

**STATE OF VERMONT
GREEN MOUNTAIN CARE BOARD**

In re: University of Vermont Medical Center)
 Inpatient Bed Replacement Project)
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**STATEMENT OF DECISION
AND ORDER**

The University of Vermont Medical Center (UVMVC, or the Applicant), formerly Fletcher Allen Health Care,¹ is Vermont’s only tertiary care facility and academic medical center and the primary referral center for a region in Vermont and upstate New York that includes a population of more than one million people. In this Certificate of Need (CON) application, UVMVC seeks to construct a seven-story building on its main campus in Burlington to house 128 single-occupancy replacement inpatient beds for a total estimated cost of \$187,297,729.

For the reasons outlined in this Statement of Decision, we approve the application, with conditions, pursuant to 18 V.S.A. § 9440(d)(4).

Findings of Fact

Procedural Background

1. The Applicant first notified the Board of its intention to apply for a CON to replace its inpatient beds (the Project) on March 21, 2013, when Roger Deshaies, then Applicant’s CFO, and Spencer Knapp, Sr. VP and General Counsel, presented an outline of six expected CON projects to the Green Mountain Care Board at its weekly public meeting. The Applicant projected the cost of the Project would be “at least \$85 million.” *See Upcoming CONs & Real Estate Acquisition Strategy, available at http://gmcboard.vermont.gov/sites/gmcboard/files/FAHC_CON032113.pdf.*
2. On May 15, 2013, the Applicant filed for a Conceptual Development Phase Certificate of Need (CCON)² to commence planning and design work for the Project. The Board issued the CCON on August 13, 2013 for \$3,744,663. On September 5, 2014, the Board granted the Applicant’s first request to increase the CCON to \$5,344,663; the Board denied the Applicant’s second request to amend the CCON on April 30, 2015.

¹ Fletcher Allen Health Care (FAHC) became the University of Vermont Medical Center in November 2014, subsequent to the filing of this application. For simplicity, we refer to the entity as “UVMVC,” or the “Applicant.”

² An applicant must first obtain a CCON for projects anticipated to be in excess of \$30 million. 18 V.S.A. § 9434(c).

3. On September 29, 2014, UVMMC filed the narrative portion of its CON application with the Board and placed legal notice of the filing in two Burlington publications.
4. The Vermont Federation of Nurses and Health Professionals (VFNHP) filed a request for interested party status on October 13, 2014. The Board granted the VFNHP amicus curiae status on February 5, 2015.
5. On October 14, 2014, the Office of the Health Care Advocate (HCA) filed a Notice of Intervention as Interested Party, and on December 11, 2014, submitted suggested questions regarding the Project for the Board to ask the Applicant.
6. On November 7, 2014, UVMMC filed the second portion of its CON application, including financial tables and architectural plans.
7. The Board requested additional information from the Applicant on January 6, February 20, and March 12, 2015, for which the Applicant provided responses on January 21, February 26, and March 17, 2015, respectively.
8. The Board retained n/e/m/d architects, inc. (n/e/m/d) to review the schematic design prepared by architectural firm Morris Switzer and the construction cost estimate prepared by Whiting Turner Company for conformance with FGI guidelines³ and construction industry standards. On April 30, 2015, n/e/m/d concluded that the design meets FGI guidelines and that the construction cost estimate (including associated soft costs but excluding finance charges) is reasonable.
9. Beginning in April 2015, the Board retained Deloitte Transactions and Business Analytics LLP (Deloitte) to provide an independent analysis of UVMMC's debt capacity and ability to sustain the costs of the Project. After a series of questions, responses, and discussions with the Applicant, Deloitte issued a Findings Report (Deloitte Report) on May 12, 2015.
10. On April 24, 2015, the Board advised the Applicant, interested party, and amicus curiae that the application was closed. Public Notice of the hearing date and location appeared in the Burlington Free Press on April 26, 2015.
11. On April 30, 2015, Martha R. Lang, Ph.D., filed a request for interested party status, and on May 7, 2015, filed an alternative request for amicus curiae status. The Board denied both requests on May 12, 2015.
12. On May 7, 2015, the Burlington Business Association, the Lake Champlain Regional Chamber of Commerce, the Vermont Business Roundtable, and the Vermont Chamber of Commerce jointly submitted a letter to the Board supporting the Project. On May 19, 2015, the Office of Burlington Mayor Miro Weinberger also provided a letter of support.

³ The Facility Guidelines Institute (FGI) publishes the *Guidelines for Design and Construction of Hospitals and Outpatient Facilities*, a minimum standard, consensus-based publication that aids in the construction and design of health care facilities.

13. On May 13, 2015, Disability Rights Vermont (DRVT) filed a request for interested party status. The Board denied the request but granted DRVT amicus curiae status on May 15, 2015.
14. A hearing was held before all members of the Board on May 18 and 19, 2015. Judy Henkin served as Hearing Officer by designation of Board Chair Al Gobeille. Mike Donofrio, Esq. represented the Board. Spencer Knapp, Esq. represented the Applicant. Kaili Kuiper, Esq. represented the HCA. Mari Cordes participated in the hearing on behalf of the VFNHP. DRVT did not participate in the hearing.
15. A public comment period ran through May 29, 2015, and included time reserved at hearing on May 19, 2015 for attendees to comment. At that time, Martha R. Lang expressed her concerns regarding the Project's projected utilization, design, and cost. Thomas Hall commented about the benefits of alternative medicine and suggested that the Board condition approval of the CON on inclusion of a plan to integrate alternative health services such as Transcendental Meditation. Transcript (TR) (5/19/15) at 208-15. Both Lang and Hall also submitted written comments, which along with others received were posted to the Board's website. *See* Public Comment, *available at* http://gmcboard.vermont.gov/sites/gmcboard/files/Public_comments_GMCB02114con.pdf.
16. On May 22, 2015, the HCA submitted a letter stating its support for single rooms, but expressing concerns about the Project's cost, the Applicant's failure to propose additional psychiatric beds, the quality of the current mental health units, and the need for continuing input from stakeholders. The HCA also questioned whether the Applicant had sufficiently addressed community needs as set out in its most recent Community Health Needs Assessment.⁴ On May 28, 2015, the Applicant filed a response to the HCA's letter.

Project Planning

17. In 2006, the Applicant retained Cannon Design (architect) and Noblis (health facility planner) to assist it with the development of a Master Facilities Plan. The plan was adopted in 2008. Application (9/29/14) at 11.
18. Concerning the Applicant's inpatient facilities, the Master Facilities Plan concludes:

The inpatient units do not provide sufficient space to provide pleasing environments for patients and visitors. In addition, due to space constraints, these units do not provide for flexible, efficient delivery of care. For this reason the master plan emphasizes the replacement of beds as a top priority and focus.

A bed replacement building should be constructed adjacent to the west of the existing ED entrance (West Site). This building . . . [should] meet modern standards

⁴ Federal legislation requires hospitals to conduct community health needs assessments and develop an implementation strategy to meet those needs every three years. Information about UVMHC's most recent assessment is available at <https://www.uvmhealth.org/medcenter/pages/About-UVM-Medical-Center/The-Community/Needs-Assessment.aspx>.

of care and enable future flexibility while creating an environment which is conducive to healing and pleasant for all participants.

Id., citing Fletcher Allen Health Care, *Master Facility Plan Final Report* (4/16/08) at 4-5.

19. To assist with the planning and design process, the Applicant began to solicit input from stakeholders including patients and their families, physicians and staff, the Mental Health Program Quality Committee (MHPQC) and the University of Vermont (UVM), and worked with the City of Burlington and Ward 1 neighbors concerning zoning and permitting issues. The Applicant discussed the Project with other hospitals and in August 2014, gave a presentation to the Vermont Association of Hospitals and Health Systems Board. Application (9/29/14) at 14-16; TR (5/18/15) at 40-47 (Brumsted⁵).
20. The Project was reviewed at multiple tiers internally; the Applicant's planning committee, finance committee, CON steering committee, and the boards of directors of the hospital and network each approved the Project unanimously. *Id.* at 81-82 (Powell).

