STAFF REPORT TO THE PUBLIC HEALTH COUNCIL FOR A DETERMINATION OF NEED	
Applicant Name	Partners HealthCare System, Inc. Brigham and Women's Hospital-Foxborough
Applicant Address	800 Boylston Street, Suite 1150, Boston, MA, 02199
Date Received	July 26, 2019
Type of DoN Application	DoN Required Equipment
Total Value	$9,476,208
Project Number	PHS–19072212-RE
Ten Taxpayer Group (TTG)	One
Community Health Initiative (CHI)	$473,810.40
Staff Recommendation	Approval
Public Health Council	December 11, 2019

Project Summary and Regulatory Review

Partners HealthCare submitted an application for a Proposed Project at Brigham and Woman's/Mass General Healthcare (Foxborough Center), located at 20 Patriot Place, Foxborough, MA 02035, to add one magnetic resonance imaging unit (MRI) and one computed tomography (CT) unit to its existing imaging service and limited associated renovations. The capital expenditure for the Proposed Project is $9,476,208; the Community Health Initiatives (CHI) contribution is $473,810.40.

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.

Following the formation of a Ten Taxpayer Group, the Department conducted a public hearing in Foxborough on September 26, 2019.

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APPLICATION OVERVIEW

Background: Partners, Brigham and Women's Hospital, Foxborough Center

The Applicant is Partners HealthCare System, Inc. (Partners), a nonprofit integrated health care system that was formed in 1994 by an affiliation between The Brigham Medical Center, Inc. (now known as Brigham Health) and Massachusetts General Hospital.[1] Partners HealthCare System had 19% of all acute care hospital discharges in Massachusetts in FY17.[a] Partners has two components related to the Proposed Project:

- Partners HealthCare Accountable Care Organization is a Health Policy Commission (HPC) certified Accountable Care Organization (ACO).[b] The ACO manages Medicare (Next Generation ACO) and MassHealth (Partners HealthCare Choice) ACO programs.
- The Foxborough Center, where the Proposed Project is located, houses a licensed satellite of Brigham and Woman's Hospital, Inc. (BWH) and a number of Brigham and Women's Physicians Organization (BWPO) primary and specialty physician practices, ambulatory surgery, urgent care, laboratory and imaging. The current imaging service includes one CT and one MRI unit. The Applicant proposes to add one CT and one MRI unit, which will enable it to better meet the current and future needs of their growing patient panel and offer additional types of scans not currently available with their existing units.

[1] Partners operates two tertiary care hospitals, six community acute care hospitals, and one acute care specialty hospital in Massachusetts; one community acute care hospital in Southern New Hampshire; one facility providing inpatient and outpatient mental health services; and three facilities providing in- and outpatient services in rehabilitation medicine and long-term care. It also operates physician organizations and practices, a home health agency, nursing homes, a program for training graduate level health professionals, as well as a licensed, nonprofit managed care organization that offers health insurance products to MassHealth, Commonwealth Care, and commercial insurance populations.

OVERVIEW of PROPOSED PROJECT AND FACTOR REVIEW

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[2]	**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 w / CONDITION**
Proposed addition of one MRI and one CT at satellite clinic of Brigham and Women's Hospital to address patient need (wait times and anticipated future demands).	• Report on the percentage of CT and MRI orders from Partners vs other providers • Report on other standard outcome measures revised from the Applicant's proposed list • Report on use of clinical decision support tool • Report on CMS measures designed to limit Low Value scans	• Report on use of clinical decision support tool • Report on CMS measures designed to limit Low Value scans	✓	• Provide DPH with results of the plan to implement enhanced engagement strategies with 4 months

[2] 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 Information

Table 1 below presents Patient Panel[3] information for the Applicant (Partners) and Foxborough Center, and the two units of equipment included in the DoN Application.

Table 1: Overview of Partners' Patient Panel, Foxborough Center Patients, and MRI & CT Patients at Foxborough Center

	Partners	Foxborough Center	Foxborough Center MRI & CT
Total Unique Patients (FY18)	1,504,478	102,381	18,491
Gender (FY18)			
Male	41.9%	41.7%	42.7%
Female	58.1%	58.3%	57.3%
Age (FY18)			
0-17	11.5%	8.8%	0.76%[4]
18-64	61.7%	68.34%	67.18%
65+	27.5%	22.85%	32.06%
Race (FY18)[5]			
White	72.8%	89.07%	90.90%
Black or African American	5.8%	2.44%	2.11%
Asian	4.1%	2.07%	1.49%
Hispanic/Latino	1.6%	0.53%	0.48%
Native Hawaiian or Other Pacific Islander	0.1%	.03%	0.01%
American Indian or Alaska Native	0.1%	.11%	0.12%
Other/Unknown/Unavailable/declined	15.5%	6.30%	4.88%
Payer Mix[6] (FY17)			
Commercial[7]	59.6%	62%	
Managed Medicaid	5.3%	3.0%	
MassHealth	3.8%	2.0%	Not available
Commercial Medicare	3.8%	3.0%	
Medicare FFS	22.7%	27%	
Other[8]	4.8%	4.0%	

Staff notes the following observations about the data above

- **Age** – The 18-64 age cohort comprises the majority (>65%) of patients at Foxborough; within this age cohort, about 37% is between the ages of 46-65. Older adults (ages 65+) make up approximately 25% of patients.
- **Age for Imaging**– 67% of the Foxborough patients receiving imaging services are non-elderly adults (18-65), with 42.97% of those in this age group being older, ages 46-65. Approximately 32% of the Patient Panel receiving Imaging Services is 65 or older.

