

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 transfer of ownership of Marlborough Hospital (MH), located at 157 Union Street, Marlborough, MA 01752. The transfer will be effectuated by a corporate merger of UMass Memorial Medical Center, Inc, the operator of a licensed hospital, and Marlborough Hospital (the “Proposed Merger”). Following the Proposed Merger, MH will become a licensed campus of UMass Memorial Medical Center (UMMMC).

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 - UMMC, and four community hospitals¹, including MH, 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.

MH is a small, 79-bed community hospital located in Central Massachusetts along Interstate 495. It joined the predecessor system to UMass Memorial in 1995, continuing its mission to provide high-quality, comprehensive care in the community. Since 2014, MH is also the site of the UMass Memorial Cancer Center, a satellite of UMMC. In recent years, MH has been significantly challenged by physician shortages, driven primarily by retiring specialty providers who once made up a sizable share of MH’s hospitalists and on-call physicians. The Proposed Merger will allow the Applicant to ensure continued access to specialty care not only at MH, but to also improve timely access to specialty consults affording patients the ability to remain on the Marlborough campus for their care.

Moreover, the Proposed Merger represents a more effective use of resources to better manage patient care, improve health outcomes, and drive quality improvement initiatives. The Proposed Merger will eliminate costs required to maintain a separate hospital license and corporate entity, as well as separate governing bodies, leadership structures and medical staff infrastructures. Furthermore, the Marlborough campus will be fully integrated into the UMMC quality, patient safety and regulatory oversight functions, allowing the Marlborough campus to participate in UMMC’s long-term planning around quality, safety and outcomes. With these potential savings and opportunities, UMMC will be able to explore additional ways to reduce operational costs and maximize services across campuses through investments in the most needed services at MH.

To that end, the Proposed Merger will improve how the Applicant serves its Patient Panel through improved access and health outcomes by re-investing cost savings to further improve access to care in the communities served by MH. Further, the Proposed Merger will maximize the resources currently available at both MH and UMMC to ensure the long-term viability of hospital services in Marlborough and access to tertiary care at UMMC for MH patients. In sum, the Proposed Merger meets the factors for determining need and should therefore be approved.

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

F1.a.i

Patient Panel

Describe your existing Patient Panel, including incidence or prevalence of disease or behavioral risk factors, acuity mix, noted health disparities, geographic breakdown expressed in zip codes or other appropriate measures, demographics including age, gender and sexual identity, race, ethnicity, socioeconomic status and other priority populations relevant to the Applicant's existing patient panel and payer mix.

UMass Memorial Health Care

UMass Memorial owns and operates the largest integrated health care system in Central Massachusetts comprised of a network of hospitals, including one academic teaching hospital and four community hospitals, as well as other health care providers that serve the residents of Central Massachusetts. UMass Memorial's mission is to care for the diverse communities of Central Massachusetts, provide health care services to underserved patient populations, and serve as the clinical partner to UMass T.H. Chan Medical School, the only public medical school in the state. UMass Memorial and each of its provider subsidiaries is a non-profit, tax-exempt organization.

The UMass Memorial patient mix during FY22 through FY24 was approximately 56% female and 44% male each year. Age demographics show that the majority (approximately 58%) of the patients were ages 18-64; however, patients aged 65 and older steadily increased from 23% in FY22 to 24.2% in FY23 and to 25.2% in FY24. Approximately 17% of UMass Memorial's patients are aged 0-17. In terms of racial make-up, most patients self-identified as White (73%). The patient panel also consists of the following races: Black or African American, Asian, Hispanic, and American Indian or Alaska Native as set forth in Table 1 below. These are patient self-reported figures and there is a significant percentage (16.2% in FY24) of the population that either chose not to report or reported in a category not reported here. Therefore, the reported racial make-up of the Patient Panel may not accurately represent the actual racial make-up of UMass Memorial patients. Almost 90% of UMass Memorial patients are from Central Massachusetts.

| Table 1: UMass Memorial Patient Panel² | FY22 Count | FY22 % | FY23 Count | FY23 % | FY24 Count | FY24 % |
|--|-------------------|---------------|-------------------|---------------|-------------------|---------------|
| Total | 382,497 | 100% | 385,391 | 100% | 437,528 | 100% |
| Gender: Female | 214,408 | 55.9% | 216,417 | 56.2% | 245,102 | 56.0% |
| Gender: Male | 168,741 | 44.0% | 168,654 | 43.8% | 192,000 | 43.9% |
| Gender: Unknown | 348 | 0.1% | 320 | 0.1% | 426 | 0.1% |
| Age: 0-17 | 71,898 | 18.7% | 69,375 | 18.0% | 73,694 | 16.8% |
| Age: 18-64 | 223,299 | 58.2% | 222,616 | 57.8% | 253,683 | 58.0% |
| Age: 65+ | 88,300 | 23.0% | 93,400 | 24.2% | 110,151 | 25.2% |
| Race: American Indian/ Alaska Native | 1,071 | 0.3% | 1,156 | 0.3% | 1,283 | 0.3% |
| Race: Asian | 13,044 | 3.4% | 12,555 | 3.3% | 12,867 | 2.9% |
| Race: Black or African American | 25,271 | 6.6% | 27,309 | 7.1% | 30,081 | 6.9% |
| Race: Declined | 4,086 | 1.1% | 4,404 | 1.1% | 6,044 | 1.4% |
| Race: Native Hawaiian/Other Pacific Islander | 322 | 0.1% | 405 | 0.1% | 587 | 0.1% |
| Race: Other/Unknown | 55,982 | 14.6% | 58,980 | 15.3% | 64,878 | 14.8% |
| Race: White | 283,721 | 74.0% | 280,582 | 72.8% | 321,788 | 73.5% |
| Ethnicity: Decline to Answer | 6,146 | 1.6% | 6,731 | 1.7% | 8,761 | 2.0% |
| Ethnicity: Hispanic or Latino | 63,214 | 16.5% | 66,490 | 17.3% | 75,387 | 17.2% |
| Ethnicity: Not Hispanic or Latino | 307,066 | 80.1% | 306,110 | 79.4% | 349,791 | 79.9% |
| Ethnicity: Unknown | 7,071 | 1.8% | 6,060 | 1.6% | 3,589 | 0.8% |
| Origin: Central Mass | 344,096 | 89.7% | 349,550 | 90.7% | 389,285 | 89.0% |
| Origin: Eastern Mass | 15,574 | 4.1% | 13,947 | 3.6% | 15,831 | 3.6% |
| Origin: Western Mass | 9,127 | 2.4% | 9,315 | 2.4% | 14,421 | 3.3% |
| Origin: Out of State | 14,700 | 3.8% | 12,579 | 3.3% | 17,991 | 4.1% |

² FY22 and FY23 do not include Harrington Hospital due to potential overlap. FY24 does include Harrington Hospital.

