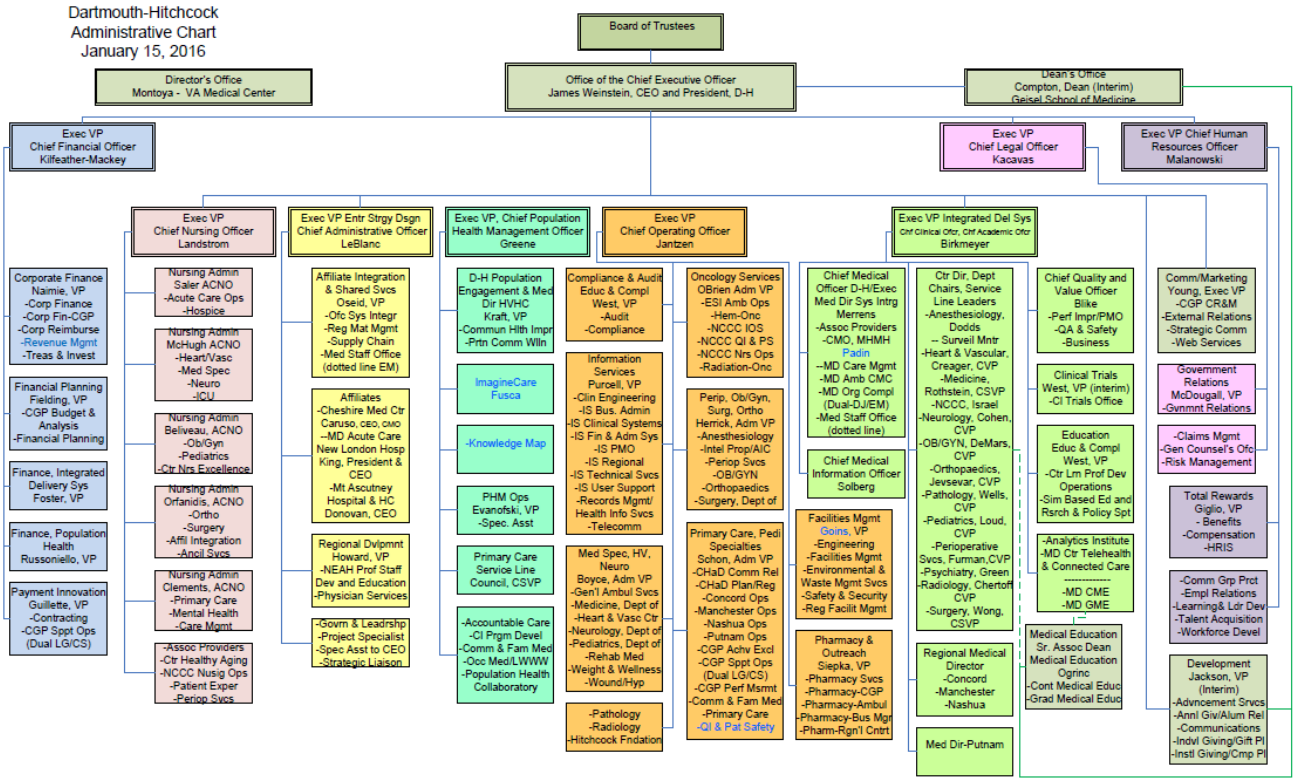
The Chief Executive Officer of the applying entity must sign and attach verification form 'A'.

[2] See footnote 1.

Dartmouth-Hitchcock Health Corporate Organizational Chart



Dartmouth-Hitchcock Health Administrative Organizational Chart



ABOUT DARTMOUTH-HITCHCOCK HEALTH, MARY HITCHCOCK MEMORIAL HOSPITAL AND NORRIS COTTON CANCER CENTER

Dartmouth-Hitchcock Health (D-HH) is a nonprofit academic health system that serves a patient population of approximately 1.9 million in New England, primarily in Vermont and New Hampshire as well as limited parts of Maine, New York and Massachusetts. D-HH is comprised of Mary Hitchcock Memorial Hospital (MHMH) in Lebanon, NH as well as the Dartmouth-Hitchcock Clinic (DHC), a multispecialty physician group practice with more than 1,000 primary care and specialty care physicians based in Concord, Keene, Lebanon, Manchester and Nashua, NH as well as Bennington, VT. As of the application, the D-HH system also includes the following affiliated hospitals.

- New London Hospital (New London, NH)
- Mount Ascutney Hospital and Health Center (Windsor, VT)
- Cheshire Medical Center (Keene, NH)

The D-HH system includes Norris Cotton Cancer Center, one of only 45 National Cancer Institute-designated Comprehensive Cancer Centers in the United States. As part of its broader network, D-HH's Norris Cotton Cancer Center is the primary provider of tertiary-level cancer treatment services to northeastern Vermont and northern New Hampshire.

Central to the delivery of these cancer treatment services is the Norris Cotton Cancer Center North located at 1080 Hospital Drive in St. Johnsbury, VT. Established in 2005, this facility works collaboratively with the following regional providers in the provision of cancer treatment services:

- Androscoggin Valley Hospital, Berlin, NH
- Cottage Hospital, Woodsville, NH
- Littleton Regional Hospital, Littleton, NH
- North Country Hospital, Newport, VT
- Northeastern Vermont Regional Hospital, St. Johnsbury, VT
- Upper Connecticut Valley Hospital, Colebrook, NH
- Weeks Medical Center, Lancaster, NH

Mary Hitchcock Memorial Hospital is the formal applicant for this Certificate of Need doing business as Norris Cotton Cancer Center in St. Johnsbury. We wanted to provide the above context of the larger D-HH system as a reference since we are known in common parlance by a variety of names including "Dartmouth-Hitchcock" and "DHMC" which are not the formal care delivery entities of the D-HH system.

PROJECT DESCRIPTION

(Note: As will be explained, "Project" will describe the overall project; "Components 1 & 2" will describe the distinct components of the overall project).

Mary Hitchcock Memorial Hospital (MHMH), doing business as Norris Cotton Cancer Center (NCCC), proposes to replace its existing Varian 2100 EX linear accelerator in the NCCC-North (NCCC-N) location in St. Johnsbury, VT with a Varian TrueBeam at a total estimated project cost of $4,807,365. The existing Varian 2100 EX linear accelerator currently at the NCCC-N facility will subsequently be maintained in its current location as a "backup" unit.

Component 1

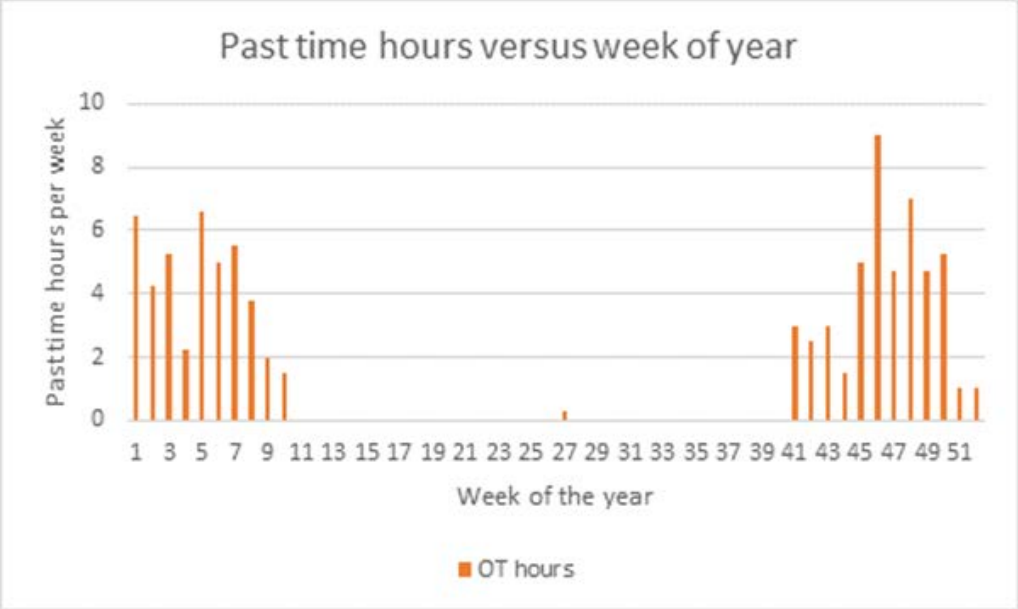
MHMH proposes to construct a second vault at the NCCC-N facility in St. Johnsbury adjacent to the existing vault and install the replacement linear accelerator in that new vault. The total cost of vault construction and TrueBeam installation is estimated to be $4,807,365. It was determined that the cost of building the new vault was only $190,000 greater than the cost to modify the existing vault and replace the 2100 EX with the TrueBeam in the existing location. These considerations are explained in greater detail under CON Standard 1.9 later in this application regarding "alternative options considered."

Component 2

MHMH further proposes that the existing Varian 2100 EX linear accelerator will be maintained and on standby in its current location as a backup linear accelerator. The purpose of having a backup in place will be to ensure that no service interruptions occur in the event of downtime with the proposed new linear accelerator—either for regular maintenance or to address an unexpected technical issue—as well as to temporarily alleviate any short-term bottlenecks that arise due to periods of high patient census. Regarding the latter point, having additional short-term linear accelerator capacity that can be brought on line quickly will help obviate the need for overtime pay for hourly staff and will also enhance the safety of patients and staff if they can commute during normal business hours, especially during the winter months.

Any simultaneous use of the two systems is expected to be very limited and intended only for those periods of high patient census where short-term need exceeds available capacity. This is not expected to be as a result of increased demand but instead, a concentration of demand during a focused period. Having the backup capacity in place will allow for the delivery of service during traditional business hours, thereby eliminating the need for "after-hours" scheduling of care which is far less patient friendly and more costly to the broader health care delivery system.

Periodic surges in patient need for radiation oncology services arise from the natural flow of scheduling during a given time period and do not reflect any significant increase in overall patient volume over time.

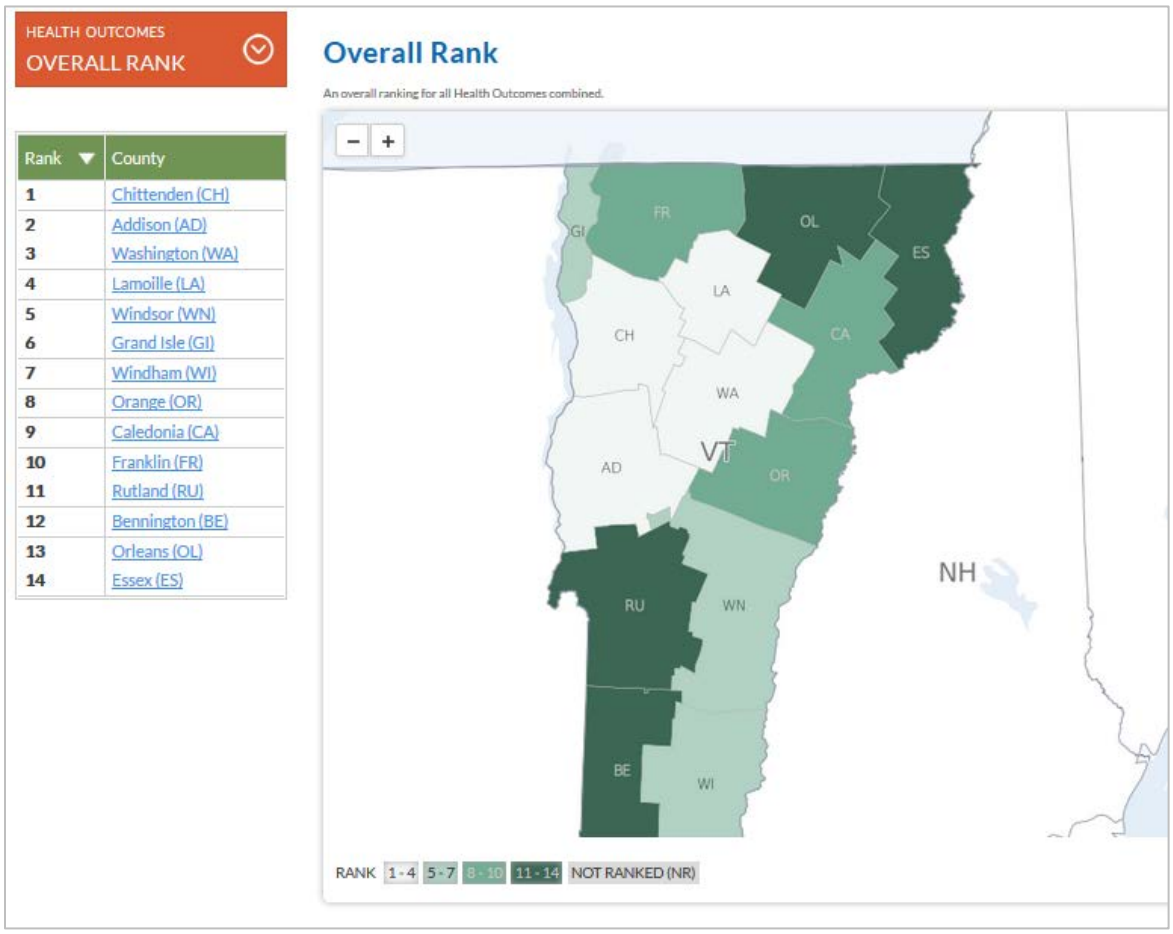


Overall Description

Component 1: The current linear accelerator located at NCCC-N in St. Johnsbury (a Varian 2100 EX) is now ten years old, which is beyond its original projected service life of seven years. While fully functional, safe and effective, it is built on what is now an outdated technology platform originally deployed nearly 30 years ago. The proposed replacement linear accelerator (a Varian TrueBeam) includes significant advances in technology made during the past decade that have resulted in more precise tumor targeting designed to provide better outcomes and enhanced patient treatment experiences.

As the Green Mountain Care Board is no doubt aware, the NCCC-N service area, which includes Caledonia and Essex Counties in Vermont is largely rural and trails the rest of the state in many health risk behaviors. The two counties rank 9th and 14th respectively overall in the County Health Rankings compiled annually by the Robert Wood Johnson Foundation (www.countyhealthrankings.org). In addition to higher rates of smoking and less access to exercise opportunities, Caledonia and Essex Counties also suffer from higher rates of obesity.

Health Outcomes – Overall Rank By County



Source: Robert Wood Johnson Foundation; http://www.countyhealthrankings.org/app/vermont/2015/

Adult obesity

Map | Data | Description | Data Source | Policies

Place	% Obese	Trend	Error Margin	Z-Score
Chittenden	21%		20 - 23	-1.58
Washington	23%		21 - 25	-1.07
Windham	23%		20 - 25	-1.07
Windsor	23%		21 - 25	-1.00
Addison	23%		21 - 25	-0.97
Bennington	24%		22 - 27	-0.45
Lamoille	26%		23 - 29	0.06
Grand Isle	27%		23 - 31	0.41
Essex	27%		23 - 32	0.61
Orange	28%		25 - 30	0.65
Caledonia	28%		25 - 31	0.78
Rutland	29%		26 - 31	0.99
Franklin	29%		27 - 31	1.16
Orleans	30%		27 - 33	1.47

Source: Robert Wood Johnson Foundation; http://www.countyhealthrankings.org/app/vermont/2015/

Adult smoking

Map | Data | Description | Data Source | Policies

Place	Sample Size	% Smokers	Trend	Error Margin	Z-Score
Chittenden	9,190	11%		10 - 12	-1.92
Addison	2,916	15%		13 - 17	-0.89
Grand Isle	700	16%		12 - 20	-0.57
Washington	4,448	16%		14 - 17	-0.57
Windsor	4,517	16%		14 - 17	-0.54
Windham	3,623	16%		14 - 18	-0.45
Lamoille	1,833	18%		15 - 20	0.01
Rutland	4,553	18%		16 - 20	0.09
Caledonia	2,432	18%		16 - 20	0.12
Bennington	2,886	19%		17 - 21	0.30
Franklin	3,159	19%		17 - 21	0.44
Orange	2,483	19%		17 - 22	0.47
Orleans	2,134	22%		19 - 24	1.16
Essex	699	26%		21 - 31	2.34

Source: Robert Wood Johnson Foundation; http://www.countyhealthrankings.org/app/vermont/2015/

MHMH considers the approval of this new accelerator vital for four primary reasons:

- The newer technology will allow for more precise tumor targeting that will lead to better outcomes for patients.
- The proposed replacement accelerator represents the latest technology platform, capable of being updated for the foreseeable future with new technological advancements as they become available.
- The capabilities of the proposed new accelerator in St. Johnsbury will be aligned with the current systems in use at MHMH in Lebanon. This will allow physicians and staff to flex more efficiently between locations as needed, thereby avoiding the need to maintain additional employee FTE equivalent capacity which may be needed only on occasion.
- Having a backup in place in St. Johnsbury adds redundancy and stability to the regional cancer care system with limited cost.

As stated above, we believe that the chief advantage of the proposed new linear accelerator is that it will provide higher energy X-rays for treatment of tumors at greater depths in the body. The new machine will allow monitoring of critical anatomical structures, such as vertebrae, during treatment and will be able to offer high precision treatments for conditions such as spine metastasis in the community setting leading to more effective treatments for patients and a greater chance for improved outcomes.

