STAFF REPORT TO THE COMMISSIONER OF PUBLIC HEALTH FOR A DETERMINATION OF NEED	
Applicant Name	Franklin MRI Center, LLC
Applicant Address	700 Congress St., Suite 204, Quincy MA 02169
Filing Date	November 1, 2019
Type of DoN Application	DoN Required Equipment- Expansion of Service
Total Value	$804,429.00
Project Number	190102412-HS
Ten Taxpayer Group (TTG)	No
Community Health Initiative (CHI)	$40,221.45
Staff Recommendation	Approval
Public Health Council	Delegated

Project Summary and Regulatory Review

Franklin MRI, LLC submitted a DoN Application to add mobile magnetic resonance imaging (MRI) to its existing imaging service and limited associated renovations at a new site, Baystate Wing Hospital. The capital expenditure for the Proposed Project is $804,429.00; the Community Health Initiatives (CHI) contribution is $40,221.45.

This DoN application falls within the definition of DoN-Required Equipment and Services, 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 Determination of Need Factor set forth within 105 CMR 100.210. This staff report addresses each of the six factors set forth in the regulation.

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APPLICATION OVERVIEW

Background

The Applicant, Franklin MRI, LLC, was formed in 2006 as a joint venture between Baystate Franklin Medical Center (BFMC) and Shields Family Equity II, LLC (Shields). The Applicant is currently authorized to provide fixed MRI services at BFMC. Under its current license, the Applicant proposes to expand its service to provide mobile MRI services five days per week at Baystate Wing Hospital in Palmer. Both BFMC and Baystate Wing Hospital Baystate Wing hospitals are members of Baystate Health, Inc.[1]

Baystate Wing Hospital (Baystate Wing) – where the mobile MRI services will be offered – is a community hospital licensed to operate 74 beds, with a newly renovated Emergency Department (ED), as well as primary care, oncology, orthopedics, neurology and cardiopulmonary services. Ten miles away, at Baystate Mary Lane Outpatient Center (BMLOC)[2] in Ware, it operates a satellite emergency facility, day surgery, a cancer center and other ancillary services.

Project Overview

As stated by the Applicant, the "need for the Proposed Project is based on the need of Baystate Wing to provide accessible MRI services to its patients. Baystate Wing currently arranges for on-site MRI services for its patients through a contractual agreement with the UMass Memorial Imaging Center (UMMIC). UMMIC is a licensed MRI clinic partly owned by UMass Memorial Medical Center (UMMC) that provides part-time mobile MRI services at Baystate Wing. This arrangement was instituted while Baystate Wing was a member of the UMass Memorial Health Care System ("UMMHC"). However, as Baystate Wing is now a member of the BH System, Baystate Wing determined that it would no longer contract with UMMIC for MRI services and seeks to have the Applicant, of which Baystate Health System (as the parent of BFMC) is a part owner, fulfill the continued need for access to MRI services at Baystate Wing." It is anticipated that patients of both Baystate Wing and BMLOC will utilize this expanded service.

[1] Baystate Wing was formerly a part of the University of Massachusetts Medical System (UMMC) but was acquired by Baystate Health in 2014
[2] Outpatient satellite; formerly Baystate Mary Lane Hospital

OVERVIEW of PROPOSED PROJECT AND FACTOR REVIEW: FRANKLIN MRI

Description of Proposed Project Component	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, 4 & 5[3]	What's Needed to Meet Factor 6: Demonstration of plans for fulfilling … responsibilities … in the DPH Community-based Health Initiatives Guideline.
	Staff Report finds			
	MEETS w/ CONDITIONS	**MEETS w/ CONDITIONS**	**MEETS**	**MEETS**
Proposed expansion of mobile MRI by Franklin MRI to **Baystate Wing Hospital (which currently has such service through a different vendor) to address Patient Panel needs for** • **expanded days of service** • **a local in-network service provider**	• Report on use of clinical decision support tool • Report on other standard outcome measures revised from the Applicant's proposed list, including reporting on a CMS efficiency measure designed to limit Low Value MRIs		✓	✓

[3] 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.
5: The … Project, on balance, is superior to alternative and substitute methods for meeting … Patient Panel needs

Patient Panel[4]
Franklin MRI's *current* Patient Panel is associated with Baystate Health's Franklin Hospital in rural Greenfield; it does not intersect with patients who will be serviced by the Proposed Project, which is 56 miles away. The Applicant asserts that its fixed MRI (in Greenfield) provides no insight into determining the need for mobile MRI (in Palmer, the site of the Proposed satellite Project), because the service areas do not overlap. The Proposed Project will therefore have no negative impact on current Patient Panel in Greenfield nor on its operations there.

Since the Applicant is proposing to establish services at a new satellite located at Baystate Wing, it has provided data on the *anticipated* Patient Panel, which is the three most recent years of available demographic information for the patient population utilizing all services at Baystate Wing, including MRI services. Baystate Wing is the referral base for the needed MRI service irrespective of MRI vendor.[5, 6]

Patient Population
The patient population to be served by the Applicant is ~60,000 per year. Table 1 below presents Fiscal Year 2018 patient information for those patients at Baystate Wing Hospital, since these patients are using the current MRI service that is the focus of this Application. This "snapshot" provides important information; staff notes the following observations about these data below:

Table 1: Overview of all Baystate Wing Hospital Patients[7]

Annual Total Patients (FY18)	~60,000
Gender (FY18)	
Male	44.6%
Female	55.4%
Age (FY18)	
0-17	13.4%
18-64	63.7%
65+	22.9%
Race/Ethnicity (FY18)[8]	
White	86.7%
Black or African American	3.3%
Asian	0.7%
Hispanic/Latino	6.4%
Native Hawaiian or Other Pacific Islander	0.0%
American Indian or Alaska Native	0.2%
Other/Unknown/Unavailable/declined	2.8%
PSA comprised of 11 communities	75.3%

[4] As defined in 105 CMR 100.100, Patient Panel is the total of the individual patients regardless of payer, including those patients seen within an emergency department(s) if applicable, seen over the course of the most recent complete 36-month period by the Applicant or Holder…(2) If the Proposed Project is for a new facility and there is no existing patient panel, Patient Panel means the anticipated patients
[5] Staff finds this to be a reasonable argument given that none of the patients who were seen at the Baystate Wing site are from the Applicant's service area (Greenfield or the surrounding towns).
[6] The Applicant asserts that the rural location in Greenfield (the location of its current fixed site) provides no insight into determining the need for services in Palmer (the location of the Proposed satellite Project), because the service areas do not overlap
[7] The table presents patient information for the MRI Satellite site, those using the services at Baystate Wing that is the focus of DoN Application. This "snapshot" provides important information for a single year, FY 2018
[8] Based on self-reporting