UMass Memorial serves a large percentage of patients who participate in government insurance programs, including approximately 25% of patients with Medicare Fee-For-Service, 19% with Managed Medicare, and 24% covered by MassHealth. Collectively, public payers make up almost 70% of UMass Memorial's payer mix.

| Table 2: UMass Memorial Payer Mix | FY22 Total Payer Mix | FY23 Total Payer Mix | FY24 Total Payer Mix |
|--|-----------------------------|-----------------------------|-----------------------------|
| Commercial PPO/ Indemnity | 3.5% | 4.4% | 4.3% |
| Commercial HMO/ POS | 25.0% | 24.4% | 23.8% |
| MassHealth | 18.1% | 15.0% | 11.9% |
| Managed Medicaid (ACO/MCO) | 6.5% | 9.0% | 11.5% |
| Managed Medicare (Medicare Advantage) | 16.3% | 17.8% | 18.8% |
| Medicare FFS | 27.0% | 25.9% | 25.5% |
| All other (e.g. HSN, self-pay, TriCare) | 3.6% | 3.4% | 4.1% |
| Total | 100.0% | 100.0% | 100.0% |

Marlborough Hospital

Marlborough Hospital's service area primarily encompasses Middlesex County and serves the residents of the Massachusetts MetroWest region which consists of cities and towns that span east to west from Framingham to Shrewsbury, and north to south from Bolton to Hopkinton. These four cities and towns as well as cities and towns that fall inside the radius they make up, such as Marlborough, Hudson, Northborough, Southborough, Stow, Berlin, Sudbury, and Westborough, have an aggregate population that exceeds 265,000 residents.

As reflected in the table below, the MH patient panel is similar in certain respects to the overall UMass Memorial patient panel. Approximately 60% of the patients served by MH are female and approximately 40% are male, reflecting a patient panel skewing slightly more towards female than the UMass Memorial patient panel. A greater number of patients cared for by MH are ages 18-64 (62% compared to 58%). Approximately 30% are age 65 and older and 8% are aged 0-17. The majority of patients at MH self-identify as White (approximately 79%). The remainder of the patient population is comprised as follows: 4% Black or African American, 3.5% Asian, 16% Hispanic, and 0.2% American Indian or Alaska Native. The vast majority of MH's patients are from Central Massachusetts.

| Table 3: MH Patient Panel | FY22 Count | FY22 % | FY23 Count | FY23 % | FY24 Count | FY24 % |
|---|-------------------|---------------|-------------------|---------------|-------------------|---------------|
| Gender: Female | 24,668 | 60.2% | 25,047 | 60.1% | 25,830 | 60.0% |
| Gender: Male | 16,268 | 39.7% | 16,577 | 39.8% | 17,157 | 39.9% |
| Gender: Unknown | 47 | 0.1% | 45 | 0.1% | 55 | 0.1% |
| Age: 0-17 | 3,408 | 8.3% | 3,499 | 8.4% | 3,348 | 7.8% |
| Age: 18-64 | 25,920 | 63.2% | 25,862 | 62.1% | 26,589 | 61.8% |
| Age: 65+ | 11,655 | 28.4% | 12,308 | 29.5% | 13,105 | 30.4% |
| Race: American Indian/ Alaska Native | 66 | 0.2% | 69 | 0.2% | 89 | 0.2% |
| Race: Asian | 1,442 | 3.5% | 1,435 | 3.4% | 1,487 | 3.5% |
| Race: Black or African American | 1,594 | 3.9% | 1,599 | 3.8% | 1,834 | 4.3% |
| Race: Declined | 443 | 1.1% | 514 | 1.2% | 546 | 1.3% |
| Race: Native Hawaiian or Other Pacific Islander | 23 | 0.1% | 28 | 0.1% | 34 | 0.1% |
| Race: Other/Unknown | 3,723 | 9.1% | 4,719 | 11.3% | 5,130 | 11.9% |
| Race: White | 33,692 | 82.2% | 33,305 | 79.9% | 33,922 | 78.8% |
| Race: Decline to Answer | 594 | 1.4% | 672 | 1.6% | 744 | 1.7% |
| Ethnicity: Hispanic or Latino | 5,851 | 14.3% | 6,723 | 16.1% | 7,043 | 16.4% |
| Ethnicity: Not Hispanic or Latino | 34,341 | 83.8% | 33,964 | 81.5% | 35,021 | 81.4% |
| Ethnicity: Unknown | 197 | 0.5% | 310 | 0.7% | 234 | 0.5% |
| Origin: Central Mass | 37,919 | 92.5% | 38,813 | 93.1% | 40,092 | 93.1% |
| Origin: Eastern Mass | 1,848 | 4.5% | 1,820 | 4.4% | 1,928 | 4.5% |
| Origin: Western Mass | 161 | 0.4% | 161 | 0.4% | 175 | 0.4% |
| Origin: Out of State | 1,055 | 2.6% | 875 | 2.1% | 847 | 2.0% |

Marlborough Hospital Payer Mix

The table below illustrates that, like UMass Memorial, Marlborough Hospital has a high percentage of patients that participate in government insurance programs comprising almost 70% of MH's payer mix.

| Table 4: MH Payer Mix | FY22 | FY23 | FY24 |
|---|---------------|---------------|---------------|
| Commercial PPO/ Indemnity | 1.2% | 1.0% | 0.9% |
| Commercial HMO/ POS | 26.3% | 27.0% | 25.1% |
| MassHealth | 14.2% | 13.8% | 10.8% |
| Managed Medicaid (ACO/MCO) | 7.5% | 9.8% | 12.5% |
| Managed Medicare (Medicare Advantage) | 18.8% | 19.1% | 20.4% |
| Medicare FFS | 27.4% | 25.4% | 25.4% |
| All other (e.g. HSN, self-pay, TriCare) | 4.6% | 4.0% | 4.8% |
| Total | 100.0% | 100.0% | 100.0% |

F1.a.ii

Need by Patient Panel

Provide supporting data to demonstrate the need for the Proposed Project. Such data should demonstrate the disease burden, behavioral risk factors, acuity mix, health disparities, or other objective Patient Panel measures as noted in your response to Question F1.a.i that demonstrates the need that the Proposed Project is attempting to address. If an inequity or disparity is not identified as relating to the Proposed Project, provide information justifying the need. In your description of Need, consider the principles underlying Public Health Value (see instructions) and ensure that Need is addressed in that context as well.

MH is a small community hospital with 79 licensed inpatient beds. Hospitals of this size face challenges with operations and long-term viability. Of the 62 acute care hospitals in Massachusetts³, there are 14 hospitals with fewer than 100 licensed beds, three of which are specialty hospitals⁴ and four are critical access hospitals⁵. After one small community hospital closed in 2024,⁶ MH is one of only seven remaining acute care community hospitals with fewer than 100 beds in Massachusetts.⁷ MH is the smallest separately licensed facility in the UMass Memorial system.

Small community hospitals like MH are finding it increasingly difficult to provide the full array of hospital and specialty services needed in the community. MH, with just 47 med/surg beds and 10 intensive care beds⁸, does not have the inpatient volume required to support a wide array of specialty service lines on site. One reason for the disintegration of access to hospital services at small community hospitals is the challenge of recruiting and retaining primary care and specialty care physicians while also having enough volume to support the high cost of such providers. The limited number of physicians at small hospitals increases the on-call burdens of those who do practice in those settings (i.e., one or two providers having to provide coverage on-call 24/7/365 as opposed to much larger groups of providers sharing on-call responsibilities at larger facilities) creating additional barriers to recruitment and retention. MH relies on both an employed physician and private practice model to provide its patients with access to primary and specialty physician services. UMass Memorial anticipates there will be a continued decline in private

³ CHIA FY22 Cost Report, plus North Adams Regional Hospital which opened in 2024.

⁴ Dana Farber Cancer Institute, Massachusetts Eye and Ear Infirmary and Shriners Hospitals for Children – Boston.