The additional capacity and the alignment of technology platforms between NCCC-N and MHMH will provide critical redundancy in the delivery system, helping to ensure uninterrupted access to therapy locally, as well as more seamless transitions of care for North Country patients with established treatment plans who may need to come to MHMH in Lebanon for other purposes such acute inpatient medical care, ambulatory procedures, or other types of care.

Component 2: The proposed second vault will enable the existing accelerator to remain in service for patient treatment during the construction activity. By maintaining the existing older accelerator, MHMH/NCCC-N will gain flexibility in addressing any downtime of its primary system, thereby ensuring uninterrupted service to patients and obviating the need for travel to a treatment facility that could be more than an additional hour away from their homes. Having the backup will also allow NCCC-N to be more flexible in responding to short-term capacity bottlenecks that arise due to periods of high patient census. The need for overtime pay of hourly staff will be greatly reduced, if not eliminated and safety will be enhanced for patients and staff if they can commute during normal hours, especially in winter months.

Location of the Proposed Project

Component 1: The replacement linear accelerator will be installed in a newly constructed vault. This new vault will be located adjacent to the existing vault within the footprint of the current Norris Cotton Cancer Center North (NCCC-N) building located at 1080 Hospital Drive in St. Johnsbury, VT. (Schematic drawings of the second vault are located in Appendix 2).

Component 2: The current vault and linear accelerator will be maintained in its existing location at NCCC-N at 1080 Hospital Drive in St. Johnsbury, VT.

Service to be Added and Proposed Location Where the Services Will Be Rendered

Component 1: The fundamental radiation therapy services being offered at NCCC-North will remain the same, and include:

- Advanced on-board imaging (OBI)
- Respiratory gating
- Volumetric-modulated arc therapy (VMAT)
- Intensity-Modulated Radiation Therapy (IMRT)
- Conventional 3D conformal therapy

Replacing the current 10-year-old linear accelerator with the latest technology will allow MHMH to continue to meet the ongoing cancer treatment needs of its patients with a newer technology platform that will allow for more clinically precise treatments. No net-new services will be added at the St. Johnsbury location as a result of this project.

Component 2: Retaining the existing linear accelerator will allow MHMH/NCCC-N to continue treatments during the installation of the replacement accelerator and during routine maintenance or unanticipated outages of the new accelerator. Currently, if some type of technical issues arises necessitating downtime for the existing linear accelerator, patients must either cancel their appointments, or reschedule them to the Norris Cotton Cancer Center facility at MHMH in Lebanon.

From a clinical care perspective, it should be noted that any type of interruption in normal treatment schedules is considered suboptimal. Patients who are temporarily unable to get treatment in St. Johnsbury, but who do not have the ability to travel to MHMH in Lebanon (or an alternate treatment facility), face an increased risk of disease progression. Studies have shown that interrupting radiation treatments even for a few days allows cancer cells to grow back. Studies have also demonstrated that patients who go through the treatment without interruption

have a statistically higher chance of beating the disease versus patients that experience an interruption in their treatment.

Access to reliable transportation resources is identified regularly as a barrier to care for patients who are elderly, disabled, or who lack adequate economic resources. As a result, any downtime of the linear accelerator in St. Johnsbury can create a disproportionately significant hardship for these patient populations. While we have not comprehensively captured data on this subject, we know anecdotally that even limited linear accelerator downtime has resulted in a significant number of patients having to forego treatment because they could not find transportation to MHMH in Lebanon.

Description of the Proposed Service Area

Component 1: The proposed service area for the new linear acceleration is not expected to differ from the current service area for radiation oncology services. The current service area includes the combined service areas of the community hospitals mentioned previously working collaboratively with MHMH and NCCC-N to deliver comprehensive cancer treatment services.

Hospital	Location	Areas Served
Northeastern Vermont Regional Hospital (NVRH)	St. Johnsbury, VT	Caledonia County, VT Essex County, VT
North Country Hospital	Newport, VT	Orleans County, VT
Cottage Hospital	Woodsville, NH	Grafton County, NH Orange County, VT
Littleton Regional Hospital	Littleton, NH	Coos and Grafton Counties, NH Orange, Caledonia, and Essex Counties, VT
Androscoggin Valley Hospital	Berlin, NH	Coos County NH
Upper CT Valley Hospital	Colebrook, NH	Coos County NH
Weeks Medical Center	Lancaster, NH	Coos and Grafton Counties, NH Caledonia, and Essex Counties, VT

Component 2: The same service area applies as for component 1.

Detailed Description of Equipment to be Purchased

Dartmouth-Hitchcock proposes to purchase a Varian TrueBeam linear accelerator including:

- 6MV, 10MV and 18 MV X-rays
- 6MeV, 9MeV, 12MeV, 15MeV, and 18MeV electrons
- 6 degree of freedom robotic controlled patient treatment couch
- On-board cone beam CT for internal anatomy localization
- Real time monitoring of target position during treatment

Number of Square Feet to be Built or Renovated

3,200 sq. ft.

Total Project Cost

The current estimated cost for construction of the new vault and installation the Varian TrueBeam linear accelerator is $4,807,365.

How Will the Project be Financed

This will be funded through cash from existing operations through MHMH's annual capital budgeting process.

Need for the Project Including Data

Linear accelerators used to produce therapeutic radiation are complex devices. While all such machines in the D-HH system receive routine preventive maintenance, it is unavoidable that unexpected repairs will occur with increasing frequency as machines age.

Linear accelerators kept in good operating condition and not suffering from aging are expected to provide 99% uptime with a minimum of unexpected repairs needed. The uptime of the current accelerator in St. Johnsbury fell to 95% in the last 6 months of 2015, with a commensurate loss of continuity of treatment. From June 29th, through November 11th, 2015, there were 9 days of machine down time resulting in 107 missed patient treatments. We consider this to be an unacceptable level of reliability which the current application addresses.

Objective to be Achieved by the Project

This project has two primary objectives:

1. **Enhanced Clinical Performance**: This first objective is to provide patients in the NCCC-N service area with access to the latest linear accelerator technology. The proposed replacement linear accelerator provides advances made in technology during the past decade, including the capability to deliver more precise tumor targeting, better outcomes and enhanced patient treatment experiences. The new linear accelerator will provide a higher energy level for deeper body treatments and will be compatible with developing radiation therapy technologies. The new accelerator will also allow for the monitoring of critical anatomical structures such as vertebrae during treatment and will be able to offer high-precision treatments for conditions such as spine metastasis in the community setting.

2. **Greater Reliability**: At 10 years old, the current linear accelerator is now three years past its originally anticipated working life. While still very useful in a backup role as proposed, the replacement linear accelerator is needed to increase the reliability of our operations and reduce unexpected downtime and cancellations. The proposed configuration will allow NCCC-N an enhanced ability to provide continuous treatment options to patients during scheduled or unplanned downtime of the new linear accelerator and as a result of any capacity bottlenecks that arise due to periods of high patient census.

3. By avoiding or at least minimizing cancellations we can prevent interruptions in the treatment plans for NCCC-N patients who would be required to travel to the MHMH campus in Lebanon, NH. As mentioned previously, the biggest benefit would accrue to those patients without reliable transportation for whom travelling to MHMH is not a viable option, thereby resulting in deferred care, the possible risk of disease progression, and greater cost to the broader health care system.

Impact on Healthcare Costs, Access and Quality

A. Healthcare Costs

Dartmouth-Hitchcock's Norris Cotton Cancer Center continuously strives to contain healthcare costs by providing effective, high-quality, tertiary cancer treatment options for its patient population through early intervention wherever possible, as well as by applying the latest medical research and providing access to clinical trials. Norris Cotton Cancer Center is one of only 45 NCI-designated comprehensive cancer centers in the United States. NCI-Designated Cancer Centers are recognized for their scientific leadership, resources, and the depth and breadth of their research in basic, clinical, and/or population health science. Comprehensive Cancer Centers demonstrate an added depth and breadth of research, as well as substantial transdisciplinary/interdisciplinary research that bridges these scientific areas.

In addition to providing high-value care, NCCC-N has already been able to achieve some cost savings by effectively and safely maintaining its existing linear accelerator three years past its originally projected useful working life of seven years. It is further expected that the proposed new accelerator will provide more efficient treatment with less downtime.

MHMH views this proposed project as a routine equipment upgrade that is consistent with the health system's greater population health goals and which also provides a vital service not available elsewhere in the region. By looking creatively at the available options, we feel that we will be able to manage the long-term costs of cancer care by building greater redundancy into the current system of care for relatively little additional cost. It was determined that the cost of building a new vault was only $190,000 greater than the cost to modify the existing vault and replace the 2100 EX with the TrueBeam in the existing location, which would have not offered greater stability and redundancy to the regional cancer care system. In short, we feel that a more reliable care delivery system can be put in pace for relatively little additional cost.

MHMH funds its planned equipment upgrades through the use of its accrued operating margin which is then allocated through a capital budgeting process. Since this is a proposed replacement for an existing system, we do not see this as adding to the cost of cancer treatment care for the region. We feel that any incremental added cost for refitting the existing space to accommodate both the new and older linear accelerators will be offset over time by enhanced reliability as well as the ability to address periodic bottlenecks during periods of high patient census. We believe this strategy will delay the longer-term need for a net new linear accelerator to be added to the greater St. Johnsbury service area thereby saving substantial cost to the healthcare system over the long term.

B. Access

Norris Cotton Cancer Center (and NCCC-North in St. Johnsbury) has historically sought to provide optimal access by working with patients' personal physicians and local specialists to make appropriate therapy available throughout our multi-state service area, despite its predominantly rural nature. This distributed regional model features points of presence within Dartmouth-Hitchcock's owned entities in Keene, Manchester, and Nashua, NH, and St. Johnsbury, VT as well as at 12 affiliated hospitals throughout NH and VT thereby enabling access to high-quality cancer care as close as possible to a patient's home.

Care is coordinated through multidisciplinary clinical oncology teams working across the D-HH system including its affiliates and other regional partners. These teams bring together physicians, specialty nurses, and other professionals who evaluate individual cases and set standards for treatment. The teams pay particular attention to preventing disfigurement, controlling symptoms, eliminating pain, and coping with the emotional distress caused by cancer.

NCCC-N in St. Johnsbury strives to provide its patients with access to the most advanced tertiary treatment options available to treat cancer in a community setting. NCCC-N opened with the goal of "providing treatment options closer to home" for patients in the North Country region of Vermont and New Hampshire which is historically a medically underserved area, especially for cancer care.

When NCCC-N was originally opened in St. Johnsbury, the expectation was that doing so would create a corresponding decrease in cancer treatment volumes at the MHMH campus in Lebanon, NH. However, organizational leadership felt strongly that it was the right thing to do for patients as well as for population health overall. Quite unexpectedly, volume at NCCC-N exceeded its projected first-year targets well before the full year was completed with only a comparatively limited impact to the volume of patients treated at MHMH. This led to the sobering conclusion that NCCC-N was likely tapping into a need that was previously unmet by offering a proactive cancer-treatment option at a major transportation crossroad that was substantially closer to the homes of patients in a largely rural region.

Failing to replace the linear accelerator would create a substantial access problem that would likely result in patients in this region deferring care or experiencing a significant hardship to obtain care. If the NCCC-N linear accelerator is not replaced, patients from the NCCC-N service area as described above would need to travel an additional 60 miles to reach MHMH in Lebanon. We would have grave concerns that if this proposed purchase did not move forward, patients would opt to defer care, or receive care inconsistently allowing for disease progression or

suboptimal long-term prospects for successful treatment at a correspondingly greater expense to the health care system.

By upgrading the equipment at NCCC-N to the latest technology platform and by creating a cost-effective redundancy in the system of care by leveraging the older linear accelerator as a backup, we believe that the proposed project enhances access, quality and the care experience for patients in the North Country referral region.

C. Quality

Installation of the Varian TrueBeam at NCCC-N will provide the current NCCC-N service area population with access to the latest linear accelerator technology. The proposed replacement linear accelerator will provide advances in technology made during the past decade, including the capability to deliver more precise tumor targeting, better outcomes and enhanced patient treatment experiences. The proposed new linear accelerator provides a higher energy level for deeper body treatments and will be compatible with all developing radiation therapy technologies. The new machine will allow monitoring of critical anatomical structures such as vertebrae during treatment and will be able to offer high precision treatments for conditions such as spine metastasis in the community setting.

Project Beginning and Completion Date

Upon the anticipated receipt of Certificate of Need (CON) approval, it is anticipated that the local building permitting process would conclude in June of 2016 and that activation of the new linear accelerator is expected in April 2017. (See Appendix 3 - Project Timeline).

The remainder of this application addresses the CON statutes and CON standards indicated in the jurisdiction letter dated May 22, 2015.

CON Statutory Criteria

CON Statutory Criteria 1 - The application is consistent with the health resource allocation plan

The application is consistent with the health resource allocation plan as evidenced by consistency with specific CON standards demonstrated below.

CON Standard 1.3: To the extent neighboring health care facilities provide services proposed by a new healthcare project, an applicant shall demonstrate that a collaborative approach to delivering the services has been taken or is not feasible or appropriate.

Norris Cotton Cancer Center – North (NCCC-N) is the only facility of its kind within the North Country referral region of Vermont and New Hampshire in which it is located, providing a full range of radiation therapy, chemotherapy, and specialized cancer care services such as familial cancer/cancer risk assessment and palliative care. In addition to the current Varian linear accelerator, NCCC-N features six infusion stations and two private infusion rooms. All treatment is closely monitored and overseen by a team of medical and radiation oncologists and nurses dedicated to providing, high-quality, patient-centered care.

Completed in 2005, NCCC-N was created on a highly collaborative model by Mary-Hitchcock Memorial Hospital (MHMH) and a consortium of regional hospitals in the service area focused on providing comprehensive cancer care to patients living in the North Country. Partner hospitals include the following:

- Androscoggin Valley Hospital, Berlin, NH
- Cottage Hospital, Woodsville, NH
- Littleton Regional Hospital, Littleton, NH
- North Country Hospital, Newport, VT
- Northeastern Vermont Regional Hospital, St. Johnsbury, VT
- Upper Connecticut Valley Hospital, Colebrook, NH
- Weeks Medical Center, Lancaster, NH

It should be noted that while NCCC-N provides the advanced cancer care, MHMH and NCCC-N work collaboratively with community-based hospitals and providers on diagnostic workups and testing wherever possible.

Since its inception, NCCC-N has been true to its original goal of local access to advanced cancer treatment services. Not only does NCCC-N serve patients closer to home, as mentioned previously our experience has shown that its presence addressed a previously unmet need in the patient population. The proposed replacement linear accelerator will enable us to continue to serve patients from the service areas of the surrounding health care facilities listed above.

There are no geographically proximate facilities providing equivalent services. The closest alternatives for patients are as follows (expressed in driving distance from St. Johnsbury where NCCC-N is located).

- Central Vermont Medical Center (Berlin, VT – 40 miles)
- Mary Hitchcock Memorial Hospital (Lebanon, NH – 65 miles)
- University of Vermont Medical Center (Burlington, VT – 76 miles)
- Concord Hospital (Concord, NH – 104 miles)
- Rutland Regional Medical Center (Rutland, VT – 105 miles)

MHMH and NCCC-N anticipate this collaborative model to continue for the foreseeable future.

CON Standard 1.4: If an applicant proposes services for which a higher volume of such service is positively correlated with better quality, the applicant shall show that it will be able to maintain appropriate volume for the service and that the addition of the service at the facility will not erode volume at any other Vermont facility in such a way that quality at that facility could be compromised.

Radiation therapy employing a linear accelerator is a clinical service for which higher volumes are positively correlated with better outcomes. Vermont's Health Resource Allocation Plan CON standard 3.25 indicates a minimum number of 6,000 treatments annually is considered to be a baseline.

As detailed in the attached financial tables (Table 8), we anticipate that both treatment and simulation volume will increase over time and will exceed the standard of 6,000. Given the demographics of the region in question, we believe that the increased volume over historical levels will come from greater system efficiency by having a newer and more reliable unit in place which is further supplemented by having the current linear accelerator placed in a backup role, thus allowing for greater flexibility.

We are projecting volume of 6,145 treatments in 2016, growing nominally to 6,331 by Year 3 (2019).

Since the proposed linear accelerator is a replacement and not "net-new" equipment, we do not anticipate any substantial increases in our effective service area or patient care volume as a result of acquiring it. With no anticipated changes in referral patterns or patient travel preferences, combined with a trend of limited population growth in the NCCC-N service area, we do not anticipate substantial growth in patient volume over time. We also do not anticipate any impact on our partner facilities in the region as a result of this proposed project.

There is always the potential for some shifting of volume among current patients who now travel from St. Johnsbury to MHMH in Lebanon for advanced treatments that are available through the use of the Varian TrueBeam. If this application is approved and that technology platform is made available in St. Johnsbury at NCCC-N as proposed, patients would then have the option to receive those treatments locally. Since it would be a shift in volume, and with a fixed price for the technology, there would be no anticipated cost savings for MHMH and NCCC-N as a result. However, there could be substantial savings for patients in the form of reduced transportation cost as well as a less quantifiable, but equally important, reduction in physical and emotional stress deriving from not having to travel an additional two hours to receive care.

Given the wide geographic distribution of other providers of similar services and since the proposed equipment is a replacement and not net-new to the health care marketplace (and since the proposed backup will be used in only very limited instances) we do not anticipate any appreciable impact on any other providers.

