

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

Applicant Name	UMass Memorial Health Care, Inc.
Applicant Address	One Biotech Park, 365 Plantation Street Worcester, MA 01605
Filing Date	January 22, 2021
Type of DoN Application	Transfer of Ownership
Total Value	\$143,325,965.00
Project Number	20121712-TO
Ten Taxpayer Group (TTG)	None
Community Health Initiative (CHI)	Exempt from Factor 6
Staff Recommendation	Approval with Conditions
Public Health Council	May 12, 2021

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 Harrington Health Care System (HHCS) which is in turn, the parent of Harrington Memorial Hospital, Inc. (HMH), which operates an acute care, community hospital with campuses in Southbridge, and Webster, MA. The Proposed Project represents a change in the ownership interest or structure of a Hospital or Clinic, or of the Hospital or Clinic's organization or parent organization(s), such that the change results in a shift in control of the operation of the Hospital or Clinic.

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 four factors set forth in the regulation.

The Department did not receive any written comments on this application nor were any Ten Taxpayer Groups formed.

## Background: UMass Memorial Health Care, Inc. (UMMHC), Harrington Health Care System (HHCS) and Application Overview

The following entities are relevant to the current application:

1. **UMass Memorial Health Care, Inc. (UMMHC)** is a Massachusetts nonprofit corporation that owns and operates an integrated health care system comprised of a network of hospitals and other health care providers that serve the residents of Central Massachusetts. UMMHC is the sole corporate member of UMass Memorial Community Hospitals, Inc. (UMMCH) and certain other affiliates. UMMHC has three hospitals with eight campuses in Central MA. UMMHC had 6.5% of all Massachusetts Acute Care Hospital Inpatient Discharges in FY19.<sup>1,a</sup>
  - UMass Memorial Medical Center (UMass Memorial) is a 749-bed academic medical center (AMC) in Worcester. The University campus has 421 licensed acute care beds, and the Memorial campus has 302 licensed acute care beds, and it also operates a 26-bed satellite psychiatric treatment and recovery center (PTRC). UMass Memorial operates the only Level 1 adult and pediatric Trauma Center in Central Massachusetts. It is a designated Primary Stroke Service (PSS) hospital, and one of nine organ transplant centers in Massachusetts. UMass Memorial is the tertiary care referral center for Central and Western Massachusetts. UMass Memorial is a High Public Payer (HPP) hospital.<sup>2</sup>
  - HealthAlliance-Clinton Hospital is a 152-bed community-HPP hospital with campuses in Clinton, and Leominster.<sup>3</sup>
  - Marlborough Hospital is a 79-bed community-HPP hospital located in Marlborough.
  - UMass Memorial Medical Group, Inc. is an integrated multispecialty group medical practice. UMass Memorial Medical Group physicians provide primary and specialty services for routine and complex health needs to patients in Worcester and throughout Central Massachusetts.
  - UMass Memorial Managed Care Network (MCN) is a group of primary and specialty care physicians affiliated with the UMass Memorial Health Care System. These physicians are either employed by their hospitals or medical groups or they are in independent private practice.<sup>b</sup>
  - 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.
2. **Harrington HealthCare System, Inc. (HHCS)** is a Massachusetts nonprofit corporation that owns and operates an integrated health system.
  - Harrington Memorial Hospital, Inc. (HMH) which operates Harrington Memorial Hospital, a 119-bed, independent, community-HPP hospital with two campuses located in Southbridge and Webster.<sup>c</sup> Harrington is a Primary Stroke Service (PSS) hospital, as designated by the Massachusetts Department of Public Health.
  - Harrington Physician Services, Inc. (HPS), operates a primary care and multi-specialty community medical practice with offices in South Worcester County and includes the primary service area (PSA) of the towns of Southbridge, Sturbridge, Charlton, Dudley, Wales, Webster, Holland, and Fiskdale.

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<sup>1</sup> Hospital Inpatient Discharges by System Affiliation (2019): Partners (19.4%), BILH (18.5%), Steward (9.3%), Baystate (6.6%), Wellforce (5.9%), Other (9.3%), and Independent Health System (24.3%).

<sup>2</sup> High Public Payer Hospitals (HPP) receive a minimum of 63% of gross patient service revenue from public payers.

<sup>3</sup> On October 1, 2017, HealthAlliance Hospital merged with Clinton Hospital to form HealthAlliance-Clinton Hospital.

- Harrington Healthcare Provider Organization Inc. (HHPO), is a managed care contracting organization.
- HHCS participates in the MassHealth ACO Program, through the Boston Accountable Care Organization (BACO).<sup>4</sup>

### **Application Overview**

The Applicant is proposing to become the sole corporate member of Harrington HealthCare System, which is in turn the parent of Harrington Memorial Hospital. The Applicant states that the Proposed Project builds upon the longstanding relationship between UMMHC and HHCS and will allow them to further improve the health of the communities they serve. The Applicant asserts that the Proposed Project will add measurable public health value for the Patient Panel currently served by both UMMHC and HHCS, and will enhance HHCS' ability to provide high quality, low-cost health care to the patients and communities in its service area. According to the Applicant, the Proposed Project will strengthen HHCS' viability through access to capital and resources that will increase access to community-based, high-quality care in its service area. The Proposed Project will enable HHCS to obtain more advanced health information technology to enhance information sharing, care coordination, and expand use of health care data for accountable care and other value-based and population health managed contracts. The Applicant maintains the Proposed Project will improve access to primary and specialty care, and access to UMMHC's physician and community hospital network for patients in HHCS' service area to support access to high quality, cost-effective health care services in the most appropriate clinical setting. The Applicant plans to integrate HHCS into its ongoing Anchor Mission and health equity work and improve the communities in which the Patient Panel reside.<sup>5</sup>

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<sup>4</sup> BMC Health System and its BMC HealthNet plan formed accountable care partnership plans with BACO and three other ACOs in other parts of the state in order to provide enhanced services to MassHealth members. The Boston Accountable Care Organization is made up of 19 provider organizations, including Boston Medical Center and, Harrington HealthCare System.

<https://www.harringtonhospital.org/news/harrington-healthcare-system-joins-boston-accountable-care-organization/>

<sup>5</sup> UMMHC's Anchor Mission work is focused on improving the health and welfare of its community beyond its Hospital's walls particularly in areas where there is pervasive inequality and social disadvantage. The Applicant's Anchor Mission work focuses on four areas or pillars: Investing, Hiring, Purchasing, and Volunteering. A fifth pillar of Data and Analytics was created so that a substantive data set of baseline information and impact analyses could be made and reviewed on a continuing basis.

## OVERVIEW of OWNERSHIP TRANSFER AND FACTOR REVIEW<sup>6</sup>

Description	What's Needed to Meet Factor 1: Demonstration of need; improved health outcomes and quality of life; assurances of health equity; continuity and coordination of care; evidence of community engagement; and competition on recognized measures of health care spending.	What's Needed to Meet Factor 2: Demonstration of cost containment, improved public health outcomes, and delivery system transformation	Factors 3 and 4 <sup>7</sup>
	<i>Staff Report finds</i>		
	MEETS w/ CONDITIONS	MEETS w/ CONDITIONS	MEETS
<p>The Applicant, UMMHC is proposing to become the sole corporate member of HHCS, which is in turn the parent of HMMH.</p> <p>The Applicant proposes to increase public health value for the Patient Panel through a greater alignment with HHCS and investments to support and enhance access to high quality care.</p>	<ul style="list-style-type: none"> <li>• Reporting on the maintenance of services at HMMH</li> <li>• Reporting on measures revised from the Applicant's proposed list</li> </ul>	<ul style="list-style-type: none"> <li>• Reporting on any changes to HHCS' participation in the MassHealth ACO Program</li> </ul>	✓

<sup>6</sup>A Determination of Need Application for a Transfer of Ownership pursuant to 105 CMR 100.735 is exempt from the Determination of Need Factors (5) and (6), unless otherwise specified.

<sup>7</sup> 3: Sufficient evidence of compliance and good standing with federal, state, and local laws and regulations.

4: Sufficient documentation of the availability of sufficient funds for capital and ongoing operating costs necessary to support the Project without negative impacts or consequences to the Applicant's existing Patient Panel.

## Patient Panel<sup>8</sup>

The Patient Panel consists of 704,581 patients, and includes UMMHC hospital facility patients and HMH patients. The Applicant provided demographic data on UMMHC patients and HMH patients, and also provided demographic data on the 9.0% of UMMHC patients served annually that reside in HMH's primary and secondary service areas.<sup>9</sup>

## Patient Information (FY20)

Table 1 presents patient information for FY20 for UMMHC patients and HMH patients. This snapshot provides important comparison information; staff notes the following observations about these data below:

- **Age** – The 18-64 age group represents the majority (~60%) of the UMMHC and HMH patients, followed by patients ages 65 and over who represent over 20% of the patient populations.
- **Race/Ethnicity** – Approximately 75% of UMMHC and HMH patients identify as White. Ten percent of the HMH patient population identified as Hispanic compared to 0.7% of the UMMHC patient population. The Applicant states that the racial diversity within the patient populations is understated when looking at the entire patient population of UMMHC and HMH patients. According to US Census Bureau data, Hispanic/Latinos represent 32% of the Southbridge population, 21.9% of the Worcester city population, and 12.2% of the Worcester County population.<sup>10,d,e,f</sup> In FY20, 14.2% of UMMHC patients and 9.6% of HMH patients chose not to report their race/ethnicity or reported a category other than the options available. In response to staff inquiry, the Applicant states, 1% of UMMHC patients chose not to report or were unable to provide a response and 13.2% reported Other. Race, ethnicity, and language data are collected during the registration process, generally during an initial visit. Patients also have the ability to complete the questions and update responses themselves via myChart. HMH captures race/ethnicity data in Meditech and Allscripts in the registration page. Each patient is asked about race/ethnicity and the response is entered into the field. Patients that do not respond to the question and those that are entered for reference laboratory services are listed as Unknown.
- **Patient Origin** – Ninety percent of UMMHC's patient population and 80% of HMH's patient population originate from Central Massachusetts. The Applicant states that a higher number of HMH patients are from out of state than UMMHC patients due to HMH's close proximity to Connecticut. UMMHC provides care to patients from HMH's primary and secondary service areas with 9% of the patients served by UMMHC hospital facilities residing in towns that make up Harrington's primary and secondary service areas.
- **Payer Mix** – Public payers make up over 65% of the payer mix for both HMH and UMMHC patient populations.
- **ACO and APM Contracts** – Approximately 40% of UMMHC patients and 50% of HMH patients are covered under risk contracts.