⁵ Athol Memorial Hospital, Fairlawn Hospital, Martha's Vineyard Hospital and North Adams Regional Hospital.

⁶ Nashoba Valley Medical Center.

⁷ MH, Beth Israel Deaconess Hospital- Needham, Baystate Noble Hospital, Baystate Franklin Hospital, Baystate Wing Hospital, Falmouth Hospital, and Nantucket Cottage Hospital.

⁸ MH's license also includes 22 adult psychiatric beds, for a total of 79 licensed beds.

practice primary and specialty care in the MH service area as existing physicians retire or leave for other opportunities, making it increasingly difficult for MH to recruit new physicians to support the needs of its patients in the community.

The lack of access to specialists at MH requires patients who could be cared for at MH to instead be transferred for admission at UMMC or another facility that can support the patient's clinical needs. As a separately licensed hospital, MH must transfer patients to UMMC when specialty consult services are not available at MH. Every time a patient is transferred between separately licensed hospitals, it is considered a discharge from one hospital and an admission to the other hospital. This requires physician, nursing, and care coordination staff to complete discharge and admission procedures that are extensive and time consuming. Under the current license structure, hospital staff must obtain insurance approval before a patient can be transferred to a new facility.⁹ It also means that some patients are responsible for the cost of transfer by ambulance/life flight. These significant logistical and insurance barriers do not exist for the movement of a patient among campuses of the same licensed hospital. Once MH is a licensed campus of UMMC, patients at the Marlborough campus will be patients of UMMC and therefore under the care of a single coordinated clinical staff. If a patient at the Marlborough campus requires services only available at UMMC's Worcester locations, they can be transported to receive those services, and when appropriate returned to MH, without requiring a transfer process, allowing for improved care coordination, eliminating unnecessary delays, and administrative costs. This will help UMass Memorial ensure that patients receive the right care in the right place at the right time more quickly, which UMass Memorial anticipates will improve patient experience and outcomes. To that end, the Proposed Merger will promote enhanced care coordination between UMMC's Worcester campuses and the Marlborough campus, leading to optimized operating room and inpatient bed utilization at the Marlborough campus, as well as improve patient and caregiver access to cutting-edge technologies, medical specialists, and tertiary services that are available through UMMC.

Following the merger, MH patients will become UMMC patients in all aspects of care delivery. As a licensed campus of UMMC, MH will benefit from integration with UMMC's medical staff and the unified healthcare team working across campuses to manage patient needs. First, every specialty of UMMC's medical staff will be able to provide teleconsultation to patients at MH, saving patients from being transferred to UMMC for their care.¹⁰ Additional access to specialists will be provided through the expansion of the UMass T.H. Chan Medical School graduate medical education program at UMMC to the Marlborough campus whereby intern and resident physicians would rotate through the Marlborough campus as they currently do at all inpatient UMMC licensed locations. Over time, UMMC will assess the needs of the Marlborough community to determine how it may be able to expand on-site specialist care and on-call coverage for the needs of the location and its community.

In addition to the improvements to care coordination achieved by combining the medical staffs and care teams of MH and UMMC, cost savings will be realized by operating MH under the UMMC license. First, the costs and resources required to maintain a separate hospital license and corporate entity will be eliminated. In addition, the merger will eliminate costs associated with separate governing bodies, leadership structures and medical staff infrastructure. Further, UMass Memorial anticipates that patient costs resulting from transporting patients between Marlborough and UMMC will be reduced because fewer patients will need to be transported to the University or Memorial campus due to increased availability of specialty teleconsults following the Proposed Merger. Moreover, the Marlborough campus will be fully integrated into the UMMC quality, patient safety and regulatory oversight functions, allowing

⁹ This does not apply to unstable ED patients who must be transferred emergently.

¹⁰ Providers who do not have privileges at MH cannot provide care to MH patients. Therefore, MH patients who require a consultation by a UMMC specialist must be transported to UMMC to receive care in person, either for an office visit or be admitted to UMMC for the remainder of their inpatient admission.

Marlborough patients to participate in UMMMC's robust long-term planning around quality, safety and outcomes. With an integrated infrastructure, efforts will be undertaken to redesign patient care at the Marlborough campus that is not possible as a separately licensed hospital. With these savings, UMMMC will be able to explore additional ways to reduce operational costs and maximize access to services for the region across campuses through investments in the most needed services.

The merger also will provide UMMMC with additional capacity to admit patients requiring a lower acuity level of care at a location other than UMMMC's tertiary care campuses¹¹ while reserving capacity at those locations for patients in need of tertiary and quaternary services. Currently, UMMMC serves patients with a range of acuity. The recent opening of the North Pavilion Building at UMMMC provided 72 additional beds for medicine patients. However, the need to preserve the beds at UMMMC's tertiary campuses for the most acute patients (including for transfers in from the region's other hospitals without tertiary and quaternary services) remains critical. Currently, UMMMC operates in excess of its medical/surgical and critical care capacity, with high numbers of ED boarders averaging approximately 21,000 hours of boarding per month in FY2024, and a significant number of denied transfer in requests, including approximately 20 such transfer requests for MH patients per month. In the short-term after the merger, through appropriate admissions and by keeping appropriate patients at the Marlborough campus with improved access to specialists, UMass Memorial anticipates that the reduction in transfers from Marlborough will result in an increase of approximately 4-6 beds becoming available at UMMMC's University and Memorial campuses. Over time, with the integration UMass Memorial anticipates the Marlborough campus inpatient bed utilization should increase from its current average capacity of 80% to 90% of available capacity. Enhancing care coordination through the merger of the two hospitals will improve the utilization of each hospital's services, including inpatient beds and operating rooms by ensuring care is delivered in the most appropriate setting. A fully integrated Marlborough campus will provide timelier access to inpatient services across campuses, ensuring that patients receive care in the most appropriate setting.

Without the Proposed Merger, it will become increasingly challenging to maintain acute care hospital services in the community at MH for the long term. The cost of operating a 79-bed facility with significant challenges securing and maintaining necessary access to specialty services will jeopardize efforts to allow the region's patients to be cared for in the community. Therefore, ensuring ongoing access to acute care services in the Marlborough community is best ensured by merging MH into UMMMC and operating MH as a fully integrated campus of UMMMC on the UMMMC license. In sum, the Proposed Merger will allow for the alignment, efficiencies, and cost savings necessary to best meet the needs of patients in the most appropriate setting.

F1.a.iii Competition

Provide evidence that the Proposed Project will compete on the basis of price, total medical expenses, provider costs, and other recognized measures of health care spending. When responding to this question, please consider Factor 4, Financial Feasibility and Reasonableness of Costs.

The Proposed Merger will compete on the basis of price, total medical expense (TME), provider costs, or other recognized measures of health care spending as detailed below.