It is anticipated that any reduction of cancer treatment volumes at MHMH in Lebanon resulting from volume shifts toward NCCC-N related to the proposed project would likely represent only a small percentage of the approximately 19,000 radiation oncology treatments performed annually at MHMH. As such there would be no anticipated impact on patient volume to the point that a corresponding impact on the quality of the services offered at MHMH would be realized especially if 6,000 tests is viewed as a baseline as per CON standard 3.25.

Also mitigating against any declines in quality is the fact that the same interdisciplinary physician group oversees the care delivery in both locations (MHMH in Lebanon and NCCC-N in St. Johnsbury) and that an alignment in the technology platforms would remove an additional variable.

CON Standard 1.6: Applicants seeking to develop a new health care project shall explain how the application will collect and monitor data relating to health care quality and outcomes related to the proposed new health care project. To the extent practicable, such data collection and monitoring shall be aligned with the related data collection and monitoring efforts, whether within the applicant's organization, or other organizations or the government.

Component 1: Implementation and operation of the new linear accelerator will not change the ongoing quality assurance programs in place at NCCC-N. All patients treated at NCCC-N benefit from multidisciplinary tumor board review at MHMH. All patient treatment plans undergo peer review at weekly MHMH Radiation Oncology chart rounds. These rounds are held over a videoconference link with full review of plan intent and details.

As one of 45 National Cancer Institute (NCI) designated comprehensive cancer centers and one of 47 full members of the Radiation Therapy Oncology Group, MHMH and NCCC-N enjoy oversight by the Imaging and Radiation Oncology Core physics group in Houston, TX. This external physics group provides routine quality assurance checks on our equipment and calibration protocols, adding assurance that our patients receive the treatment prescribed by our physicians with high accuracy and precision.

Finally, MHMH and NCCC-N are fully accredited by the American Board of Radiology and benefit from routine systems and process review for maintenance of certification.

Component 2:

Same as above.

CON Standard 1.7: Applicants seeking to develop a new healthcare project shall explain how such project is consistent with evidence-based practice. Such explanation may include a description of how practitioners will be made aware of evidence-based best practice guidelines and how such guidelines will be incorporated into ongoing decision making (2005 State Health Plan, page 48).

Component 1: This application fully adheres to page 48 of the 2005 Vermont State Health Plan, which articulates the need for evidence-based practice, citing components of identification, approval, dissemination, acceptance, integration, and verification of adherence to evidence based standards. Below, we cite three ongoing activities which promote routine identification, approval, dissemination, acceptance, and integration of evidence-based practices in our radiation oncology practices.

- Our providers maintain access to the National Comprehensive Cancer Network Clinical Guidelines®, (http://www.nccn.org/professionals/physician_gls/f_guidelines.asp), a compendium of evidence-based guidelines authored by the nation's leading cancer researchers and clinicians. The guidelines are updated annually, and embedded within them are the specific literature references upon which the recommendations are based.

- Our providers are encouraged to attend oncology conferences where the latest evidence is presented, debated, and in some cases, accepted. In addition to such research presentations, these conferences also hold didactic learning sessions, some of which are requirements for providers to maintain their board certification (further discussed below). Those who attend conferences are expected to update the remainder of the staff through AMA-approved continuing medical education (CME) events, conducted on a monthly basis by NCCC physicians. For those months during which a conference is not attended, an exhaustive search of the literature (journal club) is conducted and peers from throughout the institution are invited to review, discuss, and possibly implement relevant findings.

- Dartmouth-Hitchcock's radiation oncologists must maintain certification from the American Board of Radiology (http://www.theabr.org/moc-ro-landing), an exhaustive process which ensures that:

    - Each practitioner's individual knowledge remains current and comprehensive
    - They maintain active, current, valid, and unrestricted professional state licensure to practice medicine
    - They participate in routine practice quality improvement (PQI).

These requirements not only ensure acceptance and understanding of evidence-based practices, but require an additional step in the form of routine PQI, which helps verify adherence to the identified guidelines. There exist three primary means by which the applicants maintain quality assurance.

- First, our providers conduct peer-quality review on a weekly basis (typically Friday mornings). Known colloquially as "chart-rounds," this quality assurance meeting of all new patient cases involves peer-based review of treatment plans to ensure:

    1. Appropriateness of care, consistent with evidence-based guidelines
    2. Safety of the radiation therapy plan. Any variances are documented and expected to be addressed in a timely manner.

- Second, we conduct monthly morbidity and mortality conferences to discuss errors and near-misses attributed to radiation therapy. Meticulous notes are maintained and debriefing protocols exist to ensure repeat errors do not occur.

- Third, the department holds a monthly Quality Assurance and Quality Improvement meeting, to ensure that the standards of patient safety, access, and evidence-based guidelines optimize the care delivered to our patients.

CON Standard 1.9: Applicants proposing construction projects shall show that costs and methods of the proposed construction are necessary and reasonable. Applicants shall show that the project is cost-effective and that reasonable energy conservation measures have been taken.

MHMH believes that it has made every effort to ensure that all costs associated with the proposed project are reasonable and necessary.

Option Considered: The first option we considered was to replace the existing linear accelerator in the existing vault at NCCC-N. The projected cost to remove and replace the existing linear accelerator in its current location was estimated at $4,620,000. This amount included the cost of constructing a temporary vault in the existing facility parking area and renting a mobile unit to provide treatment in order to ensure that there would be no gaps in service. It also included necessary renovation work to the existing vault to support the new equipment.

The cost estimate for this work is based on three past projects which addressed components of this work, with those actual costs escalated to the current project schedule using industry standard escalation rates (Turner Cost Index). These reference projects include the following:

1. Temporary linear accelerator, vault set up, and rental is based on cost information obtained from our affiliate, Cheshire Medical Center. A temporary vault was set up at that facility in 2012 to enable the replacement of a linear accelerator. Based on the actual cost information obtained, this work would cost an estimated $820,000 in today's dollars. It should be noted that this would be a repeated expense at each upgrade cycle which we are proposing to avoid by investing in Component 2 at the same time.

2. Replacement of existing linear accelerator with a new Varian True Beam at MHMH in Lebanon, NH in 2013. Based on actual cost, this cost for vault modification was $358,000 in today's dollars.

3. Increasing the shielding of the existing vault in Lebanon in 2003. The cost of that work would be $540,000 in today's dollars.

Other support costs for design, permitting and other support are similar to the costs for a new vault.

Option Selected: While it reflects a slightly higher cost in the short term, we felt that the most cost-effective option over the long term would be to build a new vault for the new linear accelerator and retain the existing linear accelerator in the existing vault as a backup. The cost to construct a new vault and install the new linear accelerator, while keeping the existing equipment in operation, is $4,807,365. MHMH worked with Engelberth Construction (Williston, VT) and PC Construction (South Burlington, VT) to assemble early estimates for the construction of a new vault and the related work to support this project. The estimates provided by these firms were within 10% of each other. The PC Construction estimate was revised in September 2015 to address the final MEP scope of work. This cost of $1,826,000 was used for overall project budgeting. (See Appendix 5 – Cost Estimate)

CON Standard 1.10: Applicants proposing new health care projects requiring construction shall show such projects are energy efficient. As appropriate, applicants shall show that Efficiency Vermont, or an organization with similar expertise, has been consulted on the proposal.

Component 1: We will construct a new vault for the new linear accelerator. This project involves an existing building and associated building envelope and mechanical / electrical systems. New equipment and systems will be specified to be energy efficient, but the existing systems will remain in place. Efficiency Vermont has agreed to work with us to address the potential for energy efficiency during the design process as noted in their letter of 10/1/2015. (See Appendix 4)

Component 2: We will maintain the existing linear accelerator in its current location. Continued use of the existing linear accelerator would not require changes to the electrical or mechanical systems and thus would not require input from Efficiency Vermont.

CON Standard 1.11: Applicants proposing new health care projects requiring new construction shall demonstrate that new construction is the more appropriate alternative when compared to renovation.

All work for this project will take place within the existing facility footprint. As mentioned previously, we initially considered replacing the existing linear accelerator in the current vault. However, after additional analysis we concluded that the addition of a new vault to house the new linear accelerator is the best option for the following reasons:

- The premium cost for constructing a second vault is $190,000, or approximately 4% of the overall project cost. We felt that this additional incremental investment on the front end of the process would be a wiser use of resources over the long term since it will avoid expenses outlined above for temporary vaults and machines during initial installation as well as during future upgrade cycles.

- While feasible, we believe that the use of a temporary vault outside of the facility would constitute an unnecessary hardship for patients and staff if we were simply to renovate the existing vault. Also, significant professional staff time would be spent commissioning the temporary machine for clinical use. Finally, such temporary machines are limited in their clinical capabilities and such limitations would consequently degrade the quality of care we could deliver during the construction phase.

- Most importantly, the new vault and linear accelerator will allow us to leave the existing linear accelerator in place to serve as a backup to mitigate against primary system downtime as well as to address periodic bottlenecks during periods of high patient census in order to provide service in a timely and patient-centered manner. This will greatly reduce any potential negative impact on patients and put NCCC-N in a much better position to deliver uninterrupted care throughout a patient's course of treatment.

CON Standard 1.12: New construction health care projects shall comply with the Guidelines for Design and Construction of Health Care Facilities as issued by the Facilities Guidelines Institute (FGI), 2014 edition.

Component 1: This part of the project includes building a new vault to house the proposed new linear accelerator: This project will be designed in accordance with the 2014 edition of the Facilities Guidelines Institute (FGI) guidelines.

Included is a letter of confirmation from our architect (See Appendix 6 – Archtect Letter).

Component 2: Not applicable.

CON Standard 3.4: Applicants subject to budget review shall demonstrate that a proposed project has been included in hospital budget submissions or explain why inclusion was not feasible.

Not applicable.

CON Standard 3.7: Applicants proposing to replace diagnostic or therapeutic equipment shall demonstrate that existing equipment is fully depreciated, or the cost of the early replacement, including the cost of the remaining depreciation on existing equipment, is less costly that keeping the existing equipment.

Component 1: The current Varian linear accelerator located at the NCCC-N facility in St. Johnsbury was purchased in September 2005 at a cost of $1,925,889. Subsequent to the purchase, MHMH accrued depreciation on the equipment each month for a total of 84 months in keeping with the plan that the unit would have a working lifespan of seven years. As a result, the current Varian linear accelerator became fully depreciated as of September 2012. As mentioned previously, the current linear accelerator will remain in use as a backup.

Component 2: Not applicable.

CON Standard 3.20: Applications to purchase diagnostic or therapeutic equipment, or to expand facilities to accommodate major medical equipment purchases, shall address the appropriateness of such distribution as compared to population, the availability of appropriately trained personnel, an evaluation of patient need versus convenience, urgent versus non-urgent use, and appropriate protocol to reduce risk of repetitive testing (both within the facility purchasing the equipment and within the healthcare system).

Component 1: As mentioned previously NCCC-N is the only provider of advanced cancer care services in its service area, serving a largely rural population estimated at 70,000 spread over approximately 3,600 square miles which primarily includes Caledonia and Essex Counties in Vermont and Coos County and parts of Grafton County in New Hampshire. Since the proposed linear accelerator is a replacement, no net new capacity is being added to the system.

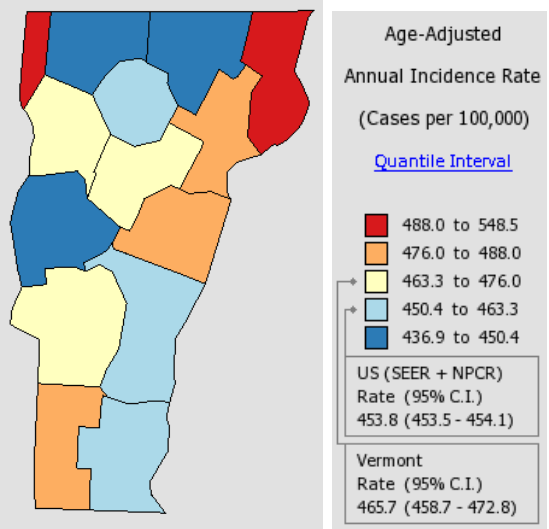
There are no geographically proximate facilities providing equivalent services. The closest alternatives for patients are as follows (expressed in distance from St. Johnsbury).

- Central Vermont Medical Center (Berlin, VT – 40 miles)
- Dartmouth-Hitchcock Medical Center (Lebanon, NH – 65 miles)
- University of Vermont Medical Center (Burlington (76 miles)
- Concord Hospital (Concord, NH – 104 miles)
- Rutland Regional Medical Center (Rutland, VT – 105 miles)

As the Board may know, radiation therapy is time intensive and usually requires patients to undergo multiple weeks of daily treatment. The average treatment is 15 minutes, 5 days per week for 5-6 weeks (which does not include the related travel and waiting time). Hence, geographic proximity and access to a facility within a reasonable travel time is critical given the extended daily nature of the treatment.

If MHMH is not granted approval to replace the linear accelerator, very ill patients would not have access to convenient treatment options using the most current and effective technology and would be required to travel considerable distances to obtain them. Granting MHMH approval to replace its linear accelerator will serve the public good and ensure continued convenient access to best-practice cancer treatment care in a region that does not have convenient alternatives.

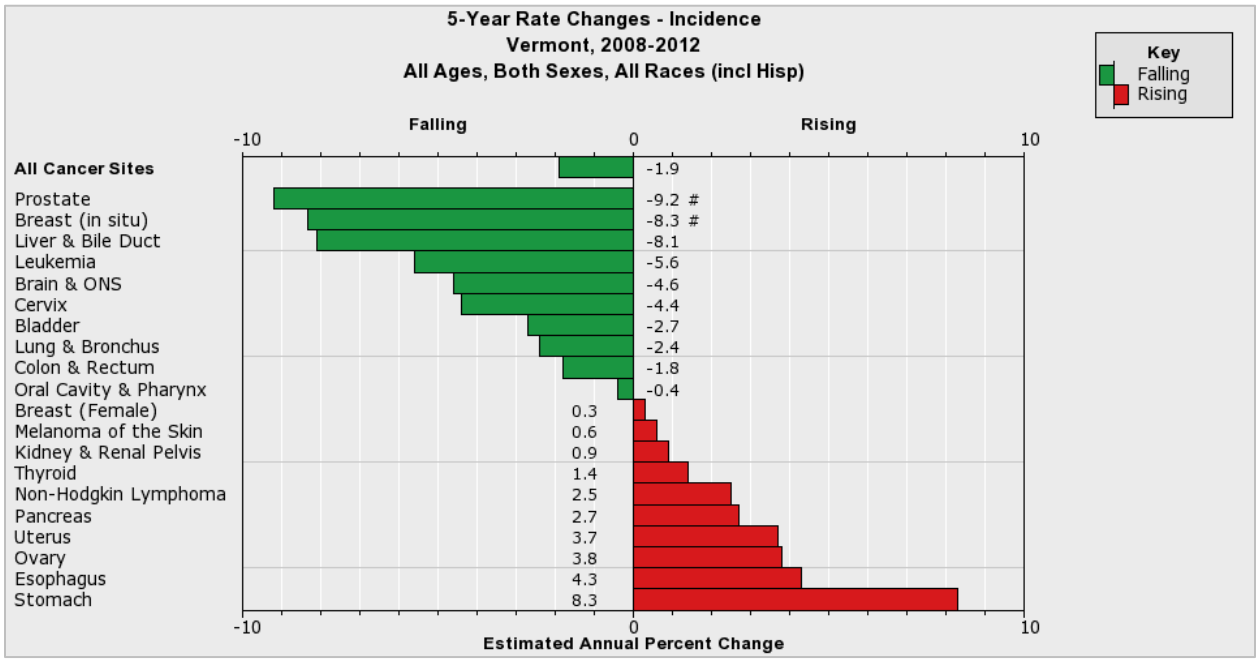
CANCER INCIDENCE RATES FOR VERMONT 2008-2012 (All Cancer Sites)



It should be noted that both Essex and Caledonia Counties, which are core to the NCCC-N service area, have among the highest incidence rates of cancer for the entire state of Vermont.

Source: State Cancer Profiles, Centers for Disease Control and Prevention and the National Cancer Institute.

And, while significant gains have been made in the treatment of cancer, the incidence rate of many tumor types continues to increase as depicted in the following chart.



Source: State Cancer Profiles, Centers for Disease Control and Prevention and the National Cancer Institute.

Vermont also continues to have both a higher incidence rate (465.7/100K vs. 453.8/100K) and higher mortality rate (173.7/100K vs. 171.2/100K) from all types of cancers combined than the United States as a whole. This further underscores the need for a robust system of cancer care serving Vermont's Northeast Kingdom and the broader North Country referral region.

Training and support to ensure optimal operation, maximum patient safety and superior clinical outcomes will come from the extensive experience accrued by current technical and professional staff at MHMH's Norris Cotton Cancer Center who have been using a similar system for many years. Supplemental training as needed is offered through the vendor (Varian) at its Las Vegas facility.

As mentioned previously, care plans are developed by an interdisciplinary team of clinicians to ensure the optimal use of resources with a minimal impact on patients in terms of convenience and the toxicity/side effects of treatment. These plans are reviewed regularly as part of an ongoing quality assurance process.

CON Standard 3.22: For applications involving the purchase of diagnostic or therapeutic equipment, applicants shall establish, through submission of evidence in the form of peer-reviewed or similar articles, the clinical efficacy of the diagnoses or procedures to be performed.