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<sup>8</sup> 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. In the case of a Transfer of Ownership, Patient Panel also includes the Patient Panel of the entity to be acquired.

<sup>9</sup> The towns that make up the service areas are Brimfield, Wales, Charlton, Fiskdale, Holland, Sturbridge, Webster, Dudley, Southbridge, Brookfield, East Brookfield, North Brookfield, West Brookfield, Spencer, West Brookfield, Oxford, Warren, and Douglas. The Applicant notes that the primary and secondary service areas for HHCS, HMH, and HPS are the same.

<sup>10</sup> Worcester County is a proxy for the total service area of UMMHC.

**Table 1: Overview of UMMHC and HMH Patients, FY20<sup>11</sup>**

	UMMHC Hospital Facilities	HMH
Total Patients	345,864	62,701
<b>Gender</b>		
Male	43.7%	45.2%
Female	56.2%	54.8%
Unknown	0.1%	
<b>Age</b>		
0-17	18.2%	10.5%
18-64	59.7%	64.7%
65+	22.2%	24.8%
<b>Race/Ethnicity<sup>12</sup></b>		
White	75.7%	78.2%
Black/African American	5.9%	1.4%
Hispanic/Latino	0.7%	10.0%
Asian	3.2%	0.7%
American Indian or Alaska Native	0.2%	0.2%
Other/Unknown	14.2%	9.6%
<b>Patient Origin</b>		
Central Mass	90.5%	80.6%
Eastern Mass	4.0%	1.1%
Western Mass	2.2%	7.7%
Out of State	3.2%	10.6%
<b>Payer-Mix<sup>13,14</sup></b>		
Commercial Total	<b>30.3%</b>	<b>26.9%</b>
Commercial PPO/Indemnity	3.2%	2.2%
Commercial HMO/POS	27.1%	24.7%
Medicaid Total	<b>24.1%</b>	<b>25.7%</b>
MassHealth FFS	17.6%	7.7%
Managed Medicaid	6.5%	18.0%
Medicare Total	<b>42.1%</b>	<b>42.8%</b>
Medicare FFS	28.7%	24.9%
Managed Medicare	13.4%	18.0%
All Other <sup>15</sup>	<b>3.5%</b>	<b>4.5%</b>
<b>ACO/APM Contracts<sup>16</sup></b>		
ACO and APM Contracts	42%	52.50%
Non-ACO and APM Contracts	58%	47.50%

<sup>11</sup> Applicant states lower counts noted in FY20 are most likely due to the COVID-19 pandemic. The UMMHC patient population decreased by 6.9% between FY19 and FY20. The HMH patient population decreased by 5.6% between FY19 and FY20.

<sup>12</sup> Based on self-reporting. The Applicant states a significant percentage either chose not to report or reported in a category not reported here and therefore the racial make-up of patients may not be accurately represented.

<sup>13</sup> Based on Gross Patient Service Revenue (GPSR) for FY20.

<sup>14</sup> Managed Medicaid: Private Medicaid/Medicaid MCOs. Managed Medicare: Private Medicare/Medicare Advantage.

<sup>15</sup> All Other: e.g. Health Safety Net (HSN), self-pay, and TriCare.

<sup>16</sup> UMMHC (2021) ACO and APM Contracts: Medicare MSSP, Medicare BPCI-Advanced, THP risk-commercial products, and HPHC risk-commercial products. Harrington ACO and APM Contracts (2020): BACO, Medicare MSSP, THP risk-commercial products, HPHC risk-commercial products, BCBS, Fallon Medicare Advantage.

## Factor 1a: Patient Panel Need

### Patient Panel Need

The Applicant attributes Patient Panel need for the Proposed Project to the necessity for continued access to health care services in the HHCS community which will occur through the following ways:

1. Maintaining the financial viability of HHCS;
2. Increasing access by the Harrington community to specialists and specialty care provided by UMMHC;
3. Improving access to ambulatory services for patients and referring providers; and
4. Improving communication and coordinated care.

#### 1. Maintaining the financial viability of HHCS

The Applicant asserts that without this project, HHCS is at risk of financial hardship and reduced resources which could lead to a reduction in services, access to care, and other limitations on its ability to serve the patients in its service area. UMMHC facilities and HMH are High Public Payer (HPP) hospitals as defined by the Center for Health Information and Analysis (CHIA) and Disproportionate Share Hospitals (DSH) as defined by the Centers for Medicare and Medicaid Services (CMS).<sup>17</sup> The Applicant states that the payer mix of HMH generates significantly lower operating margins than commercial payors. The large percentage of gross patient service revenue (GPRS) from public payers threatens the financial sustainability and long-term viability of HMH as an independent community hospital.<sup>18</sup> When confronted with financial challenges, HMH will encounter difficult operating and service delivery decisions which can lead to a reduction or closure of local services. The Applicant cited the Massachusetts Health Policy Commission (HPC) 2016 report titled *Community Hospitals at a Crossroads*, which concluded that “the variety of challenges-driven both by changes to care delivery and payment models and by market dysfunction – make traditional community hospital operating and business models unsustainable.”<sup>18</sup> The Applicant noted that the challenges facing community hospitals that were identified in the report include: high shares of publicly insured patients, low average case mix, declining volume, and a lack of resources to invest in health delivery transformation.

The Applicant states that while HMH has some services that do not operate at a loss, HHCS experiences annual financial losses overall. HHCS has experienced an operating margin loss of approximately 5% over the past four years, and noted that it is below rating agencies median. The Applicant argues that the Proposed Project will strengthen HHCS’ viability and that through financial support, operational efficiencies, management and administrative resources, and greater clinical alignment, UMMHC will 1) help HHCS withstand variations in operating margins and 2) invest in appropriate services and infrastructure to strengthen HMH’s sustainability to maintain the continuation of services in the HHCS community. The Applicant maintains that without the Proposed Project, HHCS is at risk of financial hardship which can lead to a reduction in resources over time and that the Proposed Project will provide the financial stability and resources, and expertise to support HHCS’ survival.

Table 2 listed below includes data provided by the Applicant for HHCS, representing consolidated operations of HMH and HPS. The financial ratios for HHCS are compared to S&P

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<sup>17</sup> Disproportionate Share Hospitals serve a significantly disproportionate number of low-income patients and receive payments from the Centers for Medicaid and Medicare Services to cover the costs of providing care to uninsured patients.

<sup>18</sup> HMH is one of sixteen independent community hospitals in Massachusetts. <https://www.mass.gov/doc/bulletin-hpc-2020-01-independent-community-hospitals/download>



ratios (August 19, 2020) and the Applicant notes that HHCS ratios have been less than the S&P published medium. The Applicant asserts the data demonstrate HHCS' challenges over the past five years and are an indication that HHCS is facing many of barriers/challenges to its sustainability that were cited in the HPC Community Hospitals report. Over the last five years, HHCS has generally operated at a loss; Day's cash on hand has declined over time; and the average age of HMH's plant increased from 15 to almost 20 years. And while a favorable stock market condition made it possible for HHCS to subsidize operations from its investment activities, it has also resulted in a decline in HHCS property, plant, and equipment (PP&E) and reduced HHCS' ability to build infrastructure to support health care delivery. The Applicant also states the COVID emergency has had a negative impact on HHCS operations, which is shown in the 2020 financial ratios.

**Table 2: HHCS Financial Ratios and Other Measures**

	2016	2017	2018	2019	2020	2020 <sup>(1)</sup> Adjusted for Pension Termination
<b>Operating Margin</b>	-1.8%	-0.5%	-2.9%	0.5%	-12.8%	-5.9%
<b>S&amp;P Ratio</b>	2.4%	2.2%	2.3%	2.7%		
<b>Excess Margin (includes investment activity)</b>	-0.2%	-1.2%	0%	1.6%	-5.6%	1.3%
<b>S&amp;P Ratio</b>	3.7%	4.5%	3.9%	4.3%		
<b>Debt Service Ratio</b>	3.9	2.4	3.5	4.2	(0.8)	4.1 <sup>(2)</sup>
<b>S&amp;P Ratio</b>	4.3	4.5	4.4	4.4		
<b>Days Cash</b>	127	129	120	114	143	116
<b>S&amp;P Ratio</b>	197	205	213	218		
<b>Average Age of Plant</b>	14.71	15.27	16.67	17.53	19.95	19.95
<b>S&amp;P Ratio</b>	10.6	10.8	10.6	11.0		
<b>Statewide Relative Price <sup>(3)</sup></b>	0.9	0.9	0.85			
<b>Payer Mix <sup>(4)</sup></b>						
Government		65.30%	66.52%	66.99%	67.54%	
Medicare		40.02%	40.90%	42.32%	43.74%	
Medicaid		25.28%	25.62%	24.68%	23.80%	
Commercial		34.70%	33.48%	33.01%	32.46%	
Total		100%	100%	100%	100%	

S&P report August 19, 2020

(1) HHCS incurred a one-time pension termination expense of \$11,041,000

(2) HHCS received \$9.3M in Federal and State COVID Grants

(3) CHIA Relative Price Report, 2018

(4) Internal Data

## 2. Increasing access by the Harrington community to specialists and specialty care provided by UMMHC

The Applicant asserts that the Proposed Project will provide the Harrington community with greater access to UMMHC specialists and specialty care providers, and will foster stronger, and more closely aligned provision of specialty care between the two organizations. Additionally, this will allow for more care to remain local.

To demonstrate disease burden of certain conditions, the Applicant provided data on **13 disease conditions** for patients served under contracts shared by UMMHC and HMH through the UMass Memorial Managed Care Network and the Medicare Shared Savings Program (MSSP). Table 3 lists disease prevalence for UMMHC and HMH Commercial and Medicare patients. The



Applicant states the greater prevalence of certain conditions among UMMHC patients reflects the higher level of specialty care and specialists that are available at UMMHC as compared to HMH.

