

**STAFF REPORT TO THE PUBLIC HEALTH COUNCIL
FOR A DETERMINATION OF NEED- Amended**

Applicant Name	UMass Memorial Health Care, Inc.
Applicant Address	One Biotech Park, #65 Plantation Street, Worcester, MA 01605
Filing Date	March 12, 2024
Type of DoN Application	Transfer Of Ownership
Total Value	\$368,744,992.00
Project Number	UMMHC-24021420
Ten Taxpayer Groups (TTG)	NONE
Community Health Initiative (CHI)	Exempt from Factor 6
Staff Recommendation	Approval with Conditions
Public Health Council	July 17, 2024

Project Summary and Regulatory Review

UMass Memorial Health Care, Inc. (“UMMHC” or “Applicant”), the sole corporate member of UMass Memorial Community Hospitals, Inc. (“UMMCH”) and other affiliates is proposing to become the sole corporate member of Milford Regional Medical Center, Inc. (“MRMC”), located at 14 Prospect St., Milford, MA 01757 and its affiliated physician organization and foundation. The Proposed Project represents a change in the Hospital’s parent organization(s), such that the change results in a shift in control of the operation of the Hospital.

This Determination of Need (DoN) Application falls within the definition of Transfer of Ownership, which are reviewed under the DoN regulation 105 CMR 100.000. The Department must determine that need exists for a Proposed Project, on the basis of material in the record, where the Applicant makes a clear and convincing demonstration that the Proposed Project meets each DoN Factor set forth within 105 CMR 100.210. A DoN Application for a Transfer of Ownership is subject to factors 1, 2, 3, and 4 of the DoN regulation. This staff report addresses each of the required four factors set forth in the regulation.

This Amended Staff Report Replaces the Original Staff Report. The changes are to the conditions and appear in **red**.

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Background and Application Overview

UMass Memorial Health Care, Inc.

The Applicant, UMass Memorial Health Care, Inc. (“UMMHC”), is a Massachusetts nonprofit corporation. UMMHC owns and operates an integrated health care system comprised of a network of 4 hospitals (on 8 campuses), including one academic teaching hospital and three community hospitals under UMass Memorial Community Hospitals, Inc. (“UMMCH”),¹ as well as other health care providers² that serve the residents of Central Massachusetts. The chart below depicts the acute care facilities by type:

Acute Hospital	Type (Per CHIA Category[i])	HPP %
UMass Memorial Medical Center	Academic Medical Center	66.7%
Harrington Memorial Hospital	Community High Public Payer	68.8%
HealthAlliance Clinton	Community High Public Payer	72.8%
Marlborough Hospital	Community High Public Payer	66.1%
[i] Center for Health Information and Analysis. Massachusetts Hospital Profiles. https://www.chiamass.gov/assets/docs/r/hospital-profiles/2022/ummc.pdf		

UMMHC’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 Chan Medical School, the only public medical school in the state.

Milford Hospital

Milford Regional Medical Center, Inc. (“MRMC”, “Milford”) is a Massachusetts nonprofit corporation that operates a licensed 148 bed³ acute care community hospital located in Milford. MRMC is comprised of the following affiliates: (1) Milford Regional Physician Group, Inc. (“MRPG”), which

¹ [UMass Memorial Medical Center](#) (UMass Memorial) is a 749-bed academic medical center (AMC) in Worcester on two campuses.¹ UMass Memorial operates the only Level 1 adult and pediatric Trauma Center in Central Massachusetts, is a designated Primary Stroke Service (PSS) hospital and is one of nine organ transplant centers in Massachusetts. UMass Memorial is a High Public Payer (HPP) hospital.²

[HealthAlliance-Clinton Hospital](#) is a 152-bed community-HPP hospital with campuses in Clinton, and Leominster.³

[Marlborough Hospital](#) is a 79-bed community-HPP hospital located in Marlborough.

[Harrington Hospital](#) is a 119-bed community-HPP hospital with two campuses.

² UMass Memorial Medical Group, Inc. is an integrated multispecialty group medical practice in Worcester and throughout Central Massachusetts.

UMass Memorial Managed Care Network (MCN) is a group of primary and specialty care physicians who are either employed by their hospitals or medical groups or are in independent private practice.

UMass Memorial Accountable Care Organization (UMass Memorial ACO) is an ACO that was developed to participate in the Medicare Shared Savings Program (MSSP).

Community Healthlink is a community-based provider of mental health, substance abuse, rehabilitation, homeless and related services in Central Massachusetts.

³ The bed configuration is -124 Medical/Surgical, 10 ICU/CCU/SICU, and 14 Obstetrics beds.

operates as a primary care and multi-specialty community medical practice in the MRMC service area; (2) Milford Regional Healthcare Foundation, Inc., a Massachusetts nonprofit organization established to conduct fundraising activities to support MRMC; and (3) MRHC Management Services, Inc., a Massachusetts nonprofit organization which does not currently conduct any business activities. MRMC offers a broad range of clinical specialty services including, but not limited to, Oncology, Cardiovascular, Orthopedics, Women’s Health, Maternity, Surgical (including subspecialties), and Pediatrics.

MRMC operates a community health system that serves an 18-town service area in South Worcester County.

The Proposed Project

On January 12, 2024, MRMC and UMMHC entered into an Affiliation Agreement (following all required regulatory approvals) whereby UMMCH will become the sole corporate member of MRMC.

MRMC and UMMHC anticipate that the proposed corporate affiliation (“Proposed Affiliation”), which builds on the longstanding relationship between the parties, will allow the parties to further their common nonprofit missions of promoting the health of the communities they serve in Central Massachusetts. They expect the Project will enhance MRMC’s ability to maintain its status as a high quality, financially secure community hospital, which will allow it to continue to meet and better respond to the health care needs of patients and the communities in its service area.

The Proposed Affiliation will address the need to strengthen the sustainability of MRMC as a comprehensive community-based acute care hospital with both inpatient and outpatient services, thereby maintaining local access to quality health care in the Milford service area.

Patient Panel⁴

Table 1 shows six years of Patient Panel information for the Applicant and for MRMC. The table demonstrates that both entities experienced downturns in FY 2020 as a consequence of the COVID-19 pandemic and subsequently regained their patients. Both UMMHC and MRMC’s Patient Panels grew 3.9% and 21.7%, respectively, from 2018-2023.

Table 1: Overview of UMMHC and MRMC’s Patient Panels- FY18-FY23

Year	FY 18	FY 19	FY 20	FY21	FY 22	FY 23	FY 18 v.s. 23
Unique Patients	Count	Count	Count	Count	Count	Count	% Change
UMMHC	371,136	371,488	345,864	393,429	383,520	385,469	3.9%
MRMC	111,100	113,091	101,990	124,387	134,283	134,836	21.7%

⁴ As defined in 105 CMR 100.100, Patient Panel is the total of the individual patients regardless of payer, including those patients seen within an emergency department(s) if applicable, seen over the course of the most recent complete 36-month period by the Applicant or Holder.

Table 2: Demographic Profile of UMMHC and MRMC Patients- FY21-22

Facility	UMMHC		MRMC	
	FY 22	FY 23	FY 22	FY 23
Gender				
Female	55.9%	56.2%	57.2%	57.6%
Male	44.0%	43.8%	42.6%	42.2%
Unknown	0.1%	0.1%	0.2%	0.2%
Age				
0-17	18.7%	18.0%	7.5%	7.6%
18-64	58.2%	57.8%	65.2%	65.1%
65+	23.0%	24.2%	27.3%	27.4%
Unknown	0.0%	0.0%	0.0%	0.0%
Race/Ethnicity*				
American Indian or Alaska Native	0.3%	0.3%	0.1%	0.1%
Asian	3.8%	3.9%	2.6%	2.8%
Black or African American	6.5%	6.8%	1.7%	1.7%
Declined	1.0%	1.0%	0.3%	0.3%
Multi Racial	0.0%	0.0%	0.0%	0.0%
Native Hawaiian or Pacific Islander	0.1%	0.1%	0.1%	0.1%
Other/Unknown	14.5%	14.9%	10.3%	10.8%
White	73.9%	73.0%	84.9%	84.2%
Patient Origin⁵				
Central Mass	89.8%	90.3%	57.9%	58.5%
Eastern Mass	4.1%	3.8%	37.0%	36.8%
Western Mass	2.4%	2.5%	0.2%	0.2%
Out of State	3.8%	3.4%	4.9%	4.6%

Gender: The UMMHC patient mix during FY21 through FY23 was approximately 56% female and 44% male. Approximately 57% of the patients served by MRMC are female and approximately 43% are male.

Age: Age demographics show that ~59% of UMMHC's patients were ages 18-64; ~ 24.2% were ages 65 and older; ~18% of UMMHC's patients are aged 0-17. A greater number (than at UMMHC) of patients cared for by MRMC are 18-64, ~ 65%; ~28% are age 65 and older; and 7% are aged 0-17.

Race: The self-reported UMMHC racial mix is ~73% white, ~6.8% Black or African American, ~3.9% Asian, ~17.2% Hispanic, and ~0.3% American Indian or Alaska Native. These are self-reported figures

⁵ Patient Origin is where the Patient Panel resides.

and there is a significant percentage (14.2% in FY21, 15.5% in FY22 and 15.9% in FY23) of the population that either chose not to report or reported in a category not reported here.

The MRMC self-reported race profile is ~85% white, ~1.7% Black or African American, ~2.8% Asian, ~4.3% Hispanic, and ~0.1% American Indian or Alaska Natives.