Component 1: Linear accelerator based therapy has made remarkable advances in several realms of oncology. Advances in the four most common cancers (prostate, lung, breast and colorectal cancers) are discussed below. Further examples of the medical benefits of radiation therapy in less common but nonetheless fatal cancers (such as pancreas[1], brain[2,3] or bladder[4,5] cancer) can be provided upon request. Over the past decade, technical advances in modern linear accelerators permit the safe escalation of radiation dose while decreasing the amount of radiation to healthy, normal adjacent tissues. This has most notably increased survival for aggressive prostate cancers[6] and early-stage lung cancers.

Breast Cancer: Radiation therapy after lumpectomy for early stage breast cancer[7] and after mastectomy for more advanced breast cancers[8] increases cure rates of breast cancer. Furthermore, recent advances in planning and delivery of radiation have decreased the amount of normal heart and lung tissue which receive radiation[9], decreasing the risk of heart disease or lung injury attributed to radiation[10].

Prostate Cancer: Aggressive, symptomatic prostate cancers can be treated either by surgery or radiation. Throughout the 1980s and 1990s, several trials showed that increasing radiation dose increases the likelihood of curing prostate cancer[11-14]. New forms of radiation delivery, known as intensity modulated radiation therapy (IMRT) combined with image guided radiation therapy (IGRT) further increase our ability to identify and treat prostate cancers and as result, our ability to cure many of these cancers[15,16]. The proposed treatment unit will permit continued use of these treatment mechanisms.

Lung Cancer: If a patient cannot get an operation to remove a portion of the lung for early stage lung cancer, standard radiation is of limited effectiveness[17]. However, advanced treatment technology of the replacement treatment unit (Component 1) will allow us to use a new form of radiotherapy, known as stereotactic body radiotherapy (SBRT). This type of radiation allows for a dramatic escalation of radiation dose to tumors without increasing radiation dose to nearby normal tissues, thereby increasing cure rates[17-20]. In addition, these patients receive as few as three treatments, making this not only medically advantageous, but more convenient for the patient and cost effective than standard radiation[21,22].

Colorectal Cancer: Preoperative chemo-radiation therapy for rectal cancer improves the effectiveness of surgery and decreases the need for colostomy[23]. More recently, a growing body of evidence suggests that chemo-radiation alone can cure some rectal cancers, potentially eliminating the need for surgery altogether[24].

Component 2: Maintenance of the existing linear accelerator is not net-new, so the question is not applicable.

CON Standard 3.23: In addition to providing need, applicants seeking to add or expand diagnostic or therapeutic equipment shall show that the equipment reduces costs and /or improves quality.

Component 1: The new accelerator includes vastly more efficient methods to monitor the operating condition of the accelerator. Slow drifts in operating characteristics are much more easily detected through automatically generated graphs of operating parameters versus time. Higher output of the newly designed machine makes it possible to reduce treatment time for some clinical cases, making it possible to treat more patients per day. Advanced imaging techniques allow for real-time monitoring of geometric accuracy of delivery, making it possible to detect unanticipated patient motion and to correct for that motion while using smaller treatment fields and sparing normal surrounding tissues.

Component 2: The cost of operations will be reduced by maintaining the existing accelerator for use during periods of high patient census. The need for overtime pay of hourly staff will be eliminated and safety will be enhanced for patients and staff if they can commute during normal hours, especially in winter months. In addition, we will be able to flex staff from MHMH in Lebanon as needed, thereby avoiding the increased expense of additional personnel who may be needed infrequently.

CON Standard 3.24: An applicant shall disclose potential financial conflicts of interest between hospitals and physicians and an equipment purchase.

There are no known conflicts of interest between any employees or physicians associated with Dartmouth-Hitchcock Health, Mary Hitchcock Memorial Hospital, or their agents and the company selling the replacement linear accelerator equipment (Varian) or those companies participating the design or installation of the renovation, or the companies selling the software upgrade. If a conflict of interest becomes know, MHMH will immediately alert the Green Mountain Care Board of its existence.

CON Standard 3.25: Any application for a linear accelerator unit shall demonstrate that the accelerator will perform an adequate number of treatments per year, by the second year of operation, based upon an analysis of state, regional, and national benchmarks, to achieve sufficient utilization and ensure the additional unit is needed and will perform safely, effectively and efficiently. The minimum number of treatments is 6,000 treatments per year, but this number may be modified based upon current science.

Component 1: As detailed in the attached financial tables (Table 8), we anticipate that both treatment and simulation volume will increase over time resulting primarily from the greater efficiency of the proposed new accelerator as well as being able to utilize the current accelerator as a backup during periods of high patient census. Given the demographics of the region in question as well as its comparatively remote geography, we believe that the increased volume will derive from greater system efficiency and the ability to engage auxiliary capacity rather than any shift in referral patterns or other type of market growth from patients coming from other parts of the state where treatment options are more readily available.

We are projecting volume of 6,145 treatments in 2016, growing nominally to 6,331 by Year 3 of implementation (2019).

Component 2: The maintenance of existing linear accelerator will not result in additional volume, but will support the projected volume above during periods of high patient census.

CON Standard 3.26: Any application for radiation therapy service established outside of a tertiary center shall have formal linkages established for ongoing utilization review and quality assessment in collaboration with a tertiary center.

Component 1 and 2: Norris Cotton Cancer Center - North is a regional facility owned and operated by Mary Hitchcock Memorial Hospital which is a provider of tertiary services for patients throughout Vermont and New Hampshire. Norris Cotton Cancer Center – North is a regional clinic of the broader Norris Cotton Cancer Center which is one of 45 NCI-designated comprehensive cancer centers in the United States.

As described in CON Standard 1.7 above, MHMH's radiation oncologists must maintain certification from the American Board of Radiology which ensures that:

- Each practitioner's individual knowledge remains current and comprehensive
- They maintain active, current, valid, and unrestricted professional state licensure to practice medicine
- They participate in routine practice quality improvement (PQI).

These requirements not only ensure acceptance and understanding of evidence-based practices, but require an additional step in the form of routine PQI, which helps verify adherence to the identified guidelines.

There exist three primary means by which the applicants maintain quality assurance.

- First, our providers conduct peer-quality review on a weekly basis (typically Friday mornings). Known colloquially as "chart-rounds," this quality assurance meeting of all new patient cases involves peer-based review of treatment plans to ensure:
    - Appropriateness of care, consistent with evidence-based guidelines
    - Safety of the radiation therapy plan. Any variances are documented and expected to be addressed in a timely manner.

- Second, we conduct monthly morbidity and mortality conferences to discuss errors and near-misses attributed to radiation therapy. Meticulous notes are maintained and debriefing protocols exist to ensure repeat errors do not occur.

- Third, the department holds a monthly Quality Assurance and Quality Improvement meeting, to ensure that the standards of patient safety, access, and evidence based guidelines optimize the care delivered to our patients.

CON Statutory Criteria 2 - the cost of the project is reasonable, because:

(A) the applicant's financial condition will sustain any financial burden likely to result from completion of the project;

With over $1.6 billion in total assets, annual operating revenue just under $1.4 billion, Dartmouth-Hitchcock Health (parent of Mary Hitchcock Memorial Hospital) is a financially stable organization with long-standing ties to the region. This was affirmed by Fitch Ratings in February 2015 when it conferred an A+ Stable rating on Dartmouth-Hitchcock's outstanding debt under the Dartmouth-Hitchcock Obligated Group.

As stated previously, D-H will fund the entire $4.8 million cost of the proposed project from operations through its capital budgeting process, and no debt financing expenses will be incurred. As noted in the financial tables there will be some minimal impact in the form of depreciation expense since the existing unit had already been fully depreciated.

(B) the project will not result in an undue increase in the costs of medical care. In making a finding under this subdivision, the commissioner shall consider and weigh relevant factors including;

(i) the financial implications of the project on hospitals and other clinical settings, including the impact on their services, expenditures, and charges;

Installation of the replacement linear accelerator will not result in an undue increase in the costs of medical care. (In this context "costs of medical care" is presumed to be MHMH's revenue rather than MHMH's costs or expenses to deliver the care).

Financial projections suggest that new revenue will be generated by an increased volume of treatments facilitated by the replacement linear accelerator which will be less likely to experience downtime as a new unit, which is more efficient and which will be supplemented by the existing unit serving in a backup capacity.

We do not anticipate the replacement linear accelerator to impact other clinical settings within the D-HH system, nor throughout the Vermont healthcare system. For example, the replacement linear accelerator should not impact visit volumes, charges or revenue from MHMH's primary care practices, surgery practices, imaging and laboratory services, emergency room or inpatient services. Moreover the replacement linear accelerator should not impact radiation oncology or other medical services at other institutions because of the challenges of frequent patient treatment and travel associated with radiation oncology treatment discussed more fully in the Project Description section.

Gross charges for the overall Dartmouth-Hitchcock Health system (of which Mary Hitchcock Memorial Hospital is a component) are updated on an annual basis. The average annual increase has historically been 3% and it is not expected that annual charge increases for radiation therapy would exceed that level. In addition, contracted rates with external payors are re-negotiated on a regular basis and small increases to cover general inflation pressures are expected over the next three years.

(ii) whether the impact on services, expenditures, and charges is outweighed by the benefit of the project to the public;

The proposed replacement project was anticipated at the inception of the NCCC-North program in 2005 as normal maintenance plus construction of a second vault to accommodate long term operating plans. Replacement of linear accelerator technology at intervals of approximately seven years is anticipated due to technology improvements and to avoid increased incidence of interrupted treatment courses due to machine failure. It is in the best interest of patients to receive their treatments in coherent, uninterrupted courses to minimize the chance for disease

progression. It is also in the best interest of the patients to provide backup services on site, rather than asking patients to travel to Lebanon for emergency treatments during system downtime.

(C) less expensive alternatives do not exist, would be unsatisfactory, or are not feasible or appropriate;

As stated previously we considered an option that would have been modestly less expensive (approximately $190,000) in real terms by renting a temporary vault. However, the quality of service to patients during the replacement process would be degraded as temporary machines do not have the same energy levels required for optimal treatment. More importantly however, we felt that any immediate savings in the cost of installation would be far outweighed by savings to be realized over the long term when the next replacement machine will be installed in existing facilities with no interruption of services and with no need for duplication of efforts in characterizing and calibrating a temporary machine.

(3) there is an identifiable, existing, or reasonably anticipated need for the proposed project which is appropriate for the applicant to provide;

As stated previously, the current linear accelerator (10 years old) has exceeded its optimal working lifetime of seven years and is due to be replaced. The frequency of repairs needed on the existing machine has increased over time as has the extent of repairs needed. While expected as a consequence of the continued use of aging technology, it nonetheless results in unanticipated downtime leading to situations for patients in which they are either required to travel to a facility much further away to receive their care, or they are forced to defer care altogether resulting in sub-optimal implementation of care plans.

(4) the project will improve the quality of healthcare in the state or provide greater access to healthcare for Vermont's residents, or both;

The proposed project will allow for a more efficient throughput of patient census as needed for the foreseeable future. Since we do not anticipate large growth in population nor change in referral patterns or patient travel, this plan (specifically component 2) should serve the community without need for major expansion for the foreseeable future. The quality of treatment delivered using the new accelerator will be enhanced due to advanced imaging during treatment, and advanced patient alignment capabilities.

(5) the project will not have an undue adverse impact on any other existing services provided by the applicant;

The replacement linear accelerator will not impact other existing services provided by MHMH or NCCC-N. The proposed project is for a linear accelerator which simply substitutes an updated technology for the radiation therapy service that was already being offered by the applicant in this location. The addition of this replacement linear accelerator compliments the existing portfolio of cancer services being offered an NCCC-N such as chemotherapy, specialized medical oncology, and patient and family education and support services. The treatments performed by the replacement linear accelerator are conducted as outpatient care after which the patient remains ambulatory and does not require additional diagnostic studies.

As stated previously, using the older linear accelerator as a backup will enhance the flexibility of the applicant's service offerings in this location. It will limit downtime and will allow NCCC-N to flex to accommodate patients more efficiently during periods of high census.

(6) the project will serve the public good;

Component 1: We believe that this proposed project is the best option to deliver cancer treatment services (in the form of radiotherapy) to the public in the most cost-efficient manner. The technology improvements of the new machine will allow more conformal treatment delivery with commensurate reduction of treatment related morbidity. Concordant with current trends, some therapies will be able to be delivered in fewer patient visits, allowing people to return to their normal routines, jobs, and productivity.

Retention of the existing machine for use as a backup unit and for periods of high patient census will allow patients to receive services during normal hours of operation when they can benefit from a fully staffed center and not need to travel after dark, especially in winter.

Perhaps most importantly in terms of serving the public good, NCCC-N provides cancer care services in what is historically a medically underserved area in Vermont's Northeast Kingdom and New Hampshire's North Country. The absence of radiation oncology services in St. Johnsbury would necessitate patients travelling an additional hour or more to reach comparable services in Lebanon, NH or Burlington, VT. Additionally, NCCC-N was founded on a collaborative model through which pre- and post-treatment services for patients are provided by the various regional hospital providers and not duplicated by NCCC-N. This model allows both NCCC-N and the regional hospitals to work together effectively to provide a vital service with creating duplicative capacity in the marketplace and thereby incurring increased costs to the broader healthcare system.

(8) if the application is for the purchase or lease of new health care information technology, it conforms with the health information technology plan established under section 9351 of this title (added 1979, No. 65, § 1; amended 1985, No. 234 (Adj. Sess.), § 5; 1987, No. 96, § 12; 1991, No. 160 (Adj. Sess.), § 27, eff. May 11, 1992; 1993, No. 50, § 4; 1995, No. 180 (Adj. Sess.), §§ 27, 38(a); 1997, No. 159 (Adj. Sess.), § 10, eff. March 15, 1999; 2003, No. 53 § 13, eff. July 1, 2005; No. 53, § 26; 2005, No. 71, § 277a; 2007, No. 70, § 34; 2007, No. 139 (Adj. Sess.), § 8; 2009, No. 61, § 5; 2009, No. 83 (Adj. Sess.), § 3 eff. April 21, 2010.)

While there is operating software associated with the proposed linear accelerator, its primary use is as a therapeutic technology and as such we do not believe that it constitutes health care information technology as would an electronic health record or related technology platform. Health care information technology as defined by the HHS Office of the National Coordinator for Health IT (ONC) as, “the application of information processing involving both computer hardware and software that deals with the storage, retrieval, sharing, and use of health care information, data, and knowledge for communication and decision making.”

DARTMOUTH HITCHCOCK
Replacement Linear Accelerator at NCCC – North in St. Johnsbury, VT
TABLE 1
PROJECT COSTS

Construction Costs		
1. New Construction	$	-
2. Renovation		$1,749,946
3. Site Work		-
4. Fixed Equipment		2,300,000
5. Design/Bidding Contingency		$158,351
6. Construction Contingency		$280,316
7. Construction Manager Fee		83,917
8. Other (please specify)		-
Subtotal	$	4,572,530
Related Project Costs		
1. Major Moveable Equipment	$	-
2. Furnishings, Fixtures & Other Equip.		$5,000
3. Architectural/Engineering Fees		$115,000
4. Land Acquisition		-
5. Purchase of Buildings		-
6. Administrative Expenses & Permits		$114,835
7. Debt Financing Expenses (see below)		-
8. Debt Service Reserve Fund		-
9. Working Capital		-
10. Other (please specify)		-
Subtotal	$	234,835
Total Project Costs	**$**	**4,807,365**

Debt Financing Expenses		
1. Capital Interest	$	-
2. Bond Discount or Placement Fee		-
3. Misc. Financing Fees & Exp. (issuance costs)		-
4. Other		-
Subtotal	$	-
Less Interest Earnings on Funds		
1. Debt Service Reserve Funds	$	-
2. Capitalized Interest Account		-
3. Construction Fund		-
4. Other		-
Subtotal	$	-
Total Debt Financing Expenses	**$**	**-**
feeds to line 7 above		

DARTMOUTH HITCHCOCK
Replacement Linear Accelerator at NCCC – North in St. Johnsbury, VT

Required Tables

When completing the tables please note that you need only fill-in the **shaded fields.** Fields with diagonal lines indicating **N/A** do not requiry an entry.The CON Application Form tables, when completed electronically, are set up to calculate totals as well as pre-populate fields in other tables for you. If you have any questions please contact Division staff. Also, please contact Division staff prior to determining if a given table may not be applicable for your project.