[3] 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.
[4] Foxborough Center does not currently offer pediatric primary care, only about 9% of the Patient Panel is between 0-17 years of age; these are patients are seen by specialists and in the urgent care center.
[5] Based on self-reporting
[6] Reflects aggregate Partners HealthCare revenue for 2016-2018.
[7] Commercial = Allways Health Commercial, Blue Cross Blue Shield, Commercial National Carriers, Commercial Other, Connector Care Plans, Harvard Pilgrim Health Plan, International, Qualified Health Plans, Tufts Health Plan.
[8] Other = Government Other, Other Payor, Self-Pay, Workers Comp, Unknown Summary Payor.

- **Race** - The racial makeup of the Partners' Patient Panel is more diverse than that of the Foxborough Center, which is reflective of the demographic makeup of that region.
- **Patient Origin** - The geographic composition of the Foxborough Center is distinct from that of Partners; at the Center, over 50 zip codes comprise its primary service area (where 71% of patients live, with no zip code contributing more than 7%). The largest proportion of patients resides in the towns of Foxborough, Mansfield, Franklin, Walpole and North Attleboro, while the largest portion of Partners' patients comes from Greater Boston. Similarly, about 74% of MRI and CT patients come from 50 zip codes with the same five towns contributing 7.4%-4.2% of total patients.
- **Payer Mix** – There is a higher percentage of MassHealth and Managed Medicaid (MassHealth ACO) payments at Partners overall than at the Foxborough Center (9% vs. 5%); Medicare and commercial payments are slightly higher at Foxborough Center than within Partners Patient Panel.
- **ACO and Managed Care Contracts** -Partners operates an ACO subsidiary within its system. In CY2018, 57.9%[9] of the Partners primary care lives were covered in risk contracts.[10] The Applicant notes that this percentage is derived from the number of primary care lives within the Patient Panels of the Partners primary care physicians (PCPs) that are covered under risk contracts (in which Partners bears some risk).

Factor 1a: Patient Panel Need

In this section, we assess if the Applicant has sufficiently addressed patient panel need for the MRI and CT units.

Patient Panel Need

The Applicant attributes the need for additional capacity to four interrelated factors.

a) Current scan volume has reached capacity on both the MRI and CT units;
b) Planned expansion of current primary and specialty physician practices is needed, as they are at capacity and the number of physicians relative to the total population is low;
c) Growing traffic makes transportation to other Partners sites challenging; and
d) Projected growth in aging population, which has a higher need for MRI and CT scans.

a) Need to Accommodate Volume Growth

As the chart below shows, the Foxborough Center has a growing demand for both MRI and CT services, which, it asserts, places the current units at full utilization at 94% and 86%, respectively.[11] Average annual volume growth for both MRI and CT are approximately 10% and 7% respectively; similar growth has been experienced across the Applicant's system.[12] The Applicant attributes growth for both technologies to increases in clinical applications (due to improvements in techniques, resolution and image acquisition times) and to the aging population, discussed further below.

Calendar Year	2016	2017	2018	% Change 2016-2018
MRI Exams	4,442	5,368	5,861	31.9%
CT Exams	5,044	5,731	6,139	21.7%

[9] This percentage differs from the Patient Panel described in the DoN Application
[10] The number of risk members is for CY2018 and includes members from the following risk contracts: Medicare ACO - NextGen, BCBS AQC and BCBS PPO, HPHC, TAHP, AllWays Commercial, and Medicaid ACO. The total number of patients within a PCP's panel is for FY 2017 adult and pediatric patients.
[11] Units do not operate at 100% capacity due to planned and unplanned maintenance, and holding a few appointment slots open daily for urgent cases primarily from the onsite urgent care center.
[12] In the last three years, the Department has approved expansions of DoN required equipment for imaging at BWH, BWFH and MGPO Waltham due to similar growth issues.

To accommodate the demand, the Applicant has recently extended hours of operation for MRI and CT to evenings and weekends,[13] but it does not believe that this will resolve the anticipated demand related to the needs summarized below. Current wait time for an MRI exam is approximately 4-5 days; for a CT exam it is generally 1-2 days.

The Applicant also states the need to accommodate patients with implantable devices that the current MRI units cannot accommodate. Patients with such devices cannot receive an MRI using the existing 3T unit; the new unit will be a 1.5T.

b) Need to address increased demand as a result of the planned expansion of primary and specialty physician practices for the patient panel and beyond

The Applicant asserts that it needs to address the anticipated increased CT and MRI needs resulting from the planned expansion of physician services at the center which will nearly double capacity.[14] The Center's primary care practices had been at capacity and had not been accepting new patients for nearly four years until just recently. The need for expanding primary care is clear; a study of the ratio of residents to primary care doctors in Bristol County is the worst ratio in the state (1,930:1 as compared to Massachusetts, which is 960:1.)[c]

c) Need to address a growing need for local imaging, rather than requiring travel to distant or traffic-heavy locations which creates a barrier to access

