STAFF REPORT TO THE COMMISSIONER FOR A DETERMINATION OF NEED	
Applicant Name	Tellica Imaging - Massachusetts, LLC
Applicant Address	36 South Street, Suite 2200, Salt Lake City, UT 84111
Filing Date	July 10, 2025
Type of DoN Application	DoN Required Equipment, Substantial Change In Service
Total Value	$5,849,992.00
Project Number	TIM-25041809-RE
Ten Taxpayer Groups (TTG)	NONE
Community Health Initiative (CHI)	$292,499.60
Staff Recommendation	Approval with Conditions
Delegated	Commissioner Approval

Project Summary and Regulatory Review

Tellica Imaging – Massachusetts, LLC, with a principal place of business at 36 South Street, Suite 2200, Salt Lake City, UT 84111, filed a Notice of Determination of Need with the Massachusetts Department of Public Health to acquire one computed tomography ("CT") unit and one 1.5T magnetic resonance imaging ("MRI") unit to be located at Tellica Imaging – Massachusetts, LLC, 168 Great Road, Suite C105, Bedford, MA 01730. The total value for the Proposed Project is $5,849,992.00. The Community Health Initiative (CHI) contribution is $292,499.60.

This DoN application falls within the definition of a Substantial Change in Service for DoN Required Equipment, which is reviewed under the DoN regulation 105 CMR 100.000. The Department must determine that the 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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Applicant Background and Application Overview

Tellica Imaging – Massachusetts, LLC

Tellica Imaging - Massachusetts, LLC (Applicant), is a for profit, Delaware limited liability company, and a joint venture between Tellica Imaging (51% ownership) and BMC Health System, Inc., (49% ownership). The Applicant formed as a new entity in 2023 and seeks to provide outpatient diagnostic imaging services to communities in and around Middlesex County, Massachusetts.

Joint Venture Partners

Tellica Imaging (Tellica) launched in 2021 and provides a suite of CT and MRI services at locations throughout Idaho, New Hampshire, and Utah. Tellica Imaging is a subsidiary of Intermountain Health, the largest nonprofit health system in the Intermountain West. Based in Salt Lake City, Intermountain Health serves patients and communities in Utah, Idaho, Nevada, Colorado, Montana and Wyoming through 34 hospitals and 300 clinics.

BMC Health System, Inc. (BMCHS) is a Massachusetts, non-profit, integrated health care system whose mission is "to provide exceptional care for all." BMCHS is currently comprised of six corporate affiliates that provide a variety of services, detailed in Table 1:

Table 1: BMC Health Systems

Entity	Description of Services
Boston Medical Center Corporation (BMC)	Academic safety net hospital located in Boston
Boston Medical Center – South Corporation[1] (BMC South)	Community hospital located in Brockton, Massachusetts
Boston Medical Center – Brighton Corporation[2] (BMC – Brighton),	Academic medical center located in Brighton, Massachusetts
Boston Medical Center Health Plan, Inc.	Non-profit corporation established to administer the WellSense Health Plan, a managed care organization providing comprehensive health insurance coverage options through Medicaid, Qualified Health Plans, and Senior Care Options to Massachusetts and New Hampshire residents.
Clearway Health, LLC	Pharmacy management services business with expertise in the operation of advanced health system specialty pharmacy programs
BMC Insurance Co., Ltd. of Vermont	Non-profit dormant captive insurance company originally formed to provide insurance coverage for property and certain liability exposures arising from acts of terrorism under the Terrorism Risk Insurance Act of 2002.

[1] Formerly BMC Community Hospital Corporation d/b/a Good Samaritan Medical Center.
[2] Formerly, BMC Community Hospital Corporation II d/b/a St. Elizabeth's Medical Center.

Proposed Project

The Applicant seeks to acquire one computed tomography (CT) unit and one 1.5T magnetic resonance imaging (MRI) unit to be located at a new Tellica Imaging – Massachusetts, LLC site at 168 Great Road, Suite C105, Bedford, MA 01730 (Proposed Project). Through the Proposed Project, the Applicant seeks to increase access to diagnostic imaging services in the primary service area (PSA). The Applicant asserts that the Proposed Project will:

- Increase availability of imaging services within the PSA;
- Shift routine imaging services from the hospitals within the proposed service area to the outpatient setting
- Create efficiencies to support better health outcomes through timely access to care, including earlier diagnosis and treatment;
- Reduce costs by eliminating administrative overhead; and
- Address health disparities through increased hours of operation, including after-hours care.