First, UMMMC and MH are high public-payer hospitals with nearly 70% of the hospitals' reimbursement coming from public payers whose rates are mandated with standard payment methodologies across

¹¹ University and Memorial Campuses.

hospitals.¹² Additionally, UMMC is considered a disproportionate share hospital.¹³ As such, the Applicant does not anticipate any impact on TME for these patient populations following the Proposed Merger. Further, a material impact on TME is not anticipated for commercial plans due to the relatively small percentage of Marlborough Hospital patients covered by a commercial plan compared to UMMC. In FY24, MH's total commercial gross patient service revenue (GPSR) would have represented only 4.5% of UMMC's GPSR and accounted for only 3.5% of UMass Memorial's. MH's commercial population at MH is too small to materially impact the TME of either the hospital or the system following the Proposed Merger. There is no anticipated change in physician TME as UMass Memorial Medical Group physicians are paid the same professional rates under existing UMass Memorial payer contracts regardless of whether they practice at MH or UMMC. UMass Memorial does anticipate small savings in TME will occur for those MH inpatients that are transferred to UMMC for higher level of care because they will no longer incur the ambulance/life flight bills as transportation will be as an intrafacility transfer, the expense of which is covered by UMMC. Moreover, through the merger, clinical leadership will have greater flexibility to transport patients between UMMC's inpatient campuses to more fully utilize each campus. This will create more access for tertiary and quaternary care at the University and Memorial campuses, in turn reducing the need to transfer some of the patients for whom there is not currently capacity to more expensive settings in Boston or out of state. By more fully optimizing UMMC's inpatient campuses, the Applicant anticipates that TME will not be materially impacted, and cost savings will be realized.

Next, the merger presents an opportunity to impact TME by ensuring continued access for MH's patients to care in their local community. It is anticipated that the addition of MH to UMMC's license will help to reduce the administrative barriers that delay access to UMMC's specialty care through the consolidation of medical staffs into one unified healthcare team. As a licensed campus of UMMC, MH will be able to reduce costs by reducing or eliminating the administrative costs associated with maintaining separately licensed hospitals, such as multiple medical staffing offices and separate quality and Senior Leadership teams. Over time UMMC plans to use its longstanding lean process to identify other overhead areas that it can streamline to help reduce cost.

UMass Memorial continues to develop and implement innovative strategies that will facilitate lower health care costs over the long-term. For example, UMMC's Hospital at Home program has brought hospital-level care to the homes of more than 2,000 patients, reducing patient hospital readmission rates and admission to skilled nursing facilities. This service is also shown to improve patient outcomes, as well as their care experience. In addition, UMass Memorial recently launched a Subacute Rehab at Home pilot program which brings skilled nursing and rehabilitative care to patient homes. As a campus of UMMC, MH patients will be able to access these innovative solutions, improving and access reducing the cost of care.

F1.b.i Public Health Value /Evidence-Based

Provide information on the evidence-base for the Proposed Project. That is, how does the Proposed Project address the Need that Applicant has identified.

The benefits anticipated by the Applicant that can be achieved through the Proposed Merger are supported by several research studies as further described below.

Small community hospitals face difficult operating and service delivery decisions which can lead to the curtailment or closure of local services. A systematic review of hospital mergers demonstrated that merging hospitals results in economies of scale, leading to significant financial benefits for the smaller

¹² <https://www.chiamass.gov/assets/docs/r/hospital-profiles/2023/marlboro.pdf> ; <https://www.chiamass.gov/assets/docs/r/hospital-profiles/2023/ummc.pdf>

¹³ <https://www.medicaid.gov/medicaid/financial-management/medicaid-disproportionate-share-hospital-dsh-payments/index.html>

hospital.¹⁴ Furthermore, recent multi-hospital studies have shown that mergers and acquisitions are associated with statistically significant improvements in quality outcomes, including lower mortality rates and reductions in readmission rates.¹⁵ To that end, the Proposed Merger will provide the resources to allow the Marlborough campus to continue providing a full spectrum of high-quality inpatient and outpatient services in the community as a licensed campus of UMMC.

Access to Local, Timely Care

According to the Health Policy Commission's 2016 report on Community Hospitals, "[t]he local nature of community hospital services is particularly important for patients for whom accessing care can be difficult."¹⁶ The report acknowledges that this includes many patients covered by Medicare, MassHealth, or other government programs, who are more likely to rely on locally based care.¹⁷ A 2020 article by the Department of Health and Human Services¹⁸ outlines the following key factors associated with "access" to care: coverage, services, and timeliness. Access to specialty care is a particular concern for community hospitals; a 2023 survey of community hospital CEOs found that 71% faced shortages of specialty providers.¹⁹ The Proposed Merger is intended to allow more care to remain or become available to patients in the Marlborough community in order to avoid delays in accessing specialty care, and to provide improved access to timely, locally based care.²⁰

Additionally, scientific literature demonstrates that the setting in which care is provided is a major component of the appropriateness of that care.²¹ Appropriate services require high-quality care to be provided in a setting consistent with each patient's individual clinical characteristics.²² It is well-established that the distance, time, and cost associated with traveling for health care acts as a barrier to access.²³ The Proposed Merger aims to reduce barriers to specialty care by ensuring access to specialty providers in the Marlborough community, allowing for not only the right care to be provided locally at MH, but also improved access to the UMMC Worcester University and Memorial campuses when tertiary care is appropriate. In sum, the Proposed Merger will allow for more coordinated access to the right care with the right team in the right place at the right time.

Integrated Care

The Proposed Merger will improve care for MH's patient panel by consolidating the MH and UMMC medical staffs under one unified medical staff. This will improve efficiency and coordination between the

¹⁴ Monica Giaccotti et al., *Efficiency And Optimal Size Of Hospitals: Results Of A Systematic Search*, PLoS ONE (Mar. 29, 2017), <https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0174533>.

¹⁵ See, e.g., Joanna Jiang et al., *Quality Of Care Before And After Mergers And Acquisitions Of Rural Hospitals*, JAMA (Sept. 20, 2021), <https://jamanetwork.com/journals/jamanetworkopen/article-abstract/2784342>. See also Sean May et al., *Hospital Merger Benefits: An Economic Analysis Revisited*, AMERICAN HOSPITAL ASSOCIATION (Aug. 2021), <https://www.aha.org/guidesreports/2021-08-18-hospital-merger-benefits-econometric-analysis-revisited-executive-summary>.

¹⁶ Health Policy Commission, *Community Hospitals at a Crossroads* (March 2016), <https://www.mass.gov/doc/community-hospitals-at-a-crossroads-findings-from-an-examination-of-the-massachusetts-health/download>.

¹⁷ *Id.*

¹⁸ HealthyPeople.gov, *Access to Health Services* (2020), <https://wayback.archive-it.org/5774/20220413202227/https://www.healthypeople.gov/2020/topics-objectives/topic/Access-to-Health-Services>.

¹⁹ *Top Issues Confronting Hospitals*, AMERICAN COLLEGE OF HEALTHCARE EXECUTIVES (2023), <https://www.ache.org/learning-center/research/about-the-field/top-issues-confronting-hospitals>.

²⁰ See Jiang HJ, Fingar KR, Liang L, Henke RM, Gibson TP. *Quality of Care Before and After Mergers and Acquisitions of Rural Hospitals*. JAMA Netw Open. 2021;4(9):e2124662, <https://jamanetwork.com/journals/jamanetworkopen/fullarticle/2784342>.

²¹ Gianfranco Damiani et al., *The Short Stay Unit as a new option for hospitals: A review of the scientific literature*, 17 MEDICAL SCIENCE MONITOR SR15 (2011), available at <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3539545/>.