Applicants are encouraged to submit an electronic version of a completed application via attachment to email. Please send electronic versions as attachments to email addressed to: **jgarson@bishca.state.vt.us**

Table	Description
1	Project Costs
2	Debt Financing Arrangement: Sources & Uses of Funds
3A	Income Statement: Without Project
3B	Income Statement: Project Only
3C	Income Statement: With Project (no 'fill-in' required)
4A	Balance Sheet - Unrestricted Funds: Without Project
4B	Balance Sheet - Unrestricted Funds: Project Only
4C	Balance Sheet - Unrestricted Funds: With Project (no 'fill-in' required)
5A	Statement of Cash Flows: Without Project
5B	Statement of Cash Flows: Project Only
5C	Statement of Cash Flows: With Project (no 'fill-in' required)
6A	Revenue Source Projections: Without Project
6B	Revenue Source Projections: Project Only
6C	Revenue Source Projections: With Project (no 'fill-in' required)
7	Utilization Projections: Totals
8	Utilization Projections: Project Specific
9	Staffing Projections: Totals

DARTMOUTH HITCHCOCK

:eplacement Linear Accelerator at NCCC – North in St. Johnsbury, V

TABLE 2

DEBT FINANCING ARRANGEMENT, SOURCES & USES OF FUNDS

Sources of Funds

1. Financing Instrument	Bond			
a. Interest Rate	0.0%			
b. Loan Period		To:		
c. Amount Financed			$	-
2. Equity Contribution				-
3. Other Sources				
a. Working Capital				4,807,365
b. Fundraising				-
c. Grants				-
d. Other				-
Total Required Funds			**$**	**4,807,365**

Uses of Funds

Project Costs (feeds from Table 1)		
1. New Construction	$	-
2. Renovation		1,749,946
3. Site Work		-
4. Fixed Equipment		2,300,000
5. Design/Bidding Contingency		158,351
6. Construction Contingency		280,316
7. Construction Manager Fee		83,917
8. Major Moveable Equipment		-
9. Furnishings, Fixtures & Other Equip.		5,000
10. Architectural/Engineering Fees		115,000
11. Land Acquisition		-
12. Purchase of Buildings		-
13. Administrative Expenses & Permits		114,835
14. Debt Financing Expenses		-
15. Debt Service Reserve Fund		-
16. Working Capital		-
17. Other (please specify)		-
Total Uses of Funds	**$**	**4,807,365**

Total sources should equal total uses of funds.

DARTMOUTH HITCHCOCK
Replacement Linear Accelerator at NCCC – North in St. Johnsbury, VT
TABLE 3A
INCOME STATEMENT**
WITHOUT PROJECT

(in thousands of dollars)	Latest Actual 2014	Projected Actual* 2015	Budget 2016	Proposed Year 1 2017	Proposed Year 2 2018	Proposed Year 3 2019
Revenues						
Inpatient Care Revenue	$ 906,343	$ 954,430	$ 1,020,534	$ 1,026,249	$ 1,066,050	$ 1,107,399
Outpatient Care Revenue	2,255,065	2,375,780	2,586,863	2,601,350	$ 2,702,237	$ 2,807,051
Chronic/Rehab Revenue	-	-	-	-	-	-
SNF/ECF Patient Care Revenue	-	-	-	-	-	-
Swing Beds Patient Care Revenue	-	-	-	-	-	-
Gross Patient Care Revenue	$ 3,161,408	$ 3,330,210	$ 3,607,397	$ 3,627,599	$ 3,768,287	$ 3,914,450
Disproportionate Share Payments (1)	$ 11,079	$ 8,300	$ 8,200	$ -	$ -	$ -
Free Care & Bad Debt	(99,128)	(55,180)	(74,773)	(100,878)	(91,805)	(91,711)
Deductions from Revenue	(1,882,993)	(2,057,456)	(2,263,621)	(2,210,249)	(2,304,033)	(2,402,042)
Net Patient Care Revenue	$ 1,190,366	$ 1,225,874	$ 1,277,203	$ 1,316,472	$ 1,372,449	$ 1,420,697
Other Operating Revenue	158,614	161,012	145,384	138,769	142,199	146,266
Total Operating Revenue	$ 1,348,980	$ 1,386,886	$ 1,422,587	$ 1,455,241	$ 1,514,648	$ 1,566,963
Operating Expense						
Salaries (Non-MD)	$ 421,516	$ 456,956	$ 458,596	$ 470,575	$ 482,866	495,478
Fringe Benefits (Non-MD) (2)	198,359	194,467	198,558	203,721	209,017	214,452
Physician Fees/Salaries/Contracts/Fringes (3)	228,465	236,451	249,855	256,381	263,078	269,949
Health Care Provider Tax (4)	32,636	45,839	46,642	48,585	50,091	50,817
Depreciation/Amortization	54,894	56,649	58,354	65,472	70,614	79,875
Interest	17,777	16,781	16,761	16,248	15,695	15,277
Other Operating Expense	354,087	376,156	386,154	361,937	384,877	398,315
Total Operating Expense	$ 1,307,734	$ 1,383,299	$ 1,414,920	$ 1,422,919	$ 1,476,238	$ 1,524,163
Net Operating Income (Loss)	$ 41,246	$ 3,587	$ 7,667	$ 32,322	$ 38,410	$ 42,800
Non-Operating Revenue (5)	46,240	(18,487)	20,588	23,129	26,250	29,814
Excess (Deficit) of Rev Over Exp	$ 87,486	$ (14,900)	$ 28,255	$ 55,451	$ 64,660	$ 72,614

Latest actual numbers should tie to the hospital budget process.

*Reflects pre-audited financial data for FY15. FY15 ended June 30, 2015 and we are in the process of finalizing the FY15 audit.
Dartmouth Hitchcock's Fiscal Year is July 1st - June 30th.
** Reflects financial data for the Dartmouth Hitchcock Obligated Group.
(1) DSH figure represents New Hampshire Disproportionate Share Payments. We do not budget DSH payments beyond the current year.
(2) Fringe Benefits are reported for both MDs and non-MDs in the same line. Dartmouth Hitchcock does not report them separately.
(3) Does not include Fringe, which is included in the Fringe Benefit line for both MDs and Non-MDs.
(4) Represents the Medicaid Enhancment Tax, a tax levied by the State of NH.
(5) Represents Non Operating Gains (Losses).

DARTMOUTH HITCHCOCK
Replacement Linear Accelerator at NCCC – North in St. Johnsbury, VT
TABLE 3B
INCOME STATEMENT
PROJECT ONLY

(in thousands of dollars)	Latest Actual 2014	Projected Actual* 2015	Budget 2016	Proposed Year 1 2017	Proposed Year 2 2018	Proposed Year 3 2019
Revenues						
Inpatient Care Revenue	N/A	$ -	$ -	$ -	$ -	$ -
Outpatient Care Revenue	N/A	-	-	-	-	-
Chronic/Rehab Revenue	N/A	-	-	-	-	-
SNF/ECF Patient Care Revenue	N/A	-	-	-	-	-
Swing Beds Patient Care Revenue	N/A	-	-	-	-	-
Gross Patient Care Revenue		$ -	$ -	$ -	$ -	$ -
Disproportionate Share Payments	N/A	$ -	$ -	$ -	$ -	$ -
Free Care & Bad Debt	N/A	-	-	-	-	-
Deductions from Revenue	N/A	-	-	-	-	-
Net Patient Care Revenue	N/A	$ -	$ -	$ -	$ -	$ -
Other Operating Revenue	N/A	-	-	-	-	-
Total Operating Revenue	N/A		$ -	$ -	$ -	$ -
Operating Expense						
Salaries (Non-MD)	N/A	$ -	$ -	$ -	$ -	$ -
Frings Benefits (Non-MD)	N/A	-	-	-	-	-
Physician Fees/Salaries/Contracts/Fring	N/A	-	-	-	-	-
Health Care Provider Tax	N/A	-	-	-	-	-
Depreciation/Amortization	N/A	-	-	134	538	538
Interest	N/A	-	-	-	-	-
Other Operating Expense	N/A	-	-	-	-	-
Total Operating Expense	N/A	$ -	$ -	$ 134	$ 538	$ 538
Net Operating Income (Loss)	N/A	$ -	$ -	$ (134)	$ (538)	$ (538)
Non-Operating Revenue	N/A	-	-	-	-	-
Excess (Deficit) of Rev Over Exp	N/A	$ -	$ -	$ (134)	$ (538)	$ (538)

Latest actual numbers should tie to the hospital budget process.
*Reflects pre-audited financial data for FY15. FY15 ended June 30, 2015 and we are in the process of finalizing the FY15 audit.
Dartmouth Hitchcock's Fiscal Year is July 1st - June 30th.

DARTMOUTH HITCHCOCK
Replacement Linear Accelerator at NCCC – North in St. Johnsbury, VT
TABLE 3C
INCOME STATEMENT
WITH PROJECT

(in thousands of dollars)	Latest Actual 2014	Projected Actual* 2015	Budget 2016	Proposed Year 1 2017	Proposed Year 2 2018	Proposed Year 3 2019
Revenues						
Inpatient Care Revenue	#VALUE!	$ 954,430	$ 1,020,534	$ 1,026,249	$ 1,066,050	$ 1,107,399
Outpatient Care Revenue	#VALUE!	2,375,780	2,586,863	2,601,350	2,702,237	2,807,051
Chronic/Rehab Revenue	#VALUE!	-	-	-	-	-
SNF/ECF Patient Care Revenue	#VALUE!	-	-	-	-	-
Swing Beds Patient Care Revenue	#VALUE!	-	-	-	-	-
Gross Patient Care Revenue	#VALUE!	$ 3,330,210	$ 3,607,397	$ 3,627,599	$ 3,768,287	$ 3,914,450
Disproportionate Share Payments	#VALUE!	$ 8,300	$ 8,200	$ -	$ -	$ -
Free Care & Bad Debt	#VALUE!	(55,180)	(74,773)	(100,878)	(91,805)	(91,711)
Deductions from Revenue	#VALUE!	(2,057,456)	(2,263,621)	(2,210,249)	(2,304,033)	(2,402,042)
Net Patient Care Revenue	#VALUE!	$ 1,225,874	$ 1,277,203	$ 1,316,472	$ 1,372,449	$ 1,420,697
Other Operating Revenue	#VALUE!	161,012	145,384	138,769	142,199	146,266
Total Operating Revenue	#VALUE!	$ 1,386,886	$ 1,422,587	$ 1,455,241	$ 1,514,648	$ 1,566,963
Operating Expense						
Salaries (Non-MD)	#VALUE!	$ 456,956	$ 458,596	$ 470,575	$ 482,866	$ 495,478
Frings Benefits (Non-MD)	#VALUE!	194,467	198,558	203,721	209,017	214,452
Physician Fees/Salaries/Contracts/Fring	#VALUE!	236,451	249,855	256,381	263,078	269,949
Health Care Provider Tax	#VALUE!	45,839	46,642	48,585	50,091	50,817
Depreciation/Amortization	#VALUE!	56,649	58,354	65,606	71,152	80,412
Interest	#VALUE!	16,781	16,761	16,248	15,695	15,277
Other Operating Expense	#VALUE!	376,156	386,154	361,937	384,877	398,315
Total Operating Expense	#VALUE!	$ 1,383,299	$ 1,414,920	$ 1,423,053	$ 1,476,775	$ 1,524,701
Net Operating Income (Loss)	#VALUE!	$ 3,587	$ 7,667	$ 32,188	$ 37,873	$ 42,262
Non-Operating Revenue	#VALUE!	(18,487)	20,588	23,129	26,250	29,814
Excess (Deficit) of Rev Over Exp	#VALUE!	$ (14,900)	$ 28,255	$ 55,317	$ 64,123	$ 72,076

Latest actual numbers should tie to the hospital budget process.
*Reflects pre-audited financial data for FY15. FY15 ended June 30, 2015 and we are in the process of finalizing the FY15 audit.
Dartmouth Hitchcock's Fiscal Year is July 1st - June 30th.

DARTMOUTH HITCHCOCK
Replacement Linear Accelerator at NCCC – North in St. Johnsbury, VT
TABLE 4A
BALANCE SHEET - UNRESTRICTED FUNDS**
WITHOUT PROJECT

(in thousands of dollars)						
ASSETS	**Latest Actual 2014**	**Projected Actual* 2015**	**Budget 2016**	**Proposed Year 1 2017**	**Proposed Year 2 2018**	**Proposed Year 3 2019**
Current Assets						
Cash & Investments	$ 45,438	$ 8,252	$ 10,000	$ 10,000	$ 10,000	$ 39,434
Patient Accounts Receivable, Gross (1)	300,881	261,036	251,014	251,014	251,014	251,014
Less: Allowance for Uncollectable Accts.	(122,815)	(83,749)	(80,534)	(80,534)	(80,534)	(80,534)
Due from Third Parties						
Other Current Assets	92,372	102,425	92,924	92,924	92,924	92,924
Total Current Assets	$ 315,876	$ 287,964	$ 273,404	$ 273,404	$ 273,404	$ 302,838
Board Designated Assets						
Funded Depreciation	$ -	$ -	$ -	$ -	$ -	$ -
Escrowed Bond Funds						
Other	696,015	659,233	618,492	626,353	636,951	670,051
Total Board Designated Assets	$ 696,015	$ 659,233	$ 618,492	$ 626,353	$ 636,951	$ 670,051
Property, Plant & Equipment						
Land, Buildings & Improvements	$ 632,944	$ 643,056	$ 650,171	$ 660,771	$ 683,921	$ 734,521
Fixed Equipment	479,477	524,273	595,486	651,786	711,686	764,586
Major Moveable Equipment						
Construction in Progress	13,983	29,063	18,113	20,613	39,963	31,463
Total Property, Plant & Equipment	$ 1,126,404	$ 1,196,392	$ 1,263,770	$ 1,333,170	$ 1,435,570	$ 1,530,570
Less: Accumulated Depreciation						
Land, Buildings & Improvements	$ (335,578)	$ (357,536)	$ (379,571)	$ (404,858)	$ (427,824)	$ (452,979)
Fixed Equipment	(348,385)	(380,488)	(416,807)	(456,992)	(504,640)	(559,358)
Major Moveable Equipment						
Total Accumulated Depreciation	$ (683,963)	$ (738,024)	$ (796,378)	$ (861,850)	$ (932,464)	$ (1,012,337)
Total Net Property, Plant & Equipment	$ 442,441	$ 458,368	$ 467,392	$ 471,320	$ 503,106	$ 518,233
Other Long-Term Assets	$ 62,791	$ 66,675	$ 66,675	$ 66,675	$ 66,675	$ 66,675
TOTAL ASSETS	**$ 1,517,123**	**$ 1,472,240**	**$ 1,425,963**	**$ 1,437,752**	**$ 1,480,136**	**$ 1,557,797**
LIABILITIES AND FUND BALANCE						
Current Liabilities						
Accounts Payable	$ 87,663	$ 102,666	$ 66,638	$ 66,638	$ 66,638	$ 66,638
Salaries, Wages & Payroll Taxes Payable	76,407	85,064	80,584	80,584	80,584	80,584
Estimated Third-Party Settlements	25,103	26,961	26,961	26,961	26,961	26,961
Other Current Liabilities	5,142	3,249				
Current Portion of Long-Term Debt	12,487	15,196	15,196	15,196	15,196	15,196
Total Current Liabilities	$ 206,802	$ 233,136	$ 189,379	$ 189,379	$ 189,379	$ 189,379
Long-Term Debt						
Bonds & Mortgages Payable	$ -	$ -	$ -	$ -	$ -	$ -
Capital Lease Obligations	-	-	-	-	-	-
Other Long-Term Debt	532,336	518,799	501,871	486,741	471,086	454,901
Total Long-Term Debt	$ 532,336	$ 518,799	$ 501,871	$ 486,741	$ 471,086	$ 454,901
Total Other Non-Current Liabilities	$ 275,225	$ 310,544	$ 204,939	$ 167,939	$ 145,939	$ 145,939
Total Liabilities	$ 1,014,363	$ 1,062,479	$ 896,189	$ 844,059	$ 806,404	$ 790,219
Fund Balance	$ 502,760	$ 409,761	$ 529,774	$ 593,693	$ 673,732	$ 767,578
TOTAL LIABILITIES & FUND BALANCE	**$ 1,517,123**	**$ 1,472,240**	**$ 1,425,963**	**$ 1,437,752**	**$ 1,480,136**	**$ 1,557,797**

*Reflects pre-audited financial data for FY15. FY15 ended June 30, 2015 and we are in the process of finalizing the FY15 audit.
Dartmouth Hitchcock's Fiscal Year is July 1st - June 30th.
** Reflects financial data for the Dartmouth Hitchcock Obligated Group.
(1)This is Gross AR net of all reserves except for the bad debt reserve.

