

STATE OF VERMONT
GREEN MOUNTAIN CARE BOARD

In re: Application of Northeastern Vermont)
Regional Hospital, Replacement of) GMCB-005-17con
Mobile with Fixed MRI Unit)
& Related Construction and Renovation)
)

STATEMENT OF DECISION AND ORDER

Introduction

In this Decision and Order, we review the application of Northeastern Vermont Regional Hospital (NVRH, the hospital, or the applicant) for a certificate of need (CON) to replace its existing mobile magnetic resonance imaging (MRI) unit with a fixed MRI unit and perform related construction and renovations for a total cost of \$3,191,912.

For the reasons set forth below, we approve the application and issue the applicant a CON, subject to the conditions set forth therein.

Procedural Background

On March 2, 2017, NVRH filed a CON application and request for expedited review to replace its existing mobile MRI, located onsite in a trailer, with a fixed MRI, and to perform related construction and renovation to house the new equipment. On March 17, 2017, the Board granted the applicant's request for expedited review pending response to the required public notice. As there were no responses, expedited review was granted.

The Board requested that the applicant provide additional clarifying information on five separate occasions between March 29, 2017 and January 25, 2018. The applicant responded to each set of questions and on May 31, 2018, the Board closed the application.

Jurisdiction

The Board has jurisdiction over this matter pursuant to 18 V.S.A. § 9375(b)(1) and 18 V.S.A. § 9434(b)(1)(2).

Findings of Fact

1. The applicant, which has utilized MRI technology on a full or part-time basis since October 1999, seeks to replace its refurbished Siemens Magnetom Symphony RS MRI (the Symphony RS) with a new Siemens Magnetom Aera MRI (the Aera) at a total cost of \$3,191,912. Application (App.) at 8; Response (Resp.) (April 30, 2018) at Table 1. The Symphony RS, currently on lease from Siemens, was manufactured in 2006, later refurbished, and installed in a fixed onsite trailer in 2012. App. at 8, 16.

2. To accommodate the Aera, the applicant proposes to construct a 1,374 gross square foot addition on the site where the fixed trailer housing the Symphony RS is currently parked. The new space will include a magnet room, control and equipment rooms, an injection room, and a post-screened holding room. An existing access office will be converted to a changing room, and a new access office will be constructed to replace it. App. at 19.

3. The new construction offers advantages over the use of a modular structure. With a life expectancy of 30 years, it provides a long-term solution for housing MRI services; the new workspace configuration allows for a more efficient flow of patients; and NVRH will have more options for the installation of replacement MRI scanners in the future. App. at 21.

4. The proposed construction is compliant with applicable Facility Guideline Institute (FGI) guidelines, and the applicant is working in partnership with Efficiency Vermont to incorporate energy efficiency components appropriate for this project. App. at 20-21, Appendix 5.

5. Construction is expected to take approximately 26 weeks, beginning in September 2018 and ending in April 2019. App. at 21; Resp., April 30, 2018 at 2. The Symphony RS will be relocated elsewhere on the NVRH campus and remain in use until the Aera is fully operational, assuring no interruption in MRI service. App. at 21.

6. The Symphony RS has a number of clinical shortcomings. *Id.* at 9. It is susceptible to visual artifacts,¹ and scans for certain patients are of poor image quality, necessitating referrals of these patients to other facilities for repeat scans. App. at 17; Resp. (July 13, 2017) at 3.

7. Since the Symphony RS was manufactured in 2006, MRI technology has significantly improved, resulting in increased spatial resolution of images, reduced scan times, fewer artifacts, increased ease of operation leading to fewer scanning errors, and the ability to scan varying body types. Technological improvements have also improved postsurgical visualizations and increased diagnostic accuracy in scanning musculoskeletal structures. App. at 8-9; Resp. (July 13, 2017) at 3.

8. Compared to the Symphony RS, the Aera will provide superior imagery for clinical decision-making and is less susceptible to visual artifacts, which reduce the need to refer patients to other facilities for rescans. This in turn will allow patients access to effective MRI services close to home and reduce the inconvenience and cost of additional travel. *Id.* at 9, 16-17. The Aera will also have a wide-bore opening to accommodate claustrophobic patients. *Id.* at 11.