The Applicant provided extensive information on the barriers to travel to these locations for these imaging tests due to both traffic and distance. Other closest sites are Brigham and Women's Hospital, Brigham and Women's Faulkner Hospital, and Newton Wellesley Hospital, but travel times range from approximately 20 minutes at off peak hours to approximately 120 minutes during rush hour.

d) Need to Address Growth in the Aging Population

The Applicant asserts there are increasing needs of the aging population whose present conditions may require the use of CT or MRI. The percentage of the local patient population utilizing CT and/or MRI services tend to be older than Foxborough Center's general Patient Panel, skewing towards the older segment of the 18-65 age cohort and among those over 65. As shown above, patients receiving CT and/or MRI services are older than the Foxborough Center's overall patient population; 32% are 65 or older and about 43% of the 18-65 age cohort are 46-65 years old.

- **An aging population at risk for particular conditions and diseases.** In Massachusetts, the age 65 and older population will represent a quarter of the population by 2035.[d] Further, patients age 65 and older make up a significant percentage of the Foxborough Center overall (approximately 23%), and imaging patient populations (32%). The application provided 2 key reasons for increasing demands based on age:
  - **Risk for cancer.** Advancing age is a risk factor for cancer; 60% of new cancer cases and over 70% of cancer mortalities occur in elderly people.[e]
  - **Risk for musculoskeletal conditions** such as arthritis. Three-quarters of those ages 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.[f]

[13] MRI has four 16.5 hour days, one 13.5 hour day per week, two 8 hours days on the weekend. CT includes the same weekend hours, and five 10.5 hour days.

[14] It is important to note that expansion of physician practices is not a part of the DoN application.

Analysis

Staff finds that overall, the patient panel information provided by Applicant demonstrates sufficient need for additional MRI and CT capacity resulting from current and projected volume growth within the Patient Panel. Unit scan volumes are high even with extended hours of operation, in particular for the MRI. 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 and musculoskeletal conditions as the population ages. Moreover, Bristol and Plymouth have higher than state and national averages for several risk factors that may increase demand for MRI and CT, including adult smoking, adult obesity, and physical inactivity.[g]

As the number of primary care and specialty providers increases within the Center, the Applicant anticipates that the number of scans ordered will increase. At the same time, at the public hearing, the Ten Taxpayer Group noted that expansion of services within a larger system may draw patients from other area providers, outside of the applicant's own patient panel. Therefore, Staff recommends that as a condition of approval, the Applicant report on the percentage of orders for CT and MRI coming from Partners' affiliated providers vs. from any other provider. The primary service area of the Center is large and extends into three counties. Patients from towns that are greater than 30 minutes away by car seek services at the Center, which may be the result of the lack of primary care services closer to home. Poor physician to population ratios in proximate counties (Bristol and Plymouth) means patients must travel for their care, and possibly delay treatment.[15,h,16] Such delays have been identified as a barrier to health services, and such barriers may lead to delays in receiving appropriate care, increased complications, and increased hospitalizations.[i]

Staff concurs that if unaddressed, need due to anticipated growth in volume will lead to capacity constraints that are likely to limit access to diagnostic services, and cause delays in diagnosis and treatment as the population grows and ages and as the Applicant expands the number of practitioners at the site. Further, providing non-tertiary care services in the community is preferable rather than providing such care at Academic Medical Centers (AMCs) in Boston.

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

The Applicant states that both MRI and CT are well-established technologies that enable clinicians to appropriately diagnose and develop the most effective treatment plans earlier in the disease process across a number of conditions:

- for MRI- oncologic, cardiac, abdomino-pelvic, musculoskeletal, and neurologic
- for CT- musculoskeletal, oncologic and abdominal conditions

The Applicant asserts that increasing capacity will enable it to meet growing need for CT and MRI services, thereby increasing access for more patients. By increasing capacity, the Applicant asserts that health outcomes will be addressed in a number of ways:

- **Improving access through the reduction of wait times.** As noted above, the Proposed Project will increase the capacity for both MRI and CT scans by 100%.
- **Improving 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

[15] According to Healthy People 2020, having a usual PCP is associated with greater patient trust in the provider, better patient-provider communication; increased likelihood that patients will receive appropriate care; and lower mortality from all causes.

[16] According to *County Health Rankings* & *Road Maps, P*opulation to physician ratio in Plymouth County was also low - 1,570:1, nationally it is 1,050:1- reported in 2019, data from 2016.

time than would be required by seeking services from Applicant's other facilities. Such access is also enhanced by at least three modes of public and private transportation and availability of free parking in proximity to the Center.

- **Contributing to improved outcomes.** Reducing wait times to access needed MRI and CT imaging may assist in diagnosing and treating[j] patients in a more timely fashion, potentially reducing treatment complications and contributing to better health outcomes, [k]
- **Improved patient experience.** Increasing local capacity for service will also improve the patient care experience and patient satisfaction.

Health Equity and Social Determinants of Health (SDOH)

The Applicant provided assurances around health equity and SDOH, both as a system and within the Center.