- **Age** – The 18-64 age cohort comprises the majority (>63%) of patients at Baystate Wing; within this age cohort, about 25% is between the ages of 51-64. Older adults (ages 65+) make up ~23% of patients. Over the 2016-2018 time frame, patients aged 51+ grew 1.5%. Within that cohort those aged 65+ grew at a higher rate, 1.7%.
- **Patient Origin** - The geographic composition of the Baystate Wing is from more than 20 towns. Applicant provided Baystate Wing's 11 patient origin communities where ~75% of patients live. [9] The majority of patients live in Ware and Palmer, 14.5%, and 10.5%, respectively. The third largest volume of patients 9.5%, come from Springfield, which is about 11 miles away.
- **Race/Ethnicity -** ~87% of the patient population served is white, while ~6% is Hispanic/Latino, and ~3% is Black or African American.

T**he Baystate Wing payer mix for all services FY 2018 is shown in Table 2 below.** Baystate Wing's public payer mix comprised ~50% of all patients, including the combined total of Medicare beneficiaries (about 29%); and Medicaid (about 22%) of patients. Additionally, commercially insured patients represented about 45%. The remainder of patients (~6%) had other insurance, or were designated as self-pay. The table also shows that approximately 20% Baystate Wing's primary care lives are covered in risk contracts**.**

Table 2: FY 18 Overall Payer Mix for Baystate Wing

APM Contract Percentages (For any system-affiliated Primary Care Physicians)		**Payer Mix-List Percentages (Must = 100%)**	
ACO and APM Contracts	20.4%	Commercial	44.8%
		PPO/Indemnity	*28.9%*
		HMO/POS	*15.9%*
		MassHealth	12.4%
Non-ACO and Non-APM Contracts	79.6%	Managed Medicaid	9.4%
		Commercial Medicare	7.0%
		Medicare FFS	20.8%
		All other	5.7%

The Applicant combined the payer mix for Franklin MRI patients and Baystate Wing MRI patients (under the existing contract) in FY 2018 is shown in Table 3 below. [10] The public payer mix comprised 47% of all patients, including the combined total of Medicare beneficiaries (about 32%); and Medicaid (about 15%) of patients. Additionally, commercially insured patients represented about 40%. The remainder of patients (~13%) had other insurance or were designated as self-pay. The Applicant was unable to track ACO/APM percentages since its contracts are between the payer and the physician/system, not with an MRI service.

[9] Ware, Palmer, Springfield, Belchertown, Monson, Ludlow, Wilbraham, Three Rivers, Warren and West Brookfield, Chicopee

[10]For MRI payer mix, the Applicant combined data from its current facility in Franklin and data from the other vendor's current satellite site at Baystate Wing. This was based on data from the current UMass Memorial Imaging Center ("UMMIC")-run MRI clinic at Baystate Wing.

Table 3: FY 18 Combined Payer Mix for Franklin MRI and Baystate Wing's Current MRI Patients

Payer Mix-List Percentages	
Commercial	39.9%
MassHealth	10.2%
Managed Medicaid	4.3%
Commercial Medicare	6.2%
Medicare FFS	26.3%
All other	13.1%

Factor 1: Patient Panel Need

In this section, we assess if the Applicant has sufficiently addressed patient panel need, public health value, competitiveness and cost containment, and community engagement for the MRI and expansion of service. We also assess whether the Applicant has demonstrated that the Proposed Project will meaningfully contribute to the Commonwealth's goals for cost containment, improved public health outcomes, and delivery system transformation.

Factor 1: a) Patient Panel Need

Patient Panel Need

The Applicant attributes the need for additional MRI days to three interrelated factors.

a) Need to accommodate site's MRI volume;
b) Need to improve access to local imaging services; and
c) Need to address anticipated volume growth due to
   - better integration with Baystate Health
   - BH's physician recruitment efforts in the service area; and
   - a growing aging population, which has a higher need for MRI scans.

a) Need to accommodate Baystate Wing existing MRI volume

As described in Project Overview, currently, mobile MRI services are available three days per week through an existing contract with UMMIC. As Table 4 shows, while the site had fluctuating demand for MRI services (which suggests a need best met through a part-time service) the average annual MRI volume growth over three years is ~8%.

Table 4: Current MRI Volume at Baystate Wing

Calendar Year	2016	2017	2018	2019	Average Annual % Change (2016-2019)
MRI Exams	1,691	1,445	1,846	2,121	+8.4%

The Applicant states the new service will allow it to better accommodate current volume growth at Baystate Wing, as shown in Table 4. While the Applicant noted that there was decreased MRI volume at the Baystate Wing site in FY17, it also found that Baystate Health system physicians were less likely refer patients to the mobile MRI at Baystate Wing since it was no longer within their network[11]. The Applicant believes that following

[11] Following the transfer of ownership of Baystate Wing from UMMC to Baystate Health

the Baystate Wing transfer of ownership[12] and the subsequent transition to a new BH IT system in 2017, fewer referrals may have occurred.[13] It also notes the new service will also facilitate improved alignment with the BH System.

b) **Need to improve access to local imaging services**

The Applicant states that for Baystate Wing, switching its mobile MRI operating contract to Franklin MRI LLC improves patient access, since it enables it to provide two additional days of service, which increases the availability of the service to Baystate Wing's patients and physicians. The Applicant outlined the barriers for local patients to travel to other locations within the BH system for different kinds of appointments, due to their rural location. (This will be discussed further under public health value and Social Determinants of Health). Moreover, the Applicant noted that current mobile MRI services are offered "out-of-network" for many in the patient population in the region,[14] thereby contributing to higher out–of-pocket costs if they seek care at Baystate Wing under the existing vendor.