9. The Aera will not be connected to emergency power and will not have power conditioning equipment such as an uninterruptible power supply (UPS). The control station computer, however, will have a UPS. Resp. (April 30, 2018) at 3.

10. If the system or magnet was damaged due to a sustained power outage, repair would be covered by the service agreement with Siemens. Email from NVRH Chief Financial Officer

¹ Visual artifacts are anomalies apparent during visual representation in digital graphics and other forms of imagery.

Robert Hersey to Donna Jerry (May 23, 2018). The service agreement will cost \$135,460 per year, which is included in the applicant's operating expenses beginning in Year 2. Resp. (July 13, 2017) at 4; Email from Robert Hersey to Donna Jerry (June 11, 2018).

11. Following installation of the Aera, annual MRI capacity will remain unchanged. The applicant anticipates taking scans eight hours a day, five days a week, resulting in a total annual capacity of approximately 1,984 scans from FY 2014 through FY 2021.² Resp. (April 30, 2018) at Attachment 1.

12. The applicant projects performing 1,340 scans in FY 2018 (67.5% of capacity); 1,355 in FY 2019 (68.3% of capacity); and 1,375 annually in both FY 2020 and FY 2021 (69.3% of capacity). Resp. (April 30, 2018) at Attachment 1. The applicant attributes projected increases in scan volume from FY 2019 to 2021 to the hiring of a new orthopedic surgeon and retention of patients who are currently referred to other facilities due to claustrophobia or poor image quality. Resp. (July 13, 2017) at 1.

13. To assure appropriate imaging decisions, NVRH radiologists use American College of Radiology (ACR) criteria. NVRH has also signed an agreement with National Decision Support for ACR Select, which is a comprehensive clinical decision support database providing evidence-based support and national standards for the appropriate utilization of all medical imaging procedures. If an imaging procedure is requested but not considered appropriate based on evidence-based practices, the NVRH radiologists initiate a discussion with the referring provider to suggest a more appropriate imaging procedure. App. at 15.

14. The project will not significantly increase the cost of care or impact other services offered at NVRH. App. at 16, 22. Although there may be a reduction in MRI imaging costs at facilities currently receiving patients from NVRH for MRI scans due to poor image quality or inability to scan claustrophobic patients, the project will not significantly reduce overall health care costs. *Id.* at 16.

15. The applicant does not plan to increase charges due to this project, and the average charge for the five highest volume scans (lumbar spine, brain, brain stem, upper extremity, and lower extremity) will remain level through FY 2021. Resp. (July 13, 2017) at 3-4.

16. The project's total cost is projected to be \$3,191,912. The Aera itself will cost \$1,385,769³, while expenses related to construction and renovation will cost \$1,806,143. App. at 19; Resp. (April 30, 2018) at Attachment 1, Table 1.

² With current availability, 2,080 scans could theoretically be performed every year. However, because scans are not performed on eight holidays (-64 scans) or on four days reserved for annual preventative maintenance (-32 scans), actual annual capacity is 1,984 scans. Resp. (April 30, 2018) at Attachment 1.

³ On January 10, 2018, NVRH submitted an email from Siemens Medical Solutions USA, Inc, the MRI vendor, stating that Siemens will honor the pricing quote of \$1,385,769 for the Aera until the CON request is approved.

17. The applicant will self-finance the project, and budgeted a total of \$2,100,000 for the project in both its 2016 and 2017 budget submissions. Resp. (April 30, 2018) at 2.

18. The project will not materially change NVRH's annual operating margin or other key financial metrics. App. at 22. The applicant projects a \$424,500 aggregate reduction in net operating margin associated with the project in FYs 2019-2021, representing less than one percent of its total operating expenses. Resp. (April 30, 2018) at 4.

19. During FY 2018, NVRH will begin a "lean" or similar approach to reviewing opportunities to improve efficiencies and eliminating costs throughout the organization and anticipates finding additional savings of at least \$124,146. Resp. (July 13, 2017) at 3.