Health Equity

Partners HealthCare and BWH have adopted the Culturally and Linguistically Appropriate Service ("CLAS") standards [l] for all practice sites, and listed the following strategies to demonstrate compliance with the standards and ongoing commitment to diversity:

- Diversity initiatives to address healthcare disparities, increase the percentage of employees from underrepresented groups,[17m] build trust among people of diverse backgrounds and evaluate the hospital's progress;
- Ongoing education and training in culturally and linguistically appropriate areas for staff at all levels and across all disciplines; and
- Ongoing staff training on linguistically and culturally appropriate care

- Interpretation services are provided at the Center through the centralized Brigham Health Office for Interpreter Services.
  - Of the scans where interpreters are requested, 80% require onsite interpreters due to the nature of the scan; 20% utilize remote interpreters.

Social Determinants of Health

Each of the acute care hospitals within the Partners HealthCare System has a screening and referral program for the Social Determinants of Health ("SDoH"). While variation exists amongst the hospitals as to the populations that are screened and the logistics for screening – at a minimum, all of the 133 Partners primary care practices that are participating in the MassHealth Accountable Care Organization ("ACO") Program are screening patients for SDoH needs.

- The screening tool-- available in eight languages-- explores eight domains of SDoH needs (housing, food insecurity, violence, etc.), inquiring if patients have issues with any of the domains and whether they would like assistance. Screens are conducted via iPads that are linked to the Partners' electronic health record ("EHR") system, EPIC.
- When patients screening positive for an SDOH factor, staff follow-up with the patient, such as a social worker or community health worker who then confirms the request for assistance and either assists the patient directly or refers the patient to a community-based organization for specific services or supports.
- SDoH screens are tracked in a patient's EHR in the EPIC system, whether there were positive responses for needs, and what supports were provided.

[17] Concordance has been identified as an important dimension for the patient-physician relationship that may be linked to health disparities.

Analysis

Staff has reviewed this application citing the clinical benefits of access to both CT and MRI, which are used routinely to diagnose conditions across numerous specialties, including but not limited to, cancer, musculoskeletal, and cardiologic diseases. Data on these diseases and conditions confirm these ongoing growing needs, especially for the aging 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 time period was 459.4 per 100,000,[n] which is higher than the national average.[o] 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.[p]
- 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%.[q]

Further, staff finds that the patient experience will likely be improved through improving local access to imaging since the site provides free parking and is accessible via three local modes of transportation. Age and significant medical complications make travel more difficult with increased risk.

Staff concurs that through timely access to imaging services, early and accurate diagnosis[r] for many health conditions using these imaging modalities has the potential to improve outcomes since it can reduce time lost from work and other activities, and 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 the MRI imaging, with no ionizing radiation exposure, it is preferable for patients needing ongoing scans, pregnant women and children.[s]

However, staff also notes that the *Choosing Wisely* Campaign of the American Board of Internal Medicine Foundation lists numerous MRI and CT procedures whose "necessity should be questioned and discussed" by physicians and their patients. The overuse of imaging translates to lower quality care as a result of increased radiation exposure, additional scanning, worry, and unnecessary healthcare including follow-up tests, treatments, visits, hospitalizations, and new diagnoses for benign conditions. [5] These "cascades" clearly present potential harms for patients.[t] As a Condition of approval, staff recommends annual reporting on the effectiveness of their Clinical Decision Support tool in curbing unnecessary MRI and CT imaging.

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 described fully under Conditions and in Attachment 1 that will become part of the annual reporting to DPH; they are detailed in Appendix 1.

Health Equity and SDOH

Staff finds that through their Language Access and Assistive Services Plan, #123Equity participation, and SDOH screening, the Applicant has sufficiently outlined, at a high level, a case for improved health outcomes and has provided reasonable assurances of health equity within the Partners system.
The Applicant has described how patients in the panel are screened for SDOH and how linkages to social services organizations are created; staff notes that the Applicant is collecting analyzing EHR data with a

focus on population health, and documenting the demand for each type of service to determine where the gaps lie and where resources are needed.

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 provides evidence-based citations of the benefits of co-location of services including 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.[u] 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.

The Applicant's EHR system EPIC enables imaging results and information to be available to primary care and specialty physicians across the system, and also allows patients to authorize providers outside of Partners HealthCare to access their data, view their record, and send progress notes back for improved continuity of care via the "Care Everywhere" feature. The availability of these integrated records and co-located services ensures that patients at the Center benefit from care coordination, better outcomes, and improved quality of life.

All outpatient orders entered through EPIC go a through clinical decision support (CDS) tool. Once the order for CT and/or MRI is placed, each order is reviewed and protocoled to ensure appropriateness of the study.

The Applicant notes that with the existing aforementioned care integration resources and programs, EHR, communication of diagnoses, treatment plans among radiologists, referring specialists and primary care physicians, better coordination of care can occur.

Analysis

Staff concurs that when wait times for CT and MRI are reduced, continuity and coordination of care can be more efficient, particularly as a reduction in time related to diagnosis and staging can occur. 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. [v] 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.

Staff notes that excessive imaging remains a concern in the Commonwealth, with some these imaging services have been shown to have no diagnostic value for certain conditions.[w] While Applicant discussed the successful use of the CDS tool, it such support strategies have only demonstrated modest reductions in overall utilization of diagnostic imaging tests.[x] As already noted, staff recommends annual reporting on the effectiveness of the CDS tool in curbing unnecessary imaging.