Patient Origin UMMHC provides care to patients primarily from Massachusetts (97%), with ~90% residing in Central Massachusetts. MRMC provides care to patients primarily from Massachusetts (95%), and due to its southeastern location, ~58% reside in Central Massachusetts and ~37% reside in Eastern Massachusetts.

Table 3: FY '23 Payor Mix for UMMHC and MRMC⁶

Hospital Payor Mix based on GPSR for FY23		
	UMMHC	MRMC
Commercial Total	28.8%	38.4%
Commercial PPO/Indemnity	4.4%	18.6%
Commercial HMO/POS	24.4%	19.8%
Medicaid Total	24.1%	15.0%
MassHealth FFS	15.0%	8.3%
Managed Medicaid	9.0%	6.7%
Medicare Total	43.7%	44.5%
Medicare FFS	25.9%	28.8%
Managed Medicare	17.8%	15.7%
All other	3.4%	2.2%
Subtotal Non-Commercial	71.2%	61.6%
TOTAL	100.0%	100.0%
<i>Managed Medicaid: Private</i>		
<i>Managed Medicare: Private</i>		
<i>All other: e.g. HSN, self-pay, TriCare</i>		

Payor Mix: Table 3 shows that the UMMHC hospitals and MRMC populations that participate in government insurance programs is as follows: during Fiscal Year 2023, UMMHC served ~29% commercially insured patients, ~24% Medicaid, ~44% Medicare and 3.4% all other payor classes. During Fiscal Year 2023, MRMC served ~38% commercially insured patients, 15% Medicaid, ~45% Medicare and 2.2% all other payor classes. Staff notes that all of the UMMHC hospitals are designated by CHIA as high public paying hospitals. Milford does not have this designation as its total public payer-mix is lower, 61.6%.

The Applicant provided seven years of utilization data for both the academic medical center and for MRMC that includes discharges, total and staffed beds, and occupancy rates for seven years. The data show that both UMMHC and MRMC have high occupancy rates and have exceeded their utilization levels from before the COVID pandemic. (See tables 4 and 5).

⁶ Based on GPSR Gross Patient Service Revenue.

Table 4: UMMHC Utilization Data

UMMMC	FY 17	FY18	FY19	FY20	FY21	FY 22	FY23
Discharges ⁷	37,701	37,668	38,214	34,860	35,734	35,767	38,231
Licensed Beds ⁸	777	733	733	747	749	749	747
Staffed Beds ²	654	661	671	705	724	731	732
Occupancy ⁹	70.8%	74.0%	76.1%	75.4%	83.9%	89.2%	95.1%
Staffed Occupancy ³	84.1%	82.1%	83.1%	79.9%	86.8%	91.4%	97.0%

Table 5: MRMC Utilization Data

MRMC	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	FY 23
Discharges	9,433	9,677	9,861	9,592	9,726	10,068	10,312
Inpatient Days	32,404	33,533	35,197	34,219	35,316	37,804	38,210
Observation Days	6,221	5,942	5,580	4,830	6,264	7,659	9,976
Total Days	38,625	39,475	40,777	39,049	41,580	45,463	48,186
Beds	148	148	148	148	148	148	148
Occupancy Rate	72%	73%	76%	72%	77%	84%	89%

Factor 1a: Patient Panel Need

The Applicant attributes need for the Proposed Transfer of Ownership (“Proposed Affiliation”) to the following:

1. Need to Secure the Financial Viability of MRMC to Maintain Access to Care
2. Need to Preserve Local Access to All Levels of Care for the Patient Panel and Service Area
3. Need for Investments in Clinical Collaborations and Information Technology at MRMC
4. Need for Innovative Programs that Reduce the Cost of Care at MRMC

1. Need to Secure the Financial Viability of MRMC to Maintain Access to Care

The Applicant states that the primary purpose of the Proposed Affiliation is to enable MRMC to remain financially viable. Over the past five years MRMC has experienced significant operating losses of approximately \$50 million.¹⁰ These losses are projected to continue into the future. Consequently,

⁷ Excludes newborns (“NB”)

⁸ Excludes NB and Special Care Bassinets

⁹ Inpatient Days Only

¹⁰ See Standard & Poors, S&P Global Ratings, RatingsDirect Report: Milford Regional Medical Center, Massachusetts, Table 2, p.6 (Jan. 30, 2024).

Standard & Poors¹¹ credit rating agency, downgraded MRMC from a B+ to a B rating in its report on MRMC from January 30, 2024.¹² Standard & Poors noted in its report:

*"The downgrade reflects higher-than-expected and persistent operating losses, coupled with steadily weakening balance-sheet metrics, particularly relative to unrestricted reserves, which cannot provide any cushion to help offset the losses and is also constraining strategic capital spending."*¹³

This means that MRMC, as a stand-alone, independent community hospital, will have difficulty continuing to fund its current full complement of inpatient and outpatient services and to accessing funds in the capital market to maintain and upgrade its facilities. The report continues with the following:

*"The developing outlook reflects rating upside should Milford consummate its planned affiliation with higher rated UMass Memorial Health (BBB+/Positive) and downside if management cannot reverse the trend of high operating losses or with further weakening of balance-sheet metrics."*¹⁴

When financial difficulties arise independent community hospitals face operating and service delivery challenges which can lead to the curtailment or closure of local services. Many community hospitals face operational challenges, including low rates of occupancy, relatively poor financial margins, and have older facilities compared to many AMCs and teaching hospitals.^a

The Applicant stresses that through the Proposed Affiliation, UMMHC will draw upon its own experience in weathering a challenging financial and operating environment, along with supporting its recent affiliate, Harrington Memorial Hospital ("Harrington") and previous affiliates, Health Alliance Hospitals, to enable MRMC to maintain and improve operations. The Applicant also stresses that through the Proposed Affiliation, MRMC will benefit from access to capital and the diversification of risk that exists with a larger portfolio of operations, and it will gain economies of scale and efficiencies from the Affiliation, enabling it to continue serving its Patient Panel.

2. Need to Preserve Local Access to All Levels of Care for the Patient Panel and Service Area

Access to local care is important to all patients, especially those who are low-income and insured by government payors because these patients may not have the financial resources or access to transportation to travel to Boston, Worcester, or elsewhere for services. As noted in Table 4, 60% of the Milford patient panel is insured through Medicare or Medicaid. The U.S. Office of Disease Prevention and Health Promotion, Healthy People 2030 initiative Health states health care access and quality

¹¹ S&P Global Ratings (previously Standard & Poor's and informally known as S&P) is an American [credit rating agency](#) (CRA) and a division of [S&P Global](#) that publishes financial research and analysis on [stocks](#), [bonds](#), and [commodities](#).

¹² Standard & Poors, S&P Global Ratings, RatingsDirect Report: Milford Regional Medical Center, Massachusetts, p.2 (Jan. 30, 2024).

¹³ Id.

¹⁴ Id.

continue to be priority goals by reducing the proportion of people who are unable to get medical care when they need it.¹⁵

The Applicant states that the Proposed Affiliation will allow more care to remain in the local community as clinically appropriate through UMMHC's previous experience with strengthening the financial sustainability of its community hospitals that prioritizes local accessibility, quality, and safety of care with better coordination of care: therefore, the resources of the tertiary medical center for the most acute patients can be preserved at UMMMC, which has consistently high occupancy rates. For FY's 21-23, occupancy rates were 86.8%, 91.4%, and 97%.¹⁶ Accordingly, UMMHC values the capacity that its community hospitals provide, since it helps relieve pressure on its academic medical center, UMMMC to serve more acute cases.¹⁷

The Applicant also states that the Proposed Affiliation will provide the Milford community with improved access to UMMHC specialty care in the MRMC service area, thereby allowing the community served by MRMC to stay close to home for their medical care. Within the MRMC service area, UMMHC provides a broad spectrum of specialty services at two sites, the Tri River Family Health Center ("Tri River") and Water Street. The services offered include primary care, pediatric, and specialty services, including cardiology, sports medicine, plastic surgery, pediatric gastroenterology, pediatric endocrinology, behavioral health, and nutrition.

UMMHC also intends to expand specialty offerings at its Tri River and Water Street sites, which are close to MRMC, such as endocrinology, rheumatology, vascular and echocardiography and clinical laboratory services. Through the affiliation, MRMC's tele-stroke consultation program, which is currently staffed exclusively by MGH fellows, will also have access to additional, experienced attending physicians, which may further enhance the quality and timeliness of care.¹⁸

The Applicant provided a few examples of its experiences following its recent affiliation with Harrington and a previous affiliation with the Health Alliance- Clinton Hospital.

1. Following the approvals of the UMMHC-Harrington affiliation, UMMHC implemented its operational strategy to strengthen Harrington.^b Harrington's integration into UMMHC resulted in the preservation of community-based care in its service area; Harrington has maintained the same range of services and has experienced higher occupancy rates than it did prior to joining the UMMHC system. UMMHC's electronic health record ("EHR") system (EPIC) was extended to Harrington in October of 2023, giving Harrington access to more efficient workflows, along with quality improvement and patient safety tools. The parties expect that MRMC will experience

¹⁵ Office of Disease Prevention and Health Promotion, Healthy People 2030, <https://health.gov/healthypeople/objectives-and-data/browse-objectives/health-care-access-and-quality/reduce-proportion-people-who-cant-get-medical-care-when-they-need-it-ahs-04>.