Project Description

21. UVMMC proposes to construct a seven-story inpatient building of approximately 180,000 square feet above the existing emergency department parking lot. The building will replace outdated inpatient rooms in Shepardson 3 and 4 North, built in 1960, and permit many of the hospital's remaining double occupancy rooms in the McClure and Baird buildings to be converted to single occupancy. The vacated space in Shepardson 3 and 4 North will be used for non-patient care and administrative needs. Application (9/29/14), Appendix 3.
22. The Applicant's catchment area includes four to six counties in northern New York that account for 20% of its tertiary and quaternary care services delivered in Burlington. The remaining services are provided to residents of Chittenden and Grand Isle counties, Northwestern and Central Vermont, with a small portion of services delivered to residents of the Northeast Kingdom and southern and eastern portions of the state including Rutland, Bennington and Brattleboro. TR (5/18/15) at 67 (Brumsted).
23. The newly constructed building will be located on the west side of the campus, with the first two stories built on pillars over the current emergency room entrance. Four floors—the third, fourth, fifth and sixth level—will each contain 32 single-occupancy, medical/surgical rooms; the seventh floor will be the mechanical penthouse. Application (9/29/14), Appendix 3.
24. The Project will not increase the number of inpatient beds. The approximate number of existing staffed beds (447) will be maintained initially, and the number of physical beds will decrease from 509 to 496. Application (9/29/14) at 5.

⁵ The surnames in parentheses, followed by a citation to the record, identify the testifying witnesses. The full names of the witnesses referred to in this decision are John Brumsted, M.D., Mari Cordes, John Powell, Allison Bouchard, Mark Levine, M.D., David Keelty, Dan Morris, Scott Walters, Todd Keating, Bruce Spector, and Scott Hileman.

25. The Applicant estimates a cost per bed of \$1,366,774 and cost per square foot of \$823, calculated without including \$12,350,697 in capitalized interest. Responses (1/21/15) at 4, ¶ 6.
26. The Project does not add or replace psychiatric beds that were lost statewide as a result of Hurricane Irene. According to CEO Dr. John Brumsted⁶, the loss of beds requires a “statewide solution;” UVMMC could not efficiently serve psychiatric patients in the medical/surgical units it has planned. TR (5/18/15) at 69-70 (Brumsted).
27. The Applicant does not intend to add any clinical staff from 2015 to 2020 as a result of the Project. Application (11/7/14), Table 9; TR (5/19/15) at 122 (Keating). All additional staffing— accounting for \$1.43M of the expected \$16.6M annual increase in operating expense—will be used for facility and maintenance staff due to UVMMC’s increased overall square footage. *Id.*; *see also* Responses (1/21/15), Exhibit 6 at 6 (Staffing Plans).
28. The Applicant estimates construction will take approximately 38 months to complete. UVMMC assumed construction would begin in May 2015 and the new building would be completed in September 2018. Application (9/29/14) at 7.
29. As of April 2015, the schematic design⁷ of the Project was complete. Responses (4/16/15) at 5, ¶ 2. As of hearing date, design development was “35 to 40 percent complete.” TR (5/18/15) at 232 (Keelty).
30. UVM abuts the Applicant’s property and has agreed to sell an adjacent 1.02 acre parcel of land to the Applicant for \$9.7M. UVM has begun to demolish three dormitories located on the parcel to coordinate with the Applicant’s proposed construction schedule. The purchase of the land includes compensation to UVM for costs related to housing students displaced by the loss of the dormitories. Application (9/29/14) at 14; TR (5/18/15) at 43-45 (Brumsted); *id.* at 258 (Keelty).
31. The Mayor of the City of Burlington has expressed support for the Project and regards UVMMC as a “vital partner” and “an economic engine and social service hub” for both the City and region. Letter from Miro Weinberger to Chairman Gobeille (5/15/15), *available at* http://gmcboard.vermont.gov/sites/gmcboard/files/Letter_fm_Mayor_of_Burl_%202015_05_19.pdf

⁶ Dr. Brumsted is CEO of UVMMC and the President and CEO of the University of Vermont Health Network (UVHN). UVHN was created in October 2011 when Fletcher Allen Health Care and Central Vermont Medical Center (CVMC) entered into an agreement to affiliate; in January 2013, New York hospitals Champlain Valley Physicians Hospital and Elizabethtown Community Hospital joined the affiliation.

⁷ Schematic design is the initial design that defines the general scope and conceptual design of a project. The next stage is design development, where the schematic design decisions are worked out in greater detail. Next, construction documents are drafted, which consist of drawings and specifications that set forth the detailed requirements for construction.

32. The total estimated Project cost of \$187,297,729 breaks down as follows:
- new construction costs: \$102,423,538;
 - renovation costs: \$3,953,209;
 - site work: \$7,674,673;
 - fixed equipment: \$7,828,747;
 - construction contingency: \$17,533,660;⁸
 - furnishings, fixtures and other equipment: \$12,718,123;
 - architectural and engineering fees: \$9,419,481;
 - land acquisition: \$9,700,000;
 - administrative expenses and permits: \$3,675,601;
 - debt financing expenses: \$12,350,697; and
 - CON application fee: \$20,000.

Application (11/7/14), Tables 1, 2.

Conversion to Single Rooms

33. Currently 30% of UVMHC's inpatient beds are single (private) occupancy; the remaining 70% are double (semi-private) occupancy. The Applicant's goal is to achieve at least an 85% single occupancy rate, which it states will be accomplished on completion of the Project. TR (5/18/15) at 19, 22-23 (Brumsted).
34. Single rooms are the standard for new hospital construction under FGI Guidelines, help reduce infection rates, decrease the likelihood of medication errors, improve patient outcomes and patient satisfaction, provide patient privacy, and have positive impacts on clinical staff. They are also more efficient than double occupancy rooms because fewer beds must be "blocked," which means taken out of service for infection control or gender mix issues. *Id.* at 24-25; 64-65 (Brumsted); Application (9/29/15) at 24-26; *see also* Responses (2/26/15), Exhibit 8.
35. The VFNHP, with 2,000 members employed at UVMHC, supports the conversion to private rooms but asks that the Applicant ensure "safe staffing," which it defines as the use of appropriate numbers of nursing staff, assigned to positions in their respective areas of expertise. TR (5/18/15) at 73-77 (Cordes).
36. Allison Bouchard has worked as a registered nurse at UVMHC for nine years and currently works in the cardiology unit on McClure 5. Bouchard testified that of the fifty available beds on McClure 5, 46 are located in double occupancy rooms; the four single occupancy rooms are typically used for isolation. In Shepardson, the hematology/oncology unit has double rooms smaller than those in McClure, and most patients must share use of a shower located in the hallway. *Id.* at 107-119 (Bouchard).

⁸ Labeled a "construction contingency" by the Applicant, this amount is composed of a 4.0% construction contingency, 5.0% for escalation and 8.0% for design development. *See* Finding ¶ 86.

37. Bouchard testified that in addition to clinical duties, if a patient needs to be moved to a different room because of gender issues or infection concerns, nursing staff must physically move the patient, furniture, monitors, and the patient's belongings. *Id.*
38. Notwithstanding the challenges associated with shared rooms, nursing staff has maintained an excellent record of infection control and the hospital has low rates of patient falls. Application (9/29/14) at 32-27; *see also* TR (5/18/15) at 72-73. (Cordes) (UVMMC has achieved a 0.0% infection rate for insertion of vascular lines); *id.* at 177 (Levine) (UVMMC is a "high reliability organization and [has] won awards").
39. To assist with projecting its future inpatient bed need, the Applicant hired Halsa Associates (Halsa), a firm that provides facility planning services for hospitals and health care systems. Halsa structured its work by first projecting the Applicant's future need, next assessing the condition of its current bed supply, and then developing a plan for the Applicant to move forward operationally. TR (5/19/15) at 8-10 (Walters).
40. Halsa began working on the Project in July 2012 by focusing on volume modeling and demand projections. Halsa worked with the Bed Planning Working Group (Working Group)—the primary multi-disciplinary team involved in the Project—and with other stakeholders to refine a plan that the Applicant would eventually incorporate in this CON. Application (9/29/14), Appendix 2 (Halsa Letter).
41. Weighing factors such as demographics, market share, length of stay, and utilization, Halsa first projected that in ten years (2022) the Applicant would require sixty additional inpatient beds. After accounting for the effects of health care reform and the Applicant's network partner capabilities—for example, some services can be provided locally at partner hospitals, rather than at UVMMC)—Halsa revised its projection and concluded that there would be no increased need for inpatient beds in ten years. TR (5/19/15) at 10-20 (Walters).
42. Assessing the condition and compliance with FGI guidelines of the current bed supply, Halsa found the Neonatal Intensive Care Unit (NICU) most deficient; from a clinical perspective, however, the NICU would be more appropriately relocated adjacent to the labor and delivery unit, rather than in the proposed new building. The medical/surgery beds in Shepardson North were the second most deficient units. Halsa Letter at 8; TR (5/19/15) at 21 (Walters).
43. The inpatient psychiatry units met nearly all FGI Guidelines despite the age of the building that houses them, and scored as the third best units on the hospital campus. Halsa Letter at 8; TR (5/19/15) at 22 (Walters).
44. Although not part of the Project, the Applicant has begun to address improvements for its psychiatric inpatient population that were requested by the MHPQC. For example, the Applicant has recently retained Lavallee Brensinger architects to facilitate construction of a

secure outdoor recreation area.⁹ Responses (1/21/15) at 18-19, ¶ 25, Exhibit 5; TR (5/18/15) at 220-22.

