

Project Description

UMass Memorial Health Care, Inc. (the “Applicant” or “UMass Memorial”), with a principal place of business at One Biotech Park, 365 Plantation Street, Worcester, MA 01605, seeks a Determination of Need (DoN) from the Massachusetts Department of Public Health (DPH) for the acquisition of DoN-Required Equipment by its planned Satellite Emergency Facility (the “Planned SEF”) to be located at 490 Main Street, Groton, MA 01450 (the “Proposed Project”). Following the approval of this Proposed Project, the SEF will operate as a licensed satellite of UMass Memorial Medical Center (“the “Medical Center”).

UMass Memorial is a Massachusetts nonprofit corporation that owns and operates an integrated health care system comprised of a network of hospitals, including one academic teaching hospital, the Medical Center, and four community hospitals¹, as well as other health care providers that serve the residents of Central Massachusetts. UMass Memorial is the sole corporate member of UMass Memorial Community Entities, Inc. and certain other affiliates. UMass Memorial’s mission is to care for the diverse communities of Central Massachusetts, provide health care services to indigent patient populations, and serve as the clinical partner to UMass T.H. Chan Medical School, the only public medical school in Massachusetts.

The Medical Center is the Applicant’s teaching hospital and includes four campuses: Hahnemann, Memorial, North Pavilion and University². The Memorial, North Pavilion, and University campuses are licensed to operate a total of 826 inpatient beds and provide the full spectrum of tertiary acute care. These campuses offer inpatient and outpatient medical and surgical services, including cardiology, neurology, and radiology. In addition, the Medical Center has two emergency departments (ED) and Memorial Campus and University Campus, the second largest ED in Massachusetts and is the only Level 1 trauma center in Central Massachusetts.

The Applicant proposed opening the Planned SEF in response to the urgent health care access challenges facing the Nashoba Valley region following the closure of Nashoba Valley Medical Center (NVMC) in August 2024. This facility will directly address the critical gap in emergency services left by NVMC’s closure and aligns with the recommendations of the Nashoba Valley Health Planning Working Group (the “Working Group”) and work done by Health Care For All (HCFA), both of which identified restoration of emergency care, including diagnostic services such as CT imaging, as a top community priority.

The Planned SEF will be a 24/7, DPH-licensed facility offering the same scope and level of emergency care as traditional hospital emergency departments. Central to its licensure and clinical effectiveness is the inclusion of a computed tomography (CT) unit, which is required under DPH regulations and essential for timely diagnosis and treatment of conditions such as stroke, trauma, and acute abdominal pain. Without on-site CT capabilities, the Planned SEF will be unable to meet regulatory standards or provide the level of care necessary for emergency patients, particularly given Groton’s geographic distance from the nearest emergency care facilities.

This Proposed Project, the installation of a CT unit at the SEF, will ensure the Applicant’s compliance with licensure requirements, support timely and accurate emergency care, and contribute meaningfully to the Commonwealth’s goals for cost containment, improved public health outcomes, and delivery system transformation. By reducing travel times, alleviating pressure on overcrowded emergency departments, and enabling rapid diagnosis and treatment, the Proposed Project will

¹ UMass Memorial Health - Harrington Hospital, UMass Memorial HealthAlliance - Clinton Hospital, Marlborough Hospital, UMass Memorial Health-Milford Regional Medical Center.

² Effective 1/1/2026, Marlborough Hospital will become a campus of the Medical Center.

enhance care coordination, improve patient outcomes, and lower long-term health care costs. Furthermore, through robust community engagement and collaboration with the Nashoba SEF Committee (the “Committee”), which included representatives from local health and safety organizations including fire department officials, physicians, veterans’ advocates, and community health leaders, the Proposed Project reflects a patient-centered approach that is responsive to the region’s unique needs.