To better understand need, staff inquired further about issues that affect access, wait times and capacity. The Applicant reported that with the current three day availability, the average wait time is ~4 days, and that the mobile MRI unit currently in use is operating at 89% capacity.[15]

The Applicant asserts that when the additional two days become available, only about four additional hours for appointment scheduling will become available, but that such a schedule will ensure that more patients for whom access is a challenge due to travel barriers will benefit from same day service.

c) **Need to address anticipated volume growth through:**

- **Improved alignment with the BH system.** Given the historic technical issues described above, the Applicant anticipates modest growth in volume once the Proposed Project is approved. Providers are more likely to refer to sites that are within the BH network.
- **Ongoing expansion of primary and specialty physician practices in the service area.** The Applicant asserts that it needs to address the anticipated increased MRI needs resulting from ongoing physician recruitment efforts to satisfy the needs of its patient panel in the geographic area.
- **Addressing growth in the aging population at risk for particular conditions and diseases.** The Applicant asserts there are increasing needs of the aging population whose present conditions may require the use of MRI. Patients aged 65+ grew at a rate 1.7% over the most recent three-year timeframe.
    - In Massachusetts, the age 65 and older population will represent a quarter of the population by 2035.[1] Further, patients age 50 and older make up a significant percentage of Baystate Wing's overall patients (approximately 25%). The application provided 2 key reasons for increasing demands based on age:
        - **Risk for cancer.** Advancing age is a risk factor for cancer; and

[12] From UMMC to BH

[13] The transition to a new BH IT system in 2017 may have inadvertently contributed to fewer BH System physician referrals: physicians lacked awareness of availability and were unsure how to access medical record information, and consequently referred to other MRI services operated by the BH System.

[14] BH Employees' Health Plan and HNE-Health New England.

[15]

Current Operating Capacity		
A.	Actual Number of Scans	2,121
B.	Average Hour per Scan	0.75
C.	Annual Scan Hours (A x B)	1,591
D.	Average Available Hours per Year	1,788*
E.	% Operating Capacity (C / D)	89%

Based on a 12-hour day. 36 hours of operation per week times 52 weeks = 1,872 hours, reduced by 84 hours for holidays and maintenance = 1,788 available hours.

- **Risk for musculoskeletal conditions** such as arthritis. Three-quarters of those aged 65 and older suffer from a musculoskeletal disease, including arthritis, back pain and trauma. Almost half (49.6%, 22.2 million) of adults aged ≥65 years have arthritis according to recent data.[2]

As shown in Table 5 below, to address the needs described above, the Applicant projects an overall growth over 4 years, with it stabilizing in year five. The additional hours of operation will, the Applicant anticipates, result in an occupancy rate of 88% in year 5, and emphasizes that these projected growth factors are specific to the location regardless of which vendor is operating the service.

Table 5: MRI Volume and Growth Rate

Year	1	2	3	4	5	Avg Annual % Change
# MRI Scans	1,988	2,113	2,238	2,363	2,363	3.8%

Analysis

The Proposed Project will result in benefits for the Applicant, Baystate Wing Hospital and for patients.

- For the Applicant, the Proposed Project is an expansion of service as it proposes to provide five days of mobile MRI services at a new satellite site that is not within its current service area;
- For Baystate Wing, the Proposed Project will replace one vendor with another, which presents opportunities for better efficiencies and integration of services; and
- For patients, by adding two additional days of service[16] through the Proposed Project, patients gain improved access to MRIs with that is "in network. "

  As a result, Staff finds it reasonable to conclude that providing more appointment slots will improve patient access and optimize the time that they are at the site, if same-day slots are available. Staff finds that based the historic volume, anticipated changes in the patient population, and the anticipated increased referrals due to expansion of physician practices by BHS, demonstrates sufficient need for expansion of MRI service at the Baystate Wing site.

Based on a review of the literature and other DoN applications, staff concurs that the majority of demand lies in the 55+ population and that this cohort is experiencing the greatest growth due in large part to the increased incidences of cancer, neurologic, and musculoskeletal conditions as the population ages. As the population grows and ages, the need for convenient local access to MRI becomes more important. As noted elsewhere within this Report, about one-quarter of Baystate Wing's Patient Panel is between the ages of 51-64, and those age 65+ also make up a quarter; these populations are also growing.

Staff investigated the physician to population ratios and found that there is a need for physicians in the region; the ratio of residents to primary care doctors in Hampden County is lower than the state average (1,400:1 as compared to Massachusetts, which is 960:1.)[3] As previously stated, as the number of primary care and specialty providers increases within the service area, the Applicant anticipates, the number of clinically indicated scans ordered may increase, as access to health services improves

Staff also notes that the service area of the Baystate Wing is large and rural. As a result, patients from a broad geographic area, including towns that are greater than 30 minutes away by car, seek services at the hospital; patients who travel may wait longer to seek care, and possibly delay treatment. Such delays have been identified as a barrier to health services, including delays in receiving appropriate care, increased complications, and

[16] Over the existing mobile contract of three days

increased hospitalizations,[4] having the greater flexibility to offer "same day" service with these expanded hours will benefit patients.

Staff concurs that if unaddressed, out-of-network patients will continue to experience unnecessary out-of-pocket costs, or continue to travel to an alternative site that is within their insurance network, and which may cause delays in seeking scans, and possibly delays in diagnosis and treatment. Further, providing non-tertiary care services in the community is preferable to providing such care at an academic medical center such as University of Massachusetts Medical Center-Memorial Campus (37 miles away) or the Berkshire Medical Center (54 miles away).

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

The Applicant states that MRI is a well-established technology that enables clinicians to appropriately diagnose and develop the most effective treatment plans earlier in the disease process across a number of clinical conditions, including oncologic, cardiac, abdomino-pelvic, musculoskeletal, and neurologic complications. Currently, at the proposed satellite, ~64% of scans are performed for neurologic cases and ~30% are for orthopedic cases.[17]

The Applicant asserts that expansion to this site will enable it to meet growing needed MRI services, thereby increasing access for more patients. Through the availability of additional days and access to "in-network" scans, the Applicant asserts that improvements will be achieved by:

- **Contributing to improved health outcomes.** Reducing need to travel to access services for needed MRI imaging may assist in diagnosing and treating[5] patients in a more timely fashion, potentially reducing treatment complications and contributing to better health outcomes.[6]
- **Improved access through reduced travel times to receive in-network services.** As noted above, the Proposed Project will increase "in-network" access for many patients in the local area who may be referred to MRI services.
- **Improved access through enhancing the availability of local patient service.** Through the enhanced availability of these local services, needed return visits are less burdensome with less travel time than would be required by seeking services from Applicant's other facilities. Increasing local capacity for service will also improve patient care experience and patient satisfaction.