Factor 1

In this section, we assess whether the Applicant has sufficiently addressed Patient Panel need, public health value, competitiveness and cost containment, and community engagement for this Proposed Project.

Patient Panel[3]

The Proposed Project is for a new entity, with no existing Patient Panel. The discussion of Patient Panel in this analysis refers to the patients of the health care facilities affiliated with BMHCS, as directed by the regulation.[4] The Applicant relied on CT/MRI patient data from BMC, one hospital in the BMCHS (the joint venture partner). The Applicant asserts that while the Proposed Project is meant to include access for the entire region regardless of health system affiliation, the BMC CT/MRI patient data from the PSA supports assessment of need for the Proposed Project. Staff finds this is an acceptable way to define Patient Panel.

The PSA for the Proposed Project is defined by zip codes within ten miles of 168 Great Road, Bedford, MA 01730 (Proposed Project Site) where potential patients reside. The PSA is comprised of the following cities and towns: Acton, Bedford (including Hanscom Air Force Base), Arlington, Belmont, Carlisle, Concord, Lincoln, Sudbury, Wayland, Woburn, Burlington, Billerica, Chelmsford, Lowell, North Billerica, Reading, Tewksbury, Westford, Wilmington, Winchester, Stoneham, Lexington, Waltham, Watertown, and Weston. Table 2 provides an overview of BMC's diagnostic imaging patients within the PSA from Fiscal Years (FY)2022 through FY2024.[5]

Table 2: Overview of Unique Patients in Proposed Service Area

[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] Refer to the Patient Panel definition in 105 CMR100.100.
[5] The Applicant states that BMC Brighton and BMC South are anticipated to be part of the Patient Panel but, due to the recent acquisition of these hospitals, data prior to FY2025 is currently unavailable.

	FY2022	FY2023	FY2024
BMC CT/ MRI Patients	1,102	1,229	1,300

Table 3 shows the demographic characteristics of the BMC diagnostic imaging patients in the PSA. Staff notes the following observations:

- **Age:** Greater than two thirds of the patients are in the 18-64 age range.
- **Race:** Approximately 35% of patients reported race/ethnicity in the "Other" category, which the Applicant states includes all patients who reported multiple races without identifying a primary race. Patients identifying as White comprised 33% of the population and 22% of patients identified as African American.
- **Payer Mix:** A high percentage of patients are covered by a public payer, with 29% under MassHealth, 15% Managed Medicaid, and 9% Medicare FFS.

Table 3: Demographics of BMC Diagnostic Imaging Patients Residing in PSA FY2024

	BMC Diagnostic Imaging Unique PSA Patients
Total Unique Patients	1,339
Gender	
Female	58.40%
Male	41.60%
Total	**100.00%**
Age	
0 to 17	3.88%
18 to 64	72.67%
65 and Older	23.45%
Total	**100.00%**
Race	
White/Caucasian	33.91%
Other[6]	35.47%
Black/African American	22.63%
Asian	7.99%
Total	**100.0%**
Payer Mix	
MassHealth	29.80%

[6] The "Other" category includes all patients who reported multiple races without categorizing these patients based on primary race. Going forward, the Applicant will develop its own Patient Panel and a process for collecting race/ethnicity data based on best practices for race/ethnicity data gathering.

	BMC Diagnostic Imaging Unique PSA Patients
Managed Medicaid	15.20%
Commercial – Other	13.60%
Medicare FFS	9.20%
Commercial Medicare	7.10%
Commercial - HMO/POS	9.70%
Commercial – PPO	7.60%
Free Care / HSN	4.70%
All Other	3.10%
Total	**100.0%**

Factor 1: a) Patient Panel Need

In this section, staff assesses if the Applicant has sufficiently addressed Patient Panel need for the Proposed Project.

Patient Panel Need

The Applicant attributes the need for the Proposed Project PSA to three factors:

1) Regional Need Identified for Imaging Services;
2) Growth in 65+ Population Requiring Additional Imaging Units; and
3) Projected Volume Increases.