**Table 3: Prevalence of Chronic Conditions among Patients Served Under Contracts Shared by UMMHC and HMH Through the Managed Care Network and the Medicare Shared Savings Program.**

Chronic Conditions (1/2019-12/2019)	Medical Center Commercial (BCBS, Tufts, HPHC and Fallon)	HMH Commercial (BCBS, Tufts, HPHC and Fallon)	Medical Center Medicare ACO	HMH Medicare ACO
Alzheimer's Disease/Dementia	0.9%	0.1%	8.1%	5.7%
Arthritis	0.9%	0.6%	3.1%	2.7%
Asthma	10.5%	9.6%	15.7%	15.5%
Atrial Fibrillation	2.7%	1.4%	16.7%	16.1%
Cancer	5.0%	3.0%	21.5%	18.6%
Chronic Kidney Disease	6.7%	4.3%	32.3%	28.8%
COPD	3.8%	3.3%	19.4%	22.6%
Depression	15.2%	12.1%	33.2%	25.8%
Diabetes	9.6%	7.6%	30.2%	30.4%
Heart Failure	2.3%	1.1%	16.0%	16.3%
Hyperlipidemia	35.5%	26%	83.4%	77%
Hypertension	34.2%	22.6%	84.8%	74.1%
Ischemic Heart Disease	5.8%	3.3%	30.2%	25.8%

The Applicant provided data, some of which is presented in Table 4, showing current access by the Harrington community to the specialists and specialty care provided by UMMHC. The data provided by the Applicant shows:

- **21%** of Harrington patients received care from a UMMHC specialist in the past two years;
- in the past 2 years, **Radiology** is the UMMHC specialty most utilized by Harrington patients, both in number of visits and in unique patients;
- **three** UMMHC specialists provide services in the HMH service area. (electrophysiology procedures, vascular clinic, and radiation oncology services); and
- UMass Memorial provides HMH with **eICU<sup>19</sup>** and **teleneurology/telestroke services,<sup>20</sup>** which enables clinical oversight of critical care patients in community hospitals as an alternative to transferring patients to a higher-cost, tertiary setting.

**Table 4: Most Frequent UMMHC Specialties Utilized by Harrington**

	Visits in Past Year	Visits in Past 2 Years
<b>Radiology</b>	2206	4517
<b>Oncology</b>	428	876
<b>Oncology Infusion</b>	281	647

<sup>19</sup> ICU telemedicine program that has served in all of UMass Memorial Health Care hospitals' adult intensive care units (ICUs) starting in 2007. The program supports adult patients admitted to intensive care units across the UMass Memorial Health Care system. Using advanced telemedicine technology, a team of specially trained eICU critical care nurses and intensivists monitors ICU patients 24/7 from a remote support center at UMass Memorial Medical Center.

<sup>20</sup> The Telestroke Program allows Medical Center neurologists with expertise in stroke care immediate access via videoconferencing at UMass Memorial community hospitals and affiliates. This allows a community hospital to rule out stroke and care for suspected stroke in the community.

<b>Neurology</b>	294	603
<b>Cardiology</b>	263	495
<b>Heart and Vascular</b>	204	372
<b>Dermatology</b>	144	368

Harrington Patients Receiving Care from UMMHC Specialists between 03/01/2019-03/01/2020.  
Patients in MCN Value Based Care Programs as of January 2021.

HHCS is located in UMMHC's service area. The Applicant states that UMMHC and HHCS already share many of the same patients. Approximately 9% of UMMHC patients reside in HMH's primary and secondary service areas. Data provided on the types of UMMHC services these patients utilize in FY20 reflect decreased volume as a result of the impact of the COVID- 19 emergency. Table 5 lists UMMHC top inpatient and outpatient service volume for UMMHC patients residing in HMH's primary and secondary service areas, which includes MA and CT residents.

**Table 5: UMMHC Top Ten Inpatient and Outpatient Services by Volume, FY20**

<b>UMMHC Hospitals Inpatient</b>	<b>2020</b>	<b>UMMHC Hospitals Outpatient</b>	<b>2020</b>
OB/GYN/Neonatology	29.4%	Radiology	11%
General Medicine	27.5%	Primary Care	10.7%
Cardiac/Thoracic/Vascular Services	12.9%	Subspecialist: Ortho/Podiatry	9.3%
General Surgery	8.8%	Labs	8.9%
Neurology and Neurosurgery	5.9%	Subspecialist: Pediatric Care	7.8%
Orthopedics	5.0%	Subspecialist: Cardiology/Vascular	7.5%
Other	3.1%	ED	5.8%
Oncology	2.9%	Subspecialist: Other	4.8%
Spine	2.7%	Subspecialist Cancer	4.3%
Psychiatry	1.8%	Subspecialist: OB/GYN	3.4%

The Applicant states UMMHC hospitals and HMH offer many similar services at each respective entity, including inpatient care, behavioral health, emergency department (ED), radiology, labs, and rehabilitation services. It acknowledges a community need for local access to specialty care and asserts that over time it will adjust specialty care to meet the needs of the community. The Applicant states that there are gaps in certain specialties for the HHCS community that need to be addressed. HHCS is working with UMMHC to develop a plan to address gaps in the following medical specialties at HMH and within HPS medical offices: cardiology, oncology, endocrinology, ophthalmology, and primary care. HHCS and UMMHC plan to undergo a detailed physician staffing study to obtain a greater understanding of the short and long term needs for provider recruitment in the HHCS service area and the Applicant asserts that upon project approval, UMMHC and HHCS will be able to conduct a larger, collaborative study and implement a plan for physician recruitment. The Applicant asserts that within the HHCS service area, high acuity tertiary, and quaternary care will continue to be provided at UMass Memorial which has the infrastructure to support such care. As part of its commitment to the HMH community, the Applicant asserts that through the Proposed Project it will:

- work with HMH leadership to understand HMH's patient choices about where they seek care;
- work to understand the community need for access to specialty care in HMH's service area to identify areas of greater support and collaboration and enhance support for access to specialty care locally as clinically appropriate;
- work to improve quality and patient outcomes through performance improvement initiatives, post-acute networks, and aligned care management strategies as part of its

participation with HHCS in the UMass Memorial Managed Care Network and the UMass Memorial Accountable Care Organization; and

- assist in the recruitment of physicians into the HHCS service area including:
  - (1) **three** net full-time primary care physicians (PCPs);
  - (2) **one** net new full-time psychiatrist; and
  - (3) **one** net new full-time gastroenterologist.

Southern Worcester County patients currently have access to UMMHC specialist service lines primarily through UMass Memorial or UMass Memorial Medical Group's off-campus physician office practices. UMMHC does not have a significant number of specialists in HMH's service area, but the Applicant expects that as HMH physicians integrate into the UMass Memorial Medical Group, physician recruitment and retention of both PCPs and specialists will improve in HMH's service area.

### **3. Access to ambulatory services for patients and referring providers**

The Applicant states that improving ambulatory services for patients and referring providers is one of UMMHC's top priorities across the system and that HMH will be incorporated into UMMHC's system-wide strategic and operational work in order to strengthen access to care in the HMH local service area.

- UMMHC is investing in Ambulatory Care Transformation to ease providers' schedules to allow patients faster access to primary and specialty care across the UMMHC system through utilizing Advanced Practice Providers<sup>21</sup> for routine care visits to allocate more physicians' time for new patient visits and patients with higher acuity conditions.
- UMMHC will bring the resources of a large, centralized physician recruitment infrastructure and medical group management team to support increased local access.
- UMMHC will offer access to an electronic health record (EHR) systems and the financial stability necessary to retain high quality providers which will facilitate access and intra-facility referrals.
- UMMHC utilizes Lean management principles to improve clinical and non-clinical pathways to facilitate an easier referral process, focusing on touch points involved with ambulatory patient care areas such as central scheduling, physician templates, clinic staffing needs, and physician recruitment.
- HHCS has developed a robust continuum of behavioral health services that includes inpatient, partial hospitalization and outpatient services and in February 2021, HMH received approval to add 10 inpatient (IP) psychiatric beds to address the regional needs of its Patient Panel. The full continuum is key to providing needed, local access to these services for patients in the region, and will contribute to the Applicant's stated goal to support access to local services. Particularly the IP psychiatric beds which will contribute to improving access to critical services for which there has been an inadequate supply.<sup>h</sup> The full range of HMH's behavioral health services will continue to serve as an integrated resources to which UMMHC and Community Healthlink, a community-based behavioral health

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<sup>21</sup> Naming convention for non-physician, direct care providers in the office setting. The categorization comprises Physician Assistants (PAs) and Advanced Practice Registered Nurses (APRNs) – such as Nurse Practitioners (NPs), Certified Registered Nurse Anesthetists (CRNAs), Certified Nurse Midwives (CNMs), and Clinical Nurse Specialists (CNSs) – as these individuals have been utilized to augment physician capabilities in traditional employed network settings. These same individuals have also been characterized equally effectively as Advanced Practice Professionals (APPs), Advanced Practitioners (APs), and Non-Physician Providers (NPPs).

services provider, can refer HMH service area patients.<sup>22</sup> The high prevalence of depression among UMMHC and HHCS MCN and MSSP ACO members (Table 3) supports the need for maintaining access to and improving these services. This need for local services was further highlighted during the COVID-19 emergency. The Proposed Project will enable the UMMHC and HHCS systems to develop a full continuum of care using complementary services from each system to treat a wider range of patients that will meet their Patient Panel need. UMMHC services would become more accessible to patients in the HHCS service area, including interventional psychiatry service employing electroconvulsive therapy (ECT), and there is the potential to develop satellite clinics in the HHCS service area. UMMHC and HHCS will develop a coordinated regional effort focused on filling service gaps, reducing duplication of services, and expanding local access to treatment options.<sup>23</sup>

#### **4. Improving communication and coordinated care**

The Applicant states that UMMHC is taking a multi-pronged approach to reducing outmigration, which includes strengthening care coordination and addressing barriers to timely access to care. The Applicant defines outmigration as patients residing in UMMHC's service area who receive healthcare outside of UMMHC's service area. The Applicant maintains that some of the major contributing factors to outmigration include: lack of inpatient bed capacity at UMass Memorial which limits tertiary access to care and requires patients be transported to Boston area hospitals; branding efforts that may lead patients to associate brand and higher cost with higher quality and cause them to seek out care at Boston hospitals over local community hospitals; and patients requiring more specialized care than UMMHC can provide (such as heart transplants, high acuity children's care, and high acuity cancer care) seek out such care at Boston area hospitals. The Applicant asserts that outmigration leads to fragmented care with delayed and/or difficult communication and potentially unnecessary increase in utilization.