The Applicant states that it ensures appropriate use of MRI through

- **Providing the ordering physician with access to a Clinical Decision Support Mechanism (CDSM).** The American College of Radiology's "CareSelect Imaging"[18] is accessible through an online ordering portal which can be integrated with electronic health record ("EHR") systems. It will be made available at Baystate Wing. In addition, a radiologist reviews each order for an MRI for appropriateness.
- **Ensuring Pre-Authorization**. Pre-authorization is often required for high-cost imaging exams, such as MRI. The purpose of pre-authorization is to confirm appropriateness of the imaging exam, control costs, and prevent unnecessary utilization. The Applicant also has systems in place to ensure that each MRI exam has authorization approval prior to performing the exam.

Analysis

[17] The remaining ~6% of scans are Body, Chest, Angiography and Other

[18] The CareSelect Imaging tool is a digital representation of the ACR Appropriate Use Criteria (AUC) for diagnostic imaging. It is a comprehensive, national standards-based, clinical decision support mechanism (CDSM) that uses evidence-based decision support for the appropriate utilization of all medical imaging.

The Application cites the clinical benefits of access to MRI imaging, which is used to diagnose conditions across numerous specialties, including but not limited to cancer, musculoskeletal, and cardiologic diseases. Staff confirms these ongoing growing needs, especially for the 65 and over population which comprises about one-quarter of their patient population:

- Cancer is the leading cause of death in Massachusetts with a mortality rate of 155.5/100,000 in 2014. Cancer incidence over the 2011-2015 timeframe was 459.4 per 100,000,[7] which is higher than the national average.[8] Advancing age is the most important risk factor for cancer; according to the National Cancer Institute, 83.2% of new cancer cases are diagnosed in people aged 45-84, with one quarter of new cancer cases being diagnosed in people aged 65-74. The median age for a cancer diagnosis is 66 years.[9]
- Three-quarters of those ages 65 and older suffer from a musculoskeletal disease, including arthritis, back pain and trauma where, depending on the condition, MRI or CT are the most effective imaging modalities.
- Cardiovascular disease is the second leading cause of death in Massachusetts. From 2013-2015, adults diagnosed with myocardial infarction annually ranged from 5.2-5.7%, and those diagnosed with angina/coronary heart disease from 4.7-5.8%.[10]

With the implementation of this project, staff finds that the patient experience will likely be enhanced through improved local access to imaging through additional days offered, and ensuring "in-network" patient access. Patients for whom age, significant medical complications, disability and/or socioeconomic factors make travel more difficult will benefit as a result of co-located services. All of these issues are particularly relevant for patients in rural areas; Hamden County ranks last in the state of Massachusetts for both Health Outcomes and Health Factors as measured by *County Health Rankings and Roadmaps*.[11]

Moreover, staff concurs that through timely access to imaging services, early and accurate diagnosis[12] for many health conditions using these imaging modalities has the potential to improve outcomes since it can a) reduce time lost from work and other activities, and b) for rapidly changing conditions, it may provide valuable clinical information that alters the course of treatment. As a result, patients may experience a greater sense of well-being. Because of the unique features of MRI imaging, with no ionizing radiation exposure, it is preferable for patients needing ongoing scans, pregnant women and children.[13]

However, staff also notes that in Choosing Wisely, the American College of Radiology has identified certain MRI use in its list of overused[14] imaging tests whose "necessity should be questioned and discussed" by physicians and patients. Such overuse of imaging may translate into lower quality care as a result of worry, and unnecessary healthcare interventions including follow-up tests, treatments, visits, hospitalizations, and new diagnoses for benign conditions. [5] These "cascades" clearly present potential harms for patients.[15] Staff notes the Applicant has systems in place to ensure that orders have preauthorization; while the Applicant reports that a Clinical Description Support Mechanism is "made available" to ordering providers, it has not provided assurances that its use is required for ordering MRI's.

Consequently, as a Condition of Approval, staff recommends the Applicant report on ordering physicians' use of the Clinical Decision Support Mechanism (to be made available at Baystate Wing) in order to curb potential overuse of MRI imaging. This is fully described under Conditions at the end of this report.

The Applicant has provided several measures, including wait times to appointments, which may lead to improved outcomes. Staff reviewed the suggested measures and has provided a revised list of Annual Reporting measures, including reporting on a CMS measure designed to limit Low Value MRIs, described fully under Conditions and in Attachment 1 that will become part of the annual reporting to DPH.

Health Equity and Social Determinants of Health (SDOH)

The Applicant provided assurances around health equity and SDOH, both as a system and within Franklin MRI services.

Health Equity
Both Franklin MRI Center, LLC ("the Applicant") and Baystate Wing Hospital ("Baystate Wing") are committed to the Culturally and Linguistically Appropriate Services ("CLAS") standards as well as cultural, linguistic, and health equity. The Applicant supports the adoption of the CLAS standards at this new MRI satellite location at Baystate Wing in accordance with the six categories provided in DPH's guide to CLAS.[16] All employees are required to complete CLAS training and testing, and will be required to complete a training course.

Through the Proposed Project, the patient's identified interpreter and translation program needs will be fully integrated into their EHR and accessible to all Baystate Wing providers. All patients will have access to these interpreter services,[19] which alleviate barriers to care and further health equity. The Applicant's describes a number of systems that it utilizes to ensure access culturally competent staff and interpreter services for all of its patients, including access to certified/qualified interpreters and translators at no cost to patients at all points of clinical contact. Finally, Shields Healthcare group will add this site to its tracking system for patient demographic data collection and annual reporting to the Department. The Applicant anticipates that all of these activities will help ensure that its clinical and language access services are meeting the needs of its patient population at the Baystate Wing clinic location.

Social Determinants of Health (SDoH)
The Applicant currently does not have access to the SDoH screens that have been done at the PCP's office; therefore, it prescreens patients for health related social needs relevant to their imaging appointment. When indicated, the Applicant provides transportation assistance via ride-share and cab vouchers for patients in need. If the Applicant's staff is made aware of any other SDoH issue, staff will confirm that a request for assistance is needed and refer the patient back to his/her primary care physician ("PCP") for linkage to community-based support (e.g., in the case of hunger and access to food). The Applicant states that processes will not be different for ACO patients versus patients not in an ACO.