¹⁶ Based on staffed beds. Leading up to the COVID pandemic for FY 17-20 OR's respectively were 84.1%, 82.1%, 83.1%, and 79.9%

¹⁷ Staff notes the six year (FY 17-22) average case mix index for MRMC was .91, and for UMMHC, it was 1.47 -Based on CHIA Hospital Profiles for each year <https://www.chiamass.gov/assets/docs/r/hospital-profiles/2017/FY17-Massachusetts-Hospital-Profiles-Compendium.pdf>

similar benefits. The affiliation also provided Harrington with the resources to invest in needed capital improvements.¹⁹ Similarly, a key component of the Project is UMMHC's commitment is to invest in necessary capital improvements at MRMC.

2. UMMHC's multidisciplinary clinic at HealthAlliance-Clinton Hospital is an example of how UMMHC's strengthened its community hospitals to maintain specialized services locally. Their strategy involved: (i) investing \$3.6 million in the facility with rheumatology, endocrinology, pain management, cardiology, thoracic surgery, audiology, specialty dermatology, infectious disease, infusion center, and sports medicine; (ii) bringing UMMHC specialists to the Leominster campus in order to treat patients in their own community; and (iii) maintaining capacity to treat 9,100 patients annually.

The Applicant notes that while the investments in MRMC will be different, the objectives are expected to be consistent with UMMHC's investments in its other community entities, thereby maintaining, enhancing and expanding access to high-quality care within the MRMC's service area. At a public hearing held by the Department related to the transfer of ownership, the Applicant made the following commitments; the system will maintain acute care services²⁰ at the MRMC for a minimum of 5 years; capital commitments were made for \$67M to fund EMR and non-clinical functions; significant capital has been pledged for new strategic projects; and \$2M in community benefits funding has been committed.²¹

Analysis

Staff also notes that while the Applicant states their intention to maintain and add programs and services, there are concerns about whether certain essential services will be maintained due to closure of certain services following a merger. In 2017, the Public Health Council approved the merger of UMass Memorial Health Alliance in Leominster with UMass Memorial Clinton. In accordance with the procedures laid out in Hospital Licensure regulations, in 2018, UMass Memorial closed Pediatric Services, Rehabilitation Services and Urgent Care Services at Health Alliance- Clinton Hospital, and in 2023, they also closed the Maternity Unit.²²

Recent studies have linked excessive travel times and the lack of timely access to maternity care with negative health outcomes for both mothers and newborns, including increased risk for heart failure for infants, prolonged hospitalizations, and an increased risk of infant and maternal mortality; particularly dire for women of color and those in lower socioeconomic situations. Longer transport times may result on more deliveries en route to the hospital where no specialized care is available. Since most first responders can handle simple deliveries, not specialized care, mothers and babies with complications may be at risk. Further, most cities only have 1-2 ambulances therefore, removing an

¹⁹ e.g., the purchase of Harrington Hospital's Webster Building; Harrington's restructuring of its Radiation Oncology Joint Venture to more closely align with the hospital; and a refreshed/expanded ICU.

²⁰ Services include Medical/Surgical, Intensive Care, Obstetrics; Well Infant Nursery, Continuing Care Services; Ambulatory Care Emergency Care; Primary Stroke; Diagnostic Cardiac Catheterization

²¹ If a hospital is proposing closure of an essential health service, as defined in 105 CMR 130, the facility is required to notify DPH of their intent to eliminate the service 120 days in advance; this triggers the essential service process.

²² The Essential Service process is outlined in 105 CMR 130.122

ambulance to take a laboring mother farther away leaves those having other medical emergencies at risk.

Staff notes that the closest other hospitals to MRMC are Marlborough Hospital, which is approximately 18 miles away (~30 minutes at non-peak hours), and Sturdy Memorial Hospital which is 26 miles away (~ 35 minutes away at non-peak hours.) Both of UMass Memorial Medical Center campuses in Worcester are ~ 20 miles away (~ 40 minutes away at non-peak hours). Therefore, the potential loss of the acute care services for the MRMC Patient Panel and service area could pose access challenges related to travel for many who reside in the 18-town service area.

Given these distances, Staff analyzed how dependent each town within the MRMC service area is on MRMC (“community dependency”). Six of the top 15 towns in the PSA contributed greater than or equal to 50% of that town’s total MA hospital discharges in FY 21 to MRMC; therefore, were MRMC to close or reduce services, residents of these top towns in particular could face challenges to accessing care. (See Table 6) Two other towns, Franklin and Whitinsville each have a have number of discharges (1,102 and 503, respectively) from MRMC and their community dependency on MRMC is 43% and 48% of their total discharges.

Table 6: Dependence of Service Area Communities on MRMC

MA Town	Total MRMC Discharges	MRMC's Share of Total Discharges
Milford	1952	63%
Hopedale	283	58%
Uxbridge	718	57%
Blackstone	366	55%
Mendon	233	53%
Bellingham	817	51%
Whitinsville	503	48%
Northbridge	313	45%
Franklin	1102	43%
Upton	222	40%
Medway	380	34%
Douglas	180	27%
Hopkinton	277	22%
Norfolk	170	19%
Holliston	168	14%

Accordingly, as a result of concerns over access to care due to a potential closure of services, staff recommends Condition #1 below.

3. Need Investments in Clinical Collaborations and Information Technology at MRMC

When MRMC considered the affiliation with UMMHC, an important factor was its need to continue to invest in clinical collaborations and modernize its information technology during a time of significant financial challenges and uncertainty. With UMMHC's financial resources to invest in technological integration to transition of MRMC to the UMMHC EHR, the parties will provide care to shared patients more safely and efficiently through a single coordinated record for each patient.

As discussed in Sections F1(b) and F1(c) below, the Proposed Affiliation will enhance clinical collaboration throughout the system while providing the Milford community with greater access to UMMHC specialty care. With the single EHR, the aforementioned transfers from Tri River to MRMC will be better coordinated and facilitated through better communication among clinicians.

4. Need for Innovative Programs that Reduce the Cost of Care at MRMC

Through the investment in technology the Proposed Affiliation will provide MRMC with the opportunity to participate in a number of the following UMMHC programs to increase access and potentially reduce the overall cost of care:

- **Hospital at Home (HAH):** UMMHC initiated its HAH in the summer of 2021 as a key part of its strategy to expand patient capacity, reduce costs, and improve outcomes for generally lower-acuity patients. UMMHC has demonstrated that this program has successfully reduced total costs, with 20-30% reductions in 30-day readmissions and 80-90% reductions in transfers to skilled nursing facilities (SNFs) when comparing the HAH program to hospitalist service benchmarks. The program has had positive outcomes for UMMHC's most disadvantaged patients. For example, the average 30-day readmissions were reduced by 20-30% across the HAH patient population; and the reduction in 30-day readmissions for Medicaid and Medicare/Medicaid dual-enrolled patients is closer to 50-60%. By performing home visits, the UMMHC staff can more-readily identify social needs and challenges patients face and to find ways to address them. Currently, the HAH serves four towns within the MRMC service area.
- **Mobile Integrated Health (MIH)** was launched in June 2021 to reduce emergency department and hospital admissions by sending paramedics into patients' homes to provide services and interventions. Patients who are part of UMMHC's value-based programs and have consented to this program; rather than going to the emergency department, they initially call a triage line where a trained paramedic triage provider assesses whether the MIH paramedic team can be deployed. During 2023, UMMHC utilized this service for 264 visits to over 160 patients' homes; 77% of the patients enrolled in this service had no emergency visits within the 30 days following the MIH visit and 54% had no visit within the following three months following the MIH visit.
- **Road to Care** provides coordinated and accessible behavioral health services to the most at-risk (and high-cost) patients through a mobile addiction service in Central Massachusetts; it also provides preventive care, wound care, and coordinates referrals to primary care and specialty programs.

Analysis

The Project offers UMMHC and MRMC an opportunity to work collaboratively to further develop their long-standing clinical relationships and implement investments in innovative clinical programming and information technology that can enhance the delivery of care in a lower cost community setting.

Factor 1: b) Public health value, improved health outcomes and quality of life; assurances of health equity

In this section the Applicant must demonstrate that the Proposed Project adds measurable public health value in terms of improved health outcomes and quality of life for the Applicant's existing patient panel, while providing reasonable assurances of health equity.

Public Health Value- Health Outcomes, and Quality of Life

The Applicant asserts the Proposed Affiliation addresses the public health need to maintain access to high-quality health local care in the MRMC community by preserving the full spectrum of patient services. The Applicant cites studies showing that delays in accessing health care are associated with negative health outcomes, specifically mortality.^c Further, a 2020 article by the Department of Health and Human Services^d outlines the following key factors associated with "access" to care: coverage, services, and timeliness.^e According to the Health Policy Commission's 2016 report on Community Hospitals, "[t]he local nature of community hospital services is important for patients for whom accessing care can be difficult."^f 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.^g

The Applicant states the Proposed Affiliation will expand access to primary and specialty services in the Milford region through the UMMHC network thereby saving many patients the burdensome time and transportation costs associated with travel for specialty care.^{23,24, h} Further, when necessary, MRMC patients can also benefit from increased appointment availability for specialty services across the whole UMMHC network, addressing this critical need identified in the MRMC Community Health Needs Assessment Report.ⁱ

The Applicant adds that the Proposed Affiliation may provide patients with complex and rare conditions and those with health challenges with enhanced quality of care through new support tools that their physicians can access. For example, Epic's Look-Alikes community is a database for physicians

²³ See FSG and Bristol-Myers Squibb Foundation, Breaking the Barriers to Specialty Care, Brief 2: Increasing Specialty Care Availability, June 2016, https://www.fsg.org/wp-content/uploads/2021/08/Equity-in-Specialty-Series-Brief-2_FSG-Increasing-Specialty-Care-Availability.pdf ("The supply of specialty care is not only inadequate, but it is also highly concentrated in urban areas. Estimates suggest, for example, that 97% of medical oncologists in the United States practice in urban areas. For the 20% of the U.S. population that lives in rural areas, this creates a significant challenge. Rural patients often need to travel hundreds of miles for care, a task that is particularly difficult when repeat visits are necessary to complete a course of treatment (e.g., for chemotherapy, radiation, or dialysis). Also ~3.6 million Americans miss or delay medical care for transportation reasons every year. <https://www.aha.org/aharet-guides/2017-11-15-social-determinants-health-series-transportation-and-role-hospitals#:~:text=Each%20year%2C%203.6%20million%20people,adverse%20policies%20that%20affect%20travel>).