45. As a result of Halsa's assessment of the clinical units, the Working Group identified three key priorities: First, to create a pathway for replacement of the NICU; second, to increase the percentage of medical/surgical single beds in new and existing nursing units, and third, to convert all of the medical/surgical beds in the oldest Shepardson North units to single beds or remove the rooms from patient care. Halsa Letter at 8-9.
46. The Applicant considered whether renovation and expansion of existing units would meet the Applicant's need to replace inpatient beds and concluded that it would be a more expensive option; even if the Applicant could expand the length and width of existing structures to provide adequate space, it could not construct additional floor to ceiling space. TR (5/19/15) at 26-29 (Walters); *see also* TR (5/18/15) at 204-05 (Morris) (existing buildings are too narrow for rooms to be of adequate square footage to meet current standards); *id.* at 21 (Brumsted) (renovation not feasible because rooms would not comply with current standards or code).
47. Halsa considered more than twenty configurations of proposed new beds on either two, three or four floors before recommending that the Applicant construct four floors of 32 beds each with individual room size of at least twelve feet, floor to ceiling dimension of at least 14 feet, and at least 550 square feet per bed for support space. TR (5/19/15) at 22; 27-28 (Walters).
48. As proposed, the layout and clinical uses of the new building allow for proximity of patients to the operating rooms in the McClure building and will permit closure and conversion of McClure 5 in order to create a NICU in a future project. By locating cardiovascular and thoracic surgery on the third floor and cardiology on the fourth, the plan creates an inpatient cardiovascular center on the two levels. Oncology, urology and gynecology will locate on the fifth floor, facilitating operating room access, use of single rooms for immune-compromised cancer patients, and taking into account that many urology and gynecology patients have an oncologic diagnosis. The orthopedics unit will locate on the sixth floor and the bariatric surgery program on the third. *Id.* at 9-10; Responses (1/21/15), Exhibit 6 at 2-3.
49. The rooms are designed to include a dedicated "family zone" in each, enabling visiting family members to stay with the patient 24/7, 365 days a year. TR (5/19/15) at 25 (Walters); Responses (1/21/15), Exhibit 6 at 6.

⁹ On May 20, 2015, the Board received a public comment from Anne Donahue, a member of the MHPQC, which commended the Applicant for its "clear commitment to meeting the needs of its inpatient psychiatry facilities." The letter expressed Donahue's confidence that UVMHC would repurpose vacated space in Shepardson South for staff support use, which in turn would free up space in the psychiatric unit for a "comfort" room and an exercise room, and to regain an inpatient psychiatric bed. http://gmcboard.vermont.gov/sites/gmcboard/files/Public_comments_GMCB02114con.pdf.

50. The proposed mirrored design of inpatient rooms allows nursing staff to view the two patients in neighboring rooms from a single work station located between the two rooms and use a single storage depot for supplies. In addition, plumbing can be aligned in adjacent rooms, reducing the overall amount of plumbing otherwise needed if single-sided rooms were constructed. TR (5/18/15) at 130-31; 133-34 (Bouchard); *id.* at 189 (Morris); TR (5/19/15) (Walters).
51. The Project design incorporates flexibility of use and in number of beds by accommodating step-down care, facilitating the use of telemetry (remote patient monitoring) on each of the four patient floors, and allowing for the decommissioning of beds in older buildings if bed need decreases. TR (5/18/15) at 23; 29 (Brumsted).
52. The Applicant did not provide the Board a quantitative analysis of the return on investment or cost-effectiveness of the overall Project, nor did it provide such analysis of renovation compared to new construction or cost comparison of alternative bed configurations. Responses (4/16/15) at 2, ¶ 4 (“We did not conduct a cost/benefit analysis or a return-on-investment analysis of the type that might be conducted by a for-profit business. However, we did carefully assess the benefits of this project to the communities we serve and concluded that the costs of the project are fully justified.”)

Financial Feasibility

53. The Applicant intends to finance the Project with \$45M in working capital and to raise \$30M through fundraising.¹⁰ In addition, the Applicant plans to raise \$100M from a 10.0% bond issuance and pay 12.3% of capitalized interest over the course of the Project through regular operating revenues. Application (11/9/14), Table 2; Responses (4/16/15), Exhibit 1(A); TR (5/18/15) at 30; 59 (Brumsted).
54. As of the date of hearing, both Fitch and Moody’s Investors Service (Moody’s) gave the applicant an A- bond rating while Standard and Poor’s assigned a BBB+ rating with a positive outlook.¹¹ TR (5/18/15) at 31 (Brumsted); Responses (2/26/15), Exhibits 5, 6, 7.
55. Fitch determined that the Applicant’s A- rating allows it to incur debt up to \$145 million over two-and-a half years to fund capital expenditures on the Burlington campus, and that as of May 31, 2014, the Applicant held 157.6 days cash on hand. Responses (2/26/15), Exhibit 5.
56. Moody’s upgraded the Applicant’s rating from Baa1 to A3 in September 2014. The upgrade incorporated an expectation of higher capital spending which included the

¹⁰ A report by consultant Kaufman, Hall & Associates, Inc., states that the Applicant’s baseline projections assume \$25M, rather than \$30M, in philanthropic contributions. Responses (2/26/15), Exhibit 3 at 24. The \$30M figure, however, is consistent with both the testimony and other documentation in the record.

¹¹ Rating agencies assign ratings to borrowers’ bond offerings that reflect the amount of risk involved in purchasing a particular bond; a higher bond rating reflects a borrower’s perceived ability to repay principal and interest.

inpatient bed project, and reported that the Applicant's days cash on hand increased from 149 in FY2013 to 158 in FY2014. *Id.*, Exhibit 6.

57. The Applicant plans to pay interest only on debt attributed to the Project until 2038, the year that its current debt is retired, and thereafter will begin to make payments on the principal. Deloitte Report at 18; TR (5/19/15) at 199-200 (Spector).
58. Although its fundraising campaign has not officially begun, the Applicant reports that it has raised over one-third of its target of \$30M, with a goal of meeting or exceeding its target prior to September 2018 when it anticipates completion of construction. The Applicant expects that the majority of pledged funds will be collected by 2021. Responses (1/21/15) at 6-7, ¶ 11; TR (5/18/15) at 30 (Brumsted).
59. To meet its fundraising goal, the Applicant projects it will need to raise approximately \$4.75M per year, which requires a minimum pool of 224 prospective donors to secure 86 donations of \$25,000 or higher. The Applicant has identified 653 potential donors. If it is unable to meet its fundraising target, the Applicant would "use existing capital dollars to fund the shortfall," which would likely delay future capital projects. Responses (1/21/15) at 6-7, ¶ 11.
60. Historically, the Applicant has collected 96% of pledged contributions, higher than the national average of 90%. TR (5/19/15) at 97 (Keating).
61. The Project is expected to generate approximately \$16.6M in operating costs per year, comprising approximately 1.3% of the organization's total operating budget. The Applicant intends to offset those costs by "expense reductions, increased productivity, and enhanced revenues." *Id.* at 101.
62. To reduce expenses, the Applicant plans to target overhead and administrative costs by eliminating redundancies, seeking discounts for group purchasing, consolidating some services and functions between vendors, and reducing excess capacity. *Id.* at 103, 121. The Applicant expects that labor costs, already considered low with a 53% compensation ratio,¹² "unfortunately . . . will be touched one way or another." *Id.* at 93.
63. The Applicant has ranked "in the top five or six every year" for cost efficiency among academic medical centers for the last several years. Nonetheless, the Applicant believes it can become more efficient, and that "significant opportunity" remains to further reduce spending. *Id.* at 109, 114.
64. The Applicant foresees that the Project will not financially burden the population it serves because its leadership "is seeking additional cost-saving measures to mitigate the financial impact." Responses (1/21/15) at 4, ¶ 5.

¹² The compensation ratio is determined by calculating total salaries and benefits as a percentage of net patient service revenues.

