2. Project Description

UMass Memorial Health Care, Inc. (the "Holder" or "UMass Memorial") requests approval for a Significant Change to a previously issued Determination of Need (DoN) (Application #UMMHC-22042514-HE, "Original DoN") in order to build out approved shell space at the North Pavilion campus of UMass Memorial Medical Center (the "Medical Center") located at 378 Plantation Street, Worcester, MA 01605. The proposed build out of North Pavilion campus will accommodate 24 medical/surgical (M/S) beds, consisting of six (6) beds on each of the four (4) inpatient floors of the North Pavilion campus building (the "Proposed Change"). While the Original DoN included the addition of 19 M/S beds at the Medical Center's Memorial Campus ("Memorial Beds"), the Holder since determined that the needs of its patient panel would be better met by adding 24 beds at North Pavilion instead of adding the Memorial Beds. As a result, the Proposed Change represents a net increase of five (5) M/S beds to the Medical Center's license compared to the total number of beds approved in the Original DoN. The Proposed Change will result in an increase of \$8,911,590 to the approved maximum capital expenditure (MCE), for a new total MCE of \$152,153,757.

10. Amendment

10.5.a Describe the proposed change.

The Original DoN approved the renovation of a six-story building adjacent to the Medical Center's University Campus to include 72 M/S beds, one computed tomography (CT) unit, and shell space for future build out to accommodate clinical services. The new building is known as the North Pavilion campus. Additionally, the Original DoN approved the addition of 19 M/S beds at the Memorial Campus. Based on changes to patient need since the filing of the Original DoN, the Holder seeks to re-allocate those 19 beds, which have not yet been constructed or licensed, to the North Pavilion campus. The Medical Center proposes to build out shell space on the North Pavilion campus to accommodate six (6) new beds on each floor, for a total of 24 new M/S beds. As a result of the Proposed Change, the North Pavilion campus will have 96 licensed M/S beds, and the Memorial Campus will remain at its original 307 beds. Accordingly, the Medical Center's license will reflect a total of 850 M/S beds across all campuses, for a net increase of five (5) M/S beds over the Original DoN approval.

10.5.b Describe the associated cost implications to the Holder.

The Proposed Change represents a cost-effective approach to create additional inpatient capacity at the Medical Center by building out shell space in a recently renovated facility dedicated to inpatients. First, the North Pavilion campus represents the best location for additional inpatient capacity because of its proximity to the University Campus. North Pavilion patients often require services available at University Campus and the short distance (less than 1,000 feet) between North Pavilion and University Campus requires fewer resources (e.g., staff, ambulance vehicles) to transport patients between the campuses, resulting in improved patient experience and fewer resources and costs than transporting patients between the Memorial and University campuses. Most significantly, the Proposed Change will not meaningfully increase operating expenses because the proposed beds will be added to existing M/S units and will be able to leverage existing staff to support the increased number of beds. By comparison, the Memorial Beds would be a new standalone unit and require an additional nurse manager, housekeeping staff, and unit secretary.

Furthermore, the capital expenditure for the Proposed Change is \$16,247,426. Since the Memorial Beds were not built, \$7,335,836 of the Original DoN's maximum capital expenditure was not spent. This amount will be allocated toward the Proposed Change resulting in an increase of \$8,911,590 to the original MCE, for a total MCE of \$152,153,757.

10.5.c Describe the associated cost implications to the Holder's existing Patient Panel

The Proposed Change will not increase costs for the Holder's Panel because charges and co-insurance liability will not change due to the expansion of existing services.

10.5.d Provide a detailed narrative, comparing the approved project to the proposed Significant Change, and the rationale for such change.