²⁴ The UMMHC System has 1,200 physicians and 700 advanced practice providers.

encountering unusual cases whereby they can instantly connect with peers across the country who have relevant experience, thereby fostering knowledge, sharing, and aiding in accurate diagnosis, and effective treatment. MRMC's affiliation may also provide patients with access to experimental therapies when traditional therapies have failed. MRMC clinicians and patients will be able to take advantage of UMMHC's embedded clinical trial management system and the upcoming Epic "Clinical Matchmaking" tool, to facilitate pairing patients with appropriate clinical trials. There are many other benefits of the electronic health records system that are centered around coordination of care and efficiencies gained; these are discussed further under Factor 1(c).

Outcomes- Assessment of Project Impact

The Applicant states the Proposed Affiliation will result in the full integration of MRMC into UMMHC's extensive clinical quality efforts led by UMMHC's Office of Clinical Integration (OCI).²⁵ The MRMC patient panel will be incorporated into UMMHC's quality tracking and improvement mechanisms, extending OCI's efforts with each practice to improve population health, including work to identify and address health disparities.

Quality Assessment and Benchmarking

UMMHC participates in Vizient, a third-party vendor which offers real-time data analysis and benchmarking of quality outcomes. This enables UMMHC to identify and address gaps in quality of care. Vizient allows UMMHC to track Patient Safety Indicators, patient experience (which is also tracked with Press Ganey), and efficiency and effectiveness measures. Since MRMC does not currently subscribe to Vizient, it cannot access real-time, risk-adjusted mortality rates and other metrics to benchmark against similar hospitals. Although MRMC has achieved high CMS Star Ratings (5 stars for quality, 5 stars for patient experience) and Leapfrog grades (A grade) for quality and patient experience, these programs rely on data that is 1-3 years old.

Once MRMC is added to UMMHC's existing arrangement with Vizient, quality real-time analytics, such as risk adjusted mortality, patient safety metrics, length of stay, readmission rates, patient experience, that all UMMHC hospitals utilize will be incorporated into the quality dashboards used by UMMHC hospitals enabling the Applicant to conduct a more accurate "apples to apples" comparison of quality data, identify potential quality gaps, and work collaboratively towards attaining top quartile performance on shared quality measures. After it was added to Vizient and incorporated into UMMHC's quality program, Harrington Hospital's quality scores increased by almost 25% across the measures tracked.

UMMHC's OVI, will work with MRMC to identify areas for improvement and provide additional support to address gaps in quality, and likewise best practices from MRMC will also be shared with the rest of the UMMHC System through this centralized quality improvement process.

²⁵ OCI monitors quality performance across key ambulatory programs, HEDIS measures, Mass Health clinical quality metrics, patients in UMMHC's Medicare ACO, and Point 32/UMMH Medicaid ACO.

Improved Patient Experience

The Applicant asserts the Project is anticipated to lead to improved patient experiences due to additional choice and access to specialty services, and to the potential for reduced wait times. UMMHC uses multiple tools to assess and improve its patient's experience through surveys and benchmarking. As a result, UMMHC implemented a number of best practices that have improved patient experience in recent years which will be shared with MRMC.²⁶

MassHealth Health Equity Incentive Program

UMMHC and MRMC both actively participate in the MassHealth Clinical Quality Incentive and Health Equity Incentive programs which cover a number of domains, including patient experience and care coordination, perinatal care, safety outcomes, behavioral health, and equity improvements around race, ethnicity, language and disability status, sexual orientation and gender identity (RELD/SOGI)^j and social determinants of health ("SDOH") data collection, improvements with interpreter services, and strategic planning around health equity improvement. Each of these initiatives will allow both to continue to assess, compare, and improve on these quality metrics in order to deliver high quality care and identify and address health disparities.

Analysis

The Proposed Affiliation is centered around evidence-based practices and is designed to meet the identified needs of the MRMC community. It emphasizes enhancing health care access, quality, coordination of care, continuity, that will be enhanced through critical financial stability, advancements in technology and medical research, with the goal of improving patient experiences and outcomes in the Milford region.

Public Health Value- Health Equity

The Project will expand upon MRMC's community-based efforts to support the improved health of the Milford community and further UMMHC's Anchor Mission²⁷ which is "a commitment to consciously apply the place-based economic power of UMMHC, in combination with its human and intellectual resources, to better the long-term welfare of the community in which the institution is anchored;"^k by leveraging UMMHC's organizational assets (intellectual and economic) to address social disadvantage and pervasive inequality providing community members with resources that will improve their overall social, physical, and financial health. In UMMHC's Affiliation with MRMC, the Anchor Mission commitments will be reflected in key terms of the affiliation as they were with Harrington.

²⁶ UMMHC utilizes Press Ganey to conduct surveys and gather data about patient experience, (after patients are discharged from the hospital, the emergency department, after ambulatory visits, and after ambulatory surgery visits) and Vizient to benchmark patient experience results against other hospitals and identify best practices around improving patient experience. In addition, UMMHC uses a tool provided by a vendor called Cipher to serve as a mechanism to encourage leadership rounding with patients, gather valuable insights from patients, and make interventions to improve their experience and perform service recovery in real time.

²⁷ Adopted by the UMMHC Board of Trustees in 2018

One of the three place-based investments for Harrington has already returned a tangible result. The one with Center of Hope, Inc., an ice cream and snack shop in downtown Southbridge, has not only created employment opportunities for individuals with developmental disabilities, it has also created a new community gathering place. UMMHC provided a \$250,000 loan which is scheduled to be paid back in 2028 which has not been completely used. At this time the program has served an estimated 7,000 people, has seven employees, and has provided workforce training for 26 other program members.

This Proposed Affiliation is expected to advance MRMC's ongoing efforts related to behavioral health and substance use. Currently, MRMC collaborates with an array of community organizations focused on behavioral health needs and services assisting patients upon discharge; working with schools and after school programs to address children's behavioral/mental health issues; increasing access to telehealth services; and supporting jail diversion and domestic violence resources.

Other priority areas are focused on collaborating with community organizations to reduce health disparities by improving health care access for historically disadvantaged and vulnerable populations; to prevent homelessness and reduce food insecurity, thereby improving health outcomes in the region.

Interpreter Services to Support Diverse Patient Populations

One of UMMHC's primary interventions to support diverse populations with limited English proficiency and other communication barriers is to provide professional medical interpretation services in over 100 languages (including American Sign Language) to patients and families who prefer to communicate in languages other than English. These are available 24/7 through various modes, such as in-person, over the phone, and through remote video interpretation. Interpreters facilitate communication not only for medical needs but also for non-medical inquiries, ensuring comprehensive language assistance for our diverse patient community.

The Proposed Affiliation will enhance MRMC's existing interpretation services and practices by incorporating them into UMMHC's system-wide resources and increase capacity which will include creating a management structure with designated staff, establishing written policies and procedures consistent with Massachusetts regulations.

Fostering Culturally Proficient Staff

The Applicant's commitment to equity extends to fostering a culturally proficient workforce. UMMHC established the office of Diversity, Equity, Inclusion and Belonging (DEIB), with dedicated leadership overseeing equity initiatives and with the DEIB diversity specialists providing racial literacy training around cultural proficiency and unconscious bias to UMMHC medical departments.¹ This commitment to inclusivity and cultural competence is instrumental in providing equitable care and will be incorporated into MRMC.

UMMC anticipates extending other programs to MRMC including the following:

- Doula Program for Improved Maternal Health to positively impact the patient experience and improve birth and postpartum outcomes, with a special focus on pregnant patients of color and among historically underserved populations.
- MyChart Patient Portal in Multiple Languages is being implemented to promote equal access to healthcare information for non-English speaking patients and help them stay in contact with their care teams, thereby contributing to improved health equity.

Moving forward, MRMHC will be an integral part of these signature initiatives²⁸ – both in terms of establishing the data-driven priorities for advancing equity and also in receiving the support and experience of the UMMHC system to drive meaningful improvements in healthcare equity in its patient base.

Community Benefits Program/Office

The UMMHC 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 and offer a range of services to area residents. The following are examples of programs that may be expanded or replicated and scaled to the communities served by MRMHC:

- The “Road to Care”
- “Food is Medicine” program²⁹
- The Ronald McDonald House Charities (RMHC) Care Mobile³⁰
- The Medical Legal Partnership with Community Legal Aid³¹

²⁸ UMMHC Health Equity Improvement Initiatives-Since the onset of the COVID-19 pandemic, UMMHC has incorporated a health care equity metric in its Board-level “true north” metrics each year. In 2021, it identified a disparity in rates of well-child visits among Black, Hispanic and white children. As a result of its proactive interventions, UMMHC was able to substantially improve well-child visit rates effectively narrowing the gap between Black, Hispanic and white patients.²⁸ In 2022, UMMHC focused on bridging racial disparities in osteoporosis screening, and in 2023, UMMHC focused on improving colorectal cancer screening rates for Black, Hispanic and Asian patients. In each instance, UMMHC achieved measurable improvements and exceeded its established goals, as summarized in the UMass Memorial report linked below.²⁸ For 2024, UMMHC will focus on improving data capture of race, ethnicity, language, disability, sexual orientation, and gender identity among hospitalized patients.