DARTMOUTH HITCHCOCK
Replacement Linear Accelerator at NCCC – North in St. Johnsbury, VT
TABLE 4B
BALANCE SHEET - UNRESTRICTED FUNDS
PROJECT ONLY

(in thousands of dollars) ASSETS	Latest Actual 2014	Projected Actual* 2015	Budget 2016	Proposed Year 1 2017	Proposed Year 2 2018	Proposed Year 3 2019
Current Assets						
Cash & Investments	N/A	$ -	$ (200)	$ (4,807)	$ (4,807)	$ (4,807)
Patient Accounts Receivable, Gross	N/A	-	-			
Less: Allowance for Uncollectable Accts.	N/A	-	-			
Due from Third Parties	N/A	-	-			
Other Current Assets	N/A	-	-	-	-	-
Total Current Assets	N/A	$ -	$ (200)	$ (4,807)	$ (4,807)	$ (4,807)
Board Designated Assets						
Funded Depreciation	N/A	$ -	$ -	$ -	$ -	$ -
Escrowed Bond Funds	N/A	-	-			
Other	N/A	-	-			
Total Board Designated Assets	N/A	$ -	$ -	$ -	$ -	$ -
Property, Plant & Equipment						
Land, Buildings & Improvements	N/A	$ -	$ -	$ 2,502	$ 2,502	$ 2,502
Fixed Equipment	N/A	-	-	2,305	$ 2,305	$ 2,305
Major Moveable Equipment	N/A	-	-		$ -	$ -
Construction in Progress	N/A	-	200	-	-	-
Total Property, Plant & Equipment	N/A	$ -	$ 200	$ 4,807	$ 4,807	$ 4,807
Less: Accumulated Depreciation						
Land, Buildings & Improvements	N/A	$ -	$ -	$ (52)	$ (261)	$ (469)
Fixed Equipment	N/A	-	-	(82)	(411)	(740)
Major Moveable Equipment	N/A	-	-			
Total Accumulated Depreciation	N/A	$ -	$ -	$ (134)	$ (672)	$ (1,209)
Total Net Property, Plant & Equipment	N/A	$ -	$ 200	$ 4,673	$ 4,135	$ 3,598
Other Long-Term Assets	N/A	$ -	$ -	$ -	$ -	$ -
TOTAL ASSETS	N/A	**$ -**	**$ -**	**$ (134)**	**$ (672)**	**$ (1,209)**
LIABILITIES AND FUND BALANCE						
Current Liabilities						
Accounts Payable	N/A	$ -	$ -	$ -	$ -	$ -
Salaries, Wages & Payroll Taxes Payable	N/A	-	-	-	-	-
Estimated Third-Party Settlements	N/A	-	-	-	-	-
Other Current Liabilities	N/A	-	-	-	-	-
Current Portion of Long-Term Debt	N/A	-	-	-	-	-
Total Current Liabilities	N/A	$ -	$ -	$ -	$ -	$ -
Long-Term Debt						
Bonds & Mortgages Payable	N/A	$ -	$ -	$ -	$ -	$ -
Capital Lease Obligations	N/A	-	-	-	-	-
Other Long-Term Debt	N/A	-	-	-	-	-
Total Long-Term Debt	N/A	$ -	$ -	$ -	$ -	$ -
Total Other Non-Current Liabilities	N/A	$ -	$ -	$ -	$ -	$ -
Total Liabilities	N/A	$ -	$ -	$ -	$ -	$ -
Fund Balance	N/A	$ -	$ -	$ (134)	$ (672)	$ (1,209)
TOTAL LIABILITIES & FUND BALANCE	N/A	**$ -**	**$ -**	**$ (134)**	**$ (672)**	**$ (1,209)**

*Reflects pre-audited financial data for FY15. FY15 ended June 30, 2015 and we are in the process of finalizing the FY15 audit.
Dartmouth Hitchcock's Fiscal Year is July 1st - June 30th.

DARTMOUTH HITCHCOCK
Replacement Linear Accelerator at NCCC – North in St. Johnsbury, VT
TABLE 4C
BALANCE SHEET - UNRESTRICTED FUNDS
WITH PROJECT

(in thousands of dollars) **ASSETS**	Latest Actual 2014	Projected Actual* 2015	Budget 2016	Proposed Year 1 2017	Proposed Year 2 2018	Proposed Year 3 2019
Current Assets						
Cash & Investments	#VALUE!	$ 8,252	$ 9,800	$ 5,193	$ 5,193	$ 34,627
Patient Accounts Receivable, Gross	#VALUE!	261,036	251,014	251,014	251,014	251,014
Less: Allowance for Uncollectable Accts.	#VALUE!	(83,749)	(80,534)	(80,534)	(80,534)	(80,534)
Due from Third Parties	#VALUE!	-	-	-	-	-
Other Current Assets	#VALUE!	102,425	92,924	92,924	92,924	92,924
Total Current Assets	#VALUE!	$ 287,964	$ 273,204	$ 268,597	$ 268,597	$ 298,031
Board Designated Assets						
Funded Depreciation	#VALUE!	$ -	$ -	$ -	$ -	$ -
Escrowed Bond Funds	#VALUE!	-	-	-	-	-
Other	#VALUE!	659,233	618,492	626,353	636,951	670,051
Total Board Designated Assets	#VALUE!	$ 659,233	$ 618,492	$ 626,353	$ 636,951	$ 670,051
Property, Plant & Equipment						
Land, Buildings & Improvements	#VALUE!	$ 643,056	$ 650,171	$ 663,273	$ 686,423	$ 737,023
Fixed Equipment	#VALUE!	524,273	595,486	654,091	713,991	766,891
Major Moveable Equipment	#VALUE!	-	-	-	-	-
Construction in Progress	#VALUE!	29,063	18,313	20,613	39,963	31,463
Total Property, Plant & Equipment	#VALUE!	$ 1,196,392	$ 1,263,970	$ 1,337,977	$ 1,440,377	$ 1,535,377
Less: Accumulated Depreciation						
Land, Buildings & Improvements	#VALUE!	$ (357,536)	$ (379,571)	$ (404,910)	$ (428,084)	$ (453,448)
Fixed Equipment	#VALUE!	(380,488)	(416,807)	(457,074)	(505,051)	(560,098)
Major Moveable Equipment	#VALUE!	-	-	-	-	-
Total Accumulated Depreciation	#VALUE!	$ (738,024)	$ (796,378)	$ (861,984)	$ (933,135)	$ (1,013,546)
Total Net Property, Plant & Equipment	#VALUE!	$ 458,368	$ 467,592	$ 475,993	$ 507,242	$ 521,831
Other Long-Term Assets	#VALUE!	$ 66,675	$ 66,675	$ 66,675	$ 66,675	$ 66,675
TOTAL ASSETS	**#VALUE!**	**$ 1,472,240**	**$ 1,425,963**	**$ 1,437,618**	**$ 1,479,465**	**$ 1,556,588**
LIABILITIES AND FUND BALANCE						
Current Liabilities						
Accounts Payable	#VALUE!	$ 102,666	$ 66,638	$ 66,638	$ 66,638	$ 66,638
Salaries, Wages & Payroll Taxes Payable	#VALUE!	85,064	80,584	80,584	80,584	80,584
Estimated Third-Party Settlements	#VALUE!	26,961	26,961	26,961	26,961	26,961
Other Current Liabilities	#VALUE!	3,249	-	-	-	-
Current Portion of Long-Term Debt	#VALUE!	15,196	15,196	15,196	15,196	15,196
Total Current Liabilities	#VALUE!	$ 233,136	$ 189,379	$ 189,379	$ 189,379	$ 189,379
Long-Term Debt						
Bonds & Mortgages Payable	#VALUE!	$ -	$ -	$ -	$ -	$ -
Capital Lease Obligations	#VALUE!	-	-	-	-	-
Other Long-Term Debt	#VALUE!	518,799	501,871	486,741	471,086	454,901
Total Long-Term Debt	#VALUE!	$ 518,799	$ 501,871	$ 486,741	$ 471,086	$ 454,901
Total Other Non-Current Liabilities	#VALUE!	$ 310,544	$ 204,939	$ 167,939	$ 145,939	$ 145,939
Total Liabilities	#VALUE!	$ 1,062,479	$ 896,189	$ 844,059	$ 806,404	$ 790,219
Fund Balance	#VALUE!	$ 409,761	$ 529,774	$ 593,559	$ 673,061	$ 766,369
TOTAL LIABILITIES & FUND BALANCE	**#VALUE!**	**$ 1,472,240**	**$ 1,425,963**	**$ 1,437,618**	**$ 1,479,465**	**$ 1,556,588**

*Reflects pre-audited financial data for FY15. FY15 ended June 30, 2015 and we are in the process of finalizing the FY15 audit.
Dartmouth Hitchcock's Fiscal Year is July 1st - June 30th.

DARTMOUTH HITCHCOCK
Replacement Linear Accelerator at NCCC – North in St. Johnsbury, VT
TABLE 5A
STATEMENT OF CASH FLOWS**
WITHOUT PROJECT

(in thousands of dollars)	Latest Actual 2014	Projected Actual* 2015	Budget 2016	Proposed Year 1 2017	Proposed Year 2 2018	Proposed Year 3 2019
Beginning Cash	**$ 49,418**	**$ 45,438**	**$ 8,252**	**$ 10,000**	**$ 10,000**	**$ 10,000**
Operations						
Excess revenues over expenses	87,486	(14,900)	28,255	55,451	64,660	72,614
Depreciation / Amortization	54,894	56,649	58,354	65,472	70,614	79,875
(Increase)/Decrease Patient A/R	(6,935)	779	6,807	-	-	-
(Increase)/Decrease Other Changes	(58,835)	16,281	(34,256)	-	-	-
Subtotal Cash from Operations	**$ 76,610**	**$ 58,809**	**$ 59,160**	**$ 120,923**	**$ 135,274**	**$ 152,488**
Investing Activity						
Capital Spending						
Capital						
Capitalized Interest						
Change in accum depr less depreciation	-	(2,588)	(0)	0	(0)	(1)
(Increase) Decrease in capital assets	(45,056)	(69,988)	(67,378)	(69,400)	(102,400)	(95,000)
Subtotal Capital Spending	$ (45,056)	$ (72,576)	$ (67,378)	$ (69,400)	$ (102,400)	$ (95,001)
(Increase) / Decrease						
Funded Depreciation	-	-	-	-	-	-
Other LT assets & escrowed bonds & other	(56,023)	68,217	(64,864)	(44,861)	(32,598)	(33,100)
Subtotal (Increase) / Decrease	$ (56,023)	$ 68,217	$ (64,864)	$ (44,861)	$ (32,598)	$ (33,100)
Subtotal Cash from Investing Activity	**$ (101,079)**	**$ (4,359)**	**$ (132,242)**	**$ (114,261)**	**$ (134,998)**	**$ (128,101)**
Financing Activity						
Debt (increase) decrease						
Bonds & mortgages		-	-	-	-	-
Repayment						
Capital lease & other long term debt	(3,467)	(13,537)	(16,928)	(15,130)	(15,655)	(16,185)
Subtotal Cash from Financing Activity	**$ (3,467)**	**$ (13,537)**	**$ (16,928)**	**$ (15,130)**	**$ (15,655)**	**$ (16,185)**
Other Changes (please describe)						
Manual adjustment						
Other						
Change in fund balance less net income	23,956	(78,099)	91,758	8,468	15,379	21,232
Other						
Subtotal Other Changes	**$ 23,956**	**$ (78,099)**	**$ 91,758**	**$ 8,468**	**$ 15,379**	**$ 21,232**
Net Increase (Decrease) in Cash	**$ (3,980)**	**$ (37,186)**	**$ 1,748**	**$ (0)**	**$ 0**	**$ 29,434**
Ending Cash	**$ 45,438**	**$ 8,252**	**$ 10,000**	**$ 10,000**	**$ 10,000**	**$ 39,434**
Proof	$0	$0	$0	$ (0)	$ (0)	$0

*Reflects pre-audited financial data for FY15. FY15 ended June 30, 2015 and we are in the process of finalizing the FY15 audit.
Dartmouth Hitchcock's Fiscal Year is July 1st - June 30th.
** Reflects financial data for the Dartmouth Hitchcock Obligated Group.

DARTMOUTH HITCHCOCK
Replacement Linear Accelerator at NCCC – North in St. Johnsbury, VT
TABLE 5B
STATEMENT OF CASH FLOWS
PROJECT ONLY

(in thousands of dollars)	Latest Actual 2014	Projected Actual* 2015	Budget 2016	Proposed Year 1 2017	Proposed Year 2 2018	Proposed Year 3 2019
Beginning Cash	N/A	**$ -**	**$ -**	**$ (200)**	**$ (4,807)**	**$ (4,807)**
Operations						
Excess revenues over expenses	N/A	-	-	(134)	(538)	(538)
Depreciation / Amortization	N/A	-	-	134	538	538
(Increase)/Decrease Patient A/R	N/A	-	-	-	-	-
(Increase)/Decrease Other Changes	N/A	-	-	-	-	-
Subtotal Cash from Operations	N/A	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**
Investing Activity						
Capital Spending						
Capital	N/A					
Capitalized Interest	N/A					
Change in accum depr less depreciation	N/A	-	-	-	-	-
(Increase) Decrease in capital assets	N/A	-	(200)	(4,607)	-	-
Subtotal Capital Spending	N/A	$ -	$ (200)	$ (4,607)	$ -	$ -
(Increase) / Decrease						
Funded Depreciation	N/A	-	-	-	-	-
Other LT assets & escrowed bonds & other	N/A	-	-	-	-	-
Subtotal (Increase) / Decrease	N/A	$ -	$ -	$ -	$ -	$ -
Subtotal Cash from Investing Activity	N/A	**$ -**	**$ (200)**	**$ (4,607)**	**$ -**	**$ -**
Financing Activity						
Debt (increase) decrease						
Bonds & mortgages	N/A	-	-	-	-	-
Repayment	N/A					
Capital lease & other long term debt	N/A	-	-	-	-	-
Subtotal Cash from Financing Activity	N/A	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**
Other Changes (please describe)						
Manual adjustment	N/A					
Other	N/A					
Change in fund balance less net income	N/A	-	-	0	-	-
Other	N/A					
Subtotal Other Changes	N/A	**$ -**	**$ -**	**$ 0**	**$ -**	**$ -**
Net Increase (Decrease) in Cash	N/A	**$ -**	**$ (200)**	**$ (4,607)**	**$ -**	**$ -**
Ending Cash	N/A	**$ -**	**$ (200)**	**$ (4,807)**	**$ (4,807)**	**$ (4,807)**
Edit		$ -	$ -	$ -	$ -	$ -

*Reflects pre-audited financial data for FY15. FY15 ended June 30, 2015 and we are in the process of finalizing the FY15 audit.
Dartmouth Hitchcock's Fiscal Year is July 1st - June 30th.

DARTMOUTH HITCHCOCK
Replacement Linear Accelerator at NCCC – North in St. Johnsbury, VT
TABLE 5C
STATEMENT OF CASH FLOWS
WITH PROJECT

(in thousands of dollars)	Latest Actual 2014	Projected Actual* 2015	Budget 2016	Proposed Year 1 2017	Proposed Year 2 2018	Proposed Year 3 2019
Beginning Cash	**#VALUE!**	**$ 45,438**	**$ 8,252**	**$ 9,800**	**$ 5,193**	**$ 5,193**
Operations						
Excess revenues over expenses	#VALUE!	(14,900)	28,255	55,317	64,123	72,076
Depreciation / Amortization	#VALUE!	56,649	58,354	65,606	71,152	80,412
(Increase)/Decrease Patient A/R	#VALUE!	779	6,807	-	-	-
(Increase)/Decrease Other Changes	#VALUE!	16,281	(34,256)	-	-	-
Subtotal Cash from Operations	**#VALUE!**	**$ 58,809**	**$ 59,160**	**$ 120,923**	**$ 135,274**	**$ 152,488**
Investing Activity						
Capital Spending						
Capital	#VALUE!	-	-	-	-	-
Capitalized Interest	#VALUE!	-	-	-	-	-
Change in accum depr less depreciation	#VALUE!	(2,588)	(0)	0	(0)	(1)
(Increase) Decrease in capital assets	#VALUE!	(69,988)	(67,578)	(74,007)	(102,400)	(95,000)
Subtotal Capital Spending	#VALUE!	$ (72,576)	$ (67,578)	$ (74,007)	$ (102,400)	$ (95,001)
(Increase) / Decrease						
Funded Depreciation	#VALUE!	-	-	-	-	-
Other LT assets & escrowed bonds & other	#VALUE!	68,217	(64,864)	(44,861)	(32,598)	(33,100)
Subtotal (Increase) / Decrease	#VALUE!	$ 68,217	$ (64,864)	$ (44,861)	$ (32,598)	$ (33,100)
Subtotal Cash from Investing Activity	**#VALUE!**	**$ (4,359)**	**$ (132,442)**	**$ (118,868)**	**$ (134,998)**	**$ (128,101)**
Financing Activity						
Debt (increase) decrease						
Bonds & mortgages	#VALUE!	-	-	-	-	-
Repayment	#VALUE!	-	-	-	-	-
Capital lease & other long term debt	#VALUE!	(13,537)	(16,928)	(15,130)	(15,655)	(16,185)
Subtotal Cash from Financing Activity	**#VALUE!**	**$ (13,537)**	**$ (16,928)**	**$ (15,130)**	**$ (15,655)**	**$ (16,185)**
Other Changes (please describe)						
Manual adjustment	#VALUE!	-	-	-	-	-
Other	#VALUE!	-	-	-	-	-
Change in fund balance less net income	#VALUE!	(78,099)	91,758	8,468	15,379	21,232
Other	#VALUE!	-	-	-	-	-
Subtotal Other Changes	**#VALUE!**	**$ (78,099)**	**$ 91,758**	**$ 8,468**	**$ 15,379**	**$ 21,232**
Net Increase (Decrease) in Cash	**#VALUE!**	**$ (37,186)**	**$ 1,548**	**$ (4,607)**	**$ 0**	**$ 29,434**
Ending Cash	**#VALUE!**	**$ 8,252**	**$ 9,800**	**$ 5,193**	**$ 5,193**	**$ 34,627**
Edit	#VALUE!	$ -	$ -	$ (0)	$ (0)	$ 0

*Reflects pre-audited financial data for FY15. FY15 ended June 30, 2015 and we are in the process of finalizing the FY15 audit.
Dartmouth Hitchcock's Fiscal Year is July 1st - June 30th.