²² *Id.*

²³ E.P. Mseke et al., *Impact Of Distance And/Or Travel Time On Healthcare Service Access In Rural And Remote Areas: A Scoping Review*, 37 Journal of Transport & Health 101819 (July 2024), <https://www.sciencedirect.com/science/article/pii/S2214140524000653>; see also *Healthcare Access In Rural Communities*, RHHUB (Dec. 19, 2024), <https://www.ruralhealthinfo.org/topics/healthcare-access#:~:text=Traveling%20to%20receive%20healthcare%20services,ability%20to%20access%20healthcare%20services>.

locations, resulting in improved outcomes for patients.²⁴ The unified medical staff will also save time and money by centralizing the credentialing process under one set of decision makers, eliminating duplicative processes and staffing.²⁵ This centralized decision-making apparatus will allow UMMMC staff across campuses, including the Marlborough campus, to share information for credentialing and privileging with fewer obstacles from confidentiality restrictions, allowing medical staff to operate quickly and efficiently.²⁶ By integrating medical staffs, patients will receive more consistent care, and the hospitals will receive cost savings from integrating staffing, reduced resource duplication, and fewer administrative burdens.²⁷

Hospital at Home

Hospital at Home (HaH) programs improve care delivery and patient outcomes, making them an attractive alternative to traditional inpatient care. As a campus of UMMMC, patients of the Marlborough campus will have access to UMMMC's HaH program. HaH programs, like the one UMMMC operates, allow for the provision of acute and post-acute care directly in a patient's home, reducing inpatient related costs including facility fees, overhead expenses, and eliminating unnecessary tests and procedures.²⁸ Because of these cost-reduction benefits, a randomized controlled trial found that the risk-adjusted cost reduction of home care management was 19% when valuating patients in a Hospital at Home program compared with those treated in a traditional hospital.²⁹ For example, Johns Hopkins's HaH program resulted in cost savings of 19% to 30% compared to traditional inpatient care.³⁰

In addition to economic benefits, HaH programs have significant benefits for patient care. By focusing on preventive and proactive care at home, these programs help tackle the root causes of acute episodes, manage chronic conditions more effectively, and encourage wellness and self-care, leading to overall improvements in public health.³¹ Furthermore, CMS data based on 11,000 patients demonstrated that patients who received hospital-level care at home experienced lower mortality rates and fewer complications compared to patients treated for similar acute conditions in hospitals.³² Additional research, including randomized controlled trials, has also shown that healthcare at home models can shorten patients' lengths of stay, reduce readmission rates, and prevent healthcare-acquired infections.³³ Therefore, the expansion of HaH programs will meaningfully contribute to improved health outcomes and cost savings.

²⁴ *New Flexibility Under the Medicare Conditions of Participation: A Single Medical Staff Option For A Multi-Hospital System And Other Changes*, JD SUPRA (Jul. 16, 2014), <https://www.jdsupra.com/legalnews/new-flexibility-under-the-medicare-condi-15734/>.

²⁵ Deborah A. Datte and Robin Locke Nagele, *Legal And Practical Challenges Of Maintaining A Unified Medical Staff In A Multi-Hospital System*, BLOOMBERG LAW (Jan. 2017), <https://www.bloomberglaw.com/external/document/XEN73QDK000000/health-care-operations-compliance-professional-perspective-legal>.

²⁶ *Id.*

²⁷ Sally Pelletier and Mary Hoppa, *Simplifying Administrative Requirements To Benefit Patients, Physicians, And Systems*, GREELEY (2024), <https://www.greeley.com/insights/system-wide-medical-staff-integration>.

²⁸ *The Value Of Hospital-At-Home Programs For Healthcare Systems And Payers*, INBOUND HEALTH (Sept. 6, 2024), <https://inboundhealth.com/the-value-of-hospital-at-home-programs-for-healthcare-systems-and-payers/>.

²⁹ Aditya Achanta and David E. Velasquez, *Hospital At Home: Paying For What It's Worth*, AMERICAN JOURNAL OF MANAGED CARE (Sept. 10, 2021), <https://www.ajmc.com/view/hospital-at-home-paying-for-what-it-s-worth>.

³⁰ *Hospital At Home*, JOHNS HOPKINS MEDICINE, <https://www.johnshopkinssolutions.com/solution/hospital-at-home/>.

³¹ *The Value Of Hospital-At-Home Programs For Healthcare Systems And Payers*, INBOUND HEALTH (Sept. 6, 2024), <https://inboundhealth.com/the-value-of-hospital-at-home-programs-for-healthcare-systems-and-payers/>.

³² *Providers Betting Big On Future Of Hospital At Home*, AMERICAN HOSPITAL ASSOCIATION, <https://www.aha.org/aha-center-health-innovation-market-scan/2024-04-09-providers-betting-big-future-hospital-home>.

³³ *Id.*; see also Bruce Leff et al., *Hospital at Home: Feasibility and Outcomes of a Program to Provide Hospital-Level Care At Home For Acutely Ill Older Patients*, ANNALS OF INTERNAL MEDICINE (Dec. 6, 2005), <https://pubmed.ncbi.nlm.nih.gov/16330791/>; Gideon A Caplan et al., *A Meta-Analysis of "Hospital In The Home"*, MEDICAL JOURNAL OF AUSTRALIA (Nov. 5, 2012), <https://onlinelibrary.wiley.com/doi/full/10.5694/mja12.10480>.

F1.b.ii **Public Health Value /Outcome-Oriented**

Describe the impact of the Proposed Project and how the Applicant will assess such impact. Provide projections demonstrating how the Proposed Project will improve health outcomes, quality of life, or health equity. Only measures that can be tracked and reported over time should be utilized.

The transfer of MH to UMMMC's license is expected to yield positive outcomes for Marlborough patients in terms of sustained access to community-based specialty care, opportunities for more integrated care with enhanced care coordination, and continuity of care. Access to sustainable, integrated, community-based care, including comprehensive specialty care, is expected to lead to high-quality care, improved population health, and better patient experience.

1. Access to Specialty Care at the Marlborough Campus

The Proposed Merger will decrease the number of Marlborough campus patients who require in-person care at UMMMC through the increased availability of teleconsultations.

Quality Measure #1: The Applicant will track the total number of teleconsultations performed by a UMMMC specialty provider for patients admitted at the Marlborough campus. Given the wide range of specialties that may be available to provide teleconsults post-merger, it is difficult to project the number of teleconsults that will be provided following the Proposed Merger at this time.

| Quality Measure #1 | Baseline |
|-----------------------------|----------|
| Specialty Teleconsultations | |

2. Improved Utilization of the Marlborough Campus

With access to specialty consults via telemedicine, fewer patients will need to be transported to UMMMC for admission to access specialty services. This will result in improved occupancy of medical/surgical services at Marlborough campus, demonstrating improved access to care in the community.

Quality Measure #2: The Applicant will track occupancy rates for inpatient medical/surgical services at Marlborough campus.

| Quality Measure #2 | Baseline ³⁴ | Year 1 | Year 2 | Year 3 |
|--|------------------------|--------|--------|--------|
| Inpatient Occupancy Rate: Medical/Surgical Beds | 80% | 82% | 84% | 86% |

3. Patient Experience

The Applicant anticipates that the Proposed Merger will result in improved patient experiences, specialty services, and potential for reduced wait times. This expansion in choice and accessibility is expected to contribute to a more responsive and patient-centric health care environment.

Quality Measure #3: Patients who have positive experiences receiving health care are more likely to seek out future care when needed. The Applicant will use the Press Ganey survey to measure

³⁴ All baselines provided reflect FY2024 results.

patient satisfaction following an inpatient admission. The specific measure will be “Likelihood to recommend Marlborough Hospital campus”.