²⁹ 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.

³⁰ operates a mobile clinic (Care Mobile) offering dental and wellness visits to underserved populations, provides services in local schools and it collaborates with the Department of Public Health to provide services at various shelters across Central Massachusetts. The Care Mobile is the flagship initiative for RMHC which now has Care Mobiles around the world.

³¹ 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.

- UMMHC also issues grants and sponsorships to support local initiatives with a strong focus on equity using its infrastructure to ensure proper evaluation, distribution, support, monitoring and reporting by recipients, thereby fostering continuous improvement in serving local non-profits while enhancing their capacity.

The 2021 Greater Milford Community Health Improvement Plan (CHIP)^m identified mental health and substance use, food insecurity, and homelessness as priorities. The Greater Milford Community Health Network: CHNA 6 emphasizes health equity as a cross-cutting priority in developing the CHIP.ⁿ UMMHC and MRMC share these priority areas, and the Proposed Affiliation offers opportunities for mutual learning and support, collaborative data analysis, and coalition building to strengthen these priority areas across Central Massachusetts and beyond.

UMMHC already tracks a number of metrics related to health equity for ambulatory and inpatient settings in order to identify and implement specific interventions, such as those described herein. Once MRMC is integrated into the UMMHC system, UMMHC and MRMC will track these metrics and look for substantial opportunities for MRMC to advance health equity.

Analysis

As part of its annual reporting, to measure the impact of the Affiliation, the Applicant proposes to report on the following measures on the Proposed Affiliation: (1) clinical quality metrics such as patient mortality; (2) patient safety, as measured by Patient Safety Indicator (PSI) events; (3) patient experience scores, as measured through patient survey responses; and (4) health equity, as measured by the MassHealth health equity incentive program metrics.

The Applicant describes how the Proposed Affiliation will preserve and may improve MRMC's ability provide quality, accessible health care to its community.

Staff has reviewed and concurs that the Proposed Project will add public health value in terms of improved health outcomes, quality of life and equity for both UMMHC's and MRMC's Patient Panels.

Factor 1: c) Efficiency, Continuity of Care, Coordination of Care

The Applicant states that with UMMHC providing financial stability, management, and administrative resources, MRMC will be able to continue as a community hospital. UMMHC has a successful track record with the operational and market challenges community hospitals face, and it can leverage synergies in operations as well as the capital reserves necessary to preserve MRMC.

The Applicant states the Proposed Affiliation will improve continuity and coordination of care for UMMHC's and MRMC's patient panel, with a particular emphasis on creating appropriate linkages to patients' primary care services, through 1) a common Electronic Health Record (EHR), 2) the initiatives of the UMMHC Office of Clinical Integration (OCI) to close gaps in care, and 3) closer alignment between MRMC and UMMHC physicians.

1) All UMMHC hospitals and physicians are integrated using the Epic system. This has led to increased efficiencies, economies of scale, standardization of practices, knowledge sharing, protocol alignment, and, ultimately, enhanced continuity and coordination of care through improved shared documentation.

MRMC's hospital and physician group use different IT platforms. MRMC's physician group practices rely on "Epic Care Link," which is a web-based application for connecting client organizations to community practices that provides read-only access to a patient's chart. The hospital uses the Meditech platform. These two EHR systems operate independently from UMMHC's EHR, therefore shared patients can have several medical record numbers.

The Applicant states the parties will develop an EHR implementation strategy, similar to the approach taken with Harrington Hospital, which recently integrated to a common EHR system among the parties, thereby providing clinicians systemwide with all the current necessary patient information in real time improving clinicians' ability to better manage and coordinate patient care. Through the Proposed Affiliation, with ease of access to a single medical record of the patient history and current patient data, patient safety can be improved by avoiding delays in patient care, eliminating duplication of bloodwork and of imaging studies. Such delays are associated with delays in transferring clinical data, and information between organizations; minimizing such delays is especially important for patients who are critically or acutely ill. Additional benefits of the single upgraded EHR include:

- Reducing care costs by streamlining processes and eliminating information redundancies, including the exchange of authorizations to transfer information, faxing paper between organizations, or obtaining CDs to transport radiology images, etc.;
- Including IT upgrades that foster greater patient engagement and empowerment in their healthcare experience³²; and

Currently, challenges exist with coordinating care across UMMHC and MRMC platforms. One example involves UMMHC patients who receive care at Tri River Family Health Center in Uxbridge, and who often have diagnostic studies performed at MRMC. Since EHR systems or other radiology results interfaces between MRMC and UMMHC are not integrated, results are currently sent back to the ordering provider via fax. Delays in care may result from technical issues with fax transmission, or human error such as misplacement of paper results. Once MRMC is transitioned to UMMHC's system, all tests performed at MRMC will automatically become available in the "In Basket" of the UMMHC/ Tri River ordering provider.

2) In addition, the aforementioned UMMHC OCI assists with closing gaps in care and with delivering high-quality ambulatory care by tracking performance at the clinic, provider, and patient level. Additionally, OCI works with Conifer, a population health care management vendor of UMMHC, to provide care coordination to patients and employees – e.g., multi-visit patients and patients who have health related social needs. The facilitators reach out to complex patients and assist them with care management. Once MRMC becomes part of the UMMHC system, OCI can help coordinate the care of

³² UMMHC's Epic system has received 10 Stars from Epic in 2022 and 2023

patients served by MRMC, monitor, and facilitate closure of care gaps to help deliver more comprehensive care.

3) The integration of MRMC into the UMMHC EHR will also allow for greater integration of clinical and social support services.³³ Clinical providers will be able to communicate with non-clinical support to help coordinate social care service resources based on SDOH screens through communication with social service departments and staff.

Analysis

The Applicant has detailed how the management of patient care across appropriate levels from community based primary and specialty care and to tertiary acute care is enhanced by keeping patients in the UMMHC system. When care goes outside of UMMHC, to Boston or to Western Massachusetts, it can become fragmented, communication becomes difficult and slow, and utilization may increase unnecessarily. Through the Proposed Affiliation's EHR system these challenges will be mitigated.

Studies show that integrated health information technology systems directly affect health outcomes, as access to a single, integrated health record improves care coordination, can reduce errors, improve patient safety, and support better patient outcomes.^{gg} Successful care coordination includes strong communication and effective care plan transitions among providers, and the clear communication of information that patients can understand.^{ee} Effective care coordination can improve a patient's experience, increase patient safety and reduce medical errors.^{ff} Uniform, integrated IT systems that include scheduling, EHR and patient communication tools, are timesavers which improve efficiencies. Accordingly, staff find that the Proposed Project will create efficiencies through the support of continuity and coordination of care initiatives for the Patient Panel.

Factor 1: d) Consultation

The Applicant has provided evidence of consultation, both prior to and after the Filing Date, with all government agencies that have licensure, certification, or other regulatory oversight, which has been done and will not be addressed further in this report.

Factor 1: e) Evidence of Sound Community Engagement through the Patient Panel

The Department's Guideline^o for community engagement defines "community" as the Patient Panel and requires that, at minimum, the Applicant must "consult" with groups representative of the Applicant's Patient Panel. Regulations state that efforts in such consultation should consist of engaging "community coalitions statistically representative of the Patient Panel."^p

³³ 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. 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").

The Applicant states that the community engagement representatives from UMMHC and MRMC worked collaboratively to develop a process for consulting with the community about the Proposed Affiliation and held weekly meetings to develop community awareness, to facilitate a community voice, to inform the MRMC community of the expected impact and benefits of the affiliation, and to establish transparency.

These efforts include the following activities:

- Presentation by the leadership of both organizations at the MRMC Patient Family Advisory Council (PFAC) meeting on December 6, 2023.
- A Community Forum on December 14, 2023, that included presentations by both organizations' leadership, as well as a question-and-answer session. This forum had between 120-130 participants.
- Presentation at the MRMC Annual Meeting of the Corporation on January 22, 2024, that included the attendance of Dr. Eric Dickson, President and CEO of UMMHC. This Meeting had an estimated 100 participants.
- Development and distribution of a one-pager providing information about the Project to both organizations' community networks as an additional touch point to engage the community.
- Outreach to local agencies and partners that serve the Milford community, including visiting a local community health center, and outreach to agencies that serve the increasing Brazilian and Ecuadorian population. These efforts will continue after the corporate affiliation between the entities.
- Outreach and conversations with local elected officials.³⁴

Some of the discussions focused on the following: the impact of the Affiliation on the workforce, the benefits of IT integration including the EHR, the history of UMMHC and MRMC clinical collaboration. Since these meetings occurred, UMMHC and MRMC have continued to work together to facilitate and plan additional community engagement commitments.

The Applicant described ongoing commitment to strengthen linkages with the community to address disparities that impact the health of the community, especially its underserved populations with a stated goal of engaging community stakeholders to develop trust and partnerships. Further it emphasized that it is intentional about community work, and³⁵ that it makes decisions through a health and race-conscious equity lens. Accordingly, UMMHC intends to engage with the MRMC community in a multi-faceted manner to maximize 1) structured planning, evaluation, and implementation, 2) accountability for engagement of diverse community members; and 3) transparency and reporting on interventions and outcomes to ensure they have the intended impact of addressing identified community need. Further the Applicant asserts it recognizes that building a healthy community requires long-term efforts.