The Applicant states the Proposed Project will strengthen care coordination, and address barriers to timely access to care using its Lean management system and centralized administrative support to reduce unnecessary hospital utilization (including readmissions, and avoidable ED use). UMass Memorial and UMMHC community hospitals physicians coordinate to identify patients that can remain local for their care, utilizing Sg2 Data Analytics to better understand the details of outpatient migration and to help educate referring physicians about the services available locally and the impact on care coordination. UMass Memorial looks to identify strategies to keep inpatients at the community hospitals to maintain access for higher acuity patients. The Applicant estimates that 1,000 patients requiring tertiary level care are redirected annually to other facilities because of capacity issues at UMass Memorial. UMMHC is focused on increasing patients' choices about where to receive care by providing a wide range of services at its community hospitals, and investing in its community hospitals with an emphasis on providing local access to care.

- UMMHC redesigned and renovated the Health Alliance-Clinton Hospital ED to reduce overcrowding and improve timeliness of care.
- UMMHC developed a comprehensive Cancer Center at Marlborough Hospital providing local, convenient access in a less crowded setting than the Medical Center.

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<sup>22</sup> HHCS behavioral health services include: Seven outpatient clinic sites treating patients across the lifespan; Several structured outpatient programs, including a Partial Hospitalization and Intensive Outpatient Treatment; New Urgent Care Service (Addiction Immediate Care) for patients with substance use disorders; and the Planned addition of 10 new adult psychiatric inpatient beds (for a total of 40) and Recruitment of a new psychiatrist.

<sup>23</sup> For example, UMMHC and HMH will establish a coordinated "bed huddle" effort to address the ongoing crisis in the delay for inpatient psychiatric placement.

Both UMMHC and HHCS have implemented efforts to keep care local including:

- Ambulatory Transformation to increase access to timely care to improve the likelihood that patients will access care locally;
- UMMHC has a robust physician recruitment practice that allows for recruitment to local markets and allows for specialists to serve in community hospitals to provide part-time support;
- UMMHC provision of tele-consults allowing community hospitals in network to keep higher acuity patients instead of transferring them;
- tracking and monitoring (by UMMHC) of referrals to UMass Memorial to ensure more patients remain in a community hospital setting when appropriate;
- Clinton Hospital leadership developed a process where patients are first evaluated to see if the Leominster campus can meet patient needs before considering transfer to the Medical Center;<sup>24</sup> and
- HHCS provides pre- and post-delivery OB/GYN care, including for deliveries occurring at UMass Memorial.

The Applicant states it takes a longitudinal approach to care and that care coordination across the continuum, and a closer affiliation between UMMHC and HHCS will foster better communication and reduce fragmented care. UMMHC's population health infrastructure is guided by data/analytics, and leverages resources across providers and community-based organizations to guide strategies across settings and systems. UMMHC has built strong relationships with its networks of providers and collaborations with inpatient care management teams across both systems. The Applicant asserts the Proposed Project will improve existing communication and coordination of care across systems by:

- integrating care across a broad continuum of services from primary to tertiary care throughout a wide geographic area;
- building on existing clinical collaborations and referral patterns between academic and community providers with a focus on providing care in the most cost effective and appropriate settings;
- building a comprehensive approach by PCPs to provide care through risk stratification, chronic disease identification, clinical pathways, and care management resources; and
- expanding access to data driven reports to improve coordination of care for the Patient Panel.

### ***Analysis***

Staff finds that the information provided by the Applicant demonstrates sufficient need by its Patient Panel for the Proposed Project to maintain the financial viability of HHCS and preserve continued access to healthcare services. Community hospitals provide value in the form of caring for the publicly insured, and others facing barriers to access such as transportation, language and mobility challenges and also face financial challenges due to a high public payer mix, leading to limited resources to invest in care, and hospital closures that reduce access to care.<sup>1</sup> Reports have stated that the challenges that community hospitals experience make them less equipped to manage the shifts in the healthcare system towards increasing provider consolidation and value-based payments.<sup>1</sup> Nationally, the number of independent community hospitals has been decreasing; in

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<sup>24</sup> See DoN Application for a snapshot of the UMass Memorial HealthAlliance-Clinton Tracker.

2015, 66% of community (acute care, non-federal) hospitals were affiliated with a health care system compared to 51% in 1999.<sup>k</sup> The HPC's 2016 Community Hospitals at a Crossroad Report states that since 1980, nine community hospitals in Massachusetts have closed and an additional 22 more have been converted into non-hospital facilities.<sup>l</sup> HMH is one of 16 remaining independent community hospitals in Massachusetts.<sup>m</sup> The Applicant provided data to demonstrate that HHCS system is experiencing financial challenges that pose a threat to its viability.

Studies suggest that activities to improve hospital quality and patient safety can entail substantial costs, such as investments in clinical and administrative systems and quality improvement projects, and that financially challenged hospitals may be limited in capacity to pursue quality improvements as financial performance declines.<sup>n</sup> Lower reimbursement rates and higher costs associated with caring for populations with greater medical complications and socioeconomic impediments can limit the ability of fiscally distressed facilities to engage in quality improvement programs and infrastructure.<sup>o</sup> The American Hospital Association (AHA) calculated that in 2019, payments from Medicare and Medicaid lagged costs by \$75.8 billion (\$56.8 billion for Medicare and \$19.0 billion for Medicaid).<sup>p,25</sup> One study found a clear relationship between hospital financial performance and hospital quality/safety performance score, with hospitals under greater financial distress having less favorable patient experience of care, higher readmission rates, and increased risk of adverse patient quality and safety outcomes for both medical and surgical patients.<sup>q</sup> A study commissioned for Modern Healthcare found that small and medium community hospitals that were a part of a system performed better than their independent peers, based on seven of 12 quality and cost metrics,<sup>26</sup> and that this was because the support provided by systems, including investments in EHR, is increasingly important for care coordination and value-based care.<sup>r,27</sup>

The Applicant has stated that the Proposed Project is intended to maintain HHCS' viability in order to ensure continued access to services in the HHCS service area. The Applicant maintains that HHCS financial challenges pose a threat to the continuation of these services. Hospital closures can lead patients to travel farther distances to seek care.<sup>s</sup> Maintaining access to HMH services is important for ensuring timely access to care and addressing unmet need for care in the HHCS service area, especially for behavioral health services. A recent report from CHIA states that in state fiscal year 2018, 45% of adults hospitalized in Massachusetts acute care hospitals had at least one comorbid behavioral health condition, and Medicaid adults were more likely than Medicare adults and commercially insured adults to have any behavioral health comorbidity.<sup>28,t</sup> In addition, patients with behavioral health conditions were associated with higher readmissions, and behavioral health comorbidity was associated with higher hospital utilization and cost. The increasing prevalence of mental health symptoms and substance use during the COVID-19 emergency intensified the need for behavioral health services in Massachusetts.<sup>u,v,w</sup> A shortage of beds/capacity has increased ED boarding of patients requiring inpatient behavioral health care. HMH responded by increasing its capacity of inpatient psychiatric beds. In order to ensure the Proposed Project addresses Patient Panel need for continued access to HMH services as the Project is implemented, and assessment of existing and/or duplicative services is made, as a Condition of approval, the Applicant will report any change or reduction of services at HMH and demonstrate how the need for the services has

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<sup>25</sup> Underpayment is the difference between the costs incurred and the reimbursement received for delivering care to patients.

<sup>26</sup> According to an exclusive study conducted for Modern Healthcare by Truven Health Analytics, IBM Watson Health. The analysis included 2,740 hospitals from Truven's annual 100 Top Hospitals study, which uses a variety of Medicare patient data to compare hospitals. Metrics include: inpatient mortality, 30-day mortality, core measures, average length of stay, inpatient expense, operating profit margin and overall balanced performance.

<sup>27</sup> The study found costs of care for Medicare patients to be higher in system-affiliated hospitals, but that this may have been due to additional resources employed by systems after patient discharge to manage/improve care.

<sup>28</sup> Substance use and mental health are collectively referred to as behavioral health.

changed so that all existing services are no longer needed, as well as how it will continue to meet Patient Panel need for the services. The full text of the condition is listed in the Conditions section of this report.

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

The Applicant asserts the Proposed Project will enhance two key components of access to care: timeliness and ongoing availability of services.<sup>x</sup> The Applicant asserts that the Proposed Project will improve health outcomes and quality of life of the Patient Panel by maintaining availability of services locally and decreasing delays in accessing care. The Applicant referred to a study on wait times and health outcomes showing an association between delayed access to care and increased use of emergency rooms for nonurgent conditions, decreased patient satisfaction, and negative health outcomes due to delayed diagnosis and treatment, including mortality.<sup>y</sup> In addition, delayed diagnosis of chronic conditions can lead to conditions that are harder to manage and health effects that timely access to care could have prevented.<sup>z</sup>

The UMass Memorial Office of Clinical Integration (OCI) is responsible for managing the performance of the system's value-based contracts supporting population health management (PHM) across the system. Typical PHM strategies currently in practice throughout the UMMHC system include<sup>aa</sup> coordination of care, evidence-based decision support for clinical care, actionable steps for providers, and focus on the social determinants of health (SDoH). The Applicant states that the UMMHC population health infrastructure has been developed to leverage resources and uses data analytics to guide strategies across settings. The Applicant and HHCS participate together in the UMass Memorial MCN and UMass Memorial Medicare ACO (MSSP) and work to improve quality and patient outcomes through performance improvement initiatives and care management strategies. In response to staff inquiry, the Applicant provided a detailed description of the initiatives that have been developed through collaboration by the UMass Memorial OCI's Chief Medical Officer and Senior Director of Performance Improvement, and the Harrington Physician Hospital Organization (PHO) leadership. The Applicant states that data driven reports are used to develop priorities and action plans are customized for each provider group and practice. Additionally, peer comparisons are used to evaluate provider performance in various areas. Reports are used to continually monitor performance, identify improvement and best practices are standardized. The Applicant asserts the Proposed Project will allow for continued support and integration to sustain and improve health outcomes of the Patient Panel.