65. The Applicant describes its five-year capital plan as “very fluid,” and maintains that the plan’s flexibility allows it to cut back on capital spending and reallocate funds if needed. TR (5/19/15) at 128-29 (Keating).
66. The Applicant plans no increase in per diem room rates or net patient revenue as a result of the Project through 2021 because of the “limited amount of incremental operating expenses” that will be added to its operating budget. Response (1/21/15) at 4, ¶¶ 4, 7. Nor does it expect to raise commercial rates to offset Project costs. *Id.* at 8 (“the UVM Medical Center does not anticipate any rate increases related to the project”); ¶ 12 (Applicant “does not anticipate that rate increases will be required specifically to fund the incremental operating expenses associated with the project”); TR (5/18/15) at 34 (Brumsted) (“We’re not going to increase rates to offset those costs”); TR (5/19/15) at 103 (Keating) (“[C]osts will be within the cost construct of the network [and] will not lead to any rate increases or requests of the Green Mountain Care Board with regard to our commercial lift.”).
67. According to its CFO Todd Keating, prior to the current fiscal year the Applicant made a “very conscious decision to start to pull back levers on capital spending” and set aside \$72M in a “short-term funded depreciation account.” The \$72M is earmarked to cover \$45M in working capital and the majority of the fundraising target; as the Applicant collects fundraising dollars over the next several years, it will “just take them into operations.” TR (5/19/15) at 97-98; 102 (Keating).
68. As of the date of hearing, the Applicant was \$16M ahead of its budget projections for the current fiscal year, with \$6M of that amount achieved by managing its expenses. *Id.* at 104.
69. The Applicant retained Ponder & Co. (Ponder), an independent financial advisor, to provide an opinion regarding its debt capacity and whether it could finance the Project as well as other projects in its capital plan. Ponder concluded: “[W]e believe that Fletcher Allen will be able to access the capital markets during the period 2014 to 2016 to borrow as much as \$200 million, if needed, to fund these projects, while maintaining a credit rating in the A3 to Baa2 range.” Application (9/29/14), Appendix 1.
70. The Applicant also retained Kaufman, Hall & Associates, Inc. (Kaufman Hall) to provide an analysis and issue a report about the Project’s managed care implications and financial impact. Response (2/26/15), Exhibit 3.
71. Using the Applicant’s baseline assumptions of 3.5% annual net patient revenue growth and \$125M of debt through 2018, Kaufman Hall projected that the Applicant will experience stable performance, but cautioned that its “[l]iquidity is pressured due to high levels of capital spending and new debt.” *Id.* at 18.
72. The Applicant’s 3.5% target operating margin is higher than those it has achieved historically, which range between 2.1% to 3.1% for the years 2009 through 2013. *Id.* at 33. Ponder forecasts that the Applicant will achieve operating margins from 2.4% to 2.9% for 2014 through 2018; its projection includes all capital plans and associated debt financing

but assumes no additional fixed operating expense for the Project. Response (2/26/15), Exhibit 2 at 4, 6.

73. Kaufman Hall modeled the effect on operating margin if the Applicant does not realize its baseline assumption of 3.5% net patient revenue growth, and concluded that reducing the assumed net patient revenue growth by 1.5% would produce negative operating margins of (1.0%), (2.6%), (3.8%), and (5.1%) for each year from 2015 through 2018 and negative operating income of (\$88.7M) in 2018. If the net patient revenue does not increase for the same period (0.0% growth), the Applicant's operating margin would produce negative operating margins of (4.7%), (8.4%), (11.6%) and (15.1%) for each year from 2015 through 2018 and produce negative operating income of (\$238.7M) in 2018. Response (2/26/15), Exhibit 3 at 30.
74. As a result of its analysis, Kaufman Hall concluded that the Applicant must demonstrate "continued improvement in operating performance and maintaining/improving liquidity" to maintain its credit rating. *Id.* at 23.
75. Assuming capital expenditures of \$773M through 2018, including \$175M for the Project, Kaufman Hall concludes that "reduc[ing] the overall capital plan and/or defer[ing] certain aspects would be very helpful to preserving liquidity and creating a margin for error in the projections." *Id.*
76. In addition, Kaufman Hall recommends that "[i]n light of industry, market, project risks, and the uncertainty related to the state's payment reform efforts," the Applicant should target 160 days cash on hand "to provide some cushion against future challenges." *Id.*
77. To both achieve a liquidity target of 160 days cash on hand and fund \$773M of capital, the Applicant must "generate cash flow well above recent levels" and retain an additional \$135M of cash on its balance sheet. *Id.* at 35, 36.
78. According to Kaufman Hall, the Applicant's historical estimated annual operating cash flow was \$132.8M in 2011, \$130.6M in 2012 and \$169.1M in 2013. To achieve a liquidity target of 160 days cash on hand and baseline capital of \$773M, however, it will need an operating cash flow of \$181.2M. *Id.* at 36, 37.
79. Kaufman Hall cautioned the Applicant that its net patient revenue projections may not be achievable or sustainable, and that it will need to find ways to compensate for any underperformance: "**[T]here is significant risk to maintaining the assumed levels of net patient revenue growth. Any shortfalls in net patient revenue growth will need to be offset by either a reduction in capital or improvements in the expense structure.**" *Id.* (emphasis in original).
80. Although the Project has been vetted by the UVMHC Board, current Board President John Powell believes the Applicant is "stretching" to move the Project forward:

[W]hen we show ... days cash on hand at around 156 I begin to get a little nervous. It's still not a bad number, but I would rather see it around 200 and those are momentary dips. There's a lot of unpredictability of what our revenue stream will be like.

TR (5/18/15) at 99-100 (Powell).

81. To provide an independent review of the Project's financial impact on the Applicant, the Board retained Deloitte in April 2015. Deloitte analyzed the Applicant's financial model, project assumptions, credit ratings and debt capacity, and created a separate financial model to develop projections beyond that provided by the Applicant and to identify project risks.¹³
82. Deloitte modeled adjustments to the Applicant's projected revenue growth, but kept other inputs and assumptions constant, consistent with the information it was provided by the Applicant. As a result, the Deloitte model does not reflect any positive effects on operating margin were the Applicant to reduce expenses in response to decreased revenues. TR (5/19/15) at 170-171 (Spector).
83. Deloitte's sensitivity calculations show that the Applicant "exhibits strong reliance on continued annual future Commercial Insurance rate increases in order to not only cover the increased interest expense, but operating expenses which are projected to grow at a rate of 2.8% per annum for 2015-2018." Deloitte observes that the effect of the Project on future rates "overwhelms" the question of whether the Applicant has the capacity to absorb the proposed debt, and "is central to the question of what level of future rate increases the [Board] is willing to accept for the foreseeable future to cover capital expenditures and operating costs." Deloitte Report at 8-9.
84. Should the Applicant experience a 1.0% reduction in projected revenue growth, excluding depreciation and amortization, Deloitte concludes that the Applicant will violate the 1.35x long term debt service coverage ratio required by its master bond indenture in 2018; assuming a 2.0% reduction, the Applicant will not have sufficient funds to cover operating expenses. *Id.* at 24-26.
85. Assuming a median 5.5x ratio of earnings before interest, depreciation and amortization (EBIDA) to interest expense ratio for A- rated entities, \$17M associated with existing debt, and a 5.0% coupon, Deloitte calculates the Applicant's total excess debt capacity at approximately \$317M. If revenue growth is reduced by 1.0%, the excess debt capacity decreases to \$54M. *Id.* at 49-50; TR (5/19/15) at 163-64 (Spector).
86. In addition, Deloitte provided the Board a benchmark analysis of the Applicant's proposed construction costs, as measured by dollars per square foot and per bed. Deloitte determined that such costs fall within the range of similar project costs, with cost per square foot at the

¹³ In its analysis, Deloitte considered only the financial status of the obligated group (UVMMC and CVMC) because under the Master Bond Indenture, only the obligated group can issue debt. TR (5/19/15) at 152-53 (Spector).

top end of the range and cost per bed higher than both the average and median. TR (5/19/15) at 190 (Hileman); Deloitte Report at 56.

87. The Applicant's construction contingency of 4% of new construction costs is below the 10% contingency used in comparable projects. Because the Applicant has included an additional 5.0% contingency for escalation and 8.0% for design development, however, Deloitte concluded that the combined 17% contingency provides a "fairly healthy margin" to account for potential increases in costs. Deloitte Report at 10; TR (5/19/15) at 191 (Hileman).

Standard of Review

Vermont's certificate of need process is governed by 18 V.S.A. §§ 9431-9446 and Green Mountain Care Board Rule 4.000: *Certificate of Need*. The Applicant bears the burden to demonstrate that each of the criteria set forth in 18 V.S.A. § 9437(1)-(8) is met. Rule 4.000, § 4.302(3).