In 2022, the Holder received DoN approval for the Medical Center to renovate the former Beaumont Rehabilitation and Skilled Nursing Center to create a new campus with four (4) floors of private inpatient M/S beds with 72 beds and shell space. The new building was designed to serve patients who are admitted from the University Campus ED with common conditions¹ that have high rates of inpatient admissions and account for the majority of inpatient admissions in the United States² and similarly at the Medical Center. In January 2025, the North Pavilion campus opened to patients. As the Holder anticipated, the campus has successfully provided the Medical Center with a new facility with staff dedicated to caring for patients with these conditions close to the University Campus, facilitating coordinated care. The North Pavilion campus has met the objectives of the Original DoN and the identified needs of the Patient Panel, making this location the superior option for adding the 19 beds that were to be added at the Memorial Campus. Accordingly, the Holder requests approval to build out existing shell space at North Pavilion to add a total of 24 M/S beds, in place of the 19 Memorial beds for a net increase of five (5) M/S beds to the Medical Center license.

The Medical Centers's North Pavilion campus was purposefully designed to provide high-quality inpatient care to patients presenting with some of the most frequent episodic and chronic conditions that require a hospital stay. Clinicians at the North Pavilion campus have the training and experience to deliver this care, and when patients need more specialized services, the North Pavilion campus is located right next door to the University Campus for such care. Adding beds at Memorial Campus would provide the same level of care but would not be able to leverage the consolidation of resources dedicated to subset of conditions which sets the North Pavilion campus apart. To that end, the Proposed Change will leverage the success of the North Pavilion campus to improve access to inpatient services and health outcomes.

The addition of the North Pavilion campus has allowed the Medical Center to better ensure that patients receive the right care in the right location at the right time. Since the opening of the North Pavilion, the Medical Center has shifted lower acuity patients to the North Pavilion campus who historically would be admitted to the University Campus. As the University Campus has the resources to provide tertiary and quaternary care, this shift has allowed the Medical Center to improve access to the University Campus for higher acuity patients requiring such services. This shift has resulted in lower occupancy rates at University Campus, from 100.3% in FY2024 to an average of 98.6% YTD FY2025⁴. While the inpatient M/S occupancy rate at University Campus is still higher than the Medical Center's ideal occupancy rate of 90%, it reflects the impact of the North Pavilion Campus in providing improved access to the University Campus for patients who need it.

The need for additional inpatient capacity is further supported by the demand for emergency services in and around Worcester. The Medical Center's EDs represent one-third of EDs in Worcester County, which is home to almost 900,000 individuals. In FY2022, the University Campus had 82,262 ED visits. As illustrated in Table 1 below, the number of ED visits is expected to reach 94,000 visits for FY2025 – a 15% increase since FY2022. This increase in University Campus ED visits will translate into an additional 3,000 inpatient admissions, further illustrating the patient panel's need for expanded access to M/S beds.

¹ Conditions commonly treated at the Pavilion campus include community acquired pneumonia, congestive heart failure, COVID, infections, and complications from previous admissions.

² McDermott KW, Roemer M. Most Frequent Principal Diagnoses for Inpatient Stays in U.S. Hospitals, 2018. 2021 Jul 13. In: Healthcare Cost and Utilization Project (HCUP) Statistical Briefs [Internet]. Rockville (MD): Agency for Healthcare Research and Quality (US); 2006 Feb-. Statistical Brief #277. Available from: https://www.ncbi.nlm.nih.gov/books/NBK573113/

³ University Campus's CMI for FY25 YTD (October 2024-June 2025) is 2.1930; North Pavilion campus's CMI for the same time period is 1.4192.

⁴ October 1, 2024-June 30, 2025

⁵ By comparison, Boston has 200,000 fewer residents but seven (7) EDs: MGH, BWH, BWFH, BIDMC, Tufts, BMC, NeighborHealth.

Table 1: Medical Center ED Visits by Campus

Campus	FY22	FY23	FY24	FY25 Annualized	Increase FY22-FY25
University	82,262	84,183	89,673	94,240	15%
Total	123,820	129,574	137,107	140,631	14%

In recent years, the Medical Center has been challenged by a greater need for inpatient capacity, leading to a crisis in University Campus ED. As a result, the Medical Center has been forced to keep admitted patients in the ED until an inpatient bed becomes available. In Massachusetts, a patient is considered to be boarding after waiting in the ED for more than two hours from the decision to admit to an inpatient bed. Boarding in the ED for more than four hours is considered a patient safety risk because of the direct link to increased medical errors, compromises to patient privacy, and increased mortality. Moreover, boarding is a key indicator that hospital resources are overwhelmed, and inpatient occupancy is near or at capacity. Despite these findings, boarding continues to affect the majority of large EDs, including the University Campus ED. In FY2024, monthly average ED boarding was 18,745 hours at the University Campus ED compared to UMass Memorial's affiliated community hospitals with 4,217 hours at HealthAlliance - Clinton Hospital, and just 872 hours at Marlborough Hospital.