FACILITY
PROJECT NAME
TABLE 6A
REVENUE SOURCE PROJECTIONS**
WITHOUT PROJECT

(in thousands of dollars)	Latest Actual 2014	% of Total	Projected Actual* 2015	% of Total	Budget 2016	% of Total	Proposed Year 1 2017	% of Total	Proposed Year 2 2018	% of Total	Proposed Year 3 2019	% of Total
Gross Inpatient Revenue												
Medicare	$ 423,675	46.7%	$ 461,044	48.3%	$ 495,229	48.5%	$ 467,659	45.6%	$ 485,797	45.6%	$ 504,639	45.6%
Medicaid	152,146	16.8%	177,484	18.6%	179,610	17.6%	177,103	17.3%	183,972	17.3%	191,111	17.3%
Commercial	274,820	30.3%	279,189	29.3%	303,099	29.7%	337,192	32.9%	350,268	32.9%	363,852	32.9%
Self Pay	5,963	0.7%	4,510	0.5%	9,577	0.9%	7,085	0.7%	7,360	0.7%	7,645	0.7%
Free Care / Bad Debt	18,214	2.0%	7,259	0.8%	7,449	0.7%	5,511	0.5%	5,724	0.5%	5,946	0.5%
Other	31,525	3.5%	24,944	2.6%	25,570	2.5%	31,699	3.1%	32,929	3.1%	34,206	3.1%
	$ 906,343	100.0%	$ 954,430	100.0%	$ 1,020,534	100.0%	$ 1,026,249	100.0%	$ 1,066,050	100.0%	$ 1,107,399	100.0%
Gross Outpatient Revenue												
Medicare	$ 814,652	36.1%	$ 871,007	36.7%	$ 945,338	36.5%	$ 948,454	36.5%	$ 985,238	36.5%	$ 1,023,452	36.5%
Medicaid	251,670	11.2%	311,119	13.1%	333,875	12.9%	307,584	11.8%	319,513	11.8%	331,907	11.8%
Commercial	997,794	44.2%	1,045,345	44.0%	1,153,854	44.6%	1,215,044	46.7%	1,262,167	46.7%	1,311,123	46.7%
Self Pay	65,156	2.9%	51,240	2.2%	51,268	2.0%	57,053	2.2%	59,265	2.2%	61,564	2.2%
Free Care / Bad Debt	41,164	1.8%	15,962	0.7%	16,522	0.6%	18,387	0.7%	19,100	0.7%	19,841	0.7%
Other	84,629	3.8%	81,107	3.4%	86,006	3.3%	54,828	2.1%	56,954	2.1%	59,164	2.1%
	$ 2,255,065	100.0%	$ 2,375,780	100.0%	$ 2,586,863	100.0%	$ 2,601,350	100.0%	$ 2,702,237	100.0%	$ 2,807,051	100.0%
Gross Other Revenue												
Medicare		#DIV/0!		#DIV/0!	$ -	#DIV/0!	$ -	#DIV/0!	$ -	#DIV/0!	$ -	#DIV/0!
Medicaid		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!
Commercial		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!
Self Pay		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!
Free Care / Bad Debt		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!
Other		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!
	$ -	#DIV/0!	$ -	#DIV/0!	$ -	#DIV/0!	$ -	#DIV/0!	$ -	#DIV/0!	$ -	#DIV/0!
Gross Patient Revenue												
Medicare	$ 1,238,327	39.2%	$ 1,332,051	40.0%	$ 1,440,567	39.9%	$ 1,416,113	39.0%	$ 1,471,034	39.0%	$ 1,528,091	39.0%
Medicaid	403,816	12.8%	488,603	14.7%	513,485	14.2%	484,687	13.4%	503,485	13.4%	523,018	13.4%
Commercial	1,272,614	40.3%	1,324,534	39.8%	1,456,953	40.4%	1,552,236	42.8%	1,612,434	42.8%	1,674,975	42.8%
Self Pay	71,119	2.2%	55,750	1.7%	60,845	1.7%	64,138	1.8%	66,625	1.8%	69,209	1.8%
Free Care / Bad Debt	59,378	1.9%	23,221	0.7%	23,971	0.7%	23,898	0.7%	24,824	0.7%	25,787	0.7%
Other	116,154	3.7%	106,051	3.2%	111,576	3.1%	86,527	2.4%	89,884	2.4%	93,370	2.4%
	$ 3,161,408	100.0%	$ 3,330,210	100.0%	$ 3,607,397	100.0%	$ 3,627,599	100.0%	$ 3,768,287	100.0%	$ 3,914,450	100.0%
Deductions from Revenue												
Medicare	$ 898,580	45.3%	$ 950,920	45.0%	$ 1,068,212	45.7%	$ 1,047,356	45.3%	$ 1,092,550	45.6%	$ 1,135,801	45.5%
Medicaid	324,261	16.4%	411,677	19.5%	446,257	19.1%	430,827	18.6%	448,643	18.7%	467,479	18.7%
Commercial	569,410	28.7%	607,208	28.7%	679,125	29.0%	690,186	29.9%	715,772	29.9%	748,745	30.0%
Self Pay	64,247	3.2%	46,207	2.2%	41,876	1.8%	46,046	2.0%	44,844	1.9%	45,811	1.8%
Free Care / Bad Debt	58,723	3.0%	31,505	1.5%	32,632	1.4%	38,926	1.7%	34,343	1.4%	34,004	1.4%
Other	66,900	3.4%	65,119	3.1%	70,292	3.0%	57,786	2.5%	59,686	2.5%	61,913	2.5%
	$ 1,982,121	100.0%	$ 2,112,636	100.0%	$ 2,338,394	100.0%	$ 2,311,127	100.0%	$ 2,395,838	100.0%	$ 2,493,753	100.0%
Net Patient Revenue												
Medicare	$ 339,747	28.5%	$ 381,131	31.1%	$ 372,355	29.2%	$ 368,757	28.0%	$ 378,484	27.6%	$ 392,290	27.6%
Medicaid	79,555	6.7%	76,926	6.3%	67,228	5.3%	53,860	4.1%	54,842	4.0%	55,539	3.9%
Commercial	703,204	59.1%	717,326	58.5%	777,828	60.9%	862,050	65.5%	896,662	65.3%	926,230	65.2%
Self Pay	6,872	0.6%	9,543	0.8%	18,969	1.5%	18,092	1.4%	21,781	1.6%	23,398	1.6%
Free Care / Bad Debt	655	0.1%	(8,284)	-0.7%	(8,661)	-0.7%	(15,028)	-1.1%	(9,519)	-0.7%	(8,217)	-0.6%
Other	49,254	4.1%	40,932	3.3%	41,284	3.2%	28,741	2.2%	30,198	2.2%	31,457	2.2%
DSP** (1)	11,079	0.9%	8,300	0.7%	8,200	0.6%	-	0.0%	-	0.0%	-	0.0%
	$ 1,190,366	100.0%	$ 1,225,874	100.0%	$ 1,277,203	100.0%	$ 1,316,472	100.0%	$ 1,372,449	100.0%	$ 1,420,697	100.0%

Latest actual numbers should tie to the hospital budget process.
** Disproportionate share payments

*Reflects pre-audited financial data for FY15. FY15 ended June 30, 2015 and we are in the process of finalizing the FY15 audit.
Dartmouth Hitchcock's Fiscal Year is July 1st - June 30th.
** Reflects financial data for the Dartmouth Hitchcock Obligated Group.
(1) We do not budget DSH payments beyond the current year.

DARTMOUTH HITCHCOCK
Replacement Linear Accelerator at NCCC – North in St. Johnsbury, VT
TABLE 6B
REVENUE SOURCE PROJECTIONS
PROJECT ONLY (1)

	Latest Actual 2014	% of Total	Projected Actual* 2015	% of Total	Budget 2016	% of Total	Proposed Year 1 2017	% of Total	Proposed Year 2 2018	% of Total	Proposed Year 3 2019	% of Total
Gross Inpatient Revenue												
Medicare	N/A		$ -	#DIV/0!	$ -	#DIV/0!	$ -	#DIV/0!	$ -	#DIV/0!	$ -	#DIV/0!
Medicaid	N/A		-	#DIV/0!	-	#DIV/0!	-	#DIV/0!	-	#DIV/0!	-	#DIV/0!
Commercial	N/A		-	#DIV/0!	-	#DIV/0!	-	#DIV/0!	-	#DIV/0!	-	#DIV/0!
Self Pay	N/A		-	#DIV/0!	-	#DIV/0!	-	#DIV/0!	-	#DIV/0!	-	#DIV/0!
Free Care / Bad Debt	N/A		-	#DIV/0!	-	#DIV/0!	-	#DIV/0!	-	#DIV/0!	-	#DIV/0!
Other	N/A		-	#DIV/0!	-	#DIV/0!	-	#DIV/0!	-	#DIV/0!	-	#DIV/0!
	N/A		$ -	#DIV/0!	$ -	#DIV/0!	$ -	#DIV/0!	$ -	#DIV/0!	$ -	#DIV/0!
Gross Outpatient Revenue												
Medicare	N/A		$ -	#DIV/0!	$ -	#DIV/0!	$ -	#DIV/0!	$ -	#DIV/0!	$ -	#DIV/0!
Medicaid	N/A		-	#DIV/0!	-	#DIV/0!	-	#DIV/0!	-	#DIV/0!	-	#DIV/0!
Commercial	N/A		-	#DIV/0!	-	#DIV/0!	-	#DIV/0!	-	#DIV/0!	-	#DIV/0!
Self Pay	N/A		-	#DIV/0!	-	#DIV/0!	-	#DIV/0!	-	#DIV/0!	-	#DIV/0!
Free Care / Bad Debt	N/A		-	#DIV/0!	-	#DIV/0!	-	#DIV/0!	-	#DIV/0!	-	#DIV/0!
Other	N/A		-	#DIV/0!	-	#DIV/0!	-	#DIV/0!	-	#DIV/0!	-	#DIV/0!
	N/A		$ -	#DIV/0!	$ -	#DIV/0!	$ -	#DIV/0!	$ -	#DIV/0!	$ -	#DIV/0!
Gross Other Revenue												
Medicare	N/A		$ -	#DIV/0!	$ -	#DIV/0!	$ -	#DIV/0!	$ -	#DIV/0!	$ -	#DIV/0!
Medicaid	N/A		-	#DIV/0!	-	#DIV/0!	-	#DIV/0!	-	#DIV/0!	-	#DIV/0!
Commercial	N/A		-	#DIV/0!	-	#DIV/0!	-	#DIV/0!	-	#DIV/0!	-	#DIV/0!
Self Pay	N/A		-	#DIV/0!	-	#DIV/0!	-	#DIV/0!	-	#DIV/0!	-	#DIV/0!
Free Care / Bad Debt	N/A		-	#DIV/0!	-	#DIV/0!	-	#DIV/0!	-	#DIV/0!	-	#DIV/0!
Other	N/A		-	#DIV/0!	-	#DIV/0!	-	#DIV/0!	-	#DIV/0!	-	#DIV/0!
	N/A		$ -	#DIV/0!	$ -	#DIV/0!	$ -	#DIV/0!	$ -	#DIV/0!	$ -	#DIV/0!
Gross Patient Revenue												
Medicare	N/A		$ -	#DIV/0!	$ -	#DIV/0!	$ -	#DIV/0!	$ -	#DIV/0!	$ -	#DIV/0!
Medicaid	N/A		-	#DIV/0!	-	#DIV/0!	-	#DIV/0!	-	#DIV/0!	-	#DIV/0!
Commercial	N/A		-	#DIV/0!	-	#DIV/0!	-	#DIV/0!	-	#DIV/0!	-	#DIV/0!
Self Pay	N/A		-	#DIV/0!	-	#DIV/0!	-	#DIV/0!	-	#DIV/0!	-	#DIV/0!
Free Care / Bad Debt	N/A		-	#DIV/0!	-	#DIV/0!	-	#DIV/0!	-	#DIV/0!	-	#DIV/0!
Other	N/A		-	#DIV/0!	-	#DIV/0!	-	#DIV/0!	-	#DIV/0!	-	#DIV/0!
	N/A		$ -	#DIV/0!	$ -	#DIV/0!	$ -	#DIV/0!	$ -	#DIV/0!	$ -	#DIV/0!
Deductions from Revenue												
Medicare	N/A		$ -	#DIV/0!	$ -	#DIV/0!	$ -	#DIV/0!	$ -	#DIV/0!	$ -	#DIV/0!
Medicaid	N/A		-	#DIV/0!	-	#DIV/0!	-	#DIV/0!	-	#DIV/0!	-	#DIV/0!
Commercial	N/A		-	#DIV/0!	-	#DIV/0!	-	#DIV/0!	-	#DIV/0!	-	#DIV/0!
Self Pay	N/A		-	#DIV/0!	-	#DIV/0!	-	#DIV/0!	-	#DIV/0!	-	#DIV/0!
Free Care / Bad Debt	N/A		-	#DIV/0!	-	#DIV/0!	-	#DIV/0!	-	#DIV/0!	-	#DIV/0!
Other	N/A		-	#DIV/0!	-	#DIV/0!	-	#DIV/0!	-	#DIV/0!	-	#DIV/0!
	N/A		$ -	#DIV/0!	$ -	#DIV/0!	$ -	#DIV/0!	$ -	#DIV/0!	$ -	#DIV/0!
Net Patient Revenue												
Medicare	N/A		$ -	#DIV/0!	$ -	#DIV/0!	$ -	#DIV/0!	$ -	#DIV/0!	$ -	#DIV/0!
Medicaid	N/A		-	#DIV/0!	-	#DIV/0!	-	#DIV/0!	-	#DIV/0!	-	#DIV/0!
Commercial	N/A		-	#DIV/0!	-	#DIV/0!	-	#DIV/0!	-	#DIV/0!	-	#DIV/0!
Self Pay	N/A		-	#DIV/0!	-	#DIV/0!	-	#DIV/0!	-	#DIV/0!	-	#DIV/0!
Free Care / Bad Debt	N/A		-	#DIV/0!	-	#DIV/0!	-	#DIV/0!	-	#DIV/0!	-	#DIV/0!
Other	N/A		-	#DIV/0!	-	#DIV/0!	-	#DIV/0!	-	#DIV/0!	-	#DIV/0!
DSP**	N/A		N/A		N/A		N/A		N/A		N/A	
			$ -	#DIV/0!	$ -	#DIV/0!	$ -	#DIV/0!	$ -	#DIV/0!	$ -	#DIV/0!

Latest actual numbers should tie to the hospital budget process.

** Disproportionate share payments

*Reflects pre-audited financial data for FY15. FY15 ended June 30, 2015 and we are in the process of finalizing the FY15 audit.
Dartmouth Hitchcock's Fiscal Year is July 1st - June 30th.

(1) Blank because no new volume is expected due to this project.

DARTMOUTH HITCHCOCK
Replacement Linear Accelerator at NCCC – North in St. Johnsbury, VT
TABLE 6C
REVENUE SOURCE PROJECTIONS
WITH PROJECT