Numerator: Total of all responses (top box)

Denominator: # of responses x 100

| Quality Measure #3 | Baseline | Year 1 | Year 2 | Year 3 |
|----------------------------|----------|--------|--------|--------|
| Likelihood to recommend MH | 50.6% | 52% | 54% | 56% |

F1.b.iii

Public Health Value /Health Equity-Focused

For Proposed Projects addressing health inequities identified within the Applicant’s description of the Proposed Project’s need-base, please justify how the Proposed Project will reduce the health inequity, including the operational components (e.g., culturally competent staffing). For Proposed Projects not specifically addressing a health disparity or inequity, please provide information about specific actions the Applicant is and will take to ensure equal access to the health benefits created by the Proposed Project and how these actions will promote health equity.

The Proposed Merger will expand upon and drive UMass Memorial’s commitments to advance its Anchor Mission to reduce health inequities. Adopted by the UMass Memorial Board of Trustees in 2018, UMass Memorial’s Anchor Mission is a commitment to consciously apply the place-based economic power of UMass Memorial, in combination with its human and intellectual resources, to better the long-term welfare of the community in which the institution is anchored.³⁵ The Anchor Mission aims to improve the health and welfare of the community beyond the hospital’s walls, by leveraging UMass Memorial’s organizational assets (intellectual and economic) to address social disadvantage and the pervasive inequality present in our society so that community members have access to resources that will improve their overall social, physical, and financial health. Other priority areas are focused on reducing health disparities by improving health care access for historically disadvantaged and vulnerable populations, improving health outcomes in Worcester County, and collaboration with community organizations to prevent homelessness and reduce food insecurity.

UMass Memorial has implemented the interventions described below as part of its Anchor Mission activities to further address health inequities and promote greater access to care and health equity among diverse and underserved populations.³⁶

Interpreter Services to Support Diverse Patient Populations

One of UMass Memorial’s primary interventions to support diverse populations with limited English proficiency and other communication barriers involves providing professional medical interpretation services to patients and families who prefer to communicate in languages other than English. These interpreters are proficient in over 100 languages, including American Sign Language, and are available 24/7 through various modes, such as in-person, over the phone, and through remote video interpretation.

³⁵ See UMass Memorial, [Anchor Mission](https://www.ummhealth.org/anchor-mission), <https://www.ummhealth.org/anchor-mission>; see also, Harvard Chan School of Public Health, 2019 Case Study, [Anchor Health Beyond Clinical Care: UMass Memorial Health Care’s Anchor Mission Project](https://alumni.sph.harvard.edu/s/1319/images/gid2/editor_documents/mhcm_alumni/ummhc_case_study.final_formatted.pdf?gid=2&pgid=61&sessionid=6ab760ce-c187-4c0a-9199-35743be650cc&cc=1), https://alumni.sph.harvard.edu/s/1319/images/gid2/editor_documents/mhcm_alumni/ummhc_case_study.final_formatted.pdf?gid=2&pgid=61&sessionid=6ab760ce-c187-4c0a-9199-35743be650cc&cc=1; see generally, Healthcare Anchor Network, [Resources for the Anchor Mission](https://healthcareanchor.network/anchor-mission-resources/), <https://healthcareanchor.network/anchor-mission-resources/>.

³⁶ Berry, L.L., Letchuman, S., Khaldun J., Hole, M., *NEJM Catal Innov Care Deliv* 2023;4(4), <https://catalyst.nejm.org/doi/full/10.1056/CAT.22.0329> (indicating that hospitals that invest in community health equity can benefit and advance the entire hospital).

UMass Memorial interpreters facilitate communication not only for medical needs but also for non-medical inquiries, ensuring comprehensive language assistance for our diverse patient community.

Fostering Culturally Proficient Staff

UMass Memorial's commitment to equity extends to fostering a culturally proficient workforce. UMass Memorial established the office of Diversity, Equity, Inclusion and Belonging (DEIB), with dedicated leadership overseeing equity initiatives. As part of this commitment, the DEIB diversity specialists provide racial literacy training around cultural proficiency and unconscious bias to UMass Memorial medical departments.³⁷ This commitment to inclusivity and cultural competence is instrumental in providing equitable care.

Doula Program for Improved Maternal Health

UMass Memorial launched a doula program to positively impact the patient experience and improve birth and postpartum outcomes, with a special focus on addressing documented disparities in outcomes for pregnant patients of color.³⁸ This program, which has shown promise in Central Massachusetts, aims to provide support and care that address specific needs, especially among historically underserved populations.

MyChart Patient Portal in Multiple Languages

To ensure equal access to healthcare information, UMass Memorial is implementing the MyChart patient portal in multiple languages, starting with Spanish and expanding to other languages in the future. This initiative will empower non-English speaking patients to access essential health information and stay in contact with their care teams, contributing to improved health equity.

UMass Memorial Health Equity Improvement Initiatives

Since the onset of the COVID-19 pandemic, UMass Memorial has made an intentional decision to incorporate a health care equity metric in its Board-level "true north" metrics each year.

In 2021, UMass Memorial identified a disparity in rates of well-child visits among Black, Hispanic and white children. As a result of its proactive interventions, UMass Memorial was able to substantially improve well-child visit rates for Black and Hispanic populations while increasing rates for White children, and also effectively narrowing the gap between Black, Hispanic and White patients. In recognition of its achievements, UMass Memorial was honored with the Joint Commission/Kaiser Permanente Bernard Tyson award for its contributions to health equity improvement.³⁹ In 2022, UMass Memorial broaden its

³⁷ UMass Memorial, Diversity and Cultural Awareness, Programming and Education, <https://www.ummhealth.org/umass-memorial-medical-center/about-us/diversity-and-cultural-awareness/programming-and-education>.

³⁸ See UMass Memorial, New Doula Program Aims to Address Maternal Health Inequities (Feb. 28, 2023), <https://pursuit.ummhealth.org/articles/new-doula-program-aims-address-maternal-health-inequities>; Sobczak A, Taylor L, Solomon S, Ho J, Kemper S, Phillips B, Jacobson K, Castellano C, Ring A, Castellano B, Jacobs RJ. The Effect of Doulas on Maternal and Birth Outcomes: A Scoping Review. *Cureus*. 2023 May 24;15(5):e39451, <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC10292163/#:~:text=The%20results%20of%20the%20study,to%20initiate%20breastfeeding%20%5B31%5D>.

³⁹ The Joint Commission, The Joint Commission, Kaiser Permanente name first recipient of Bernard J. Tyson National Award for Excellence in Pursuit of Healthcare Equity, Nov. 2, 2021, <https://www.globenewswire.com/en/news-release/2021/11/02/2325630/0/en/The-Joint-Commission-Kaiser-Permanente-name-first-recipient-of-Bernard-J-Tyson-National-Award-for-Excellence-in-Pursuit-of-Healthcare-Equity.html>; Arvin Garg, Tracey Wilkie, Alison LeBlanc, Rulan Lyu, Thomas Scornavacca, Josephine Fowler, Lawrence Rhein, Eric Alper, Prioritizing Child Health: Promoting Adherence to Well-Child Visits in an Urban, Safety-Net Health System During the COVID-19 Pandemic, *The Joint Commission Journal on Quality and Patient Safety*, Volume 48, Issue 4, 2022, Pages 189-195, [https://www.jointcommissionjournal.com/article/S1553-7250\(22\)00028-9/fulltext](https://www.jointcommissionjournal.com/article/S1553-7250(22)00028-9/fulltext).

efforts to bridge racial disparities in osteoporosis screening, and in 2023, UMass Memorial dedicated efforts to improving colorectal cancer screening rates for Black, Hispanic and Asian patients to close a statistically significant gap in screening rates. Most recently in 2024, UMass Memorial focused on improving data capture of race, ethnicity, language, disability, sexual orientation, and gender identity among hospitalized patients.