Factor 1. Applicant Patient Panel Need, Public Health Values and Operational Objectives

In May 2024, Steward Health Care System, LLC (Steward) announced it filed for protection under Chapter 11 bankruptcy laws. In August 2024, during the bankruptcy proceedings, Steward closed NVMC in Ayer, which eliminated access to emergency care in the region, requiring residents to seek care farther away or delay care altogether. Subsequently, Governor Healey announced the formation of the Working Group. The Working Group began meeting in October 2024 and, following a series of meetings, data analysis, and stakeholder and community engagement, produced a final report detailing the Working Group’s findings and recommendations to address the health care access challenges resulting from Steward’s bankruptcy. In parallel to the work of the Working Group, DPH asked HCFA to provide Nashoba Valley’s residents with information about accessing health care and to survey respondents about their experience and top health care concerns. Most respondents cited emergency care as their top concern, leading HCFA to adopt “restoration of emergency care and diagnostic services, facilities for outpatient procedures” as a key recommendation. Similarly, the Working Group determined that short of a full hospital replacement, an emergency department, including critical ancillary services like laboratory, x-ray, and CT, should be included in the first tier of any effort to re-establish health care services in the region.

In response to the communities’ needs, UMass Memorial announced in January 2025 that it would open a SEF in Groton, one of the communities most impacted by the loss of emergency services, resulting in increased travel times for those services. SEFs are DPH-licensed hospital satellites that are open 24/7 to provide the same scope and level of emergency care that traditional hospital emergency departments provide. Additionally, SEFs, like the one to be opened by UMass Memorial, provide local access to emergency care, including for trauma patients who can be triaged and stabilized by SEF staff before being transported (by helicopter or ambulance) to an appropriate hospital.

As required by the DPH hospital licensure regulations, SEFs must provide 24/7 emergency services and “radiology services including CT scans and ultrasound with a clinically appropriate turnaround time from the ordering to the reporting of results” [105 CMR 130.834(D)]. SEFs may provide radiology services at an alternative site with appropriate transfer protocols only if they can ensure a clinically appropriate turnaround time. If a SEF cannot provide that appropriate turnaround time, it must provide radiology services at its facility. In addition, beginning January 1, 2026, SEFs will be required to adhere to DPH’s time targets for stroke care, including access to CT within 25 minutes of arrival at the SEF.

As noted earlier, the Planned SEF will be located in Groton due to its central location within the region and its distance from other emergency services. From Groton Town Hall, the nearest Massachusetts hospitals are more than 16 miles and almost 30 minutes away.³ These distances are significant for many emergency patients, particularly trauma and stroke patients who could be triaged and stabilized at the Planned SEF. Without a CT at the Planned SEF, the delay in receiving CT imaging could adversely impact their course of treatment. It would not be practical, cost-effective, or patient-centered to transport patients from the Planned SEF to an alternative location for CT. As a result, licensure of the Planned SEF is contingent upon the availability of onsite-CT services. Without the Proposed Project, the Planned SEF will be unable to meet the minimum standards for emergency diagnostic services, rendering it ineligible for licensure and operation. To that end, the Proposed Project is necessary to support timely and accurate emergency care and diagnostic services that are needed in the region.

Factor 2. Health Priorities

The Proposed Project will establish on-site CT imaging services at the Planned SEF, thereby addressing a critical gap in emergency care in the community. By expanding access to timely, high-quality diagnostic services in a geographically underserved area, the project will alleviate pressure on overcrowded emergency departments, reduce transportation-related barriers, and improve patient outcomes, particularly for time-sensitive conditions like stroke. In alignment with the Commonwealth's goals for cost containment and delivery system transformation, the project integrates community input through the Committee and supports a patient-centered model of care that enhances coordination, reduces delays, and lowers long-term health care costs.