Due to the additional capacity available with the opening of the North Pavilion campus, the Medical Center has been able to move patients more quickly from the ED to an inpatient bed. In the second quarter of FY2025, the University Campus experienced a nearly 20% decrease in boarding hours and a reduction of almost 37% per patient through June 2025 as evidenced in Table 2 below.

Table 2: University Campus Average Hours Boarding Per Patient

Campus	FY25 Q1	FY25 Q2	FY25 Q3	FY25 Q1-Q3 Change
University	19.7	16.3	12.5	-36.5%

Similarly, the total hours that medical patients spent boarding in the University Campus ED has decreased by 40% since the first quarter of FY2025 as illustrated in the table below.

Table 3: University Campus Total Hours of Medical Boarding

Campus	FY25 Q1	FY25 Q2	FY25 Q3	FY25 Q1-Q3 Change
University	55,869	42,925	33,340	-40.3%

Despite these decreases, ED boarding at the University Campus is still more than twice the national average of 175 minutes. To improve ED throughput at the University Campus, additional inpatient capacity is needed.

In summary, the Proposed Change will further UMass Memorial's mission to provide the right care in the right location at the right time. Through the Proposed Change, the Medical Center will admit more lower acuity patients to the North Pavilion campus and improve access to University Campus for higher acuity patients. Moreover, patients will be timelier admitted to an inpatient bed from the ED, reducing boarding and improving access to appropriate care. Adding beds at the North Pavilion campus expands access to a designated space and resources that provide patient-centered care and improve health outcomes.

⁶ Janke, A. T., Melnick, E. R., & Venkatesh, A. K. (2022). Hospital Occupancy and Emergency Department Boarding During the COVID-19 Pandemic. *JAMA network open*, 5(9), e2233964. https://pmc.ncbi.nlm.nih.gov/articles/PMC9526134/

Factor 6. Community Health Initiative (CHI)

The Medical Center is currently carrying out the CHI for the Original DoN. Due to the size of the CHI from this Amendment, UMass Memorial will defer to the existing CHI Advisory Committee to decide whether additional years of funding are offered to the current grantees, or whether new grantees through a different funding model. For example, the committee could pursue providing direct funding for a single organization to provide a significant investment.

The breakdown of the CHI monies for the Proposed Change is detailed in the table below.

Table 5: CHI Money Breakdown	Original DoN	Amendment	Combined
MCE	\$143,242,167.00	\$8,911,590.00	\$152,153,757.00
CHI Monies	\$7,162,108.35	\$445,579.50	\$7,607,687.85
Administrative Fee	\$143,242.17	\$17,823.18	\$161,065.35
Remaining Monies	\$7,018,866.21	\$427,756.32	\$7,446,622.53
Statewide Initiative	\$1,754,716.55	\$42,775.63	\$1,797,492.18
Local Initiative	\$5,264,149.66	\$384,980.69	\$5,649,130.35
Evaluation Monies	\$526,414.97	\$38,498.07	\$564,913.04
CHI Monies for Local Awards	\$4,737,734.69	\$346,482.62	\$5,084,217.31

The Medical Center requests approval to use up to four (4%) of local CHI funding (\$17,823.18) for administrative funding. These monies will support promotion of meetings, interpretation/translation, community engagement, stipends for community resident participation, additional staff time for these efforts.

Additionally, the Medical Center plans to use 10% of local CHI funding (\$38,498.07) for evaluation efforts. These monies will allow the Medical Center to retain the expertise of the internal and/or external resources to develop and implement appropriate evaluation metrics of the CHI-funded projects.