The Applicant has provided several measures, including time from completion of scan to finalization of the report that may demonstrate efficiencies and coordination of care and may lead to improved outcomes. Staff has reviewed these and included those that will become part of the annual reporting to DPH; they are detailed in Appendix 1.

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[18] 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."[19]

The Applicant states it held a public meeting in June 2019 to provide information about the Proposed Project and the overall expansion of services at the Center and to answer questions and address concerns. The Applicant publicized the meeting through community-wide flyer distribution. Six people attended the meeting (one member of the public and five residents of the Foxborough area who were affiliated with the Center). Personnel from BWH and the Foxborough Center presented information and answered questions about the Proposed Project, the two technologies, how they meet different imaging needs, and the increased access to all the health care services that the expansion will provide. The Applicant states that it continues to maintain a public email address for questions about the Proposed Project.

Analysis

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

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

The Applicant 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 these two units. Improved access to needed imaging, improvements in patient wait-times, and efficiencies of maximizing the use of the existing infrastructure as opposed to establishing a new site will not increase TME or price of services. Some patients may be able to a) avoid undergoing more invasive, or less effective diagnostic or treatment therapies that are more expensive, as well as b) benefit from more targeted treatment plans, both of which are likely to result in reductions in healthcare spending. These improvements can result in lower provider and payer costs and out of pocket expenses, leading to a reduction in TME. When services can be delivered to patients in a timely, high quality manner, the Applicant will be able to ensure its competitive position.

Analysis

It has been well established that improving access to timely care is likely to reduce healthcare utilization and spending.[y,z] Moreover, numerous studies have detailed high costs for unnecessary repeat imaging[aa] which may be ameliorated through appropriate use of MRI and CT. For the Proposed Project, reducing operational inefficiencies 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, reflecting both higher utilization and greater use of higher-

[18] Community Engagement Standards for Community Health Planning Guideline
[19] DoN Regulation 100.210 (A)(1)(e). https://www.mass.gov/files/documents/2018/12/31/jud-lib-105cmr100.pdf

priced hospital outpatient departments…. Common diagnostic imaging includes X-rays, CT scans, and MRIs. Many of these imaging services have been shown to have no diagnostic value for certain conditions.[bb] As noted above, one way of assessing the use of unnecessary imaging is evaluating the effectiveness of the CDS tool.

Staff finds that with approval of recommended conditions, while difficult to measure on a 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.

Description of proposed measures, suggested Conditions, 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) on the effectiveness of the Clinical Decision Support tool and 2) on the percentage of orders for CT and MRI coming from Partners affiliated providers and those from any other provider. 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 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 MRI and CT units, reimbursement rates will remain 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 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 cannot assess how the Applicant's contracts with payers that may incentivize more or less utilization of services, are structured.

Staff has reviewed recent reports from the Massachusetts Health Policy Commission (HPC) and from the Center for Health Information and Analysis (CHIA) of health care cost and utilization trends in Massachusetts to evaluate the Proposed Project's alignment with the state's cost containment goals. The HPC states that total health care spending is a function of price and utilization.[cc, 20, 21] Provider price variation and high academic medical center (AMC) costs –even in the outpatient setting-- are two issues of particular relevance to the Proposed Project.

Moreover, according to a recent report, provider price remains the biggest health care cost driver in Massachusetts; after pharmacy prices, outpatient services are experiencing the greatest cost growth. [dd] To examine provider price variation in Massachusetts commercial market, CHIA annually reports on the relative price, taking into account differences in patient acuity, and the types of in and outpatient services delivered and groups hospitals into four categories. Two of Partners' hospitals, MGH and BWH, fall into the Academic Medical Center cohort that includes four other hospitals.[22] The Statewide Relative price (S-RP) for CY17 for AMCs was 1.18. However, MGH and BWH had S-RP values of 1.40 and 1.38 respectively in 2017.[ee,23] Healthcare provider consolidation has resulted in cost increases due to a system's market leverage when negotiating provider contracts, leading to higher provider prices[ff]. Based on the CHIA and HPC reports, and the high S-RP's, this appears to be true for large systems in MA,[gg] like Partners. Since the Foxborough Center operates as a satellite of BWH, it is likely the prices are higher for these services than in alternative settings.

As a result of the above analyses, Staff believes that the project may impact healthcare expenditures both positively, due to aforementioned reduced staffing costs, the benefits of co-location, care integration and the provision of services in less expensive setting than an acute care hospital, and negatively due to Partners high market leverage to negotiate higher prices as evidenced by Partners higher cost services.

While it is clear that improvements in patient health outcomes result from appropriate diagnostic use of CT and MRI for many healthcare conditions that have been discussed previously in this report in the literature, 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 noted above, staff recommends reporting on the utilization of CDS procedures.

Staff considered the Applicant's assertions around existing strategies to reduce low value utilization alongside its position as a high-cost provider. While DoN staff can conclude that expanding services through the Proposed Project will likely not lead to increased costs and prices from the status quo, 105 CMR 100.310(A)(18) enables the Department to rely on the Health Policy Commission's oversight of increases in provider costs as a way to monitor provider spending.

[20] Total Medical Expenses (TME) represents the full amount paid to providers for health care services delivered to a payer's member population, expressed on a per member per month (POMPOM) basis. TME includes the amounts paid by the payer and patient cost-sharing, and covers all categories of medical expenses and all non-claims related payments to providers, including provider performance payments.