Conclusions of Law

Section 9437 of Title 18 provides that a certificate of need shall be granted if an applicant demonstrates, and the Board finds, that it has satisfied each of eight statutory criteria. Here, we conclude that the Applicant has provided sufficient evidence for the Board to conclude that the application and Project, subject to the conditions discussed below and set forth in the Order, complies with all applicable statutory and regulatory criteria. We impose conditions within the Order to ensure that the scope and costs of the Project remain squarely within the parameters of our approval once construction begins.

Discussion

- I. The Applicant has demonstrated that the application is consistent with the health resource allocation plan (HRAP). 18 V.S.A. § 9437(1).

While we find that the Applicant has met this criterion, we do so recognizing that the HRAP was last updated in 2009 and that our health care landscape has shifted over the last six years.¹⁴ Nonetheless, and as required by statute, we evaluate the application in light of any pertinent HRAP standards to ensure consistency with the policy directives and principles they represent.

- *STANDARD 1.6: Applicants seeking to develop a new health care project shall explain how the Applicant 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 related data collection and*

¹⁴ As noted in the HRAP, not all of the standards are germane to each application. We find this premise is amplified in light of recent national and state changes in health care. For example, the HRAP predates the Patient Protection and Affordable Care Act, signed in to law by President Obama in 2010, and Act 48 (2011), Vermont's seminal health care reform legislation.

monitoring efforts, whether within the Applicant's organization, other organizations or the government.

To satisfy this standard, the Applicant has shown that it reports three data measures related to inpatient care: patient falls, infection rates, and patient satisfaction scores. Application (9/29/14) at 32-37. In addition, the Jeffords Institute for Quality and Operational Effectiveness measures aspects of patient care and shares its findings with the Applicant's leadership, trustees, quality committees, and with various governmental agencies. *Id.* at 40

- *STANDARD 1.7: Applicants seeking to develop a new health care 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 practice guidelines and how such guidelines will be incorporated into ongoing decision making.*

The Applicant has met its burden to show that the replacement of semi-private rooms with private, single-occupancy rooms is consistent with evidence-based practice. Single rooms are consistent with FGI standards and have been shown to reduce infection rates and medication errors, improve patient satisfaction and outcomes, improve patient privacy, and have a positive impact on clinical staff. Finding ¶ 34.

STANDARD 1.8: Applicants seeking to develop a new health care project shall demonstrate, as appropriate, that the Applicant has a comprehensive evidence-based system for controlling infectious disease.

In addition to the reduced risk of infectious disease as a result of the change to single beds, the Applicant has outlined the work of its Infection Prevention Team, established in 1984 as part of the James Jeffords Institute for Quality and Operational Effectiveness. *See* Application (9/29/14) at 42.

- *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.*
- *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.*
- *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.*

We find that the Applicant has demonstrated that the Project is consistent with these three related standards. The majority of our analysis and discussion regarding the reasonableness of

the Project's cost and alternatives to the Project as proposed, however, duplicates our analysis of the statutory Criterion 2. We therefore defer that discussion until later in the decision.

Concerning energy efficiency, the Applicant has established energy conservation targets, is seeking LEED (Leadership in Energy and Environmental Design) certification, and will work with Burlington Electric Department and Vermont Gas Systems to employ high-efficiency means to light, heat and ventilate the new building. Application (9/29/14) at 42-45; TR (5/18/15) at 190 (Morris) (“[W]e’re tracking to achieve LEED silver level”).

- *STANDARD 1.12: New construction health care projects shall comply with the Guidelines for Construction and Equipment of Hospital and Medical Facilities as issued by the American Institute of Architects (AIA).*

Our independent contractor has reviewed this application and advised the Board that the Project meets applicable standards. See Finding ¶ 8.

- *STANDARD 3.2: Applicants proposing any major bed construction, facility upgrades or additions shall consider availability and access to both in-state and out-of-state service capacity and provide an analysis of 10 year population and utilization trends. Population-based science and analyses shall be used to support need.*

The Applicant provided sufficient information regarding its ten-year projection for bed need to satisfy this standard. See Findings ¶¶ 39, 40, 41. Moreover, the bulk of our discussion regarding the need for this project falls within statutory Criterion 3, discussed later in our decision.

- *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.*

The Applicant has satisfied this standard. TR (5/18/15) at 31 (Brumsted) (confirms that “the capital for this project has been part of our presentations to the Green Mountain Care Board in all of our budget presentations and our financial forecasting”).

- *STANDARD 3.10: Applicants seeking to renovate or develop hospital space shall not be required to add single occupancy rooms. If an Applicant wants to add single occupancy rooms, the Applicant shall show that the initial increased costs will be offset by operational or clinical efficiencies and improvements or that the benefits of such expansion justify the increased costs to the Vermont healthcare system.*

Again, we conclude that this standard has been met, but to avoid duplication, our analysis is more appropriately placed within our discussion of statutory Criterion 2.

- *STANDARD 4.5: To the extent possible, an Applicant seeking to implement a new health care project shall ensure that such project supports further integration of mental health, substance abuse and other health care.*

Although this Project does not include changes to the psychiatric units or the addition of psychiatric beds, we conclude that the Applicant has satisfied this criterion. As part of its assessment of the facility, Halsa determined that the inpatient psychiatric units meet nearly all FGI guidelines; moreover, the Applicant is actively addressing recommendations of the MHPQC. Findings ¶¶ 43, 44; *see also* ¶ 19 (MHPQC included in planning process).

II. The Applicant has met its burden to show that the cost of the project is reasonable pursuant to 18 V.S. A. § 9437(2) (Criterion 2).

Under Criterion 2, the Applicant must demonstrate that the cost of the project is reasonable by meeting three statutory requirements: First, that it “will sustain any financial burden likely to result from the completion of the project”; second, that “the project will not result in an undue increase in the cost of medical care”; and third, that “less expensive alternatives do not exist, would be unsatisfactory, or are not feasible or appropriate.” 18 V.S.A. § 9437(2). We conclude that the Applicant has satisfied this criterion and address each of the three requirements in turn.

A. The Applicant can sustain the financial burden likely to result from completion of the Project.

Based on the financial information provided by the Applicant and by the Board’s independent financial analyst, we conclude the Applicant can sustain the financial burden resulting from completion of the Project.

We begin our analysis with the Applicant’s current financial health. As discussed at hearing and presented in its application, the Applicant’s bond ratings evince a positive assessment of its ability to sustain the debt associated with the Project. Although some concern was expressed with the Applicant’s ability to maintain liquidity in light of projected capital expenditures, overall the outlook is positive and the Applicant’s financial position stable. Findings ¶¶ 54, 55, 56. This view is also supported by Ponder, which concluded that the Applicant could borrow as much as \$200M and maintain a credit rating in the A3 to Baa2 range. Finding ¶ 68.

Based on its assertions that it has raised more than a third of its fundraising goal before officially opening its campaign, has identified numerous potential donors, and has historically collected 96% of amounts pledged, the Applicant has demonstrated that it can meet its \$30M fundraising target. Findings ¶¶ 58, 59, 60. Given the importance of adequate funding for a project of this size and scope, however, we impose a condition that the Applicant provide the Board with detailed information about funds raised to date and those anticipated, and demonstrate that it has received at least \$20M in pledges prior to commencing construction.

The Applicant has also demonstrated to the Board its ability to reduce expenditures to meet or exceed budget projections. Prior to the current fiscal year, the Applicant set aside approximately \$72M, which covers the Project’s working capital and the majority of its fundraising goal. Finding ¶ 67. For the current year, it is below total budget by \$16M, with approximately \$6M of that amount attributable to expense reductions. Finding ¶ 68. For the last

several years, UVMMC has consistently ranked within the top five or six most cost efficient academic medical centers. Finding ¶ 63. Given that the projected \$16.6M in operating costs as a result of the Project comprise only 1.3% of the organization's total operating budget, *see* Finding ¶ 61, we reasonably expect that the Applicant can and will find additional cost savings and operational efficiencies to keep the Project, and the organization, on an affirmative course.

Notwithstanding our conclusion that the Applicant can financially sustain the Project, we must also recognize the financial hurdles which it may encounter as this Project moves forward. In light of the analyses provided by Kaufman Hall and by Deloitte that stress the need for attaining revenue growth targets and preserving liquidity, we find that the financial margin for error is narrow. Should the Applicant's projections and assumptions fail to materialize as expected, there exists the real possibility that costs will be borne by health care consumers through increased rates, fees, and room charges. Accordingly, to ensure the Project's financial viability, we require that prior to construction, the Applicant demonstrates that it has complied with a series of conditions, set out in our Order, which will promote a solid and stable financial footing from which to proceed.