A. Creating Access to Clinically and Geographically Appropriate Medical Services

The Proposed Project will meaningfully advance the Commonwealth's goals for cost containment by expanding access to high-quality CT imaging services for low-acuity patients in a clinically appropriate setting. Through the first quarter of 2025, Massachusetts EDs recorded 555,097 visits, up from 517,707 in 2023 and 544,949 in 2024, representing a 1.8% increase year-over-year.⁴ This overall increase in the ED utilization rate places additional strain on EDs across the Commonwealth, many of which are already operating at or near capacity.⁵ The Applicant's Planned SEF and this Proposed Project will help alleviate this pressure by ensuring that patients in the surrounding communities can receive emergency care promptly and without additional transport times.

Additionally, the Proposed Project will benefit patients by ensuring timely access to medical services. Studies have found that delays in medical care contribute to increasing the length of patient stays and ED utilizations, as well as worsening patient outcomes.⁶ Conversely, earlier access to CT imaging enables faster diagnosis and treatment, preventing illness progression, and reducing the need for

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From Groton Town Hall to:	Mileage	Travel Time (Minutes)
HealthAlliance-Leominster	16.7	27
Emerson Hospital	18.2	28
Lowell General Hospital	13.9	30

⁴ *Emergency Department Database Reporting*, CHIA, <https://www.chiamass.gov/emergency-department-database-edd-reporting/> (last visited September 24, 2025).

⁵ *ED Capacity Issues Nearing Boiling Point*, BECKER'S HOSPITAL REVIEW, <https://www.beckershospitalreview.com/care-coordination/ed-capacity-issues-nearing-boiling-point/> (last visited September 24, 2025).

⁶ Kendra L Ratnapradipa et al, *Factors Associated With Delaying Medical Care: Cross-Sectional Study of Nebraska Adults*, BMC HEALTH SERV RES (2023), available at <https://pmc.ncbi.nlm.nih.gov/articles/PMC9899134/>.

more expensive interventions.⁷ Thus, on-site CT services at the Planned SEF will enhance care coordination, reduce wait times, and lower long-term health care costs for both patients and the Commonwealth.

Moreover, the Planned SEF will provide emergency CT services in a community that is currently without any nearby emergency care, addressing a critical geographic gap. The closure of NVMC on August 31, 2024, left the surrounding area without a local hospital or ED, resulting in residents needing to travel further distances to receive emergency medical services. Currently, the nearest comprehensive Massachusetts emergency services are in Concord, Leominster and Lowell, each nearly 14 to 18 miles away, requiring 27–30 minutes of travel.⁸ This distance increases the strain on the Commonwealth's emergency medical services system and poses a significant barrier, particularly for residents without reliable transportation. Studies demonstrate that improving transportation access to health care services not only enhances patient outcomes but also reduces avoidable costs.⁹ The Planned SEF will be in Groton, a location chosen in collaboration with the region's fire and EMS chiefs and members of the Committee. By offering emergency CT services in Groton, including CT imaging, the Proposed Project will help eliminate transportation-related barriers that are known to contribute to delayed treatment and poorer health outcomes.¹⁰

B. Use of CT Units in Emergency Care

The Proposed Project will improve public health outcomes by expanding timely access to CT imaging for emergency care. CT imaging is a critical diagnostic tool in emergency medicine to identify a wide range of conditions including heart abnormalities, head injuries, pulmonary embolisms, stroke, and acute abdominal pain.¹¹ Many studies have shown that shorter CT turnaround times improve diagnostic accuracy and clinical outcomes, reducing both emergency department and inpatient length of stay, as well as overall hospitalization costs.¹² As a result, this Proposed Project will improve patient outcomes in emergency care situations, when timely intervention is of the utmost importance.

In accordance with Massachusetts hospital licensure regulations, the Applicant's Planned SEF must possess the capabilities to provide emergency care for patients presenting with symptoms of stroke.¹³ Timely access to CT imaging is essential in stroke management, as rapid diagnosis directly influences treatment outcomes.¹⁴ The median time from stroke symptom onset to arrival at a health

⁷ Clinton Lam et al, *Impact of Radiology Turnaround Time on ED Operations: Literature & Strategies Review*, EM RESIDENT (2021), available at <https://www.emra.org/emresident/article/lit-review-radiology-times/>.