The Applicant states the primary outcome of the Proposed Project is the maintenance of high-quality care for the Harrington community and as such UMMHC and HHCS will track and monitor:

- the level of care provided to the community as evinced by hospital discharges, ED visits, primary care visits, and ancillary services provided by HHCS caregivers;
- HHCS quality measures provided in response to DoN follow-up questions (Exhibits); and
- specific population health initiatives, including but not limited to well visits, telehealth visits, potential avoidable ED visits, transition of care visits, and advanced care planning visits.

Currently, HMMH serves primarily public payer patients, and 50% of their patients are covered under ACOs and Alternate Payment Methods (APMs), including BACO to ensure local access to a range of populations. The MassHealth ACO contracts support its populations with defined expectations for its populations surrounding access, quality, outcomes and patient experience. Continued access



to services through the BACO contract are key to improved health outcomes and quality of life as well as assuring equity for MassHealth patients currently covered through this contract.

### ***Analysis***

Staff finds that the Applicant has sufficiently outlined, at a high level, a case for improved health outcomes and access to care based on Applicant's past investments in its community hospitals as well as commitments to sustain and enhance collaboration with and support to HHCS. These commitments include greater alignment of care and investments in information technology. The Applicant proposed specific measures to track the impact of the Proposed Project. Staff recommends that in order to completely address Factor 1, these reporting measures also be required as a Condition of Approval. In order to track the impact of the Proposed Project, staff recommend the Applicant also report annually on the recruitment of physicians into the HHCS service area, outmigration, HHCS referrals to UMass Memorial (Medical and Behavioral health) by acuity level, and SDoH screening performance measures by age cohort (Table 6).

### **Description of language access and interpretive services**

The Applicant states UMMHC has a long-standing, robust Interpreter Services (IS) Department, which provides services for both inpatient and ambulatory patients, and access to telephonic capabilities in over 100 languages. The Applicant provided additional information on UMass Memorial's IS to demonstrate the scope of services that are available to patients.

- Patients with Limited English Proficiency (LEP) have access to qualified interpreters in over 100 languages and to auxiliary services and accommodations needed for the Deaf and Hard of Hearing (DHH) patients.
- Interpreter services are available 24 hours a day, seven days a week via Video Remote Interpreting (VRI), Face to Face (F2F), or Over the Phone interpreting (OPI).
- Comprehensive data collection, data analysis, monitoring systems, and educational requirement trainings are in place to ensure quality of services. Senior leadership review IS data to examine current conditions, identify areas of improvement, and improve quality of and access to services.<sup>29</sup> Training and educational sessions on cultural competence and the importance of using qualified interpreters are provided to caregivers on an ongoing basis.
- The Applicant redesigned its operational model to adapt to the COVID-19 emergency including accelerated expansion of VRI, integrated onsite hospital interpreters in the VRI call center and Telehealth platforms.

The Applicant maintains that full IS are provided at UMMHC member hospitals through multiple platforms with varying utilization. Each facility has a specific focus of in-person interpreters based on the needs of that community, and each facility uses system agreements for both virtual IS and telephonic IS. Interpreter services are available in every unit of the hospital and UMMHC is equipped with virtual systems and phone equipment that can be operational within a few minutes. In order to ensure accurate and timely access to IS, UMMHC monitors utilization of in-person, virtual, and telephonic IS services and adjusts the mix of offerings based on needs identified in data trends. UMMHC continues to monitor and review in-person IS services to identify ways to improve access across entities and monitors virtual IS to keep up with technology changes and make adjustments as needed.

Currently, HHCS interpretation services are provided 24 hours a day, seven days a week with two full-time employees working Monday through Friday. Interpreter services can also be accessed

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<sup>29</sup> Quality Goals, Quality Performance Metrics, and Strategic Plan are described in DoN Application Exhibits.

immediately through Stratus Video for over 240 languages. The Applicant's plans to Integrate HHCS into the IS Program include:

- conducting a Language Needs Assessment to identify need and sharing IS findings with leadership and the community; and
- developing a plan to address language needs that includes hiring and training of Medical Interpreters and provide training on cultural competency and communication.

### Social Determinants of Health (SDoH)

UMMHC SDoH screening process is anchored in UMMHC's primary care practices. The Applicant states that it has set a goal that by September 20, 2021, 75% of UMMHC primary care practices will be conducting universal SDoH screening for their patients annually. The SDoH screening tool identifies needs in 14 domains,<sup>30</sup> is available in four languages, and will become a component of UMMHC's patient portal pre-visit check-in process. After SDoH screening is complete, any necessary follow up is provided by the patient's PCP and social workers. Table 6 lists the measures by which UMMHC tracks progress and assesses performance of SDoH screening.

**Table 6: SDoH Performance Measures**

Distinct Patients Screened	CommunityHELP resource database
Overall and by primary care practice	Resource searches per month
Percent Primary Care Practice attributed patients screened in the past year	Top 3 areas of need searched within CommunityHELP <ul style="list-style-type: none"> <li>• Overall</li> <li>• By Central MA municipality</li> </ul>
For screened patients <ul style="list-style-type: none"> <li>• Percent with identified needs, with no identified needs, and percent declined or unable to complete survey</li> </ul>	Top 3 searchers within each of the 3 top need categories <ul style="list-style-type: none"> <li>• Overall</li> <li>• By Central MA municipality</li> </ul>

Through a collaboration with community-based organizations (CBOs), the Applicant launched CommunityHELP (Health and Everyday Living Program), an online directory of community resources connecting patients with assistance to improve health and wellbeing. CommunityHELP centralizes access to resources allowing provides caregivers, care managers, healthcare teams, and individuals access resources to address SDoH needs. It provides immediate translation for over 100 languages and connects patients with resources via electronic referrals to CBOs. UMMHC is working with community organizations to explore leveraging the CommunityHELP platform to provide immediate linkage from SDoH screening to referrals to appropriate community-based resources. Through the Proposed Project, the Applicant will work with HHCS and its local community to expand CommunityHELP to include the HHCS' service area and make the fully integrated version of CommunityHELP available to HMM and its providers once HMM is integrated into the UMMHC Epic electronic record. UMMHC expects to track CommunityHELP usage and activity in the Harrington region.

### Health Equity

UMMHC states that it has a system-wide, data driven focus on addressing racial and ethnic health disparities and asserts it will perform targeted outreach to Hispanic/Latino and other ethnic groups in the area to improve access to care and address health disparities. UMMHC has implemented the

<sup>30</sup> Domains include: Food, housing, utilities, transportation, employment, budget strain, education, childcare, social support, legal assistance, health insurance, dental health, material needs, and stress.

following outreach strategies to improve access to the quality of services for the Hispanic/Latino population and other ethnic groups in the area.<sup>31</sup>

- Multi-sectoral, community-wide Pediatric Asthma Intervention
- Organizing and supporting the Coalition for a Healthy Greater Worcester
- Development of an ACE (Adverse Childhood Experience) Program in collaboration with the Worcester Youth Violence Task Force
- Development of Community Gardens in collaboration with neighborhood residents to address food insecurity
- Improve access to medical and preventive dental care through the UMass Memorial Ronald McDonald Care Mobile
- Providing COVID-19 testing in collaboration with the Worcester Division of Public Health and representatives of the Latino community
- Developed a mobile COVID-19 vaccination program that partners with a range of community-based organizations

The Applicant states a lack of Spanish-speaking providers is a significant language and cultural barrier contributing to a low percentage of the Hispanic/Latino population connecting to care with HHM providers and accessing care. The Applicant states health equity and reducing health disparities is a UMMHC “True North” goal.<sup>32</sup> Each member entity is required to set downstream goals to achieve improvement for the system. HHCS will be included in all system-led performance improvement initiatives and held accountable to meet these goals. HHM’s president and others, will be evaluated and incentivized based on system performance on these goals. UMMHC’s OCI will continue to collaborate with the HHCS population health department to align goals and establish cohesive data reporting to support best practices. The Applicant states that UMMHC has adopted a Health Equity strategy in response to the COVID-19 emergency and its disproportionate impact on Latino/Hispanic and LEP populations in the region that is driven by data, community and hospital leadership engagement, and input from affected/impacted communities.

The Applicant states that it plans to track and improve key outcome measures in the communities in which the Patient Panel reside. The Applicant assessed disparities in its communities and HHCS communities through examining quality of life measures (median household income, percentage of population on Medicaid, and percent unemployment), life expectancy (key indicator of quality of life and health equity), and the Social Vulnerability Index (SVI) percentile of Worcester County.<sup>bb</sup>

- **Quality of Life Measures<sup>cc</sup>**

Using American Community Survey (ACS) US Census data from 2014-2018, the Applicant provided Mean Household Income, Percent Population with Medicaid/Means Tested Coverage Alone or in Combination, and Unemployment Rate; and Population 16 Years and Over for the Country, the State, Worcester County and the municipalities of Dudley, Fitchburg, Leominster, Marlborough, Southbridge, Webster, and Worcester. The data shows variations in each of the measures across the cities and towns: Mean Household income ranged from \$62,987 in Southbridge to \$100,656 in Marlborough; Percent Population with Medicaid ranged from 13.7%

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<sup>31</sup> A full description of each strategy and the measures collected can be found in the responses to DoN follow up questions.

<sup>32</sup> “True North represents a compact between management and the front line staff. It is a commitment by management that we will work every day to meet the legitimate needs of our people and it is a commitment by our people that they will work every day to meet the needs of our patients and the organization. It’s a commitment that everyone of us will work every day to make UMMHC the best place to give care and the best place to get care.” <https://createvalue.org/wp-content/uploads/The-UMMHC-Management-System.pdf>

in Dudley to 33.4% in Southbridge; and Unemployment Rate ranged from 4.7% in Marlborough to 9.1% in Leominster.

- **Life Expectancy Measures<sup>dd</sup>**

Using USA Small Area Life Expectancy Project<sup>33</sup> data, the Applicant revealed an 11 year difference in life expectancy between two neighborhoods, two miles apart in Worcester, which correlated with differences in mean household income, percent Medicaid coverage, and percent of the population with vehicles.<sup>34</sup>

- **Social Vulnerability Index (SVI)<sup>35,36</sup>**

The Applicant provided the Overall SVI map for Worcester County as well as for each of the following SVI themes: Socioeconomic Status, Household Composition/Disability, Race/Ethnicity/Language, and Housing Type/Transportation. The maps list percentile rankings ranging from 0% to 100% with higher values indicating greater vulnerability. The maps demonstrate variability within the county and each census tract for each of the SVI themes. The Applicant asserts that in combination with HHCS, it will use the SVI data to target Anchor Mission and SDoH work.