We are also concerned with the proposed structure of the debt repayment, which defers any payment of the principal until 2038, when the Applicant retires old debt and the inpatient building is two decades into its useful life. Over that period of time, we reasonably foresee that other capital expenditures will be required and health care reform will bring changes to how we deliver and pay for care, yet the asset at the core of this Project will remain essentially unpaid. We therefore require that the Applicant restructure the debt to begin earlier payment on the principal so that the full burden of its repayment is not inherited by a future hospital administration and a new generation of health care consumers.

With these guardrails in place, we are satisfied that the Applicant can sustain the financial burden of completing the Project.

B. The Project will not result in an undue increase in the costs of medical care.

To determine whether there is an undue increase in the costs of care, the Board must consider and weigh relevant factors that include the impact on services, expenditures, and charges, and whether such impact is outweighed by the benefit to the public. 18 V.S.A. § 9437 (2)(B)(i), (ii).

While this Application has been pending, we have expressed our concern, in our interrogatories and through our questions and comments at hearing, about the financial impact of this Project on Vermont consumers of health care services. In response, the Applicant has consistently advised the Board that the Project will not cause an increase in commercial rates, nor will it increase per diem room rates or net patient revenue. Finding ¶ 66. While we accept that the Applicant intends to control costs as it moves forward so that rates will not be affected, we know with near certainty that the management team now in place will not be in place in 2038, the year the Applicant plans to begin paying the principal on the debt resulting from the Project.

Further, while we find that the Applicant has demonstrated its ability to operate efficiently and that it intends to reduce costs or defer future capital spending should it fail to meet its financial projections, *see, e.g.*, Findings ¶¶ 63, 65, 67, 68, we have no crystal ball to confirm that its projections will materialize or that it will be able to cut costs or forgo capital improvements without affecting quality. We therefore must also consider the cautionary forecasts provided by Kaufman Hall and Deloitte and our own review of the record and express our concern that a future hospital administration, faced with a financial picture substantially different than the one the Applicant now paints, may reasonably seek to remedy financial shortfalls through increased rates and charges. To avoid this outcome, we impose conditions that mitigate risk, ensure that the Applicant’s margin of error is a more comfortable one, and lessen the possibility that future shortfalls will result in increased commercial rates or other consumer charges.

As discussed below, we conclude that this Project is needed, and recognize that it will confer a substantial benefit to our State. We again emphasize, however, that it must be launched from a firm financial base, particularly in light of the Applicant’s ambitious plans for future capital expenditures. *See* Finding ¶ 1 (Applicant presents plans for future CON projects at public meeting). The conditions imposed, below, will further solidify that base and reduce the risk of adverse financial impacts.

Accordingly, subject to the conditions outlined in the Order, we conclude that this part of the criterion has been satisfied.

C. Less expensive alternatives are not feasible or appropriate.

The last part of this statutory criterion requires we find that “less expensive alternatives do not exist, would be unsatisfactory, or are not feasible or appropriate.” 18 V.S.A. § 9437(2)(C). Our discussion here also addresses HRAP Standard 3.10, requiring that the increased costs of single rooms be offset by operational or clinical efficiencies and improvements, or in the alternative, that the benefits of expansion justify increased costs to the Vermont health care system.

The Applicant has deemed the replacement of its inpatient beds “a top priority” for almost a decade. Findings ¶¶ 17, 18. During the course of planning for this Project, the Applicant engaged both experts and stakeholders to determine how best to accomplish this priority in a way that meets future bed need, aligns with modern standards, and looks to the future use and functionality of the facility as a whole. Findings ¶¶ 19, 39, 40, 41, 45.

Though the Applicant failed to provide any quantitative analysis of its choice of new construction versus renovation—a notable weakness of this application—we nonetheless find that dimensional limitations of the existing facility render renovation unfeasible and an inappropriate alternative to new construction. In support of this criterion, the Applicant presented credible testimony that its older buildings do not have floor to ceiling dimensions that can be increased to accommodate contemporary HVAC systems and meet current hospital standards or code; similarly, the buildings cannot be extended in width to gain sufficient square footage to create patient rooms of adequate, code-compliant size. Finding ¶ 46.

Further, and again despite the lack of quantitative analysis that should have been included in the application, we find that the Project was designed in a manner to gain clinical and operational efficiencies which offset the costs of conversion to single rooms. Single occupancy rooms utilize nursing staff more efficiently than shared rooms; they do not have to be “blocked” for infection control or gender issues, allowing nursing staff to devote time to clinical duties instead of physically moving patients, their belongings and medical equipment. Findings ¶¶ 34, 37. The mirrored room design allows one nurse to monitor two patients simultaneously from a single work station, halves the number of storage spaces which staff must inventory and stock and the software licenses the Applicant must purchase and manage, and reduces the amount of plumbing that must be bought and maintained because fixtures are located on adjacent walls. Finding ¶ 50; *see also* TR (5/18/15) at 189 (Morris) (singlehanded design rooms more costly due to additional plumbing); TR (5/19/15) at 44-45 (Walters) (same-sided rooms require “twice as many software licenses, twice as many devices to manage, twice as many storage depots that need to be inventoried and stocked.”).

We also find that the Applicant adequately justified its choice of a curved, rather than straight, building façade. The design is not a true curve or significant cost driver, and instead consists of a series of segmented straight line constructions that makes optimum use of a constrained building site. TR (5/18/15) at 197 (Morris). The designing architect compared the Project to similar projects at academic medical centers, describing it as “very modest” and planned in a way to maximize costs savings and clinical efficiencies: “I don’t think there’s a way to squeeze significant money out of this project . . . we have tried to uncover every rock to see whether or not there’s a better idea or better way to do this, and then I honestly don’t believe there is.” *Id.* at 201 (Morris)

Finally, we also weigh in our decision those benefits that are difficult to quantify but which relate closely to the constraints of HRAP Standard 3.10. We recognize the benefits associated with single occupancy rooms; they are the standard for new hospital construction, allow for patient privacy, decrease the risk of infection and medication errors, increase patient satisfaction and patient outcomes, and have positive impacts on clinical staff. Finding ¶ 34. Additionally, the Applicant provided credible testimony that the building was thoughtfully designed with an eye towards future need and utilization; the design incorporates flexibility in use and number of beds, provides a pathway to a future NICU, and creates a unified cardiovascular unit over two levels of the building. Findings ¶ 51, 48.

Based on the totality of the information presented, we conclude that the Project as proposed satisfies this part of the criterion. Accordingly, we conclude that the Applicant has demonstrated that the cost of the Project is reasonable.

III. The Applicant has met its burden to show an identifiable need for the proposed project.

Under Criterion 3, the Applicant must show that there is “an identifiable, existing, or reasonably anticipated need for the proposed project which is appropriate for the Applicant to provide.” 18 V.S.A. § 9437 (3). Based on the record and the testimony at hearing, the Applicant has proven the Project meets this criterion.

The University of Vermont Medical Center is Vermont’s only tertiary care facility and academic medical center, located in our most populous county with a service area extending throughout the state and upstate New York. Finding ¶ 23. A need for the replacement of its inpatient beds was identified almost ten years ago and prioritized in the Applicant’s Master Facility Plan. Finding ¶ 18. As described in its application, supporting materials, and through testimony over two days of hearing, the facility is undeniably aging and rooms in several units fail to meet contemporary hospital standards. Although single rooms have become the current standard for new hospital construction for medical/surgical beds, only 30% of the rooms at UVMMC are in single occupancy. Finding ¶ 34.

This Project will replace outdated patient rooms without increasing the number of overall inpatient beds, consistent with the Applicant’s ten-year projection of bed need. Finding ¶ 42. Once the Project is complete, the ratio of single occupancy beds will increase to approximately 85%, meeting the facility’s bed conversion goal and bringing with it the advantages associated with private rooms. And while we recognize that practitioners and staff have been able to achieve excellent outcomes despite the outdated facilities—for example, UVMMC infection rates are low—we agree that more contemporary, FGI guideline compliant rooms provide benefits for both staff and patient. Finding ¶ 39.

Based on the information presented, the Applicant has shown that this Project addresses an identifiable and existing need to replace inpatient beds.

IV. The Applicant has shown that the project will improve the quality of health care in the state.

Criterion 4 requires that an applicant show that the project “will improve the quality of health care in the state or provide greater access to health care for Vermont’s residents, or both.” 18 V.S.A. § 9437 (4).