[21] Total Health Care Expenditures (THE) is a measure that represents the total amount paid by or on behalf of Massachusetts residents for health care services covered by public and private health insurance.

[22] Beth Israel Deaconess, Tufts and UMass Memorial and Boston Medical Centers

[23] While MGH and BWH received the highest percent of commercial payments, 13.5% and 11% a respectively, relative size and volume analysis was not included in the analysis.

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.

Delivery System Transformation
Overall, the Applicant **notes that Delivery System Transformation** will be addressed through linking patients to social service programs through its through SDOH screening and referral, described above. In follow-up questions and responses, the applicant reports on its ongoing efforts to analyze its SDOH screening tracking data to assess where there are gaps in such services and resources needed. Another tool that is under development will enable those social service organizations to enter the disposition of a Partners patient once a referral has been made. The Applicant also states that 57.9% of Partners primary care lives are covered in risk contracts[24,25] of the Partners primary care physicians (PCPs) that are covered under risk contracts (Partners bears some risk); this percentage does not include patients referred from other plans. Further the applicant reports on two additional ongoing assessment efforts which have the potential to improve continuity of care for its patients and to assist in future resource allocation: one is to enable social service organizations to enter the disposition of a Partners' patient in a site once a referral has been made, and the other is to amalgamate and analyze its SDOH screening and tracking data to assess where there are gaps in services their patients are referred to and what resources are needed.

***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 CT and MRI for many healthcare conditions, some imaging procedures have been identified as low value care. As noted above, staff recommends reporting on the utilization of CDS procedures.

***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 "covered lives" patients in the panel are assessed and how linkages to social services organizations are created. This has the potential to improve the continuity of care for a large section of Partners' patients, since the Applicant is a MassHealth ACO (Partners HealthCare Choice), a Medicare ACO (Next Generation ACO), and has five commercial risk contracts. As such, it has ongoing incentives to address population health needs and SDOH. This has the potential to improve the continuity of care for a large section of Partners' patients overall.

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
The CPA analysis included a review of numerous documents in order to form an opinion as to the feasibility of the Proposed Project including:

- Five Year *Pro-Forma*[26] for the Project
- FY 2017 and 2018 audited financial statements for Partners HealthCare System, Inc. and Affiliates

[24] The number of risk members is for CY2018 and includes members from the following risk contracts: MassHealth ACO, Medicare ACO - NextGen, BCBS AQC and BCBS PPO, HPHC, TAHP, AllWays Commercial. The total number of patients within a PCP's panel is for FY 2017 adult and pediatric patients.
[25] This percentage differs from the Partners' Patient Panel described the DoN Application.
[26] FY 2019-2023

- A five year *Financial Framework* for PHS[27]
- Annual reports and other public documents

During its review of the Pro-Forma, the CPA examined the underlying assumptions used to develop the revenue and expense forecasts. Additionally, key metrics and ratios for profitability, liquidity, and solvency were compared to historic performance to measure Partners' overall financial health.[28]

The CPA reports that Net Patient Service Revenue (NPSR) is the sole category that would be impacted by the Proposed Project. Consequently, it only analyzed NPSR and reports that the project represents a very small share of projected operating revenue of the Partners Healthcare System ranging from 0.007% in 2021; the first year revenue from the Proposed Project would be realized to 0.027% in 2023. The CPA reports that primarily based upon historic performance, the revenue growth projected by Management are a reasonable estimation.

The CPA's analysis reports that operating expenses will represent only about 0.003% in 2021 and 0.014% in FY 2023 of Partners total operating expenses and relative to historic performance, determined that the Applicant's projections are reasonable. The analysis included the impact of capital expenditures on cash flow in the context of the Applicant's ability to reinvest in plant and equipment and the CPA determined that the impact of such an investment is reasonable.

In conclusion, the CPA reports, "Because the impact of the proposed expansion of MRI and CT imaging services at the Foxborough Center represents a relatively insignificant portion of the operations and financial position of Partners HealthCare, I determined that the Projections are not likely to result in insufficient funds available for capital and ongoing operating costs necessary to support the proposed projects." The report continued with the following statement: "… I determined the projects and continued operating surplus are reasonable and based upon reasonable financial assumptions….The proposed expansion of MRI and CT imaging services at the Foxborough Center is financially feasible and within the financial capability of Partners HealthCare."

Staff finds the CPA analysis to be acceptable, noting the favorable operating margin of BWH 1.8%[hh] is equal to the average of the Academic Medical Center peer cohort in 2017 based on reporting by CHIA.[29]

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 two alternative proposals to the Proposed Project.

- **Maintain the status quo of one MRI unit and one CT unit and to rely on the Applicant's other imaging locations to meet their patient's scanning needs**. 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 to wait longer and/or travel farther for their scans, care would be more fragmented, meaning the efficiencies, and benefits of co-location would not be realized. There

[27] Prepared as of December 6, 2018
[28] Incorporated in the overall financial projections, the CPA noted a balloon payment on long-term debt maturing in 2021.
[29] Staff relies on the CPA Analysis and CHIA reporting and does not perform its own financial analysis.

would be no additional operating costs but there is a potential for increased travel costs to patients obtaining their imaging outside of their community.