Analysis: Health Equity and SDoH
Staff finds that through their planned language access and health equity extension to the new site, the Applicant has sufficiently outlined a case for improved health outcomes and has provided reasonable assurances of improved health equity at its site. Staff finds that the Applicant's Language Access and Assistive Services Plan is sufficient, with the understanding that, as a new site, the Applicant will need to comply with requirements of the Office of Health Equity.

The Applicant has sufficiently described how patients are screened for certain social related health needs. Access to transportation is an important social determinant of health in rural communities; its availability affects a person's ability to gain access to appropriate well-coordinated healthcare and other services that impact SDoH. The populations most likely to need transport in rural areas are the elderly, those with disabilities including veterans and those with low-incomes.[20]

[19] Over the past 24 months, languages requested at the current UMMIC-run MRI clinic at Baystate Wing included: Russian, Spanish and Cantonese- were 2 requests for telephone interpretation services and 16 requests for video interpretation services, all of which were fulfilled. No live on-site interpreters were requested or utilized.
[20]Rural Health Information Hub- formerly the Rural Assistance Center, is funded by the Federal Office of Rural Health Policy to be a national clearinghouse on rural health https://www.ruralhealthinfo.org/topics/transportation

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

In addition to earlier diagnosis, improved access for patients, and anticipated greater patient/family satisfaction, the Applicant provided extensive citations documenting the benefits of service co-location. The benefits include greater opportunities for providers to collaborate and improve skills and serve patients, and improved referrals (related to appropriateness, timeliness and completion rates) leading to increased efficiency and improved health outcomes.[17] Imaging at the point of care can improve continuity and coordination of care by providing immediate clinical information thereby eliminating costs related to follow-up visits and improved health outcomes due to earlier commencement of treatment.

As noted above, the Applicant's EHR system will be integrated into the Baystate Wing system which will enable imaging results and information to be available to primary care and specialty physicians across the BH system, and also allows patients to authorize providers who are outside of the system access to their EHR, and to exchange progress notes for improved continuity of care through the regional Pioneer Valley Information Exchange (PVIX).[21] The Applicant points to evidence in the literature which suggests access to integrated health information technology systems directly impacts health outcomes through reducing fragmentation and improving coordination among care providers.[18]

Analysis

Staff concurs that through the Proposed Project, as both physical and insurance access for MRI is improved, and records are better integrated, continuity and coordination of care can be more efficient. In addition, as a reduction in time between physician's office and scan appointments occurs, more timely diagnosis and staging can occur. Further, having an established process for gaining pre-authorization, a regular component of private health insurance will ensure efficiency in gaining approvals and safeguard against patients receiving unexpected bills.

Additionally, 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. [19] By utilizing existing resources, staff and processes for case management to perform individual needs assessment screenings for imaging patients would appear to improve continuity and coordination of care and address the complex individual care needs of those patients. As such, the Proposed Project appears to make imaging services more efficient. Moreover, the availability of integrated records and co-located services ensures that patients will benefit from care coordination, better outcomes, and improved quality of life.

However, as noted above, one way of assessing the use of unnecessary imaging, which can contribute to poorer health outcomes, is evaluating the effectiveness of the CDSM, for which staff has already recommended a Condition.

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.

[21] PVIX allows patients and health care providers secure access sharing of patient data from separate electronic health records through a "One Patient, One Record" platform.

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

The Department's Guideline[22] 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."[23]

To ensure sound community engagement throughout the development of the Proposed Project, the Applicant took the following actions:

- Presentation to the Baystate Health Eastern Region (BEHR) Patient Family Advisory Council (PFAC) in October 2018;
- Presentation to the Baystate Health Eastern Region Community Benefits Advisory Council (CBAC), also in October 2018; and
- Publication of legal notice to the Baystate Wing and Shields Healthcare Group websites.

BHER's[24] PFAC consists of 2 staff members and 12 patient or family member advisors.[25] BHER's PFAC strives to attract members that reflect the communities served by Baystate Wing and Baystate Mary Lane Outpatient Center (BMLOC). Members are recruited through community-based organizations, promotional efforts, and word of mouth/through existing members.[26] At the October 2018 meeting, there were 13 PFAC members and 4 guests (of whom 3 were staff members and 1 was a potential new PFAC member) in attendance. Information was provided about the MRI project.

At the CBAC October 2018 meeting there were 18 members in attendance; 4 were employees, and 4 were guests. The CBAC has broad representation of a number of groups, including substance use disorders, low-income, youth, parents, clergy, area business representatives, community members, seniors, and a representative from the Quaboag Connector.[27]

The Applicant reports that feedback from both the PFAC and CBAC meetings was positive. Members expressed support for the Proposed Project and did not express any concerns. To ensure appropriate awareness within the community about the Proposed Project, Baystate Wing and Shields Healthcare Group also posted the legal notice of the Proposed Project prominently on their websites and reports that to date no comments were received.

Following implementation of the project, the Applicant will solicit feedback from patients through an automated process where patients can anonymously give feedback in real time using an electronic system. Baystate Wing also rounds on patients in both the inpatient and outpatient areas to elicit real time feedback from patients.

Analysis

Staff finds that the Applicant met the minimum required community engagement standard of *Consult* in the planning phase of the Proposed Project.

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[22] Community Engagement Standards for Community Health Planning Guideline

[23] DoN Regulation 100.210 (A)(1)(e). https://www.mass.gov/files/documents/2018/12/31/jud-lib-105cmr100.pdf

[24] Baystate Health Eastern Region

[25] Between July 1, 2018 – June 30, 2019

[26] PFAC members are given incentives to encourage participation. Particular encouragement is given to those who have used (or family members) the wide array of services at Baystate Wing/BMLOC, such as MRI, or have family members who have used these services.

[27] A local transportation service serving seven towns in the BHER.

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

The Applicant asserts that through the Project, it will continue to compete based on price, TME, costs and other measures of health care spending through the addition of the unit. Improved access to needed imaging, and efficiencies of maximizing integration within the existing insurance provider networks will not result in an increase in TME or price of services. Similar to the current UMMIC arrangement, the MRI services offered by the Applicant at Baystate Wing will be independent diagnostic testing facility ("IDTF") services and, thus will be reimbursed at rates that are lower than hospital-based rates. Moreover, the Applicant's proposed MRI service at Baystate Wing will help address current out-of-network challenges faced by patients, , who pay higher rates since are now covered by Health New England ("HNE") as discussed herein, and the existing UMMC MRI service is out-of-network.