³⁴ Documentation of the various activities and informational materials referenced above are attached as Exhibits H, I and J of the DoN Application.

³⁵ See DoN UMMHC-24021420 Narrative pp 29-32 <https://www.mass.gov/doc/narrative-pdf-umass-memorial-health-care-inc-transfer/download>

Analysis

Staff reviewed the information on the Applicant's community engagement and finds that it has met the required community engagement standard of Consult in the planning phase of the Proposed Project.

Factor 1: f) Competition on Price, Total Medical Expenses (TME), Costs and Other Measures of Health Care Spending

The Applicant states the Proposed Affiliation is not anticipated to have an adverse impact on competition in the Massachusetts health care market based on price, total medical expense ("TME"), provider costs, or other recognized measures of health care spending.

The Applicant and MRMC are both providers whose costs are within the mid to lower ranges of their respective Center for Health Information and Analysis ("CHIA") hospital cohorts. The most recent data published by CHIA³⁶ show that MRMC's statewide relative price ("RP") and net patient service revenue ("NPSR") per case mix adjusted discharge³⁷ ("CMAD") were similar to those of UMMHC's member community hospitals. (See Table 7). Further there is no change in Statewide RP from 2018 to 2021, before and after the merger of Harrington with UMMHC.

Table 7: UMMHC COMMUNITY HOSPITALS RELATIVE PRICE & NPSR/CMAD³⁸ CY 2021

Hospital	Hospital System	Statewide (Cross-Payer RP) 2018 ³⁹	Statewide (Cross-Payer RP) 2021 ⁴⁰	NPSR per CMAD 2021
Harrington Memorial Hospital	Harrington Healthcare System, Inc.	.85	.85	\$8,400
Marlborough Hospital	UMass Memorial Health Care	.88	.94	\$8,871
HealthAlliance-Clinton Hospital	UMass Memorial Health Care	.87	.85	\$9,447
Milford Regional Medical Center	Milford Regional Medical Ctr., Inc	.86	.88	\$8,588

³⁶ See CHIA, Provider Price Variation in the Massachusetts Commercial Market: Databook (August 2023), available at: <https://www.chiamass.gov/assets/docs/r/pubs/2023/Relative-Price-Databook-2021.xlsx>.

³⁷ Inpatient Net Patient Service Revenue (NPSR) per Case Mix Adjusted Discharge (CMAD) measures the hospital's NPSR divided by the product of the hospital's discharges and its case mix index. NPSR includes both net inpatient revenue and inpatient premium revenue. See Acute Hospital Profiles p.10 <https://www.chiamass.gov/assets/docs/r/hospital-profiles/2015/FY15-Profiles-Tech-Appendix.pdf>

³⁸ Data provided in Tables 1-3 originates from the CHIA, [Provider Price Variation in the Massachusetts Commercial Market: Databook](https://www.chiamass.gov/assets/docs/r/pubs/2023/Relative-Price-Databook-2021.xlsx) (August 2023), available at: <https://www.chiamass.gov/assets/docs/r/pubs/2023/Relative-Price-Databook-2021.xlsx>.

³⁹ <https://www.chiamass.gov/assets/docs/r/pubs/2020/S-RP-Final-Results-CY-2018.pdf> No NPSR per CMAD posted

⁴⁰ <https://www.chiamass.gov/relative-price-and-provider-price-variation/?viewfullsize=1>

Table 8 depicts the most recent CHIA data that shows MRMHC's measures of health care spending are among the lowest among all eleven community hospitals in its cohort. The Statewide relative price across all payers was the third lowest in its cohort and below the statewide median of .94. Further, the case-mix adjusted discharge ("CMAD") payment rate shows that Milford's payments were the lowest of all hospitals in its cohort.

Table 8: COMMUNITY HOSPITALS RELATIVE PRICE & NPSR/CMAD CY 2021

CHIA Cohort Community Hospital	Hospital System	Statewide (Cross-Payer) RP	Cohort Median SRP	Inpatient NPSR per CMAD
Nantucket Cottage Hospital	Mass General Brigham	1.81	.94	\$17,623
Martha's Vineyard Hospital	Mass General Brigham	1.5	.94	\$18,553
South Shore Hospital	South Shore Health System	1.01	.94	\$11,827
Brigham and Women's Faulkner Hospital	Mass General Brigham	1	.94	\$13,503
Newton-Wellesley Hospital	Mass General Brigham	.96	.94	12,198
Beth Israel Deaconess Hospital - Needham	Beth Israel Lahey Health	.94	.94	\$9,802
Emerson Hospital	Emerson Health System Inc & Subsid	.93	.94	\$11,754
Winchester Hospital	Beth Israel Lahey Health	.9	.94	\$12,142
Milford Regional Medical Center	Milford Regional Medical Ctr, Inc. & Affil.	.88	.94	\$8,588
Beth Israel Deaconess Hospital - Milton	Beth Israel Lahey Health	.83	.94	\$10,948
Anna Jacques Hospital	Beth Israel Lahey Health	.76	.94	\$8,939

The Applicant asserts that it is committed to keeping care in local communities of its member hospitals, when clinically appropriate; and that in so doing, patients in the community are able to receive cost effective, convenient, high-quality care and while enabling UMMHC to keep total medical expenses low.

Furthermore, the most recent CHIA data, shows the Applicant's tertiary/quaternary medical center, UMMHC, has the second lowest RP and NPSR/CMAD of the other six academic medical centers in Massachusetts. UMMHC reports a lower RP than its peer academic medical centers Mass General Brigham Hospitals (MGH, BWH), Boston Medical Center (BMC) and Tufts Medical Center (Tufts). This means that when patients seek care at UMMHC's competitors based in Eastern Massachusetts, when

they could have received care at UMMHC, the overall cost of care is higher than it would have been at UMMHC.

Table 9: UMMMC CASE MIX, RELATIVE PRICE, NPSR/CMAD CY 2021

Hospital	Case Mix Index	Relative Price	NPSR /CMAD
BIDMC	1.63	1.08	\$14,064
UMMMC	1.55	1.14	\$14,692
BMC	1.47	1.17	\$16,202
Tufts	1.82	1.11	\$16,366
MGH	1.9	1.42	\$16,404
BWH	1.72	1.44	\$19,873

Accordingly, the Proposed Affiliation presents an opportunity to maintain or reduce TME by maintaining and expanding MRMC patients' access to care locally, and within the UMMHC system, is a more affordable system, compared to outmigration to the higher cost tertiary/quaternary medical centers in Eastern Massachusetts.

Additionally, the Applicant asserts that one of its top priorities is to improve access to ambulatory services for patients. With the addition of MRMC to the Applicant's system, MRMC's patients will gain greater access to ambulatory services and allow them to retain care at the local level. Both UMMHC and MRMC participate in value-based programs. The ability to keep health care at the clinically appropriate level of care within the UMMHC system's network means that the total medical expense for those patients may be reduced through better coordinated care. This is better for patients and better for the financial success of value-based programs because it reduces unnecessary emergency department usage, readmissions, and the overall cost of care.

Analysis

Staff notes that in Fiscal Year 2022 UMMHC had 7.5% of all Massachusetts Acute Care Hospital Inpatient Discharges.⁹ Milford Regional Health Care had 1.4% of all Massachusetts Acute Care Hospital Inpatient Discharges. As such any increase in market share (which is not cumulative since there may be overlap in the patients at the Applicant's facilities) is likely to allow the Applicant and its proposed new affiliate to remain competitive within the central Massachusetts service area without a significant price impact on TME given that both providers are among the lowest cost providers in their Hospital cohort.

Factor 1 Summary Analysis

The Applicant described the importance to the Milford Service area of securing the financial viability of MRMC so that the full spectrum of acute and non-acute care services can be maintained. In Factor 1(b), the Applicant cited evidence that when access to local care is diminished those covered by Medicare, MassHealth, or other government programs, who are more likely to rely on locally based

care, are disproportionately impacted. Staff finds that the Proposed Project will secure the financial viability of MRMC so that access to local care and to specialty services can be maintained for the Patient Panel of MRMC.

As a result of the information provided by the Applicant and additional analysis, staff finds that the Applicant has demonstrated that the Proposed Project meets Factor 1(a-f).

Factor 2: Cost Containment, Improved Public Health Outcomes and Delivery System Transformation

Cost Containment

The Applicant asserts that the Proposed Affiliation is aligned with the Commonwealth's goals for cost containment for the following reasons:

- 1) Both Parties' TME is among the lowest in their hospital cohort,
- 2) By providing long-term financial stability, the parties will benefit from investments that will enable better coordination of care which can lower the cost of care
- 3) By improving communication and coordination of care, value-based programs may be enhanced

1) The Proposed Affiliation is intended to preserve and strengthen cost effective, local care in the MRMC service area. It is anticipated that by enabling residents to continue to receive their care locally in Central Massachusetts, total medical expense (TME) will remain lower because patients will not need to seek care outside of their local community. As referenced in Factor 1(f) MRMC ranks among the lowest in TME measures among all community hospitals and as compared to the Boston area health care systems, UMMHC has lower TME.

2) As described in Factor 1, MRMC has had three consecutive fiscal years (FY21 to FY23) of negative operating margins that range from \$11.9M to \$15.3M, or 3.6% to 4.0%. If the Proposed Affiliation does not go forward, there is a substantial risk that MRMC will not be able to meet its debt covenants over time. Without this Proposed Affiliation, constraints resulting from insufficient funds including investments in maintaining plant and equipment, as well as health care services will likely occur.