- **Maintain the current MRI and CT capacity at Foxborough Center, and add MRI and CT capacity at a different Applicant site.** While this would not impact the quality of the scans provided, similar to the first option, the patient experience would decline as patients would not benefit from the efficiencies, convenience and care coordination of co-locating these additional units in their community along with the other health care services at the Foxborough Center. Capital and operating costs would likely not differ from the Proposed Project.

Analysis

Staff agrees that either alternative means that wait times will increase as the planned number of providers at the Foxborough Center increases. The effects of delayed diagnosis and treatment could negatively impact outcomes and patient satisfaction with added costs related to additional resource use for coordination of care. With the efficient use of all of the Applicant's MRI and CT units system-wide being optimal, Staff inquired further about travel times to other Partners' facilities. The applicant replied that getting to Newton-Wellesley Hospital, the nearest other Partners site, during mid-day hours, takes 25-50 minutes, whereas for a 9am appointment, travel times range from 45 to 105 minutes from the Foxborough Center**.**

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, relevant background and context

The Applicant fulfilled their requirements for a 2019 Community Health Needs Assessment (CHNA) by:

1. Including communities where licensed satellite sites are outside of the geographic area for the primary site; and
2. Coordinating with the collaborative CHNA/CHIP process for the entire city of Boston.

The CHNA for the primary site (Boston) was done with robust community engagement processes, including community wide surveys, focus groups, key informant interviews, and in person convenings to obtain community input. The Applicant also engaged the various committees associated with the Boston CHNA/CHIP in the development of its CHNA. The Applicant plans to further engage the community across stages of the CHNA/CHIP process from assessment through prioritization and project planning. **The CHNA's Foxborough section** (among the Applicant's other Satellite sites) included a summary of sociodemographic data, community assets, and highlights of health outcome information related to these topics. The Applicant identified low food access, independent living needs for seniors, and housing and financial insecurity for those with Behavioral Health challenges as key concerns in Foxborough.

The Applicant provided the following documents for review and analysis:

- **CHNA (Foxborough section)** detailed information as noted above. However, the overall CHNA focused on the community health needs for Boston, and lacked detailed information and community engagement processes specific to Foxborough.
- **The Community Engagement Plan and a Community Health Initiative Narrative** provided background information for, and explanation of current 2019 CHNA/CHIP planning processes,

Community Benefit structure, advisory board duties, and administrative information. These processes included multiple health systems, community based organizations, businesses, and residents in the communities represented. The Plan focused on the 2019 CHNA for Boston, and while it outlined plans for additional engagement in Foxborough, did not adequately demonstrate that the Applicant could proceed to implementing Health Priority strategies that meet DPH standards. Based on these materials, staff requested further information on the Applicant's plans to fully assess Foxborough community needs and engage members of the Foxborough community. The Applicant was not required to, and did not submit, stakeholder assessments.

- **The Community Engagement Plan Supplement, requested by staff,** included more specifics on:
  - **Community Engagement** - The Applicant provided details on plans for additional engagement of the Foxborough community and subsequent CHI planning processes. This will include at least three additional community conversations with stakeholders specific to Foxborough, as well as through the development of an ad-hoc subcommittee comprised of community stakeholders. This will serve to align community engagement and CHI processes for the impacted community and provide the applicants standing Community Advisory Committee with representation from the Foxborough community.
  - **Commitment to equity framing** - The supplement provided detail on how the newly formed engagement plans will utilize health equity framing from assessment through prioritization and project planning. Staff discussed with the Applicant appropriate use of the framing questions (*Who benefits, who is harmed, who influences, who decides, what might be some unintended consequences*) throughout decision making processes.
  - **Revised timeline for CHI activities** – Given the plans for additional engagement, the timeline has been revised and extended to allow for sufficient assessment, and development of decision making structure and priority setting strategies. The Applicant anticipates a nine-month period necessary to develop a fair and transparent RFP process.

In order to help meet Guideline expectations, Staff is continuing its work with the Applicant to strengthen particular elements of their community engagement processes with Foxborough residents and stakeholders, including the development of an ad-hoc Advisory Committee with a focus on stakeholder and resident level representation in the Foxborough community.

***Analysis*:** Staff finds that with the condition outlined below, and with their ongoing commitment to work with staff on the above outlined issues (and as written in the Applicant's Community Engagement Plan Supplement) and based on planning timelines that staff will approve, the Applicant has demonstrated that the Proposed Project has met Factor 6. This includes use of administrative funds to support the facilitation of community engagement activities described in the Community Engagement Plan Supplement.

As a Condition of approval, staff recommends that the Applicant provide DPH with results of the plan to implement enhanced engagement strategies as described in its Community Engagement Plan Supplement, and specific to the Foxborough community, within four months of the date of the Notice of DoN.

Public Hearing

Within thirty days of the filing date, the public has the opportunity to comment on all DoN Applications, form a ten taxpayer group (TTG), and to request a public hearing in the service area of the proposed project. A TTG representing Sturdy Memorial Hospital formed and requested that a public hearing be held. In response, the Department conducted a public hearing on September 26, 2019 in Foxborough.[30]

There were seventeen speakers, sixteen in favor of the project and one (the TTG) opposed. The proponents represented the Applicant, including the president of BWH, administrators at Foxborough, and affiliated physicians; fire, police and several social service areas in Foxborough; patients and family members; and an elected official. All spoke of the benefits of local access to services, the high quality of care provided and the difficulties of traveling to alternative sites in Boston.