The Applicant has shown that the Project will increase health care quality in Vermont. As we have said elsewhere in this decision, there is an existing and identifiable need to replace outmoded inpatient rooms, many of which do not meet industry standards. This Project fulfills that need while creating operational efficiencies, as we discussed relating to Criterion 2.C, above. We also acknowledge that the Project was planned with an eye to the Applicant’s future clinical and operational needs; notably, vacated space in McClure is targeted as the most appropriate location of a new NICU, a key priority for the hospital and the facility’s most deficient unit.

In addition, we believe that the single rooms as planned will afford patients a better care experience—the rooms allow for patient privacy, reduce the likelihood of patient transfer and its associated inconveniences, and permit 24/7 access to family—which will in turn produce better outcomes. And although we recognize that the Applicant has succeeded in providing high quality care to its patients despite a facility that does not fully meet contemporary industry standards, we believe that replacing outdated shared rooms with those that are modern and code-compliant will reasonably reduce the risk of infection and medical error, while providing clinical staff with a

safer and less stressful workplace. Indeed, we agree with the Applicant that challenging work conditions should not be the norm, but should be remedied where needed and financially feasible. *See, e.g.*, TR (5/18/15) at 177 (Levine) (“Wouldn’t it be nice if [high reliability and quality] would come easier?”).

V. The project will not have an undue adverse impact on existing services provided by the Applicant.

The Project does not present any undue adverse impact on existing services. The Applicant will continue to provide existing services, and intends to maintain inpatient beds in semi-private rooms until such time as new single occupancy rooms are completed.

VI. The project will serve the public good.

For the reasons set forth in our discussion of each of the other criterion, and with the conditions imposed in the Order, we conclude that this criterion has been met.

VII. The Applicant has adequately considered the availability of transportation to the facility.

The Applicant has met this criterion. The newly constructed inpatient bed facility will be located in the City of Burlington, on the current UVMHC campus adjacent to the University of Vermont, which we find provides an accessible health care hub in Vermont’s most populous city.

VIII. The Applicant is not purchasing or leasing new health care information technology.

Although this CON is not for the purchase or lease of new health care information technology (HIT), we anticipate the need for HIT related to this Project, particularly in light of the inclusion of telemetry in each of the new units. According to the Applicant, it intends to request a separate CON at some future juncture to convert its electronic health records (EHR) to an integrated system that will enhance efficiencies and coordination of care. *See Upcoming CONs & Real Estate Acquisition Strategy at 6, available at http://gmcboard.vermont.gov/sites/gmcboard/files/FAHC_CON032113.pdf*. We stress that our approval and issuance of this CON in no way controls our decision regarding the future HIT project.

ORDER

Based on the foregoing, we conclude that the Project as proposed meets the criteria set forth in Section 9437 of Title 18, and a certificate of need shall issue.¹⁵

Initially, we allow the Applicant to proceed with the purchase of 1.02 acres of land from the University of Vermont for \$9.7M under the terms as described in the application. We do so

¹⁵ Our decision today does not constrain the Board to approve or deny any future hospital budgets or capital expenditures that may be requested by the Applicant as a result of its decision to move forward with the Project.

recognizing that this is a unique opportunity for the Applicant in light of the slim possibility of adjacent real estate becoming available in the future.

Next, we allow the Applicant to expend funds and commit the necessary resources to move from architectural schematic design to construction documents that include project drawings and specifications. This step enables the Applicant to develop a more accurate cost estimate for the actual construction, and consistent with Condition A.1, below, helps ensure that costs will not escalate unchecked once site work or other construction activity begins.

Last, while we agree that the Applicant should update its inpatient bed capacity to fully meet Vermont's current and future health care needs, we are also cognizant of the inherent risks of a project of this scale and significance, particularly at a time of impending change in the ways we deliver and pay for our health care. We therefore impose the following conditions to mitigate those risks and to ensure that the Applicant can sustain the costs of the Project as set forth in the application.

Conditions

A. The Applicant Shall Not Commence Any Construction Activity, Including But Not Limited To Project Site Preparation and the Purchase and Acquisition of Construction Materials, Until It Has Demonstrated to the Board Compliance With Each of the Following Conditions:

1. The Applicant shall provide the Board an updated construction cost estimate for the inpatient bed facility based on construction documents, rather than on schematic design. The updated construction cost shall not exceed the estimated construction cost reflected in the November 7, 2014 application of \$102,423,538 by more than 8%, consistent with the Applicant's current contingency for design development.
2. (a) For FY2016, the Applicant shall budget for, and demonstrate that it has operated at, the levels incorporated in its management case which include:
 - i. annual net patient revenue growth not to exceed 3.5%;
 - ii. expense growth not to exceed 2.8%; and
 - iii. a minimum operating margin of 3.5%.
- (b) For FY2017, the Applicant shall demonstrate in its FY2017 hospital budget submission that it will meet the following levels:
 - i. annual net patient revenue growth not to exceed 3.5%; *however, if the Board's FY2017 hospital budget guidance sets a total growth cap lower than 3.5%, the Applicant shall not exceed the cap set by the Board;*
 - ii. expense growth not to exceed 2.8%; and
 - iii. a minimum operating margin of 3.5%.

3. The Applicant shall achieve a minimum of 160 days cash on hand and a minimum annual operating cash flow (defined as net income plus depreciation, and excludes unrealized items) of \$181.2M. The Applicant shall demonstrate to the Board that it has held these annualized levels for at least two consecutive quarters, and provide a pro forma demonstrating its ability to maintain these levels over the next five years.
4. The Applicant shall provide the Board a detailed schedule demonstrating that it has received, in cash or in pledges, a minimum of \$20M for use on the Project. The schedule shall include the source of the funds, any restrictions on their use, and the anticipated date on which the full amount of each pledge will be received.
5. The applicant shall develop and submit to the Board an alternative financing plan in which the Applicant will pay a minimum of 30% of the \$100M debt principal within the first twenty (20) years of the Project's life.

B. In Addition to Conditions A1 – A5, the Applicant Must Comply with the Following Conditions:

1. The Applicant shall develop and operate the Project in strict compliance with the Project scope as described in the application, in other materials in the record submitted by the Applicant, and in strict conformance to the Findings of Fact, Order and Conditions set forth in this Statement of Decision. This shall include, but not be limited to, compliance with the proposed conversion of rooms from semi-private to private to attain a minimum of 85% single occupancy inpatient beds at the end of the construction period. This certificate of need is limited to the Project and activities described therein.
2. The Project as described in the application shall be fully implemented within six (6) years of the date of this certificate of need, or the certificate of need shall become invalid and deemed revoked.
3. Noncompliance with any provision of this certificate of need or with applicable ordinances, rules, laws and regulations constitutes a violation of this certificate of need and may be cause for enforcement action pursuant to 18 V.S.A. §§ 9445, 9374(i) and any other applicable law.
4. This certificate of need is not transferable or assignable and is issued only for the premises and entity named in the application.
5. If the Applicant contemplates or becomes aware of a potential or actual nonmaterial change, as defined in 18 V.S.A. § 9432(12), or a material change as defined in 18 V.S.A. § 9432(11), to the scope or cost of the Project described in its application and as designated in this certificate of need, the Applicant shall file a notice of such change immediately with the Board. The Board shall review the proposed change and advise the Applicant whether the proposed change is subject to review.

6. The Applicant shall file implementation reports with the Board at three-month intervals beginning six months from the date of this certificate of need, through the date all components and phases of the Project are complete and fully operational. The implementation reports shall include the following information and analysis:
 - a. Overview of the Project, including information and analysis demonstrating that the Project is in conformance with the scope of the Project as described in the application. Such reports must identify any changes to the financing of the Project and shall include (i) days cash on hand, (ii) operating expenses, (iii) utilization projections, and (iv) any change or anticipated change to credit rating.
 - b. A separate spreadsheet showing quarterly expenditures by individual line item. The spreadsheet shall show the approved overall amount per the application, the amount spent during the quarterly reporting period, the amount spent to date, and the amount remaining in both dollars and in percentages.
 - c. Notice of any material or nonmaterial change, or verification that no material or nonmaterial changes are contemplated or have occurred.

If any financial indicators forecast a change in overall debt capacity, the Applicant must provide the Board a reconciliation report that includes options for expense reductions, productivity management initiatives, investment fund distribution, and reducing or eliminating other capital expenditures.

7. The Board may, after notice and an opportunity to be heard, make such further orders as are necessary or desirable to accomplish the purposes of this certificate of need, and to ensure compliance with the terms and conditions of this certificate of need.
8. All reports, notices, forms, information or submissions of any kind required to be submitted to the Board as a condition of this certificate of need shall be signed by the Applicant's chief executive officer and verified by the chief executive officer, or by his or her designated representative.
9. The conditions and requirements contained in this certificate of need shall remain in effect for the duration of the reporting period defined in paragraph B.2, above.