The Proposed Affiliation will provide MRMC with the long-term financial stability necessary to advance initiatives that contribute to the Commonwealth's goals of cost containment, improved quality, and greater access to UMMHC cost saving initiatives as noted Factor 1(b), the improved management of patient care, along the full continuum of care, including tertiary and community level inpatient care, ambulatory and post-acute care, will be enhanced by providing patients greater coordination of care within the integrated UMMHC community.

3) The closer affiliation between UMMHC and MRMC will enable better communication and more coordinated care potentially reducing unnecessary emergency department usage, readmissions, and the overall cost of care which is better for the patients and better for the financial success of value-based programs as described in Factor 1(b).

Public Health Outcomes

The Applicant notes that when care goes outside of UMMHC to Boston, or even Western Massachusetts, the care becomes fragmented, communication becomes difficult, information can be lost, and utilization is often increased unnecessarily (e.g., duplication of tests) and costs increase. With the Proposed Affiliation, care will remain within the service area within an integrated health system. Failure to meet aforementioned debt covenants will likely lead to reductions in public health value through decreased access to necessary medical services in the MRMC service area negatively impacting the health of the Milford community.

The Proposed Affiliation is expected to improve health outcomes by retaining and strengthening high-quality, comprehensive services in the Milford service area. Through the Proposed Affiliation, the parties anticipate that MRMC's transition to UMMHC's EHR system will improve MRMC's ability to manage and coordinate patient care across the UMMHC system.⁴¹ This initiative is aligned with the government's Healthy People 2030 twin objectives of increasing care access, and exchange of health information among hospitals.⁴² The Healthy People 2030 Health IT objectives generally focus on streamlining health IT systems in order to permit easier exchange of health information, which may result in improved health outcomes.⁴²

Delivery System Transformation

The Applicant asserts the incorporation of social services and community-based expertise are critical to the achievement of the parties' delivery system transformation objectives and gives some examples of community initiatives undertaken systemwide and locally in Factor 1(b).

UMMHC has adopted a multifaceted strategy that addresses SDOH as part of the care planning process. For over five years, UMMHC has been screening patients for SDOH in ambulatory settings. This has been accomplished by UMMHC's clinic staff asking patients SDOH questions while they are roomed. The percentage of patients screened by UMMHC ambulatory clinics has gradually increased, with 44.5% of UMMHC's primary care patients screened during CY2024. Patients who are identified as having a health-related social need can access a user-friendly solution called CommunityHelp, which is described in Factor 1(b). While CommunityHelp can be accessed from within the patient's medical record, patients and community members can also search for resources themselves.

⁴¹ See HealthIT.gov, Improved Care Coordination, <https://www.healthit.gov/topic/health-it-and-health-information-exchange-basics/improve-care-coordination> (indicating that use of EHR may improve care coordination among clinicians in various care settings, including primary, specialty care, and emergency services); HealthIT.gov, Improved Diagnostics & Patient Outcomes, <https://www.healthit.gov/topic/health-it-and-health-information-exchange-basics/improved-diagnostics-patient-outcomes> (indicating that use of EHR may improve access to diagnostic results in order to drive better patient outcomes, as clinicians have more reliable access to test results, and that EHRs may help reduce errors and improve patient safety by automating certain checks and exposing potential safety issues).

⁴² Office of Disease Prevention and Health Promotion, Healthy People 2030, *Health IT*, <https://health.gov/healthypeople/objectives-and-data/browse-objectives/health-it> ("Health information exchange gives health care providers and patients the ability to appropriately access and securely share medical information electronically. Strategies to streamline health IT systems can make it easier to electronically exchange health information and may result in improved health outcomes.").

In 2024, UMMHC plans to expand SDOH screening to all inpatients, as well as streamline workflows in the ambulatory setting using the Navigate Platform implemented by Get Well, whereby upon admission, patients will receive text messages encouraging them to complete a brief survey about their SDOH. If any SDOH are identified, Get Well will assist patients in navigating available resources that may help address their need for social services supports—either via a text or phone-based platform. In some cases, social workers and virtual community health workers may to assist the patient with identifying needed services. These SDOH screening initiatives will be extended to MRMC’s ambulatory and inpatient patient populations to ensure that the MRMC patients benefit from UMMHC’s collective experience and resources to help address SDOH in the MRMC community.

Factor 2 Summary Analysis

Staff has summarized a number of credible ways the Proposed Affiliation will maintain or reduce costs, improve public health value and lead to delivery system transformation that were described by the Applicant. As a result of the information provided by the Applicant and additional analysis, staff finds that the Applicant has demonstrated that the Proposed Project meets Factor 2

Factor 3: Relevant Licensure/Oversight Compliance

The Applicant has provided evidence of compliance and good standing with federal, state, and local laws and regulations and this Factor will not be addressed further in this report. As a result of information provided by the Applicant, staff finds the Applicant has reasonably met the standards of Factor 3.

The Applicant is in compliance with the Essential Services regulatory process outlined in the regulations (105 CMR 130.122).

Factor 4: Demonstration of Sufficient Funds Independent CPA Analysis

Under factor 4, the Applicant must demonstrate that it has sufficient funds available for capital and operating costs necessary to support the Proposed Project without negative effects or consequences to the existing Patient Panel. Documentation sufficient to make such a finding must be supported by an analysis by an independent CPA.

The CPA analysis included a review of numerous documents in order to form an opinion as to the reasonableness and feasibility of the projections regarding the Proposed Transfer of Ownership including:

1. Financial Model for UMMHC & MRMC both individually and combined from September 30, 2024 through September 30, 2029;
2. Proposed FY’s 2023 and 2024 UMMHC Budget Presentation;
3. Audited FY’s 21-23 Financial Statements for both UMass Memorial Healthcare, Inc. and Milford Regional Medical Center, Inc.;

4. Milford Savings Summary for FY 2025 prepared by Huron Consulting Group;
5. Definitive Healthcare data;
6. Data obtained from Integra Information, A Division of Microbilt Corporation as of August 4, 2023; and,
7. IBISWorld Industry Report, Hospitals in the US, dated November 2023.

The CPA calculated standard financial ratios, reflecting profitability, liquidity, and solvency⁴³ of the forecasted operating results to market information from Integra Reports IBISWorld and Definitive Healthcare to assess the reasonableness of the Projections.⁴⁴

Revenues⁴⁵

Projected net patient service revenue for UMMHC is expected to grow by 12.9% in FY 2024 over FY 2023, and for FY's 2025 and 2026 is projected to be 3.3% and 0.2%, respectively. For the remainder of the projection period (FY 2027 through FY 2029), Management projected nominal patient service revenue growth. Total operating revenue in FY 2024 for UMMHC represents 90.8% of the total combined operating revenue within the projections and is the basis for the projected revenue growth. In FY 2024 growth can be attributed to several factors including UMMHC's new computed tomography ("CT") project, along with the retention of higher acuity patients, and with a combination of volume and charge rate increases between 4.0%- 6.0%. Revenue growth in the recent and near term also relates to efficiency initiatives that UMMHC has implemented since FY 2018. One initiative is UMMHC's ambulatory transformation which has helped the Applicant more efficiently utilize its existing clinical network and staff. Another is UMMHC's implementation of a new electronic health record ("EHR") system in FY2018-2019. As a result of UMMHC's these and other operating improvement initiatives, the Applicant expects to be able to allocate patients with low acuity cases more efficiently and enable more senior physicians to focus on providing care to patients with higher acuity levels.

Milford's revenue was expected to grow 3.1% in FY 2024 and 0.5% in FY 2025. For the remainder of the Projection Period (FY 2026 through FY 2029), Management projected nominal patient service revenue growth. The CPA notes in Table 10, the combined total operating revenue growth for UMMHC and MRMC anticipated for FY 2024 is slightly above the FY 2021-23 compounded annual growth rate ("CAGR"); and the assumed nominal revenue growth beyond FY 2025 is based on Management's consideration of changes in volume, not on inflation or reimbursement increases beyond FY 2025.

Table 10: Combined Revenue Growth Historical and Projected for UMMHC and MRMC

⁴³ Profitability metrics, such as EBITDA, EBITDA Margin, Operating Margin and Total Margin are used to assist in the evaluation of management performance in how efficiently resources are utilized. Liquidity metrics, such as Current Ratio, Cash Days on Hand and Days in Accounts Receivable measure the quality and adequacy of assets to meet current obligations as they come due. Solvency metrics, such as Total Assets and Total Equity measure the company's ability to service debt obligations. Certain metrics can be applicable in multiple categories.

⁴⁴ See Pages 8-9 of the CPA report <https://www.mass.gov/doc/cpa-report-pdf-umass-memorial-health-care-inc-transfer/download>

⁴⁵ Revenue includes net patient service revenue and other operating revenue. The cumulative patient service revenue comprises 93.3 percent of the cumulative total operating revenue from FY 2024 through FY 2029.

	Annual Growth Range (FY 2021 –23)	CAGR (FY 2021 – 2023)	FY 2024 Growth	Annual Growth Range (FY 2025-29)
Revenue	7.9% – 11.4%	9.7%	11.8%	0.0% – 2.9%

In order to determine the reasonableness of the projected revenue, the CPA reviewed the underlying assumptions upon which Management relied that includes historical operating results and anticipated demographic trends in the UMMHC service area.

As a result of the analysis, the CPA concludes that the revenue growth projected by the Applicant reflects a reasonable estimation of future revenue of UMMHC.