The Applicant states that it will partner upstream with community stakeholders to identify needs and leverage existing resources to address health disparities and improve health outcomes among marginalized populations in HHCS' service area. Through the Proposed Project the Applicant will:

- work with Harrington in the development of a robust Community Health Needs Assessment (CHNA) and Community Health Improvement Plan (CHIP) to identify community health needs specific to HHCS' service area and outline strategies to address them;
- support HMH with best practices such as ensuring a robust CHNA is completed and that engages the area's Latino/Hispanic community and other racial/ethnic groups and marginalized populations;
- provide shared learning for the development and implementation of CHIP and strengthen HMH's local Community Health Network Area (CHNA) infrastructure to develop strategies necessary to implement the CHIP;
- share best practices with HMH to develop a strategy for conducting outreach that engages multi-sectoral representation among community partners in the local CHNA; and
- apply its existing interventions which include community health worker (CHW) interventions focused on priority issues such as pediatric asthma (pending availability of funding and capacity).

### ***Analysis***

Staff finds that through a review of CLAS initiatives, including language access, and SDoH screening and referral processes, the Applicant has sufficiently outlined, at a high level, a case for improved health outcomes and has provided reasonable assurances of health equity and access to care.

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<sup>33</sup> The USALEEP project produced estimates of life expectancy at birth—the average number of years a person can expect to live—for most of the census tracts in the United States for the period 2010-2015.

<sup>34</sup> Salisbury Street 84 years and Kelly Square 72.9 years. Description can be found in DON Application Exhibits.

<sup>35</sup> CDC Social Vulnerability Index (CDC SVI) uses 15 U.S. census variables to help local officials identify communities that may need support before, during, or after disasters. CDC SVI uses U.S. Census data to determine the social vulnerability of every census tract. Census tracts are subdivisions of counties for which the Census collects statistical data. The CDC SVI ranks each tract on 15 social factors, including poverty, lack of vehicle access, and crowded housing, and groups them into four related themes..

<sup>36</sup> CDC Social Vulnerability Index 2018 PART 1 Worcester County, Map.

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

The Applicant states that the Proposed Project will facilitate greater sharing of patient information and coordination of care. All UMMHC hospitals and campuses utilize Epic for an electronic health record, and plans are to implement Epic at HMH. UMMHC hospitals have achieved HIMSS Stage 7 recognition.<sup>37</sup> The Applicant states that use of Epic across UMMHC and HMH provides:

- a single patient record for care of 1.2 million patients regardless of location;
- high levels of care coordination across the system;
- information that is readily available about patient care as patients move between care settings;
- ease of use of documentation tools, private secure data, quick access to data, patient safety, meaningful use, lab and imaging results, and myChart, a new system-wide patient website currently used by over 215,000 patients sharing and accessing information;
- documentation of care associated with over 221,000 ED visits, 1.5M ambulatory visits, 4,500 births, and 49,000 discharges; and
- Epic “Care Everywhere” features which allow UMMHC to exchange patient information for 9 million patients, over 2,000 hospitals, 1,700 EDs, and 43,000 ambulatory clinics/practices and from all 50 states.

HHCS currently uses two separate electronic medical records (EMRs) with limited integration, and the Applicant states that physicians and others providing care for patients must often look in multiple systems to access complete information on their patients. The Applicant maintains the Proposed Project will advance HHCS’ health information technology to enhance and expand the use of health data and better manage patient care. Until the migration to Epic occurs, HHCS caregivers will have access to UMMHC’s Epic “CareLink” portal which allows UMMHC to extend patient information to external facilities and affiliated providers to facilitate continuity of care in the community and across providers by allowing HHCS’ physicians to view all patient records and order referrals and to access UMMHC’s Physician Concierge Services (PCS) team to book specialty appointments. Once employed by UMMHC’s Community Medical Group (CMG), HHCS physicians will be granted full access to Epic and will be able to make notes in patient records.

The Applicant states the current plan to move HHCS caregivers from their current Allscripts and Meditech systems will occur in a single transition to Epic with little downtime and disruption during the migration process. HHCS caregivers moving to Epic will have access to a single patient record including all information about a patient and information from other care providers using Epic will be easily accessible. UMMHC is in the pilot phase of an EMR integration project to enable HHCS EMR data to be brought into the Epic system to coordinate care, performance reporting, and analysis. The Applicant expects to complete the project and have the exchange go live in Epic in Summer, 2021. As part of the migration, certain quality and population health information will be transmitted from Harrington’s EMR to the UMMHC EMR via an Information Exchange System.

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<sup>37</sup> The Electronic Medical Record Adoption Model (EMRAM) is an eight-stage (0-7) model that measures the adoption and utilization of electronic medical record (EMR) functions. Meeting the requirements of each stage will move closer to achieving a near paperless environment that harnesses technology to support optimized patient care. The HIMSS Analytics Electronic Medical Record Adoption Model (EMRAM) for hospitals and O-EMRAM for outpatient, incorporates methodology and algorithms to automatically score hospitals and ambulatory sites around the world relative to their EMR capabilities.

### ***Analysis***

Staff find that the Proposed Project will support continuity and coordination of care for the Patient Panel. Successful care coordination includes good communication and effective care plan transitions between providers and clear and simple information that patients can understand.<sup>ee</sup> Effective care coordination can improve patient experience, increase patient safety and reduce medical errors.<sup>ff</sup> Uniform, integrated IT systems that include scheduling, EHR and patient communication tools, are timesavers. 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.<sup>gg</sup>

### **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<sup>38</sup> 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."<sup>39</sup>

### **HHCS**

In 2018, HHCS Board and HHCS' 60 individual community members with representation from local health and services organization, endorsed the creation of a Board level Strategic Planning Committee to consider whether to pursue a corporate affiliation with a larger health system.<sup>40</sup> The Applicant provided a timeline of HHCS' community engagement efforts that took place through this selection process.

- September 2018 to December 2018. HHCS and its Members held several forums, and the Strategic Planning Committee recommended to the HHCS Board to move forward with a Request for Proposal (RFP) process.
- February 2019. The RFP was sent to all regional health systems in Massachusetts.
- April 2019. Strategic Planning Committee evaluated the three responses to the RFP and communicated with representatives of the three respondents through November 2019.
- October 2019. Annual HHCS Members meeting where HHCS Community input was obtained on the RFP process.
- December 2019. Strategic Planning Committee recommended to the HHCS Board the selection of UMMHC.
- January 2020. HHCS Members and Board met and voted to approve letter of intent to enter into corporate affiliation.

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<sup>38</sup> Community Engagement Standards for Community Health Planning Guideline. <https://www.healthit.gov/faq/what-are-advantages-electronic-health-records>

<sup>39</sup> DoN Regulation 100.210 (A)(1)(e). <https://www.mass.gov/files/documents/2018/12/31/jud-lib-105cmr100.pdf>

<sup>40</sup> Included representatives from the following organizations: You, Inc., Open Sky Community Services, United Way of South Central Massachusetts, Catholic Charities Worcester County, and Central Massachusetts Agency on Aging.

- HHCS continued community engagement efforts beyond the 60 community Members and through this process HHCS and UMMHC identified community health needs of the Patient Panel in the HHCS community.<sup>41</sup>

## **UMMHC**

The Applicant provided a list of long-term planning and strategies that it plans to undertake to improve health of South Worcester County that will begin as part of its Community Benefits approach once the transaction is complete. Activities include listening sessions, forums with community stakeholders, outreach to local departments of health, development of committees to address inequities, and coalition building.<sup>42</sup> The Applicant states that interpretation services will be provided and planned engagement activities with the greater community of Southbridge and the surrounding area will adhere to safety protocols and use technology (i.e. Zoom, Webex) to accommodate current circumstances. The Applicant states that it plans to engage a diverse set of community members and incorporate planning, evaluation and implementation, and reporting on interventions and outcomes to ensure the impact aligns with identified community health needs.

## ***Analysis***

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

## **Factor 1: f) Competition on price, total medical expenses (TME), costs and other measures of health care spending**

The Applicant states that the Proposed Project will not have a negative impact on competition in the Massachusetts healthcare market based on price, TME, provider costs or other recognized measures of health care spending. In order to support this assertion, the Applicant provided a slide from the HPC 2019 Cost Trends Hearing presentation showing annual commercial spending per member based on patients attributed to a provider group. The slide, presented in Figure 1 below, shows that spending increased 24% from 2013-2018 and that there was variation in spending by provider group, with a \$2,000 difference from the most expensive group (Partners) to the least expensive group (Boston Medical Center). In addition, UMass Memorial was below the average for the group.

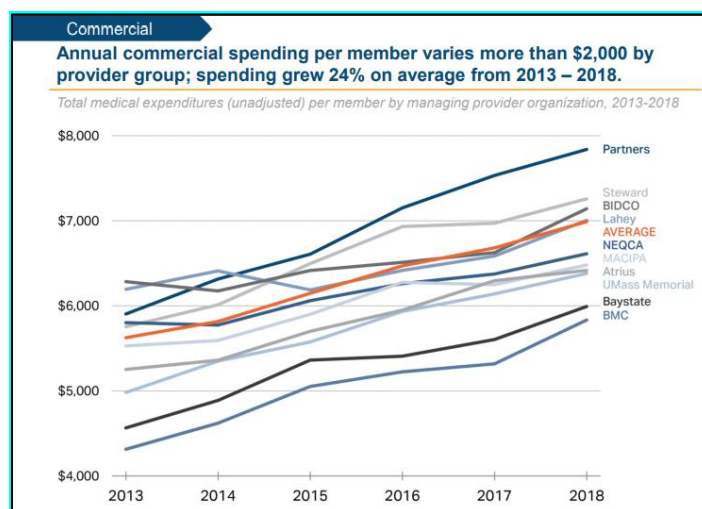
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<sup>41</sup> Included Southbridge Rotary, Southbridge Town Meeting, Webster Town Council, Greater Worcester Community Foundation, and South County Connects – Community Health Network Area (CHNA 5).