The TTG (Sturdy Memorial) spoke in opposition of the Proposed Project. Sturdy Memorial Hospital is an independent community acute care hospital that is also a disproportionate share hospital.[31] The testimony stressed the vital services that the hospital provides to the local community, including its ED, accredited cancer center, and obstetrics departments and stressed that profitable services subsidize those that are not profitable. However, with the difficulties community hospitals have to remain viable, when larger systems and entities are granted approval to develop services that compete with the community hospital's profitable service lines, the viability of the entire hospital may be jeopardized. The TTG requested that there be safeguards for such services similar to those in which community hospitals are protected from developers of ambulatory surgery centers. Finally, the TTG requested that an independent cost analysis be performed and that the Proposed Project go before the Public Health Council.

Staff Analysis

Staff recognizes the important and complex issues raised by the TTG, and staff's consideration of the Applicant's assertions regarding Patient Panel Need as related to Factor 1 also resulted in concerns around use of these services by patients ordered by the Applicant or by other providers. Staff notes that in its review of Patient Panel Need, Staff has recognized that increased demand for CT and MRI may also be linked to increased orders by local, non-Partners providers. As such, staff has suggested a Condition monitoring the percentage of CT and MRIs orders that originate inside and outside the Partners system.

Findings and Recommendations

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

[30] A transcript of the hearing can be found on the DoN website: https://www.mass.gov/files/documents/2019/10/10/don-hearing-transcript-partners-foxborough.pdf

[31] This means that the hospital treats greater than 63% of Gross Patient Service Revenue is from public payers, Medicare and Medicaid. https://archives.lib.state.ma.us/bitstream/handle/2452/792887/ocn994684730-FY2017.pdf?sequence=1&isAllowed=y

Conditions

In order to demonstrate that Proposed Project will add measurable public health value in terms of improved health outcomes, quality of life, and to further demonstrate the need of the Applicant's Patient Panel, the Holder shall, on a yearly basis:

1. Report on improvement of measures outlined in Attachment 1.

2. In order to demonstrate appropriate use of both MRI and CT, report on the effectiveness of the Foxborough Center providers' use of the American College of Radiology (ACR) Clinical Decision Support tool "ACR Select – NDSC" for Adult MRI or CT imaging orders (or any subsequent CDS). Holder shall provide, at minimum
    a) data showing yearly changes in "low utility" or "marginal utility" CT and MRI orders; and
    b) percentage of provider response to alerts provided by ACR Select-NDSC (or any subsequent CDS)

3. In order to further demonstrate the need for MRI and CT among Partners' Patient Panel, report on the percentage of orders for CT and MRI coming from Partners' affiliated providers vs those from any other provider.

CHI Conditions to the DoN

4. Of the total required CHI contribution of $473,810.40:
    a) $45,485.80 will be directed to the CHI Statewide Initiative
    b) $409,372.18 will be dedicated to local approaches to the DoN Health Priorities
    c) $18,952.42 will be allowable for administrative costs

5. To comply with the Holder's obligation to contribute to the Statewide CHI Initiative, the Holder must submit a check for $45,485.80 to Health Resources in Action (the fiscal agent for the CHI Statewide Initiative).
    a) The Holder must submit the funds to HRiA within 30 days from the date of the Notice of Approval
    b) The Holder must promptly notify DPH (CHI contact staff) when the payment has been made

6. The Holder shall provide DPH with results of the plan to implement enhanced engagement strategies as described in the Community Engagement Plan Supplement and specific to the Foxborough community within four months of the date of the Notice of Approval.

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. Patient Experience/Satisfaction (Press Ganey)
Overall satisfaction of care provided **(fair or lower only)**

Holder shall Report on the following:

a) Satisfaction rate for patients receiving MRI and/or CT
b) Patient response rate with a breakdown of respondents by race
c) Any policy changes instituted as a result of Holder's evaluation of fair or lower ratings

Holder shall Report on progress in making (ongoing) reductions in

2. Wait Times: Holder shall Report on the following:
Time interval (in days) from when the case was initiated for scheduling in EPIC, to the next available outpatient appointment. Holder shall Report on the following:

a) Median number of days between ordering elective MRI and imaging test performed.
b) Median number of days between ordering elective CT and imaging test performed.
c) Median number of days from the completion of a patient's CT/MRI service at the Foxborough Center to finalization of radiology report
d) Any policy changes instituted as a result of Holder's evaluation of increasing days

3. Percentage of MRI scans that triggered an Important Finding Alert (IFA) that the radiologist conducted a critical value report. Holder shall Report on the following:

a) % of IFAs where critical value report 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

Holder shall also report on imaging efficiency

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

a) MRI Lumbar Spine for Low Back Pain (OP-8)
b) Abdomen Computed Tomography – Use of Contrast Material (OP-10)
c) Thorax CT – Use of Contrast Material (OP-11)
d) Simultaneous Use of Brain CT and Sinus CT (OP-14)

These publicly reported OIE measures are calculated using data from hospital outpatient claims paid under Medicare's Outpatient Prospective Payment System (OPPS).

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