	Latest Actual 2014	% of Total	Projected Actual* 2015	% of Total	Budget 2016	% of Total	Proposed Year 1 2017	% of Total	Proposed Year 2 2018	% of Total	Proposed Year 3 2019	% of Total
Gross Inpatient Revenue												
Medicare	$ 423,675	46.7%	$ 461,044	45.2%	$ 495,229	48.5%	$ 467,659	45.6%	$ 485,797	45.6%	$ 504,639	45.6%
Medicaid	152,146	16.8%	177,484	17.4%	179,610	17.6%	177,103	17.3%	183,972	17.3%	191,111	17.3%
Commercial	274,820	30.3%	279,189	27.4%	303,099	29.7%	337,192	32.9%	350,268	32.9%	363,852	32.9%
Self Pay	5,963	0.7%	4,510	0.4%	9,577	0.9%	7,085	0.7%	7,360	0.7%	7,645	0.7%
Free Care / Bad Debt	18,214	2.0%	7,259	0.7%	7,449	0.7%	5,511	0.5%	5,724	0.5%	5,946	0.5%
Other	31,525	3.5%	24,944	2.4%	25,570	2.5%	31,699	3.1%	32,929	3.1%	34,206	3.1%
	$ 906,343	100.0%	$ 954,430	93.5%	$ 1,020,534	100.0%	$ 1,026,249	100.0%	$ 1,066,050	100.0%	$ 1,107,399	100.0%
Gross Outpatient Revenue												
Medicare	$ 814,652	36.1%	$ 871,007	33.7%	$ 945,338	36.5%	$ 948,454	36.5%	$ 985,238	36.5%	$ 1,023,452	36.5%
Medicaid	251,670	11.2%	311,119	12.0%	333,875	12.9%	307,584	11.8%	319,513	11.8%	331,907	11.8%
Commercial	997,794	44.2%	1,045,345	40.4%	1,153,854	44.6%	1,215,044	46.7%	1,262,167	46.7%	1,311,123	46.7%
Self Pay	65,156	2.9%	51,240	2.0%	51,268	2.0%	57,053	2.2%	59,265	2.2%	61,564	2.2%
Free Care / Bad Debt	41,164	1.8%	15,962	0.6%	16,522	0.6%	18,387	0.7%	19,100	0.7%	19,841	0.7%
Other	84,629	3.8%	81,107	3.1%	86,006	3.3%	54,828	2.1%	56,954	2.1%	59,164	2.1%
	$ 2,255,065	100.0%	$ 2,375,780	91.8%	$ 2,586,863	100.0%	$ 2,601,350	100.0%	$ 2,702,237	100.0%	$ 2,807,051	100.0%
Gross Other Revenue												
Medicare	$ -	#DIV/0!	$ -	#DIV/0!	$ -	#DIV/0!	$ -	#DIV/0!	$ -	#DIV/0!	$ -	#DIV/0!
Medicaid	-	#DIV/0!	-	#DIV/0!	-	#DIV/0!	-	#DIV/0!	-	#DIV/0!	-	#DIV/0!
Commercial	-	#DIV/0!	-	#DIV/0!	-	#DIV/0!	-	#DIV/0!	-	#DIV/0!	-	#DIV/0!
Self Pay	-	#DIV/0!	-	#DIV/0!	-	#DIV/0!	-	#DIV/0!	-	#DIV/0!	-	#DIV/0!
Free Care / Bad Debt	-	#DIV/0!	-	#DIV/0!	-	#DIV/0!	-	#DIV/0!	-	#DIV/0!	-	#DIV/0!
Other	-	#DIV/0!	-	#DIV/0!	-	#DIV/0!	-	#DIV/0!	-	#DIV/0!	-	#DIV/0!
	$ -	#DIV/0!	$ -	#DIV/0!	$ -	#DIV/0!	$ -	#DIV/0!	$ -	#DIV/0!	$ -	#DIV/0!
Gross Patient Revenue												
Medicare	$ 1,238,327	39.2%	$ 1,332,051	36.9%	$ 1,440,567	39.9%	$ 1,416,113	39.0%	$ 1,471,034	39.0%	$ 1,528,091	39.0%
Medicaid	403,816	12.8%	488,603	13.5%	513,485	14.2%	484,687	13.4%	503,485	13.4%	523,018	13.4%
Commercial	1,272,614	40.3%	1,324,534	36.7%	1,456,953	40.4%	1,552,236	42.8%	1,612,434	42.8%	1,674,975	42.8%
Self Pay	71,119	2.2%	55,750	1.5%	60,845	1.7%	64,138	1.8%	66,625	1.8%	69,209	1.8%
Free Care / Bad Debt	59,378	1.9%	23,221	0.6%	23,971	0.7%	23,898	0.7%	24,824	0.7%	25,787	0.7%
Other	116,154	3.7%	106,051	2.9%	111,576	3.1%	86,527	2.4%	89,884	2.4%	93,370	2.4%
	$ 3,161,408	100.0%	$ 3,330,210	92.3%	$ 3,607,397	100.0%	$ 3,627,599	100.0%	$ 3,768,287	100.0%	$ 3,914,450	100.0%
Deductions from Revenue												
Medicare	$ 898,580	45.3%	$ 950,920	40.7%	$ 1,068,212	45.7%	$ 1,047,356	45.3%	$ 1,092,550	45.6%	$ 1,135,801	45.5%
Medicaid	324,261	16.4%	411,677	17.6%	446,257	19.1%	430,827	18.6%	448,643	18.7%	467,479	18.7%
Commercial	569,410	28.7%	607,208	26.0%	679,125	29.0%	690,186	29.9%	715,772	29.9%	748,745	30.0%
Self Pay	64,247	3.2%	46,207	2.0%	41,876	1.8%	46,046	2.0%	44,844	1.9%	45,811	1.8%
Free Care / Bad Debt	58,723	3.0%	31,505	1.3%	32,632	1.4%	38,926	1.7%	34,343	1.4%	34,004	1.4%
Other	66,900	3.4%	65,119	2.8%	70,292	3.0%	57,786	2.5%	59,686	2.5%	61,913	2.5%
	$ 1,982,121	100.0%	$ 2,112,636	90.3%	$ 2,338,394	100.0%	$ 2,311,127	100.0%	$ 2,395,838	100.0%	$ 2,493,753	100.0%
Net Patient Revenue												
Medicare	$ 339,747	28.5%	$ 381,131	29.8%	$ 372,355	29.2%	$ 368,757	28.0%	$ 378,484	27.6%	$ 392,290	27.6%
Medicaid	79,555	6.7%	76,926	6.0%	67,228	5.3%	53,860	4.1%	54,842	4.0%	55,539	3.9%
Commercial	703,204	59.1%	717,326	56.2%	777,828	60.9%	862,050	65.5%	896,662	65.3%	926,230	65.2%
Self Pay	6,872	0.6%	9,543	0.7%	18,969	1.5%	18,092	1.4%	21,781	1.6%	23,398	1.6%
Free Care / Bad Debt	655	0.1%	(8,284)	-0.6%	(8,661)	-0.7%	(15,028)	-1.1%	(9,519)	-0.7%	(8,217)	-0.6%
Other	49,254	4.1%	40,932	3.2%	41,284	3.2%	28,741	2.2%	30,198	2.2%	31,457	2.2%
DSP**	11,079	0.9%	8,300	0.6%	8,200	0.6%	-	0.0%	-	0.0%	-	0.0%
	$ 1,190,366	100.0%	$ 1,225,874	96.0%	$ 1,277,203	100.0%	$ 1,316,472	100.0%	$ 1,372,449	100.0%	$ 1,420,697	100.0%

Latest actual numbers should tie to the hospital budget process.

** Disproportionate share payments

*Reflects pre-audited financial data for FY15. FY15 ended June 30, 2015 and we are in the process of finalizing the FY15 audit.
Dartmouth Hitchcock's Fiscal Year is July 1st - June 30th.

DARTMOUTH HITCHCOCK
Replacement Linear Accelerator at NCCC – North in St. Johnsbury, VT
TABLE 7
UTILIZATION PROJECTIONS**
TOTALS

A: WITHOUT PROJECT	Latest Actual 2014	Projected Actual* 2015	Budget 2016	Proposed Year 1 2017	Proposed Year 2 2018	Proposed Year 3 2019
Inpatient Utilization						
Staffed Beds(1)	422	432	439	439	439	439
Admissions(2)	25,737	26,317	27,042	27,200	27,300	27,400
Patient Days	121,743	127,558	128,957	129,600	130,200	130,900
Average Length of Stay	4.73	4.85	4.77	4.76	4.77	4.78
Outpatient Utilization						
All Outpatient Visits	1,453,790	1,474,569	1,543,156	1,558,600	1,574,200	1,589,900
OR Procedures	11,239	10,882	11,632	11,700	11,800	11,900
Observation Units (3)						
Physician Office Visits (4)						
Ancillary						
All OR Procedures (5)	19,693	19,486	20,941	21,100	21,300	21,500
Emergency Room Visits	31,268	31,477	31,000	31,300	31,600	31,900
Adjusted Statistics(6)						
Adjusted Admissions	51,103	52,371	54,490	54,808	55,010	55,211
Adjusted Patient Days	241,733	253,840	259,848	261,144	262,353	263,764

B: PROJECT ONLY	Latest Actual 2014	Projected Actual* 2015	Budget 2016	Proposed Year 1 2017	Proposed Year 2 2018	Proposed Year 3 2019
Inpatient Utilization						
Staffed Beds	N/A	-	-	-	-	-
Admissions	N/A	-	-	-	-	-
Patient Days	N/A	-	-	-	-	-
Average Length of Stay	N/A	-	-	-	-	-
Outpatient Utilization	N/A					
All Outpatient Visits	N/A	-	-	-	-	-
OR Procedures	N/A	-	-	-	-	-
Observation Units	N/A	-	-	-	-	-
Physician Office Visits	N/A	-	-	-	-	-
Ancillary	N/A					
All OR Procedures	N/A	-	-	-	-	-
Emergency Room Visits	N/A	-	-	-	-	-
Adjusted Statistics	N/A			-	-	-
Adjusted Admissions	N/A	-	-	-	-	-
Adjusted Patient Days	N/A	-	-	-	-	-

C: WITH PROJECT	Latest Actual 2014	Projected Actual* 2015	Budget 2016	Proposed Year 1 2017	Proposed Year 2 2018	Proposed Year 3 2019
Inpatient Utilization						
Staffed Beds	422	432	439	439	439	439
Admissions	25,737	26,317	27,042	27,200	27,300	27,400
Patient Days	121,743	127,558	128,957	129,600	130,200	130,900
Average Length of Stay	4.73	4.85	4.77	4.76	4.77	4.78
Outpatient Utilization						
All Outpatient Visits	1,453,790	1,474,569	1,543,156	1,558,600	1,574,200	1,589,900
OR Procedures	11,239	10,882	11,632	11,700	11,800	11,900
Observation Units	-	-	-	-	-	-
Physician Office Visits	-	-	-	-	-	-
Ancillary						
All OR Procedures	19,693	19,486	20,941	21,100	21,300	21,500
Emergency Room Visits	31,268	31,477	31,000	31,300	31,600	31,900
Adjusted Statistics						
Adjusted Admissions	51,103	52,371	54,490	54,808	55,010	55,211
Adjusted Patient Days	241,733	253,840	259,848	261,144	262,353	263,764

(1) Represents available Beds, including 30 Intensive Care Nursery and 17 Normal Nursery.
(2) We report Discharges.
(3) Observation units are included as part of the Inpatient Admissions/Discharges, above.
(4) All Outpatient Visits represent Provider Appointments. Therefore, Physician Office Visits are what is being reported in All Outpatient Visits above.
(5) Includes both inpatient and outpatient OR cases, including the figure provided for Outpatient OR Procedures above.
(6) Calculated based on Actual * CMI for each time period
*Reflects data for FY15. FY15 ended June 30, 2015 and we are in the process of finalizing the FY15 audit.
Dartmouth Hitchcock's Fiscal Year is July 1st - June 30th.
**Reflects utilization data for Dartmouth Hitchcock.

DARTMOUTH HITCHCOCK
Replacement Linear Accelerator at NCCC – North in St. Johnsbury, VT
TABLE 8
UTILIZATION PROJECTIONS
PROJECT SPECIFIC

A: WITHOUT PROJECT	Latest Actual	Projected Actual*	Budget	Proposed Year 1	Proposed Year 2	Proposed Year 3
You may wish to enter your own categories below:	2014	2015	2016	2017	2018	2019
Acute (1)						
Acute Care Admissions						
Acute Patient Days						
Acute Staffed Beds						
Imaging (1)						
Radiology - Diagnostic Procedures						
Nuclear Medicine Procedures						
Cat Scan Procedures						
Magnetic Resonance Imaging						
Other						
Laboratory Tests (1)						
Radiation Oncology D-H - Simulations	1,749	1,830	1,850	1,869	1,888	1,907
Radiation Oncology D-H - Treatments	18,227	17,811	19,565	19,761	19,959	20,159
Radiation Oncology St. Johnsbury Only - Simulations (2)	351	383	425	429	433	437
Radiation Oncology St. Johnsbury Only - Treatments (2)	5,528	5,346	6,145	6,206	6,268	6,331

B: PROJECT ONLY (3)	Latest Actual	Projected Actual*	Budget	Proposed Year 1	Proposed Year 2	Proposed Year 3
	2014	2015	2016	2017	2018	2019
Acute (1)						
Acute Care Admissions	N/A	-	-	-	-	-
Acute Patient Days	N/A	-	-	-	-	-
Acute Staffed Beds	N/A	-	-	-	-	-
Imaging (1)						
Radiology - Diagnostic Procedures	N/A	-	-	-	-	-
Nuclear Medicine Procedures	N/A	-	-	-	-	-
Cat Scan Procedures	N/A	-	-	-	-	-
Magnetic Resonance Imaging	N/A	-	-	-	-	-
Other						
Laboratory Tests (1)	N/A	-	-	-	-	-
Radiation Oncology D-H - Simulations	N/A	-	-	-	-	-
Radiation Oncology D-H - Treatments	N/A	-	-	-	-	-
Radiation Oncology St. Johnsbury Only - Simulations	N/A	-	-	-	-	-
Radiation Oncology St. Johnsbury Only - Treatments	N/A	-	-	-	-	-
	N/A					

C: WITH PROJECT	Latest Actual	Projected Actual*	Budget	Proposed Year 1	Proposed Year 2	Proposed Year 3
	2014	2015	2016	2017	2018	2019
Acute (1)						
Acute Care Admissions	-	-	-	-	-	-
Acute Patient Days	-	-	-	-	-	-
Acute Staffed Beds	-	-	-	-	-	-
Imaging (1)						
Radiology - Diagnostic Procedures	-	-	-	-	-	-
Nuclear Medicine Procedures	-	-	-	-	-	-
Cat Scan Procedures	-	-	-	-	-	-
Magnetic Resonance Imaging	-	-	-	-	-	-
Other						
Laboratory Tests (1)	-	-	-	-	-	-
Radiation Oncology D-H - Simulations	1,749	1,830	1,850	1,869	1,888	1,907
Radiation Oncology D-H - Treatments	18,227	17,811	19,565	19,761	19,959	20,159
Radiation Oncology St. Johnsbury Only - Simulations	351	383	425	429	433	437
Radiation Oncology St. Johnsbury Only - Treatments	5,528	5,346	6,145	6,206	6,268	6,331
	-	-	-	-	-	-

(1) Diagnostic work-up associated with Radiation Oncology for patients treated at the St. Johnsbury site is provided by the patients' home-based hospital, including but not limited to NVRH, Cottage and Littleton. This includes Imaging and Lab tests. Similarly, any Acute Care admissions that might be required for St. Johnsbury patients would be at their home-based hospital.
(2) St. Johnsbury figures are also included in the Simulations and Treatments for Radiation Oncology D-H Simulations and Radiation Oncology D-H Treatments.
(3) Incremental volume is not anticipated in St. Johnsbury due to the project.

*Reflects pre-audited financial data for FY15. FY15 ended June 30, 2015 and we are in the process of finalizing the FY15 audit.
Dartmouth Hitchcock's Fiscal Year is July 1st - June 30th.

DARTMOUTH HITCHCOCK
Replacement Linear Accelerator at NCCC – North in St. Johnsbury, VT
TABLE 9
STAFFING PROJECTIONS
TOTALS

A: WITHOUT PROJECT	Latest Actual 2014	Projected Actual* 2015	Budget 2016	Proposed Year 1 2017	Proposed Year 2 2018	Proposed Year 3 2019
Non-MD FTEs (1)						
Total General Services						
Total Inpatient Routine Services						
Total Outpatient Routine Services						
Total Ancillary Services						
Total Other Services						
Associate Providers	329.3	366.7	384.1	386.4	388.7	391.1
Direct Nursing	2,102.6	2,200.3	2,252.8	2,266.3	2,279.9	2,293.6
Housestaff	393.4	399.1	391.4	393.7	396.1	398.5
Allied Health	1,104.8	1,194.1	1,297.8	1,305.6	1,313.4	1,321.3
Nursing Other	234.2	249.0	271.1	272.7	274.3	276.0
Administrative Other	2,704.2	2,805.9	2,729.8	2,746.2	2,762.7	2,779.3
Total Non-MD FTEs	**6,868.4**	**7,215.1**	**7,326.9**	**7,370.9**	**7,415.1**	**7,459.6**
Physician FTEs (2)	841.3	868.3	899.0	904.4	909.8	915.3
Direct Service Nurse FTEs (3)	2,102.6	2,200.3	2,252.8	2,266.3	2,279.9	2,293.6

B: PROJECT ONLY	Latest Actual 2014	Projected Actual* 2015	Budget 2016	Proposed Year 1 2017	Proposed Year 2 2018	Proposed Year 3 2019
Non-MD FTEs						
Total General Services						
Total Inpatient Routine Services						
Total Outpatient Routine Services						
Total Ancillary Services						
Total Other Services						
Associate Providers		0.0	0.0	0.0	0.0	0.0
Direct Nursing		0.0	0.0	0.0	0.0	0.0
Housestaff		0.0	0.0	0.0	0.0	0.0
Allied Health		0.0	0.0	0.0	0.0	0.0
Nursing Other		0.0	0.0	0.0	0.0	0.0
Administrative Other		0.0	0.0	0.0	0.0	0.0
Total Non-MD FTEs	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
Physician Services		**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
Direct Service Nurse FTEs		**0.0**	**0.0**	**0.0**	**0.0**	**0.0**

C: WITH PROJECT	Latest Actual 2014	Projected Actual* 2015	Budget 2016	Proposed Year 1 2017	Proposed Year 2 2018	Proposed Year 3 2019
Non-MD FTEs						
Total General Services						
Total Inpatient Routine Services						
Total Outpatient Routine Services						
Total Ancillary Services						
Total Other Services						
Associate Providers	329.3	366.7	384.1	386.4	388.7	391.1
Direct Nursing	2,102.6	2,200.3	2,252.8	2,266.3	2,279.9	2,293.6
Housestaff	393.4	399.1	391.4	393.7	396.1	398.5
Allied Health	1,104.8	1,194.1	1,297.8	1,305.6	1,313.4	1,321.3
Nursing Other	234.2	249.0	271.1	272.7	274.3	276.0
Administrative Other	2,704.2	2,805.9	2,729.8	2,746.2	2,762.7	2,779.3
Total Non-MD FTEs	**6,868.4**	**7,215.1**	**7,326.9**	**7,370.9**	**7,415.1**	**7,459.6**
Physician Services	841.3	868.3	899.0	904.4	909.8	915.3
Direct Service Nurse FTEs	2,102.6	2,200.3	2,252.8	2,266.3	2,279.9	2,293.6

(1) We do not report FTEs according to categories such as Inpatient and Outpatient Routine Services. Therefore, we opted to report Non-MD FTEs according to our HR Job Categories.
(2) Numbers include both employed and contracted MDs.
(3)These FTEs are included in "Direct Service Nursing" row above in Total Non-MD FTEs.

*Reflects data for FY15. FY15 ended June 30, 2015 and we are in the process of finalizing the FY15 audit.
Dartmouth Hitchcock's Fiscal Year is July 1st - June 30th.
**Reflects staffing data for Dartmouth Hitchcock.