As a result, these improvements can result in lower provider, payer and patient out-of-pocket expenses, leading to a reduction in TME. When services can be delivered to patients in a timely, cost effective manner, the Applicant states it will be able to ensure its competitive position.

Analysis

It has been established that improving access to care is likely to reduce healthcare utilization and spending.[20,21] Numerous studies have detailed high costs for unnecessary repeat imaging[22] which may be ameliorated through appropriate use of MRI and better integration of services. For the Proposed Project, reducing unnecessary expenditures related to both out-of-network care, and inefficiencies from lack of service integration, will lead to lower operational overhead and lower healthcare spending, which may reduce TME.

Staff also notes that excessive imaging remains a concern in the Commonwealth. "Massachusetts ranks 4th in the nation in Medicare spending for imaging…. Common diagnostic imaging includes … MRIs. Some of these imaging services have been shown to have no diagnostic value for certain conditions.[23] As noted above, the American College of Radiology has also identified certain use of MRI in its list of overused[24] imaging tests. One way of assessing the use of unnecessary imaging is evaluating the use and effectiveness of the CDSM, for which staff has already recommended a Condition.

Staff finds that with approval of recommended conditions, while difficult to measure on an individual service-specific level, on balance, the requirement that the Proposed Project will likely compete on the basis of price, TME provider costs, and other measures of health care spending have been met.

Recommended Conditions, and Description of Proposed Measures, FACTOR 1

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 Project has met Factors 1(a-f).

Staff recommends adding two Conditions requiring specific reporting, described fully under Conditions:

1. Annual reporting on the ordering physician's use of their Clinical Decision Support Mechanism (to be made available at Baystate Wing) in order to curb potential overuse of MRI imaging

In addition, the Applicant proposed specific outcome, process and balancing measures to track the impact of the Proposed Project. Staff reviewed the suggested measures and has provided a revised list of Annual Reporting measures, including a report on one CMS Outpatient Imaging Efficiency measure, described fully under Conditions and in Attachment 1. Staff recommends that, in order to completely address Factor 1, all of these reporting measures be required as a Condition of Approval.

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

The Applicant discussed how the Proposed Project will align with the Commonwealth's goal for cost containment, as well as contribute to improved public health outcomes.

Cost Containment

The Applicant states that with the addition of the two days of MRI, reimbursement rates will the same as its current rate and as a result, total medical expenses (TME) will not be impacted. Additionally, it states that cost savings will be realized at the Center since staff will no longer need to work overtime shifts to accommodate the expanded hours of the existing units. Further, the Applicant suggests that cost savings may occur from the reduction of wait-times and potentially duplicative imaging, which can lead to faster, more accurate diagnosis and treatment. The Applicant also asserts that for patients, the Proposed Project will save in travel expenses for gas, parking and time away from work.

Analysis: Cost Containment

Generally, within a facility or system, cost containment can occur in two ways: a) by designing and implementing efficient processes that eliminate resource use, including staff time and supplies, thereby controlling per procedure/service operating expenses; and/or b) reducing unnecessary utilization that includes eliminating low value testing while ensuring timely access to the appropriate diagnostic and testing tools. Each of these strategies saves patients and providers time and money, and much of this has already been reviewed in Analysis of Factor 1(f) above. Staff believes the Proposed Project has the potential for the Applicant to maintain or lower certain operating costs through the means described above.

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. As a result, staff assessed the likelihood that the Applicant's contracts with payers will increase reimbursement rates; due to the relatively[28] small volume of business, found that to be unlikely.

As a result of the analyses throughout this report, Staff believes that the project, which is relatively small, may marginally impact healthcare expenditures due to aforementioned reduced out-of-pocket costs for patients related to the benefits of co-location, care integration and the provision of services in less expensive setting where the global outpatient IDTF fee is likely less than that of an acute care hospital. Staff also considered the Applicant's assertions around existing strategies to reduce low value utilization through the use of CDSM, radiologist reviews of orders and precertification.

As a result, of the benefits described above, (co-location, care integration, use of CDSM and global IDTF) DoN Staff can conclude that expanding services through the relatively small Proposed Project will likely meet the cost containment factor.

Further, while it is clear that improvements in patient health outcomes result from appropriate diagnostic use of MRI for many healthcare conditions, some imaging procedures have been identified as low value care by the *Choosing Wisely Campaign* and because of their high procedural costs, contribute to potentially unnecessary spending on the part of patients and payers. Determining the appropriate mechanism to ensure that inappropriate utilization does not drive up costs is a challenge. As already noted, staff recommends a Condition on reporting on the effectiveness of the CDSM tool and recommends that the required measures for annual

[28] Relative to other full-time and full capacity MRI services Staff has reviewed in other DoN applications.

reporting include a report on one CMS Outpatient Imaging Efficiency outcome. These Conditions may also help ensure inappropriate utilization does not drive up costs.

Improved Public Health Outcomes
The Applicant has discussed how more timely access these diagnostic tools can lead to more appropriate, timely treatments that ultimately reduce morbidity and mortality for numerous diseases and conditions. This has been discussed earlier in this report.

Analysis: **Public Health Outcomes**
As detailed elsewhere in this Report, while it is clear that improvements in patient health outcomes result from appropriate diagnostic use of MRI for many healthcare conditions, some imaging procedures have been identified as low value care. As noted above, one way of assessing the use of unnecessary imaging is evaluating the effectiveness of the CDSM, for which we have already recommended a Condition.

Delivery System Transformation
As already noted above, the Applicant prescreens patients for social needs relevant to their imaging appointment, and if a situation arises that a patient screens positive for other needs, they are referred back to their PCP for assistance and/or needed referrals. Further, the Applicant reports, in Table 2 above, that approximately 20% Baystate Wing's primary care lives are covered in risk contracts Moreover, and as previously stated, bringing Baystate Wing patients needing MRIs back into the BH system will be more cost effective for patients and ensure better coordination of their care.

Analysis: **Delivery System Transformation**
Central to the goal of **Delivery System Transformation** is the integration of social services and community-based expertise. The Applicant has described how patients are screened for MRI related social related needs, and how linkages to social services organizations are created and have the potential to improve for example one commonly identified issue related to transportation to and from care. Further, the integration of medical records with the existing PVIX system may improve continuity of care for MRI patients.

Recommended Conditions, and Description of Proposed Measures, FACTOR 2
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 Project has met Factor 2.