In each instance, UMass Memorial achieved measurable improvements across all populations and exceeded its established goals as summarized in the report, Improving Health Equity at UMass Memorial Health.⁴⁰ UMass Memorial continues to measure each clinical initiative described above to ensure the ongoing reduction of the identified disparity and improvement of health outcomes.

MassHealth Health Equity Incentive Program

UMMMC and MH actively participate in the Mass Health Clinical Quality Incentive and Health Equity Incentive programs. These quality improvement initiatives cover a number of domains, including patient experience and care coordination, as well as perinatal care, safety outcomes, behavioral health, and equity improvements around race, ethnicity, language and disability status, sexual orientation and gender identity (RELD/SOGI)⁴¹ and SDOH data collection, improvements with interpreter services, and strategic planning around health equity improvement. These initiatives allow UMass Memorial to assess, compare, and improve on these quality metrics in order to deliver high quality care and identify and address health disparities across its communities, hospitals, and campuses.

Social Drivers of Health / Health Related Social Needs

As discussed in greater depth in Section F2.c below, in 2017 UMass Memorial and Reliant Medical Group established a local instance of the FindHelp platform⁴² to make it easier for patients to find assistance for health-related social needs, such as food and housing resources. UMass Memorial caregivers are able to place referrals for these social services within Epic. In 2024, UMass Memorial updated the tools and workflows for screening patients for SDOH needs and linking them to resources. This update includes leveraging a vendor, Get Well,⁴³ that will make it easier for patients to complete these screenings through a text messaging platform and provide text message or telephone based navigational supports so patients can more easily find the social service resources that they need in the community.

Community Benefits Program/Office

The UMass Memorial Community Benefits Program is dedicated to enhancing healthcare access and improving health, with a particular focus on disadvantaged, ethnically diverse, underserved, historically marginalized, and vulnerable populations. Community Benefits Programs (“Program”) are developed collaboratively through partnerships with community-based organizations, social agencies, public health allies, and comprehensive Community Health Needs Assessments (CHNA) conducted triennially. Programs address both medical and non-medical aspects of health and wellbeing and offer a range of services to area residents, including, but not limited to, mobile medical and dental care, health and wellness screenings, behavioral health services, senior services, outreach and education to address social determinants of health, youth development and violence prevention programs, community

⁴⁰ Garg, A., [Improving Health Equity at UMass Memorial Health](https://www.ummhealth.org/sites/default/files/eNewsletter_Files/Quality_Matters/qm23_09/Infographic%20Improving_Health_Equity_083023.pdf), https://www.ummhealth.org/sites/default/files/eNewsletter_Files/Quality_Matters/qm23_09/Infographic%20Improving_Health_Equity_083023.pdf.

⁴¹ See MassHealth, [Health Equity Incentives Program RFI, Appendix A: MassHealth RELD, Sex & SOGI Data Standards](https://www.mass.gov/doc/health-equity-incentives-rfi-appendix-a-0/download) (October 2021), <https://www.mass.gov/doc/health-equity-incentives-rfi-appendix-a-0/download>.

⁴² See <https://www.communityhelp.net>.

⁴³ See <https://www.getwellnetwork.com/why-get-well/>.

gardens in respective UMass Memorial communities, workforce development efforts that engage local school systems, and scholarship opportunities for students from marginalized groups pursuing health-related education. Additionally, the Program provides social support through enrollment assistance for health insurance, SNAP and WIC nutrition vouchers, children's wellness, and protection efforts. It also focuses on fostering culturally and linguistically responsive staff to ensure equitable care delivery.

The following programs address the specific priorities identified above:

- The "Road to Care" program is a mobile clinical intervention for substance use disorders that reaches directly to the specific affected populations and targeted areas of focus to provide support and services to community members where they are.
- The "Food is Medicine" program collaborates with and funds local food pantries and community-based organizations to create green spaces and establish sustainable access to nutritious food in areas facing food insecurity.
- The Ronald McDonald House Charities (RMHC) Care Mobile operates a mobile clinic ("Care Mobile") offering dental and wellness visits to underserved populations. The Care Mobile is the flagship initiative for RMHC which now boasts Care Mobiles around the world. The Care Mobile also provides services in local schools and has been integral in the support of incoming migrants to the state. It collaborates with DPH to provide services at various shelters across Central Massachusetts.
- The Medical Legal Partnership in collaboration with Community Legal Aid connects low income patients with legal resources to address health-harming legal needs such as substandard or unstable housing, benefits denials, and appropriate educational placements and support for children with disabilities.
- UMass Memorial issues grants and sponsorships to support local initiatives with a strong focus on equity. UMass Memorial's robust infrastructure ensures proper evaluation, distribution, support, and monitoring and reporting by recipients, thereby fostering continuous improvement in serving local non-profits and enhancing their capacity.
- UMass Memorial is exploring investment opportunities to address the housing crisis with respect to both physical housing needs, retention of existing housing, as well affordability through its Community Benefits Program and its Anchor Mission work.

F1.b.iv *Provide additional information to demonstrate that the Proposed Project will result in improved health outcomes and quality of life of the Applicant's existing Patient Panel, while providing reasonable assurances of health equity.*

In addition to the robust UMass Memorial system initiatives already benefiting the Marlborough community, the Proposed Merger will improve access to specialties, care coordination, and bring tertiary care to more patients through innovative models of care, such as UMMC's HaH program. Currently, MH is challenged by having access to fewer specialty providers in the community. As many of these specialty providers retire, or move to more populated areas and larger hospitals, it will be difficult to ensure specialty care at MH. To address this growing concern, the Proposed Merger is needed to re-enforce the specialty care available to MH patients. Immediately following the merger, every specialty of UMMC's medical staff will be able to provide teleconsultation to patients at MH, saving patients from unnecessary trips to the University campus to receive consultation.

Further, as a licensed campus of UMMC, MH patients will benefit from UMMC's medical staff and the unified healthcare team working across campuses to manage their needs. Because these patients will already be under the care of a coordinated staff, the campuses will be able to follow a transport process instead of the more logistically and resource-intensive transfer process, allowing for improved care coordination and saving staff time to allow patients to the right place for care sooner.

Moreover, patients of the Marlborough campus will have access to all of UMMC's innovative care models, such as HaH, Rehab at Home, the virtual patient observation program⁴⁴, and Mobile Integrated Health (MIH), all of which not only provide cost savings but have demonstrated improved health outcomes including those previously discussed in Section F1.b.i. These programs are currently only available to patients of UMMC and are not available to UMass Memorial's other hospitals. Following the merger of MH and UMMC, the HaH program, as well as Rehab at Home, remote patient monitoring, and MIH, will be available to patients at the Marlborough campus. In addition, the Marlborough campus will be integrated into UMMC's robust quality program and will benefit from the long-range planning around quality, safety and outcomes currently achieved by UMMC. For example, following the merger, the Marlborough campus will have access to UMMC's Safer Teams for quality improvement initiatives, the office of patient advocacy, and patient experience teams and management, all of which have a demonstrated history of quality improvement outcomes.