1) Regional Need Identified for Imaging Services

To determine the need for the Proposed Project, the Applicant analyzed population and chronic disease data based on various sources, including a Need/Market Assessment ("the Assessment") conducted by the Applicant in conjunction with a leading technology vendor focused on automation, digitalization, and infrastructure. The Assessment found pockets of need for imaging services in the PSA by analyzing claims data for imaging services and projected need for such services – noting a large gap between the two elements. Trilliant Health[7] data showed that 20% and 17% of individuals residing in Bedford and the surrounding towns within the PSA experienced wait times greater than 30 days for a CT scan and an MRI scan, respectively; this is detailed in Table 4. These data also demonstrated that a third of patients had to travel more than 10 miles from their homes to obtain a scan. There are no established recommended waiting times for CT and MRI appointments for non-urgent patients but for semi-urgent, urgent, and emergent patients, the wait times for CT and MRI appointments are recommended to be no longer than 30 days for semi-urgent patients and within 7 days and 24 hours for urgent and emergent patients, respectively.[a]

[7] Trilliant Health is a healthcare data analytics, market research, and strategic consulting firm that uses predictive modeling, claims data, and consumer insights to help providers and payers optimize growth, demand forecasting, and network performance. It provides evidence-based tools for competitive intelligence, price transparency, and patient journey mapping.

Table 4: Wait Times for Individuals in the PSA to Receive Necessary Scans

Wait time to Receive Scan	Count	Percent of Total
CT		
0-5 Days	8,218	25.0%
6-10 Days	6,687	20.3%
11-15 Days	4,402	13.4%
16-20 Days	2,743	8.3%
21-25 Days	3,249	7.1%
26-30 Days	1,928	5.9%
Over 30 Days	6,595	20.0%
CT Totals	**32,922**	**100%**
MRI		
0-5 Days	6,584	26.3%
6-10 Days	5,417	21.6%
11-15 Days	3,568	14.3%
16-20 Days	2,194	8.8%
21-25 Days	1,683	6.7%
26-30 Days	1,218	4.9%
Over 30 Days	4,634	17.4%
MRI Totals	**25,028**	**100%**

The Assessment also outlined larger gaps within certain geographic areas within the PSA when analyzed for claims versus projected need. The Assessment considered that Middlesex County is the second fastest growing county in Massachusetts, exceeding 4% growth since 2020[b], predicting that additional medical services will be needed to support the ongoing growing population. Because older adults account for a disproportionate share of advanced diagnostic imaging utilization due to higher prevalence of musculoskeletal degeneration, cancer incidence, vascular disease, and neurologic disorders,[c, d, e] the Applicant further analyzed this information in conjunction with age related statistics. Table 5 examines the 65+ population within the Proposed Service Area to support the need for access to imaging services within this area.

Table 5: Proposed Service Area – Age Statistics

Community (MA)	Population	Persons 65+ (%)	Estimated Persons 65+
Acton	24,021	18.3%	4,396
Weston	11,397	22.2%	2,530
Belmont	27,295	17.8%	4,858
Arlington	46,308	16.8%	7,780
Watertown	35,329	14.6%	5,158

Community (MA)	Population	Persons 65+ (%)	Estimated Persons 65+
Waltham	65,849	15.3%	10,075
Lexington	34,743	21.0%	7,296
Stoneham	22,748	19.8%	4,505
Winchester	22,970	20.6%	4,732
Wilmington	23,282	18.9%	4,401
Westford	25,142	17.6%	4,425
Tewksbury	31,796	20.1%	6,391
Reading	26,041	20.5%	5,338
North Billerica (CDP)	3,373	15.9%	536
Lowell	115,554	13.2%	15,253
Chelmsford	36,626	17.1%	6,264
Billerica	42,119	17.4%	7,332
Burlington	27,693	14.9%	4,125
Woburn	43,895	15.6%	6,848
Wayland	13,943	21.5%	2,998
Sudbury	19,196	21.4%	4,109
Lincoln	6,996	20.5%	1,434
Concord	18,491	23.4%	4,327
Carlisle	5,317	21.3%	1,132
Hanscom AFB (CDP)	1,540	7.1%	109
Bedford	14,955	18.1%	2,706
Total (Service Area)	**793,619**	—	**~135,478**

The Applicant asserts that locating MRI/CT services in Bedford improves geographic access for many municipalities listed in Table 4. The Applicant expects that the Proposed Project will reduce travel burden for the residents in the Proposed Service Area, which facilitates compliance with follow-up imaging intervals frequently required in chronic disease care pathways (oncology surveillance, spine/joint disease, neurocognitive evaluation). As a result of the assessment of need in the region, the Proposed Project Site was selected given the large aging population, current need for services, high county growth, and projected capacity.