Expenses

The CPA analyzed each category of projected operating expenses for reasonableness and feasibility.⁴⁶ Total expenses are projected to grow by 16.6% and 2.7% in FY 2024 and FY 2025, respectively, which is in-line with projected revenue growth. Starting in FY 2026, Management held operating expenses relatively flat, assuming nominal growth for FY 2026 through FY 2029, except for interest expense which is projected based on UMMHC’s projected level of debt and current terms, depreciation and amortization, and other direct expenses. In the earlier years of the projections, increases are related to salaries and benefits due to a competitive labor market and an increase in pharmaceutical costs.

Table 11 indicates that the range of expense growth for FY 2024 -29 is above the two-year CAGR. The main drivers of this change are operational improvement plans and transformation initiatives which are expected to enable UMMHC to reduce administrative costs (including consulting and other professional services expenses), decrease in contractor rates (with a focus on replacing travel nurses with full time employees), and lower IT costs from UMMHC’s transition to new enterprise resource planning (“ERP”) and EMR systems.

Table 11: Expense Growth Historical and Projected

	Annual Growth Range (FY 2021 –23)	CAGR (FY 2021 – 2023)	FY 2024 Growth	Annual Growth Range (FY 2025-29)
Expenses	2.6% - 15.0%	8.6%	16.6%	0.0% - 2.7%

The CPA notes that the projected total expenses for UMMHC as a percentage of total revenue range from 99.8% to 100.3% from FY 2024-29. This is consistent with the combined historical total expenses as a percentage of total revenue (which ranged from 96.1% to 101.1% from FY 2021 to FY 2023). As a result of its analysis the CPA concluded that operating expenses reflect reasonable estimation of future expenses for the Applicant.

⁴⁶ Operating expenses include salaries and wages, employee benefits, professional fees, purchased services, pharmacy, medical supplies, non-medical supplies, utilities, insurance, rental leases, other direct expenses, system allocation expenses, depreciation and amortization, and interest expenses.

Capital Expenditure

There is no substantial capital expenditure within the Proposed Project. The Applicant will transition Milford to its EHR which is expected to require an expenditure of approximately \$55.0 million from FY 2025 to FY 2026. The forecasted capital expenditures budget for this was approved by UMMHC's finance committee will be funded through current operations and unrestricted fundings.

Based on its review, the CPA determined that the capital expenditure projected reflect a reasonable estimation of future capital outlay of UMMHC.

CPA Conclusion

The Projections exhibit a cumulative operating EBIDA surplus of approximately 4.7 percent of cumulative projected operating revenue for the six years from FY 2024 through FY 2029. The CPA determined the anticipated EBIDA surplus is a reasonable expectation and based upon feasible financial assumptions and projections. Accordingly, it determined that the Proposed Affiliation is not likely to have a negative impact on the patient panel or result in a liquidation of assets of UMMHC.

Factor 4 Analysis

As a result of information provided by the Applicant, staff finds that the Applicant has met Factor 4.

Factor 5: Relative Merit

Transfers of Ownership are exempt from this factor.

Factor 6: Community-based Health Initiatives

Transfers of Ownership are exempt from this factor.

Findings and Recommendations

Based upon a review of the materials submitted, staff finds that the Applicant has met each DoN factor and recommends approval of this Application for Transfer of Ownership, subject to all applicable Standard and Other conditions.⁴⁷

Other Conditions

In establishing Conditions, the DoN Program ("Program") notes the Holder stated throughout the DoN Application the intent to allow care to be maintained, enhanced, and expanded in the MRMC's community to provide local access to high-quality care at a lower cost for the community.

1. To establish adherence to this intention as outlined at the public hearing on the proposed transfer of ownership, as a condition of approval, the Holder must maintain all essential services **at MRMC** for a minimum of 5 years post DoN approval.

⁴⁷ (B)(1) A Determination of Need Application for Transfer of Ownership pursuant to 105 CMR 100.735 is exempt from 105 CMR 100.310(A)(5), (6), (7), (9), (10) and (13).

2. In doing so and to allow for Program monitoring of the Applicant's commitment to maintaining all **essential** services after the acquisition of MRMC, the Holder must report on the following **at MRMC**:
 - a. On a quarterly basis, the Holder will inform the Program of any anticipated material or prolonged reduction of any **essential** service at MRMC during the upcoming quarter, and the rationale for such reduction, ~~(whether or not it is an essential service)~~. The Holder will provide an analysis of utilization patterns over a minimum of the previous five years, budgeted and actual Full Time Equivalent (FTE) staffing for each of the services referenced for reduction, a data supported assessment of community need, and a justification for the reduction the service, including alternatives considered and alternative sites where access can be reasonably assured for its Patient Panel.

Following a notice of anticipated reduction of any service at MRMC, the Holder may be referred to the Public Health Council for review of the long-term implications of such reduction and compliance with the DoN approval.

- b. The Applicant has expressed its intent to increase services at the UMMHC Tri-River and Water Street sites. As part of the Holders Annual reporting, the Holder shall report on initiatives undertaken to achieve the intended goal of increasing services at the UMMHC Tri- River and Water Street sites, that includes which specialty services have been added or eliminated.
 - c. The Holder will provide MRMC with the opportunity to participate in a number of the following UMMHC programs to increase access and reduce the overall cost of care: Hospital at Home, Mobile Integrated Health, Road to Care, and EMR technology enhancements. As part of its annual reporting, the Holder shall report on specific actions taken to improve access to these and similar programs that, if applicable, incorporates the rationale for not moving forward with these initiatives, including implementation of the EMR.
3. The Holder shall provide, in its annual report to the Department, reporting on its proposed measures to assess the impact of the Proposed Project, including (1) clinical quality metrics such as patient mortality; (2) patient safety, as measured by Patient Safety Indicator (PSI) events; (3) patient experience scores, as measured through patient survey responses; and (4) health equity, as measured by the MassHealth health equity incentive program metrics.

<https://www.mass.gov/doc/community-hospitals-at-a-crossroads-findings-from-an-examination-of-the-massachusetts-health/download#:~:text=At%20the%20same%20time%2C%20as,many%20AMCs%20and%20teaching%20hospitals.>

^b <https://www.mass.gov/lists/don-umass-memorial-health-care-inc-20121712-to>

^c See Prentice JC, Pizer SD. Delayed access to health care and mortality. Health Serv Res. 2007 Apr;42(2):644-62, <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1955366/>; see also, Office of Disease Prevention and Health Promotion, Healthy People 2030, [https://health.gov/healthypeople/objectives-and-data/browse-objectives/health-care-access-and-quality/reduce-proportion-people-who-cant-get-medical-care-when-they-need-it-ahs-04_\(indicating_that_“delaying_medical_care_can_negatively_impact_health_and_increase_the_cost_of_care”\)](https://health.gov/healthypeople/objectives-and-data/browse-objectives/health-care-access-and-quality/reduce-proportion-people-who-cant-get-medical-care-when-they-need-it-ahs-04_(indicating_that_“delaying_medical_care_can_negatively_impact_health_and_increase_the_cost_of_care”)).

- ^d 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>.
- ^e 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>.
- ^f 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>.
- ^g Id.
- ^h See Elek P, Molnár T, Váradi B. The closer the better: does better access to outpatient care prevent hospitalization? *Eur J Health Econ*. 2019 Aug;20(6):801-817, <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6652173/> (providing support for “bringing outpatient care closer to a previously underserved population yields considerable health benefits” and suggesting that patients may substitute between outpatient and inpatient care).
- ⁱ Milford Regional Medical Center, Community Health Needs Assessment, 2021 Final Report, <https://www.milfordregional.org/app/files/public/f71683c8-c7a4-455b-98ba-8a91bcef4416/Milford%20Regional%20Medical%20Center%20-%202021%20CHNA.final.pdf>.
- ^j See MassHealth, Health Equity Incentives Program RFI, Appendix A; MassHealth RELD, Sex & SOGI Data Standards (October 2021), <https://www.mass.gov/doc/health-equity-incentives-rfi-appendix-a-0/download>.
- ^k See UMMHC, 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.formatte.d.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/>.
- ^l UMMHC, Diversity and Cultural Awareness, Programming and Education, <https://www.ummhealth.org/umass-memorial-medical-center/about-us/diversity-and-cultural-awareness/programming-and-education>.
- ^m The Greater Milford Community Network, CHNA 6, Community Health Improvement Plan (CHIP) (February 2022), <https://drive.google.com/file/d/1MuagAZT3cuWi6ZYzhBPFc-c1r1-xpi5X/view?pli=1>.
- ⁿ Milford Regional Medical Center, About CHNA 6, <https://www.chna6.org/>.
- ^o Community Engagement Standards for Community Health Planning Guideline. <https://www.mass.gov/doc/community-engagement-guidelines-for-community-health-planning-pdf/download>.
- ^p DoN Regulation 100.210 (A)(1)(e). at <https://www.mass.gov/files/documents/2018/12/31/jud-lib-105cmr100.pdf>.
- ^q <https://www.chiamass.gov/hospital-and-hospital-system-performance-dashboard/>
- ^r See Office of Disease Prevention and Health Promotion, Healthy People 2030, Objective: Increase the proportion of hospitals with access to necessary electronic information — HC/HIT-D06, <https://health.gov/healthypeople/objectives-and-data/browse-objectives/health-it/increase-proportion-hospitals-access-necessary-electronic-information-hchit-d06>; Office of Disease Prevention and Health Promotion, Healthy People 2030, Objective: Increase the proportion of hospitals that exchange and use outside electronic health information — HC/HIT-D05, <https://health.gov/healthypeople/objectives-and-data/browse-objectives/health-it/increase-proportion-hospitals-exchange-and-use-outside-electronic-health-information-hchit-d05>.