20. Due to the small number of additional MRI scans that will be performed with the Aera, the project's impact on the applicant's net patient revenue (NPR) growth will be minimal. The project will increase the applicant's NPR by \$19,880 in FY 2019, \$49,800 in FY 2020, and \$51,400 in FY 2021. Due to the project's low impact on the applicant's NPR growth, a reduction in its NPR growth target will not materially change its projections. Resp. (April 30, 2018) at 2.

21. The project does not affect the availability of affordable, accessible patient transportation to MRI services on NVRH's campus. App. at 11, 24.

22. No new health care information technology will be purchased or leased as part of this project. *Id.* at 24. There are no conflicts of interests between NVRH or any NVRH physician and Siemens or any other contractor on this project. *Id.* at 18.

Standard of Review

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

Conclusions of Law

I.

Under the first statutory criterion, the applicant must show that the application is consistent with Vermont's health resource allocation plan (HRAP). The HRAP, last updated in 2009, identifies needs in Vermont's health care system, resources to address those needs, and priorities for addressing them on a statewide basis. *See* 18 V.S.A. § 9437(1).

Here, the applicant has persuasively shown that this project is consistent with the relevant HRAP standards. *See, e.g.*, Standard 1.4 (volume of services is positively correlated to better quality, applicant can maintain appropriate volume, and project will not erode volume at any other Vermont facility); Standard 1.6 (applicant will collect and monitor data relating to health care quality and outcomes); Standard 1.7 (the project is consistent with evidence-based practice); Standards 1.9, 1.10, 1.11, 1.12 (project is cost-effective, energy efficient and conforms with FGI Guidelines); Standard 3.4 (project was included in hospital budget submissions); Standard 3.5

(information available on current utilization and internal program instituted to prevent unnecessary utilization); Standard 3.7 (equipment is fully depreciated); Standard 3.23 (equipment is needed, reduces costs and/or improves quality); Standard 3.24 (no conflicts of interest). We thus conclude that this criterion has been satisfied.

II.

Under the second criterion, the applicant must demonstrate that the project cost is reasonable because first, the applicant can sustain any financial burden likely to result from the project's completion; second, the project will not cause an undue increase in the costs of care, and third, "less expensive alternatives do not exist, would be unsatisfactory, or are not feasible or appropriate." 18 V.S.A. § 9437(2). In determining whether the project will unduly increase the costs of care, the Board must consider factors that include the financial impact on the facility's services, expenditures and charges, and whether such impact is outweighed by the project's benefits to the public. 18 V.S.A. § 9437(2)(B).

First, the applicant can sustain the financial burden of the project. Although entirely self-financed, the project will not materially change the applicant's annual operating margin or other key financial metrics, including NPR growth. *See* Findings of Fact (Findings) ¶¶ 17, 18, 20. Indeed, the aggregate reduction in net operating margin associated with the project in FYs 2019-2021 represents less than one percent of its total operating expenses. Findings ¶ 18. The applicant will also begin reviewing opportunities to improve efficiencies and eliminate costs later this year—a process through which it expects to find at least \$124,146 in additional savings. Findings ¶ 19.

Next, the project will not unduly increase the costs of care. NVRH's annual MRI capacity will remain unchanged following installation of the Aera, and the average charge for the five highest volume scans will remain level through FY 2021. Findings ¶¶ 11, 15. Beyond retaining patients who are currently referred to other facilities due to claustrophobia or poor image quality, the project will have minimal, if any, impact on services or expenditures of other hospitals or clinical settings—including other imaging modalities at NVRH. Findings ¶¶ 12, 14. Though the project is unlikely to significantly reduce overall health care spending, *see* Findings ¶¶ 14, 20, we find that its cost is reasonable in light of its benefits, which we elaborate on below, when we address alternatives to the project.

The project replaces an eleven-year old refurbished mobile MRI unit that is beyond its useful life with a unit that incorporates up-to-date technology. Findings ¶¶ 1, 6-8. It will improve a critical diagnostic imaging service to meet community need, reduce the number of patient referrals to other facilities for rescans, and allow certain patients to access their care closer to where they live, alleviating the costs and inconvenience of additional travel. Findings ¶ 8. The project also includes the added long-term benefit of providing a permanent structure to house the replacement unit within the hospital's Diagnostic Imaging Department. Findings ¶ 2, 3. Given these benefits to providers, patients and their families, we find that the project's total cost of \$3,191,912, including new construction and renovation expenses, is reasonable, and that any less expensive alternatives would be infeasible or inappropriate. *See* Findings ¶ 16.