⁸ *Notice of Transition and Closure Plan*, Steward Nashoba Valley Medical Center, Inc., available at <https://www.mass.gov/doc/nashoba-valley-closure-plan-pdf/download>.

⁹ Abigail L. Cochran et al, *Transportation Barriers to Care Among Frequent Health Care Users During the COVID Pandemic*, BMC PUBLIC HEALTH (2022), available at <https://bmcpublichealth.biomedcentral.com/articles/10.1186/s12889-022-14149-x>.

¹⁰ *Transportation Barriers to Care*, *supra* note 8.

¹¹ *Computed Tomography (CT)*, NATIONAL INSTITUTE OF BIOMEDICAL IMAGING AND BIOENGINEERING, <https://www.nibib.nih.gov/science-education/science-topics/computed-tomography-ct> (last visited September 24, 2025).

¹² Hui Guo et al, *Impact of CT Turnaround Time on Diagnostic and Clinical Outcomes in Acute Abdominal Pain: A Retrospective Cohort Study*, AMERICAN JOURNAL OF EMERGENCY MEDICINE (2025), available at https://www.sciencedirect.com/science/article/abs/pii/S0735675725006230?dgcid=rss_sd_all.

¹³ 105 CMR 130:00 Hospital Licensure, MASS.GOV, <https://www.mass.gov/regulations/105-CMR-13000-hospital-licensure> (last visited September 24, 2025).

¹⁴ *Even Short Delays in ER May Reduce the Lifespan of Stroke Survivors*, AMERICAN STROKE ASSOCIATION, <https://newsroom.heart.org/news/even-short-delays-in-the-er-may-reduce-the-lifespan-of-stroke-survivors> (last visited September 24, 2025).

care facility is approximately 188 minutes.¹⁵ Once a patient arrives, immediate neuroimaging is critical because studies show that each hour of delay in treatment can reduce life expectancy by up to 11 months, and even a 10-minute delay may shorten life expectancy by eight weeks. Neuroimaging plays a central role in stroke care, enabling clinicians to identify the cause of the stroke, guide treatment decisions, and predict patient outcomes. While advances in neuroradiology have contributed to reductions in stroke-related mortality and morbidity, long-term disability and complications remain common.¹⁶ These outcomes carry a significant economic burden, with stroke-related health care costs exceeding \$34 billion annually in the United States.¹⁷ By offering CT services locally, the Planned SEF will enable prompt intervention, improve survival rates, and reduce long-term disability for patients in the region.

C. Delivery System Transformation

To support delivery system transformation and ensure the SEF reflects the needs of the community, the Applicant convened the Nashoba SEF Committee, a dedicated committee that includes members of the Nashoba Valley Health Planning Working Group. The Committee is composed of representatives from local health and safety organizations including fire department officials, physicians, veterans' advocates, and community health leaders, all tasked with guiding the development of a patient-centered care model that integrates both the physical and social needs of area residents. The Committee met several times in April and May 2025, to advise the Applicant on emergency service coordination and public education efforts. The Medical Center continues to evaluate and expand committee membership to ensure broad representation from towns within the SEF's service area.

As part of its commitment to community engagement and public health improvement, the Applicant has launched a targeted public information campaign in accordance with 105 CMR 130.827. These efforts include:

- Participation in local city and town events to raise awareness about emergency services and health safety.
- Hosting information tables at public meetings and events, where residents receive clear, accessible materials outlining SEF services, alternative emergency care options, and the proposed opening date.
- Disseminating public safety and prevention education through print and online media channels.
- Ongoing collaboration with the Committee and other community health-related coalitions to ensure messaging is responsive to community needs.