2) Growth in 65+ Population Requiring Additional Imaging Units

As previously noted, age-associated, high-prevalence disease burden drives sustained demand for MRI/CT services[f, g, h] and the Applicant asserts the need for increased imaging capacity to meet the projected growth in the 65+ age cohort in the PSA of Middlesex County. The Applicant notes that continued growth in the Proposed Service Area is supported by population growth estimates provided

by the University of Massachusetts – Donahue Institute (UMDI), a public service, research, and economic organization that contracts with the Commonwealth of Massachusetts to produce population projections for Massachusetts geographies for use in both public and private planning initiatives. According to data provided by UMDI, between 2025 and 2050, the overall population of Middlesex County is projected to grow approximately 2% while the 65+ age cohort is expected to grow over 13%.[i]

The Applicant anticipates that the need for outpatient diagnostic imaging services will increase as the 65+ age cohort in the Patient Panel grows. The Applicant cited literature on CT and MRI trends, which indicate that imaging rates tend to be higher among older adults as these imaging modalities are beneficial in diagnosing and treating a variety of age-related conditions.[j]In support of the regional statistics regarding the 65+ population in the region, Table 6 examines the historic utilization among BMC's 65+ patient population in the Proposed Service Area, demonstrating the population has routinely received between 25-30% of the diagnostic imaging scans.

Table 6: Scans for BMC's Diagnostic Imaging Patients Aged 65+ Within the PSA

	FY2022	FY2023	FY2024	FY2025 YTD
Number Scans Among 65+	701	634	786	471
Percent of Total BMC Scans Among 65+ Population	29.93%	25.08%	27.93%	29.60%

While CT and MRI utilization rates are stable across all age cohorts within BMC's Imaging population located in the Proposed Service Area, patients in the 65+ age cohort have increased at a higher rate over the last three fiscal years. The current fiscal year data suggest that these trends will continue. The overall regional growth in the 65+ population, supported by the BMC scan data above, lead the Applicant to assert that this Proposed Service Area is in need of additional CT and MRI units to continue providing patients in the region with the necessary imaging.

3) Projected Volume Increases

The Applicant states scan volume in the region, presented in Table 7, is expected to increase exponentially, and the Proposed Project is necessary to provide increased access to low-cost outpatient imaging services. Once operational, the Applicant expects that patients in the Proposed Service Area will seek services at the Proposed Project Site.

Table 7: Projected Imaging Scan Volume at Tellica Imaging – Massachusetts

	FY2026	FY2027	FY2028	FY2029	FY2030
CT	1,273	2,590	5,270	7,560	7,560
MRI	848	1727	3,515	5,040	5,040

Total	**2,121**	**4,317**	**8,785**	**12,600**	**12,600**

To develop CT and MRI scan projections for the Proposed Project, the Applicant combined and extrapolated from Trilliant and Advisory Board projections, data from the market assessment conducted by the Applicant, and BMC's historical diagnostic imaging data in Table 6 below. The Applicant asserts that the projected increase in volume is largely due to the greater incidence of conditions as individuals age (degenerative musculoskeletal disease, vascular disease, oncology surveillance, etc.) that often require serial follow-ups through MRI and CT services. The Applicant also states that Massachusetts has growing rates of chronic diseases (e.g., cancer, heart disease, chronic lower respiratory disease, and stroke) which are drivers of healthcare utilization.[k] As these conditions increase, or are managed over longer periods of time, imaging volumes will also rise for diagnosis, staging, monitoring, and surveillance.

Table 8 examines the historical utilization data that supported the Applicant's projections for future scans. The tables shows that BMC had an approximately 28% increase in the number of CT scans from FY2022 to FY2024, while MRI grew at a more modest 3% during that time. The Applicant attributes these increases to the aging population within the PSA, particularly the 65+ age cohort, as discussed above.