III.

Under the third criterion, 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).

NVRH has offered MRI imaging services since 1999. Findings ¶ 1. The Symphony RS currently in use at NVRH has a number of clinical shortcomings related to its outdated technology and is susceptible to visual artifacts. Findings ¶ 6. These issues have resulted in repeat scans for certain patients, who are typically referred to another facility. *Id.* As we discussed above with respect to the project’s cost, replacing this critical piece of equipment with up-to-date technology will increase diagnostic accuracy and reduce the need for patients to travel to other facilities for rescans. Findings ¶ 8. In addition, the Aera will have a wide-bore opening that can accommodate all patients, increasing access to MRI services in NVRH’s service area. *Id.* We thus conclude that there is an identifiable and existing need for the project, satisfying the third criterion.

IV.

Under the fourth criterion, the applicant must demonstrate that the proposed project will improve the quality of health care in Vermont, provide greater access to health care for Vermonters, or both. 18 V.S.A. § 9437(4). The Aera’s enhanced technological capability, as compared with the Symphony RS, will substantially improve the quality of patient care by reducing the need for repeat MRI scans, which generate added costs to providers, patients, and to the system as a whole. Findings ¶¶ 7, 8. Use of the new MRI will increase access to care by eliminating the need for patients to travel to other facilities, farther from their homes, to repeat their MRIs. Findings ¶ 8. Based on the application and supporting materials, we conclude that the applicant has demonstrated that the project will improve both quality and access to care for patients in its service area, and therefore satisfied the fourth criterion.

V.

The fifth criterion requires that the applicant demonstrate the project will not have an undue adverse impact on other services it offers. 8 V.S.A. § 9737(5). In this case, the applicant currently provides MRI services, *see* Findings ¶ 1, and will simply replace its outdated MRI with newer technology and construct a permanent structure, with adequate space for associated MRI imaging functions, to house the new unit. Findings ¶¶ 2-8. Moreover, the aggregate reduction in the applicant’s net operating margin associated with the project is minimal, and represents less than one percent of its total operating expenses in FYs 2019-2021. Findings ¶ 18. We are thus persuaded by the applicant’s assertions that the project will not have an undue adverse impact on its services, expenditures or charges, *see* Findings ¶¶ 14, 15, and conclude that it has satisfied the fifth criterion.

VI.

For all of the reasons discussed throughout this decision, we further conclude that the project will “serve the public good,” satisfying the sixth criterion. 18 V.S.A. § 9437(6). Specifically, the project will enable NVRH to provide high quality MRI imaging services to residents of its service area, allowing for improved clinical decision-making and increased diagnostic accuracy in scanning musculoskeletal structures. Findings ¶¶ 7, 8.

VII.

The seventh criterion requires the applicant to adequately consider the availability of affordable, accessible patient transportation services to the facility. 8 V.S.A. § 9437(7). Because the project does not add or relocate any patient or transportation services, the applicant has satisfied this criterion. *See* Findings ¶ 21.

VIII.

Finally, the applicant must demonstrate that the purchase of new health information technology conforms to the State’s health information technology plan. 18 V.S.A. § 9437(8). To the extent that this criterion is relevant to the purchase of new medical equipment, we conclude that it has been satisfied.

Conclusion

Based on the above, we conclude that the applicant has demonstrated that it has met each of the required statutory criterion under 18 V.S.A. § 9437. We therefore approve the application and issue a certificate of need, subject to the conditions outlined therein.

SO ORDERED.

Dated: July 2, 2018 at Montpelier, Vermont.

s/ Kevin Mullin, Chair)

s/ Jessica Holmes)

s/ Robin Lunge)

s/ Tom Pelham)

s/ Maureen Usifer)

GREEN MOUNTAIN
CARE BOARD
OF VERMONT

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