Staff recommends adding a Condition requiring specific reporting, described fully under Conditions:

- Annual reporting on the ordering physician's usage of the Clinical Decision Support Mechanism (CDSM) (to be made available at Baystate Wing) in order to curb potential overuse of MRI imaging

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.

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 provided by the Applicant in order to form an opinion as to the feasibility of the Proposed Project including:

- Historical revenue and expenses of the existing on-site MRI servicing Baystate Health's patients at Baystate Wing in Palmer, Massachusetts through a contractual agreement with Shields Health Care Group and UMMIC for the fiscal years ended December 31, 2018 and 2017;
- 2019 year-to-date revenue and expenses (January 1, 2019 to June 30, 2019) of the existing on-site MRI services at Baystate Wing in Palmer, Massachusetts;
- Historical revenue and expenses of the existing on-site MRI services for BH's patients at BFMC in Greenfield, Massachusetts through a contractual agreement with the Applicant for the fiscal years ended December 31, 2018 and 2017;
- Projected pro-forma revenue and expenses for the Project for the five years ending December 31, 2020, 2021, 2022, 2023 and 2024;
- Projected statements of cash flows for the Project for the five years ending December 31, 2020, 2021, 2022, 2023 and 2024; and
- Management Services Agreement applicable to the Project between Shields Management of Greenfield, LLC and the Applicant.

During its review of the five-year pro-forma, the CPA examined the underlying assumptions the Applicant used to develop its revenue and expense forecasts.

The CPA reports that the revenue growth projected by the Applicant is based primarily upon three years of historic performance of the existing contractual agreement with UMMIC. It noted that there will be a change from UMMIC, in billing structure from a technical and professional fee to one global fee. Patients receive one bill, thereby eliminating the separate radiologist's bill. There is a projected 6% annual growth in outpatient gross and net revenues[29] based on volume growth. The report states, "Based on our analysis, the pro-forma operating revenues are reasonable."

The CPA's analysis reports that operating expenses driven primarily by the *facilities and equipment components* of delivering the service which encompass ~ 44% of total costs, while *salaries and benefits* make up the next largest component ~26.5%. There are fees paid to Shields for *billing marketing,* and *training* comprising approximately 25% of fees as well. The report points out that the formal agreement among the parties has not yet been realized.

The CPA included analysis of capital and operating expenditures on cash flow. There will be a net loss for the service based on outpatient revenue alone, requiring annual cash infusions over the five year period of ~$1.34 Million. By the end of FY 2024 the Applicant anticipates it will have $142,000.

The CPA concluded, "Based upon our review of the projections and relevant supporting documentation, we determined the Project and continued operating deficits are reasonable and based upon feasible financial assumptions. Therefore, the addition of a part-time mobile MRI service at Baystate Wing and the capital needs associated with this service is financially feasible and within the financial capability of the Applicant."

Due to concerns about the net loss of the project and the potential impact on the overall viability of the Applicant, staff asked the Applicant for additional assurances. The CPA obtained and reviewed the following supplemental documents of the Applicant:

- Statements of operations - budgets for the years ended December 31, 2019, 2018 and 2017;

[29] Following an initial 25% increase due to incorporating the physician fee into one bill.

- Statement of operations - actual results for the ten months ended October 31,2019;
- Projected statements of operations for the years ending December 31,2020 - December 31, 2024;
- Capital budgets for the years ended December 31, 2019, 2018 and 2017;
- Balance sheets at October 31, 2019, December 31, 2018 and 2017;
- Statements of cash flows for the period January 1, 2019 - October 31, 2019 and for the years ended December 31, 2018 and 2017; and
- Projected statements of cash flows for the years ending December 31, 2020 - December 31,2024.

The CPA's conclusion from the initial CPA report was unchanged following a review of the additional above referenced documents stating, "Based on our review of the projections and relevant supporting documentation listed above, we conclude that the Applicant is financially capable of funding the projected deficit of the Project over the period January 1, 2020 through December 31, 2024 which is estimated to be approximately $1,340,000 in total."

Analysis
After requiring supplemental review by the CPA, Staff is satisfied with the CPA's analysis of Applicants business decision to proceed with the Proposed Project. As a result of this additional inquiry, Staff finds the CPA analysis to be acceptable and that the Applicant has met the requirements of Factor 4.

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

The Applicant has provided sufficient evidence that the Proposed Project, on balance, is superior to alternative and substitute methods for meeting the existing Patient Panel needs identified by the Applicant pursuant to 105 CMR 100.210(A)(1). Evaluation of 105 CMR 100.210(A)(5) shall take into account, at a minimum, the quality, efficiency, and capital and operating costs of the Proposed Project relative to potential alternatives or substitutes, including alternative evidence-based strategies and public health interventions.

The Applicant considered and rejected one alternative to the Proposed Project.

- **Maintain the status quo of the existing three day per week mobile MRI unit.** This was rejected because it would have an overall negative impact on access, efficiency, quality of care, and patient and provider satisfaction. Patients would have fewer days of service; out-of-network patients would continue to have to travel to alternative sites or pay more to obtain their scan locally. In addition, care would be more fragmented, meaning the efficiencies, and benefits of co-location would not be realized. There would be no additional operating costs but there is a potential for increased travel costs to patients obtaining their imaging outside of their community.

Analysis
Staff agrees that the alternative means that fewer days offered could mean longer wait times as patients may not receive same day service and a continued absence of "in-network" service for patients in the region. Due to transportation challenges for elderly, low income and rural populations, the effects of delayed diagnosis and treatment could negatively affect outcomes and patient satisfaction with added costs related to additional resource use for travel and coordination of care.

Staff finds that the Applicant has appropriately considered the quality, efficiency, and capital and operating costs of the Proposed Project relative to potential alternatives. As a result of information provided by the Applicant and additional analysis, staff finds the Applicant has reasonably met the standards of Factor 5.

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

Summary and relevant background and context for this application: Baystate Health, Inc. (Baystate Health) is currently engaged in a Community Health Initiative (CHI) as the result of a prior approved DoN application; for CHI purposes, the Proposed Project will be considered a Baystate Health system activity[30]. As part of its planning for previous CHI processes, Baystate Health established a practice for equitable and transparent distribution of CHI funds across the four hospitals within the system[31]. Accordingly, the CHI funds from this current project will be combined with existing CHI resources and allocated using this formula.