F1.c Provide evidence that the Proposed Project will operate efficiently and effectively by furthering and improving continuity and coordination of care for the Applicant's Patient Panel, including, how the Proposed Project will create or ensure appropriate linkages to patients' primary care services.

The Proposed Merger will improve continuity and coordination of care for MH's and UMMC's patient panel through the creation of a single, unified medical staff, the implementation of initiatives to close gaps in care, and more appropriate inpatient placements at both UMMC's tertiary campuses and the Marlborough campus as previously discussed. Moreover, with Marlborough operated as a campus of UMMC, greater integration of clinical and social support services can be achieved.⁴⁵ Clinical providers will be able to communicate with non-clinical support that will help coordinate social care services based on SDOH screens. Utilization of a single medical record not only enhances the communication and coordination of health care services but will also provide opportunities for communication with social service departments and staff for a more holistic approach to patient wellness. As the list of community resources added to and available through CommunityHelp⁴⁶ continues to grow, the unified medical record will be especially helpful to connect patients with the highest needs with social service agencies that can assist.

F1.d Provide evidence of consultation, both prior to and after the Filing Date, with all Government Agencies with relevant licensure, certification, or other regulatory oversight of the Applicant or the Proposed Project.

⁴⁴ <https://www.healthcareitnews.com/news/umass-memorial-health-proves-rpm-virtual-sitting-effective-person-care>

⁴⁵ Chen M, Tan X, Padman R. [Social determinants of health in electronic health records and their impact on analysis and risk prediction: A systematic review](https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7671639/). J Am Med Inform Assoc. 2020 Nov 1;27(11):1764-1773, <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7671639/> (providing a literature review demonstrating "early and rapidly growing evidence that integrating individual-level SDOH into EHRs can assist in risk assessment and predicting healthcare utilization and health outcomes, which further motivates efforts to collect and standardize patient-level SDOH information").

⁴⁶ CommunityHELP is a collaborative effort between UMass Memorial and Reliant Medical Group to create a live resource repository of community providers across the care continuum.

The Applicant carried out a diverse consultative process with individuals at various regulatory agencies and departments regarding the Proposed Merger. The following individuals and agencies are some of those consulted regarding this Application:

- Emily Daily, Chief of Staff to DPH Commissioner Goldstein
- Dennis Renaud, Director Determination of Need Program, DPH
- Jaclyn Gagne, Esq., Chief Deputy General Counsel Health Care Licensure, DPH
- Steven Davis, Director Division of Health Care Facility Licensure and Certification, DPH
- Walter Mackie, JD, Manager State Health Inspection Unit, DPH
- Chris Harding, Chief of Staff to EOHHS Secretary Walsh
- Lois Johnson, Health Policy Commission
- Sandy Wolitzsky, Massachusetts Attorney General's Office
- Center for Health Information and Analysis
- The Centers for Medicare & Medicaid Services
- MassHealth

F1.e.i **Process for Determining Need/Evidence of Community Engagement**

For assistance in responding to this portion of the Application, Applicant is encouraged to review Community Engagement Standards for Community Health Planning Guideline. With respect to the existing Patient Panel, please describe the process through which Applicant determined the need for the Proposed Project.

As more fully described in Section F1.a.ii, the Applicant determined the need for the Proposed Merger in response to the challenges impacting the long-term success of MH as a small community hospital. Following the decision to merge MH with UMMMC, the hospitals in coordination with UMass Memorial developed a comprehensive, multi-faceted community engagement plan to ensure robust communication to and with patients, employees, community members, partners, and other relevant stakeholders. The final strategy implemented included:

1. Identifying a detailed list of internal and external stakeholders and appropriate communication channels to ensure broad community engagement.
2. Developing appropriate education materials to fully describe the benefits of the Proposed Merger to all parties.
3. Facilitating conversations with patients, employees, and community leaders and organizations.
4. Presenting the Proposed Merger to hospital-based groups including the hospitals, Community Benefits Advisory Councils (CBACs) and Patient Family Advisory Council (PFACs); and
5. Ongoing messaging and outreach leveraging UMass Memorial's social media footprint and other media for equitable community access and education.

UMass Memorial, UMMMC, and MH continue to work together to facilitate community awareness and involvement regarding the Proposed Merger through ongoing engagements. To date, these efforts include the following activities:

- January 3, 2025: Phone call to Marlborough City Councilors Mike Ossing and Trey Fuccillo, and Marlborough Economic Development Corporation Executive Director Meredith Harris
- January 6, 2025: Phone calls with Marlborough Mayor Dumais, Senator Eldridge and Representative Gregoire
- January 7, 2025: Meeting with UMMMC Chairs and Executive Team
- January 8, 2025: Email to Marlborough Hospital Medical Staff
- January 8, 2025: Phone calls to Marlborough State Legislators, Other Elected Officials, Other Health Systems, Insurers, MHA, Healthcare for All, and unions
- January 8, 2025: In-person meetings with SHARE and MNA leadership
- January 9, 2025: Town Hall Virtual Meeting with Marlborough Caregivers
- January 15, 2025: In-person and virtual meetings with MH's CBAC and PFAC and Marlborough Business Leaders
- January 16, 2025: Publication in UMass Memorial's newsletter, The Thread
- January 17, 2025: Email to the Worcester CBAC
- January 21 and 23, 2025: Public Forums at MH
- January 23, 2025: Presentations and discussions with Worcester Together and the Marlborough Economic Development Corporation.
- January 28, 2025: In-person and virtual meeting with the Worcester PFAC

Lastly, throughout the months of January and February, the Applicant conducted additional outreach to the Health Foundation of Central MA, Thrive Communities, Coalition for a Healthy Greater Worcester, United Way of Tri-County, Chamber of Commerce, Marlborough Economic Development Council, 495 Partnership and Corridor 9.

The overwhelming response to these activities has been positive with strong support for the Proposed Merger. Stakeholders expressed support for UMass Memorial's commitment to and investment in the region, providing local, accessible care for patients and families, and ensuring access to specialty providers in the community.

The Applicant will continue to offer Marlborough employees listening sessions and provide updates at key meetings including manager meetings and all-employee town halls. As part of these updates, employees will be encouraged to ask questions and share concerns. In response to any such questions and concerns, FAQs and other messaging as needed will be developed and shared with employees. Across UMass Memorial, updates and the opportunity to share questions and concerns will be offered through

systemwide communications channels including town halls and newsletters. The Proposed Merger will be a standing agenda item on future Marlborough CBAC and PFAC meetings, as well as at other meetings with community leaders such as the Marlborough Economic Development Corporation and the 495/MetroWest Partnership.

F1.e.ii *Please provide evidence of sound Community Engagement and consultation throughout the development of the Proposed Project. A successful Applicant will, at a minimum, describe the process whereby the “Public Health Value” of the Proposed Project was considered, and will describe the Community Engagement process as it occurred and is occurring currently in, at least, the following contexts: Identification of Patient Panel Need; Design/selection of DoN Project in response to “Patient Panel” need; and Linking the Proposed Project to “Public Health Value”.*

As described in the previous section, the Applicant executed a robust communication and outreach strategy to ensure patients, employees, community leaders, and community members of both hospitals were informed of the need for the Proposed Merger, as well as the benefits of it, and feedback was solicited.

In addition, the Applicant published a legal notice for the Proposed Merger in *The Telegram & Gazette* and *MetroWest Daily News* on January 20, 2025. A copy of the legal notice was posted prominently on both hospital’s websites.