SO ORDERED.

Dated: July 1, 2015 at Montpelier, Vermont.

s/ Alfred Gobeille)	GREEN MOUNTAIN CARE BOARD OF VERMONT
s/ Jessica Holmes)	
s/ Betty Rambur)	
s/ Allan Ramsay*)	

*Board member Allan Ramsay does not join the majority decision on Conditions A.2, A.3, and A.5, and has filed a separate concurrence. Board member Cornelius Hogan has filed a separate dissent.

Filed: July 1, 2015

Attest: s/ Janet Richard
Green Mountain Care Board, Administrative Services Coordinator

Ramsay, Concurring:

The Applicant has made a compelling case in support of the need for replacing inpatient beds by constructing a new inpatient bed facility. At hearing, we heard from health care professionals, patients, community members, and the nurse's union (VFNHP) about and the limitations of the existing, outdated patient rooms, and why this Project makes sense. I agree a certificate of need should issue and the Project should move forward, but as discussed below, would not impose Conditions A.2, A.3 or A.5.

Condition A.2:

In 2013, the Board established the net patient revenue targets for all Vermont hospitals for FY 2014-2016 and issued budgetary guidance for the hospitals to follow. *See* http://www.gmcboard.vermont.gov/sites/gmcboard/files/Hospital/Net_Patient_Review_Policy.pdf. For the past two years, the Applicant consistently followed the Board's hospital budget guidelines. Under Condition A.2, however, the Applicant is now required to abide by a net patient revenue target for FY2016 that is lower than the one set by the Board, for the sole reason that it wishes to proceed with a capital project that has been planned and that we have been aware of for the past several years. In addition, this condition requires that for FY2017, the Applicant accurately predicts and prepares its budget to align with hospital budget requirements that the Board has neither considered nor issued, and won't for some time.

The Applicant's business plan for the new bed facility includes its known and current financial information and its historical and future utilization trends. The Applicant has exercised diligence and judgment in its effort to predict the effects of the Project on net patient revenue and operating margin, without relying on an increase in the rates Vermonters will pay. The Applicant has given appropriate consideration related to how it will manage other capital expenditures, expense reduction, and productivity enhancement if the financial projections in its management case change over the course of the Project. The Applicant cannot be expected to know, or predict with certainty, the future effects of health care and payment reform.

For these reasons, I believe the Applicant has demonstrated its ability to operate at the levels set forth in its management case and condition A.2 needlessly delays the onset of construction.

Condition A.3:

Condition A.3 is unnecessary and will further delay the Project. The Applicant has already demonstrated a progressive increase in the number of days cash on hand, which from FY2013 to FY2014 rose from 149 to 158. Responses (2/26/15), Exhibit 6. Moreover, days cash on hand is only one measure of liquidity in health care financing and is influenced by the lag time between provision of health care services and payment. The Applicant has in place sufficient safeguards to ensure that it will meet its funding obligations, has pledged to reduce future capital spending if needed, and has already set aside funds in a short term depreciation account to assure adequate liquidity. Accordingly, I do not believe that the start of construction activity should be dependent on achieving a specific target for days cash on hand for a prescribed period of time.

Condition A.5:

Last, I do not agree that the Applicant must return to the Board with an alternative financing plan. The financing plan, as proposed by the Applicant, includes issuance of a \$100M bond with 12.3% in capitalized interest. The Applicant's management team made a reasoned decision to pay interest only on this debt while older debt is fully retired, and thereafter begin paying down the principal. None of the financial consultants that have reviewed the plan (Deloitte, Kaufman Hall, Ponder) have opined that the financing plan, including repayment of the debt in the manner chosen by the Applicant, was imprudent or unreasonable.

I therefore believe the Applicant should have the right to make such decision based on its overall financial plan for the Project and should not be asked to restructure its debt proposal.

In all other respects, I agree with the Board's decision that a certificate of need shall issue, and the remaining conditions set forth in the Order.

s/ Allan Ramsay

Hogan, Dissenting:

I do not agree with the majority of the Board that the Applicant has proven it can sustain the financial burden of the Project. I therefore cannot support the issuance of a certificate of need.

This Board is tasked with controlling costs and improving the overall health care system in Vermont. Vermont's hospitals, including UVMMC, have partnered with us to work toward these goals and have commendably lowered net patient revenues and improved their balance sheets.

The record in this CON shows that the inpatient bed replacement project is badly needed and that it has been well thought out and designed. My concern, however, is with the Applicant's

financial plan and with the fundamental assumptions that form the basis for that plan. I believe that it is likely that one or more of these assumptions will not materialize, which will result in increased health care costs for Vermonters, whether by higher rates, room fees or other charges. In my view, the numerous risks identified by the majority in the financial section of the order are substantial enough to warrant a “no” for the Project. Additionally, I believe that the Applicant’s financial plan fails to account at all for the inevitable changes to our health care system.

The Applicant’s financial plan assumes that Medicaid and Medicare payments will not be less than they are today. I find little basis for that assumption; for example, the federal government has made clear that Medicare payments will move from volume- to value-based. *Better, Smarter, Healthier: In historic announcement, HHS sets clear goals and timeline for shifting Medicare reimbursements from volume to value*, HHS Press Release (1/26/15), available at <http://www.hhs.gov/news/press/2015pres/01/20150126a.html>.

The Applicant also fails to account for potential decreases in net patient revenue growth, which will significantly reduce operating margins. According to Kaufman Hall, a 1.5% decrease from the management case assumption of 3.5% would require annual expense reductions of \$15.8M, in addition to the \$16.6M the Applicant needs to offset the costs of the Project. The Applicant has stated it does not intend to raise rates as a result of this Project, but I am unconvinced it can reduce its expenses to this extent, and increasing revenues through higher rates could be its most viable option.

The Applicant also assumes that it will be able to move away substantially from fee for service payments. OneCare Vermont Accountable Care Organization (ACO) was established primarily to meet this objective. If it falters, I believe that the risks associated with this Project will increase.

The State of Vermont has invested solidly in the Blueprint for Health, SASH (Support and Services at Home), and in significant expansions of home health care. These programs, as part of their missions, are designed specifically to avoid hospitalization. The Applicant assumes that its inpatient volume will not decrease over ten years. If SASH, the Blueprint and home health agencies are successful in their missions, the Applicant’s bed need may further decrease and negatively impact its revenue projections.

The hospitals in Vermont, and particularly UVMMC, have performed well by reducing net patient revenue to 3.6% or less over the last few years in response to the Board’s hospital budget guidance, while still improving their balance sheets. It is possible that in the future the Board will require net patient revenue growth below 3%. UVMMC is already one of the best academic medical centers in the nation for controlling costs and expenses. Given its remarkable performance, I question whether UVMMC can continue to cut expenses to meet both its revenue projections and the Board’s hospital budget guidelines.

Final construction cost is not yet established, but at the schematic design level, the estimated cost is significantly lower—up to 40% lower, according to the architect’s hearing testimony—than costs for a number of other recent projects, including the project at Eastern Maine Medical Center. TR (5/18/15) at 192-94 (Morris). Without knowing construction cost

with more exactitude, I am concerned that the Applicant's seemingly low estimate may foretell cost overruns that exceed its budgeted construction contingency.

Further, the Applicant requires \$30M in philanthropy as a component of its management plan, which it intends to raise by 2018, and has already raised approximately \$11M. If the Applicant cannot reach its ambitious goal in a timely fashion, it will need to make up for the shortfall, which may be in the form of future rate increases.

I believe that one or a combination of these risks will materialize in some manner.

The majority believes that it can mitigate financial risk by imposing specific financial conditions which the Applicant must meet prior to and during construction. Although the Board through its hospital budget process sets broad parameters within which our hospitals must function, I do not agree that it should micromanage hospital affairs. Moreover, the majority's requirement of specific financial conditions will not and should not be used to remedy deficiencies of the application, and will be toothless once ground is broken.

Based on what I believe is a lack of convincing evidence that the Applicant can financially sustain this Project, I would deny a certificate of need for the construction of a new inpatient facility. However, the Applicant may return to the Board in two years when I believe it can show that the liquidity of its balance sheet has improved, it has performed as it states it is capable, and when the risks pointed out by consultants Kaufman Hall and Deloitte have been minimized.

I would, however, allow the Applicant to purchase the parcel of land from the University of Vermont at this time, for the reasons set forth in the majority decision.

s/ Cornelius Hogan