Further, through robust community engagement, Baystate Health in 2019 coordinated four Community Health Needs Assessments (CHNA) (one for each hospital) to guide population and community health improvement efforts (including allocation of CHI resources)[32]. The Community Benefit Advisory Council (CBAC) specific to this Proposed Project selected the Social Environment as a core focus areas through multiple rounds of voting and narrowing.

Staff has assessed Baystate Health's 2019 CHNA and determined that it is an adequate and appropriate basis for CHI purposes. DPH staff further requested and received status updates and materials pertaining to how the CHNA was used to select DPH Health Priority strategies and have deemed their RFP aligns with the Health Priority framework, further supporting the readiness of the existing project to take on the CHI funds from this current application. The RFP has utilized DPH standards and adapting DPH language regarding priorities. Staff have determined that this project should contribute to the infrastructure in place. This represents the "Pooled Funding" option available to Tier 1 Applicants.

Baystate Wing submitted a CHNA/CHIP Self-Assessment, 4 Stakeholder Assessments and the 2019 Community Health Needs Assessment for Baystate Wing.

- **In the Self-Assessment**, the Applicant provided a summary of socio-demographic data and highlights of health outcome information related to these topics. Through surveys, focus groups, and in person meetings, the participating community groups and residents identified key concerns. This information was derived from the 2019 CHNA, described further below.
- **Stakeholder Assessments** were submitted by 4 individuals. These assessments provided information on their personal participation and role as well as how the Applicant engaged the community in community health improvement planning processes. The information provided in these forms was largely consistent with the self-assessment conducted by the Applicant.
- **The Community Health Needs Assessment.** In creating the CHNA for this hospital, the Applicant conducted focus groups, key informant interviews, one Community Conversation and several Community Chats.

Through these methods, the Applicant engaged community residents and other community stakeholders alike, including the experiences of community members who gave input in focus groups or key informant interviews in other regions, which were often considered relevant to the Applicant's service area. Additionally, the Applicant conducted data analysis and completed a review of the previous CHNA and existing assessment reports published since 2016. The 2019 CHNA lists the following as the key priorities identified – Social Environment,

[30] The Applicant's proposed project pertains to one of the four hospitals within the Baystate Health system and will result in a small CHI total.

[31] Each hospital receives a base amount of funding, influenced by likelihood of funding from other sources, as well as service area and capacity. Additionally, the funds are distributed according to population volume and size. This is distributed as a per capita allocation. Lastly, the hospitals receive funds based on environmental justice indicators. These funds are determined using seven demographic, socioeconomic, and health measures

[32] Each hospital has its own Community Benefit Advisory Council (CBAC). CBACs formed an RFP Task Force responsible for crafting the final decisions about the distribution of funds for this CHI process. Each hospital has selected its own priorities and conducted its own process for narrowing that selection. These processes included community meetings, voting, sorting and summarizing in order select one or more DPH Health Priorities areas to be used as the basis for releasing requests for proposals (RFPs). The Community Health Needs Assessment was conducted in 2019 by each hospital participant in the Baystate Health system. Each hospital's report contains elements specific to its geographic service area.

Housing Needs, Transportation Access, Basic Needs Resources, Financial Health, and Violence and Trauma. Additionally, health outcomes impacting the service area include mental health, chronic conditions, infant and perinatal health, and Alzheimer's disease and dementia. The CHNA identifies barriers to improving outcomes in each of the priorities as well as priority populations for each of the health conditions.
Summary Analysis: As a result of information provided by the Applicant and additional analysis, staff finds that with the conditions outlined below, and with their ongoing commitment to work with staff on the above outlined issues and based on planning timelines that staff will approve, the Applicant has demonstrated that the Proposed Project has met Factor 6.

Findings and Recommendations

Based upon a review of the materials submitted, Staff finds that, with the addition of the recommended conditions detailed below and in Attachment 1, the Applicant has met each DoN Factor for the Proposed Project, and recommends that the Department approve this Determination of Need, subject to all applicable standard and Other Conditions.

Conditions

1. In order to demonstrate appropriate use of MRI, report on the effectiveness of ordering providers' use of the American College of Radiology (ACR) Clinical Decision Support Mechanism "ACR Select" for Adult MRI imaging orders (or any subsequent CDSM). Holder shall provide, at minimum
    a. Percent of ordering physicians using the mechanism *(denominator = all ordering physicians; numerator – those using the CDSM)*
    b. Data showing yearly changes in "low utility" or "marginal utility" MRI orders; and
    c. The percentage of ordering providers' responses to alerts provided by ACR Select (or any subsequent CDSM)
    d. Any policy changes instituted as a result of these data
2. Report annually on improvement of measures outlined in Attachment 1.

CHI Conditions to the DoN

3. Of the total required CHI contribution of $40,221.45
    a. $3,861.26 will be directed to the CHI Statewide Initiative
    b. $34,751.33 will be dedicated to local approaches to the DoN Health Priorities, of which up to 10% of these funds may be used for evaluation purposes
    c. $1,608.86 will be designated as the administrative fee.

4. To comply with the Holder's obligation to contribute to the Statewide CHI Initiative, the Holder must submit a check for $3,861.26 to Health Resources in Action (HRiA, the fiscal agent for the CHI Statewide Initiative).
    d. The Holder must submit the funds to HRiA within 30 days from the date of the Notice of Approval.
    e. The Holder must promptly notify DPH (CHI contact staff) when the payment has been made.

Attachment 1: Required Measures for Annual Reporting

The Holder shall provide, in its annual report to the Department, reporting on the following measures. These metrics will become part of the annual reporting on the approved DoN, required pursuant to 105 CMR 100.310(A)(12).

1. Conduct a critical value report* for MRIs. Holder shall report on the following:

a) % of important finding alerts (IFAs) where critical value report was indicated
b) % of critical value reports radiologists performed over the total number of IFAs
c) Any policy changes instituted as a result of increasing critical value reporting

~~**2. Imaging Efficiency Measures***~~

~~As is required for calendar year (CY) 2020 payment determinations, the Holder will report on one CMS Outpatient Imaging Efficiency (OIE) measure that are publicly reported within the Hospital Outpatient Quality Reporting (OQR) Program:~~

~~a) MRI Lumbar Spine for Low Back Pain (OP-8)~~

~~This publicly reported OIE measure is calculated using data from hospital outpatient claims paid under Medicare's Outpatient Prospective Payment System (OPPS).~~

~~***If improvement (e.g., decrease or increase from baseline) is not achieved, Holder shall report on reasons why and outline plans for improvement**~~

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