These initiatives are designed to ensure that residents are informed, engaged, and empowered to access emergency care and preventive services. By integrating community voices into the planning and outreach process, the Applicant is advancing delivery system transformation in alignment with the Commonwealth's goals for equitable, coordinated, and community-responsive care.

The Proposed Project will expand access to timely, high-quality emergency care by offering on-site CT imaging at the Planned SEF, reducing strain on overcrowded EDs and lowering health care costs.

¹⁵ *Even Short Delays in ER*, *supra* note 13.

¹⁶ Omid Shafaat and Houman Sotoudeh, *Stroke Imaging*, NATIONAL LIBRARY OF MEDICINE (2023), available at <https://www.ncbi.nlm.nih.gov/books/NBK546635/>.

¹⁷ *Stroke Imaging*, *supra* note 15.

Further, the Proposed Project addresses a critical geographic gap in the area following the closure of NVMC, ensuring residents can access emergency services locally. CT imaging is essential for diagnosing conditions like stroke, where rapid intervention improves outcomes and reduces long-term disability. Through community engagement and collaboration with the Committee, the Applicant is advancing a patient-centered, equitable care model aligned with the Commonwealth's health care transformation goals.

Factor 4. Financial Feasibility

DPH has waived factor 4.

Factor 5. Relative Merit

As previously noted, DPH regulations require the provision of CT by all SEFs. There are no CT units close enough to the Planned SEF to provide CT imaging within a clinically appropriate turnaround time. Therefore, the Planned SEF must have its own CT on site to provide care to patients and there is no alternative option available.

Factor 6. Community Health Initiative Narrative

Please note that after consulting with the DPH CHI Team, the Applicant is requesting to carryout a local CHI, rather than contributing to the Statewide Fund as suggested by the DoN Director (see Appendix 3).

A. Justification for Local Community Health Initiative

At this time, UMass Memorial does not have a Community Health Needs Assessment (CHNA) that covers the service area of the Planned SEF. However, as is evident in UMass Memorial's decision to operate the Planned SEF, UMass Memorial is committed to the health and wellbeing of the region and will further that commitment by carrying out a local community health initiative (CHI). In addition, the Applicant proposes directing the CHI solely within the Nashoba Valley region due to the location of the Proposed Project and because there have been no opportunities for CHIs in this region. Given the size of this CHI, focusing on one region will also allow these funds to be distributed with the most impact.

A. Community Health Needs Assessment

In lieu of a CHNA conducted by a UMass Memorial community hospital member, UMass Memorial seeks to use the CHNA currently being prepared by the Nashoba Associated Boards of Health (NABH). This CHNA will be completed in December, 2025. The Applicant proposes using this CHNA for the following reasons:

1. The NABH CHNA is being conducted using an identical mixed-methods approach with secondary data collection and analysis, primary data collection through interviews and focus groups and a survey.
2. The secondary data list includes measures on demographics, built environment, education, employment, housing, social environment (mental health, substance use disorder, nutrition access), domestic violence (where data is available) and chronic disease.
3. The service area is defined as the municipalities within the NABH footprint.

4. The NABH has equity champions who are engaged to help shape the process so that it is responsive to and reflective of some of NABH's most underserved communities.

Additionally, the NABH CHNA covers the appropriate regional area and focuses on the social determinants of health needs of the community as well as the medical care needs. The Applicant considered available or upcoming CHNAs for local communities. Several did not cover the full community to be served by the SEF, while other available sources of information, such as the work of the Working Group, while of great value, do not have the same focus as a traditional CHNA. The NABH CHNA will help the Applicant and the Groton Community Advisory Board (CAB) it will form for this CHI to better understand the needs of the region, will help identify major challenges faced by vulnerable communities, including families, caregivers, and service providers, and will aid in finding root causes and potential solutions.

B. Timeline for Partner Assessments Submission

Within three months from forming the Groton CAB, the Applicant will work with the CAB members to complete and submit individual Partner Assessments to DPH.