<sup>42</sup> A full list of activities proposed by the Applicant can be found in the DoN Application narrative.

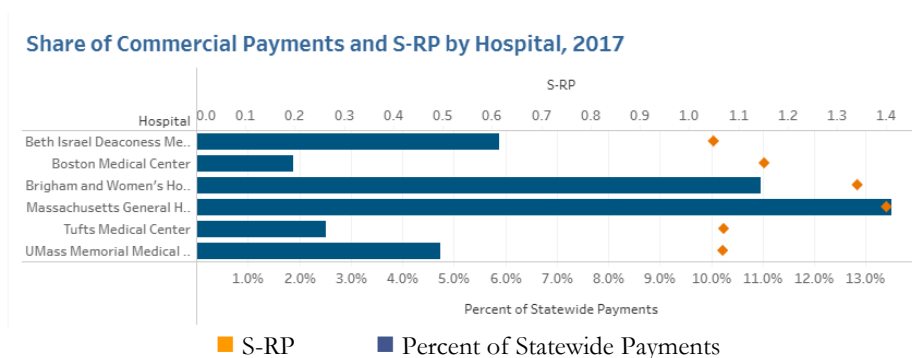


Figure 1: Unadjusted TME By Provide Organization, 2013-2018<sup>hh,43</sup>



The Applicant also provided select data from the Center for Health Information and Analysis (CHIA) interactive tableau graphics showing statewide relative price (S-RP),<sup>44</sup> a measure of the prices paid to a provider across multiple payers in a given calendar year, for the AMC hospital cohort and the percent share of statewide payments for each AMC in the cohort (Figure 2). While the Applicant noted that HMF's S-RP is generally comparable to UMMHC's community hospitals (and included in Table 7 is the statewide relative price (S-RP) for the AMC cohort and for the community-HPP Cohort for the UMass and Harrington systems) HMF's RP is lower than UMMHC's community hospitals.

Figure 2: S-RP by AMC Cohort, 2017<sup>ii</sup>



<sup>43</sup> Analysis includes the ten largest provider groups and commercial spending for BCBSMA, Tufts, and HPHC members only. Members included are those in HMO or POS products which require choice of a primary care provider. Source: HPC analysis of Center for Health Information and Analysis 2016-2019 Annual Reports, TME Databook

<sup>44</sup> S-RP blends relative price across payers using payer payment distributions. Since relative price is calculated within each payer, a blending of relative prices will not account for absolute price differences across payers. For this reason, it is not advisable to use S-RP to understand absolute price differences between one provider and another. S-RP should only be used for directional purposes. A commercial S-RP for a given acute hospital of 1.20 indicates that the hospital is paid 20 percent higher than average S-RP among acute hospitals across commercial payers.

**Table 7: S-RP AMC Cohort and Community-HPP Cohort, 2017**

<b>AMC Cohort</b>	<b>S-RP</b>	<b>% Statewide Payments</b>
BIDMC	1.05	5.9%
BMC	1.15	1.9%
BWH	1.34	11.0%
MGH	1.40	13.5%
Tufts Medical Center	1.07	2.5%
UMass Memorial	1.07	4.7%
<b>Community-HPP Cohort</b>	<b>S-RP</b>	<b>% Statewide Payments</b>
Harrington Memorial Hospital	0.89	0.5%
Clinton Hospital <sup>45</sup>	0.86	0.1%
Health Alliance Hospital	0.83	0.4%
Marlborough Hospital	0.88	0.2%

The Applicant maintains that because HHCS physicians already contract through the UMMHC MCN for the three major payers (Tufts, HPHC, and BCBSMA), the transaction is unlikely to have a material impact on pricing. The Applicant asserts that the Proposed Project will reduce TME by sustaining and enhancing access to high quality care in the most appropriate and cost-effective setting and preventing outmigration of patients to higher cost facilities, particularly those located in Boston. The Applicant maintains that through the Proposed Project it will reduce outmigration to facilities where the cost of care is higher and provide greater support and collaboration to invest in and encourage use of community hospitals to keep appropriate care local in a lower cost, community setting. This will increase the success of UMMHC's and HHCS participation in value-based programs.

### ***Analysis***

Several studies have stated that consolidation of the hospital market has led to higher negotiated prices with private insurers, and that price increases have not been shown to reflect higher quality and instead reflect differences in providers' market leverage.<sup>jj,kk,ll</sup> The 2015 HPC Cost Trends Report states that less competition (as measured by the number of community or teaching hospitals with overlapping service areas) was associated with higher prices in Massachusetts and healthcare markets with less competition and greater market concentration tend to have higher prices.<sup>mm</sup> A report from the Massachusetts Association of Health Plans (MAHP) indicated that provider price, and not utilization, was the bigger health care cost driver in Massachusetts; and that provider consolidation, creates market leverage leading to higher prices.<sup>nn,46</sup> The report also stated that a greater share of public-payer patients was associated with lower commercial prices.

Staff finds that the Applicant and its community hospitals lower relative price (RP), existing contracting with HHCS, and various initiatives that will contribute to a reduction in TME, including efforts to keep care local, reduce the likelihood that the Proposed Project will have a materially negative impact on prices and other measures of healthcare spending. Many patients seek care at AMCs and teaching hospitals (TH's) for care that could be provided in the community and when patients travel outside of the community to larger, more expensive systems to access care it can

<sup>45</sup> In 2016, HealthAlliance Hospital and Clinton Hospital merged and are currently under one license.

<sup>46</sup> Common findings identified from nine reports examining health care cost and quality that were published between 2016 and 2019 by three leading state agencies in Massachusetts: CHIA, the HPC, and the AGO. A common finding is defined as one that was mentioned in at least two reports. Most of the reports focus on the commercial market, particularly of the top three insurers.

result in higher TME. Maintaining appropriate care in the community setting can help to reduce the use of higher-cost facilities, without compromising quality. Table 8 presents UMMHC community hospitals and HMH inpatient and outpatient relative prices for their top commercial payers.<sup>47,oo</sup> Staff note that Fallon plans to shift away from commercial insurance products and focus on government-sponsored health insurance programs.<sup>pp</sup> The relative price (RP) measure compares prices paid to different providers within a payer's network, and shows variation by comparing provider prices to the average price paid in the network. A relative price of 1.0 represents each payer network's average price across inpatient, outpatient, or physician services. A relative price of 1.10 means that the provider's price level is 10% more than the average inpatient, outpatient, or physician price in a payer's network.

**Table 8: Relative Price, CY2019**

	Harrington				Marlborough				HealthAlliance-Clinton			
	BCBS	Fallon	Tufts	HPHC	BCBS	Fallon	Tufts	HPHC	BCBS	Fallon	Tufts	HPHC
Inpatient RP	0.79	0.66	0.63	0.58	0.86	0.78	0.73	0.63	0.84	0.94	0.67	0.68
Outpatient RP	0.9	0.81	1.06	0.82	0.76	0.97	0.74	0.82	0.75	1.07	0.71	0.73

1. Abbreviations: Blue Cross Blue Shield of Massachusetts (BCBS), Harvard Pilgrim Health Care (HPHC), Tufts Associated Health Maintenance Organization, Inc. (Tufts), and Fallon Community Health Plan (Fallon).
2. Insurance Category: Commercial (self and fully insured). Product Type: All Products.

## Factor 1 Summary

As a result of information provided by the Applicant and additional analysis, staff finds that with the Conditions outlined below, the Applicant has demonstrated that the Proposed Transfer of Ownership has met Factors 1(a-f). Staff note that no comments were received on this application and no ten taxpayer groups (TTGs) formed in connection with this application. Staff recommends the following Conditions, fully described under Conditions at the end of this report:

1. Reporting on the maintenance of services at HMH.
2. Reporting on measures revised from the Applicant's proposed list.

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

### Cost Containment

The Applicant states that the Proposed Project will provide HHCS and HMH with the long-term financial stability that will allow it to pursue initiatives, which have been described earlier in this report, that contribute to the Commonwealth's cost containment goals, including improved quality and greater access to cost-effective care locally. The Applicant cites Harrington's planned addition of new inpatient adult psychiatric beds on its Webster campus to address regional and state-wide critical delays, as evidence of one such initiative.<sup>48</sup> The Applicant maintains the Proposed Project will allow HHCS, as an affiliate of UMMHC, to improve access to high quality care in the HHCS service area with no expected material impact on rates of payment.

<sup>47</sup> Relative price (RP) is a calculated metric that measures provider price variation in the Massachusetts health care market. RP is an aggregate measure used to evaluate variation in prices for similar providers within individual payer networks. To ensure prices are appropriately compared across providers, RP adjusts for differences in the quantity and types of services delivered by providers and for differences in the types of insurance products carried by each provider's patients. Different data are provided for inpatient and outpatient care which requires different methods to be used to create a single RP value within each spending category. For inpatient care, payers provide total payments, total discharges, and the case-mix for their member population. For outpatient care, payers report multipliers on a standard fee schedule by service categories that are reflective of their contracts with providers, and do not report a volume metric or case-mix index.

<sup>48</sup> See DoN approvals related to the State of Emergency at <https://www.mass.gov/doc/harrington-hospital-approval/download>

### ***Analysis: Cost Containment***

Cost containment on a statewide level is impacted through pricing, which is a function of what providers charge payers and what payers agree to pay. While payment contracts between individual providers and commercial payers are confidential, those among providers and Medicare and Medicaid are relatively transparent. DoN staff reviewed reports from HPC and CHIA to assess the Proposed Project's alignment with the state's cost containment goals. The HPC states that total health care spending is a function of the prices of health care services as well as health care utilization. At the 2019 Cost Trends Hearing, the HPC showed that unit price was a key driver of spending growth among the top three Massachusetts payers (BCBSMA, THP, and HPHC) from 2016 to 2018.<sup>49</sup> Rising prices lead to increasing consumer cost sharing which can ultimately affect access to care.<sup>tr</sup> Staff find that the Proposed Project aligns with the Commonwealth's goals by maintaining and supporting increased access to high-quality care in lower cost, community settings. In addition, HMH is a high public payer, community hospital with low relative prices compared to other hospitals.

### **Improved Public Health Outcomes**

The Applicant states that it will apply its Anchor Mission efforts with targeted investments in the SDoH to improve Patient Panel health outcomes and quality of life measures, and to improve the health and well-being of HHCS communities. UMMHC's Anchor Mission work is focused on improving the health and welfare of its community beyond its Hospital's walls particularly in areas where there is pervasive inequality and social disadvantage.<sup>ss</sup> The Applicant's Anchor Mission work focuses on four areas: **Investing** in local projects to improve the welfare of our community; **Hiring** identifying opportunities to ensure the employee profile is reflective of the community;<sup>49</sup> **Purchasing** to support local businesses, with a focus on areas of social disadvantage or ongoing inequality within our community;<sup>50</sup> and **Volunteering** opportunities for employees. Through its Community Benefits program the Applicant works to address social factors that impact upstream, root causes of health. Investments in SDoH have been identified in the CHNA or CHIP reports of UMMHC member hospitals and are reviewed and approved by UMMHC's Community Benefits Committee. Specific community-based investments already deployed total 2.4M;<sup>51</sup> and UMMHC committed to increasing existing Anchor Mission investments to a total of \$3.1M by September, 2021.

UMMHC is a member and participant in the "Healthcare Anchor Network" of the Democracy Collaborative, a health system-led collaboration that helps participants to more rapidly and effectively advance an anchor mission approach within their institution, an authentic partnership with the communities they serve, and across the healthcare sector. UMMHC has also been working to improve socioeconomic factors in the communities it serves through "Purchasing Pillar, Investment Pillar and Hiring Pillar" committees that address the needs of communities through emphasizing local purchasing, investing, and hiring. HHCS has begun participating in UMMHC's

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<sup>49</sup> Working with community-based partners including MassHire, Worcester Adult Learning Center, Worcester Community Action Council, Ascentria Care Alliance and Ascentria Community Services to identify and better understand barriers in recruiting and hiring local applicants for available positions at UMMHC.

<sup>50</sup> Working to develop actionable strategy to increase local purchasing with an initial focus on identifying existing barriers with finding, developing and building local spend. Applicant provided a summary of actions taken to support efforts to increase UMMHC's local, diverse and sustainable purchasing.

<sup>51</sup> A complete description can be found in responses to DON Questions. Finally, Home Loan Fund (\$500,000) – housing Creative Hub Arts Center (\$500,000) – create community and economic hub Fitchburg Arts Community (\$750,000) – housing Worcester Common Grounds (\$400,000) – housing Tiny Home Village (\$300,000) – housing.

Anchor Mission work and with HHCS full integration into UMMHC's Anchor Mission work through the Proposed Project, the Applicant intends to identify areas of investment in the HHCS service area to improve the health of the communities that will be served by the combined system. The Applicant expects that the Proposed Project will result in new local hiring and local purchasing, and community-based investments that will improve the health and wellbeing of HHCS communities.

### ***Analysis: Public Health Outcomes***

Staff find that the Applicant's work to address the causes of health issues at the community level is likely to improve health outcomes. It is estimated that health care delivery drives only 20% of health outcomes while the SDoH can impact as much as 80% of healthcare outcomes. Further, medical services account for 90% of healthcare expenditures.<sup>tt</sup> Studies assert that traditional health care sector-focused interventions are insufficient as a primary strategy to address population-level health disparities and suggest that future research, policy, and implementation efforts should concentrate more on interventions targeting upstream SDoH.<sup>uu</sup> Moving upstream to address the root causes of these issues has also been estimated to reduce healthcare costs.<sup>vv</sup>

### **Delivery System Transformation**

The Applicant asserts the Proposed Project will strengthen UMass Memorial OCI and HHCS population health team's partnership on shared value-based contracts to monitor and improve performance in quality and reductions in TME. HHCS currently participates in six value-based contracts: 1) Medicare ACO with UMMHC 2) Blue Cross - internal Managed Care Network with UMMHC 3) Tufts - Managed Care Network with UMMHC 4) HPHC - Managed Care Network with UMMHC 5) Fallon Medicare Advantage and 6) Boston ACO (BACO) with BMC. HHCS is a participant in the MassHealth Program through BACO. In its 2020 DoN Application, HHCS noted that there are 5,200 covered lives in BACO. The Applicant asserted that there are no planned changes to HHCS participation in the MassHealth ACO program and no plans for UMMHC to participate in the MassHealth ACO program during the next contracting period. The Applicant states that the various EMRs in the HHCS system, the Epic system at the Medical Center, and independent provider reporting platforms hinder aggregation of patient quality data that might lead to improved patient outcomes and contract performance and that acquisition and implementation of Epic at HHCS will allow HMMH access to real-time, actionable data to improve patient outcomes and contract performance.

### ***Analysis: Delivery System Transformation***

Central to the goal of Delivery System Transformation is the integration of social services and community-based expertise. The Applicant described its ongoing work to address the SDoH, including screening and referral processes, and enhancing relationships with CBOs. Risk contracting has increased incentive for Applicants to increase assessments and improve linkages to social services for their patients. This has the potential to improve the continuity of care for a growing percentage of patients. Given the structure of value-based payment models, ACOs are encouraged to address SDoH and undertake SDoH related interventions to support efforts improve outcomes and reduce costs.<sup>ww</sup> The MassHealth ACO Program is a delivery system transformation effort to integrate physical health care, behavioral health care, and long term services and supports (LTSS), and build linkages to services in the community to address SDoH needs, which have played a critical role during the COVID-19 emergency. HHCS has covered lives enrolled in BACO that are currently accessing services through the program. In order to ensure continued access to services for BACO enrollees, as a Condition of approval, in the event the Applicant determines it will change HHCS

participation in the MassHealth ACO Program, it will report to the Department how access to needed services would be provided without enrollment in BACO.

## **Factor 2 Summary**

As a result of information provided, staff finds that with the Condition outlined below, the Proposed Transfer of Ownership has sufficiently met the requirements of Factor 2. Staff recommends the following Condition, fully described under Conditions at the end of this report:

1. Reporting on any changes to HHCS' participation in the MassHealth ACO Program.

## **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 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.

## **Factor 4: Demonstration of Sufficient Funds as Supported by an 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 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: Audited financial statements for both UMMHC and HHCS, Financial Model for UMMHC and HHCS individually and combined, Affiliation Agreement by and between UMMHC and HHCS, financial projections for FY21 through FY25, and industry reports. The review included analysis of key metrics that fall into three categories: profitability, liquidity, and solvency. The projections exclude the impact of inflation on both operating revenue and operating expenses after FY2021 and therefore the projections consider only the impact of volume on both projected revenue and operating expenses for FY22 through FY25.

### **Revenues**<sup>52</sup>

Total operating revenue for the Projections are expected to grow by 3.7% in FY2021 compared to FY2020<sup>53</sup> and 0% for the Projection Period FY22 through FY2025. Revenue growth in FY2021, is largely due the expectation that operations will return to normal after being impacted by the COVID-19 pandemic and the return to normal operations is offset by the absence of Provider Relied Funds under the CARES Act in FY21. FY2021 revenue is expected to increase by 10.2% compared to FY19 (last year of normal operations prior to COVID-19) due to several improvement initiatives the Applicant has implemented since FY18 that are enabling the Applicant to operate more efficiently. FY21 operating revenue growth is also supported by the operational return of facilities and staff that were not available in FY20. The revenue growth anticipated for FY21 is below the three-year compound annual growth rate (CAGR) and within the range of annual revenue growth rates for the Applicant between FY17 and FY20. Based on its review, the CPA determined the Applicant's projected revenue growth is a reasonable estimation of future revenue of the Applicant.

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<sup>52</sup> Revenue includes net patient service revenue and other operating revenue.

<sup>53</sup> FY2020 Revenue includes ~158M in Provider Relief Funds received from HHS pursuant to the CARES Act.

## **Expenses**<sup>54</sup>

Total expenses are projected to grow by 3.1% and 10% in FY21 compared to FY20 and FY19 and 0% for FY22 through FY25, except for interest expense projected based on the Applicant's projected level of debt and current terms. The increase in FY21 is slightly below the three-year compound annual growth rate (CAGR) between FY17 and FY20, with the drivers of lower expense rate attributed to the operational improvement plan, transformation initiatives, and other investments made by the Applicant in FY17 through FY19 enabling UMMHC to operate more efficiently and reduce administrative costs. Based on its review, the CPA determined that the operating expenses within the Projections are a reasonable estimation of future expenses of the Applicant.

## **Capital Expenditure**

There is no significant investment or capital growth expenditures in the Projections, except a plan to replace certain obsolete equipment at UMMHC in FY20. For FY22 through FY25, capital expenditure projections were consistent with the forecasted depreciation and amortization. Based on its review, the CPA determined that the capital expenditures projected reflect a reasonable estimation of future capital outlay of UMMHC.

The Projections exhibit a cumulative operating EBITDA surplus of ~0.2% of cumulative projected operating revenue for FY21 through FY25, and is a reasonable expectation. Based on its review, the CPA determined that the Projections are reasonable and feasible and not likely to have a negative impact on the Patient Panel.

## **Analysis**

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

## **Factor 5: Assessment of the Proposed Project's Relative Merit**

*Transfer of Ownership Applications are exempt from this factor*

## **Factor 6: Fulfillment of DPH Community-based Health Initiatives Guideline**

*Transfer of Ownership Applications are exempt from this factor*

## **Conditions**

1. The Holder will inform the Department of any plans to change or close any services including, but not limited to any decrease of behavioral health services and/or inpatient behavioral health beds at Harrington Memorial Hospital. In such circumstances of any changes to services, the Holder will provide a justification for the reduction or discontinuation of the service, including but not limited to an analysis of utilization patterns and Patient Panel need for such service and an analysis sufficient for DoN staff to determine that the proposed reduction or closure will not have a negative impact on access for patients in the HHCS service area.

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<sup>54</sup> Analysis of operating expenses included salaries and wages, employee benefits, professional fees, purchased services, pharmacy, medical supplies, non-medical supplies, utilities, insurance, rental leases, and other direct expenses, system allocation expenses, depreciation and amortization, and interest expenses.



2. The Holder will notify the Department should HHCS propose discontinuing its participation in the MassHealth ACO Program, and in such notice the Holder will provide an explanation sufficient for DoN staff to determine that its patients who are enrolled in the MassHealth ACO Program will maintain access to services within the HHCS service area.
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.

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