Table 8: Historic Utilization of Diagnostic Imaging Scans - Patients from the PSA

	FY2022	**FY2023**	**FY2024**	**FY2025 YTD[8]**
BMC MRI Scans	788	777	819	503
BMC Brighton MRI Scans				214
TOTAL MRI SCANS	**788**	**777**	**819**	**717**
BMC CT Scans	1,554	1,751	1,995	1,088
BMC Brighton CT				706
TOTAL CT SCANS	**1,554**	**1,751**	**1,995**	**1,794**

Staffing

The Applicant determined that 8 FTEs are needed to staff the new facility, including a patient service representative; CT technologists; MRI technologists; and Radiologists for each session. As patient volume increases at the site, additional technologists may be added to each session to assist with order management, screening for implantable metal/devices, helping to relieve the other technologists during shifts, and other administrative duties.

[88] FY2025 Year To Date includes data from October 1, 2024 to March 31, 2025.

Analysis

Staff finds the Applicant has identified a regional gap in imaging services within the Projected Service Area. The historical growth in volume for patients aged 65+, as well as projected volume increases due to population growth, particularly among the 65+ cohort suggests there will be a need for the addition of CT and MRI in the area to serve the people in this region. As a result, Staff finds that the Proposed Project meets the requirements of Factor 1a.

Factor 1: b) Public Health Value, Improved Health Outcomes and Quality of Life; Assurances of Health Equity

In this section, staff will assess if the Proposed Project adds measurable public health value in terms of improved health outcomes and quality of life for the Applicant's existing Patient Panel, while providing reasonable assurances of health equity.

Public Health Value and Health Outcomes

The Applicant asserts that the Proposed Project supports improved health outcomes and quality of life. Advances in diagnostic imaging technologies such as CT are widely credited with leading to improved patient outcomes, through earlier and more accurate diagnoses of disease using noninvasive techniques. The Applicant provided an array of literature (listed in Appendix II) demonstrating the clinical utility of both MRI and CT technology. The overall themes of the various studies cited include:

<u>MRI</u>

- MRI is a widely accepted, non-invasive imaging technology that uses a powerful magnetic field and pulses of radio waves to create detailed images of the body's internal organs, tissues, and structures;
- MRI imaging may be used for the brain, spine, musculoskeletal system, abdomen, pelvis, breast, chest, and heart.
- MRI assists in diagnosing or monitoring treatment for conditions such as tumors of the abdomen, diseases of the liver (e.g., cirrhosis), abnormalities of the bile ducts and pancreas, and inflammatory bowel diseases such as Crohn's disease and ulcerative colitis.
- MRI imaging enables the high-resolution evaluation of soft tissues without the use of ionizing radiation;
- 1.5T MRI included in the Proposed Project supports high patient volume through faster exam times versus machines with magnets of lesser strengths while maintaining high quality images;
- The lower strength of the 1.5T MRI included in the Proposed Project enables patients with implanted devices/foreign objects to have necessary scans.

<u>CT</u>

- CT is a type of diagnostic imaging that utilizes x-ray techniques to create detailed images of the body and then uses a computer to create cross-sectional images of the bones, blood vessels and soft tissues inside the body resulting in imaging more detailed than X-rays;
- CT technology aids in diagnosing disease, trauma, planning and guiding procedures, and monitoring the effectiveness of therapy;
- CT is used to help determine when surgeries are necessary and reduce the need for exploratory surgeries;
- CT technology is useful in detecting tumors or lesions within the abdomen and lungs, heart disease, abnormalities of the heart, head injuries, blood clots, and embolisms;
- CT-guided interventional radiology is a tool in treating neurological conditions, cancer, heart disease, spinal problems, and vascular disease.

The Applicant plans to provide imaging services for the conditions listed in Tables 9 & 10, based on the top Current Procedural Terminology (CPT) codes for MRI and CT procedures performed at BMC.

Table 9: Ten Most Common CPT Codes for CT Services at BMC in FY2023-FY2024

74177 - CT ABDOMEN AND PELVIS W-CONTRAST MATERIAL
70450 - CT HEAD-BRAIN W-O CONTRAST MATERIAL
77014 - CT GUIDANCE RADIATION THERAPY FLDS PLACEMENT
71260 - DIAGNOSTIC COMPUTED TOMOGRAPHY THORAX W-CONTRAST
72125 - CT CERVICAL SPINE W-O CONTRAST MATERIAL
71275 - CT ANGIOGRAPHY CHEST W-CONTRAST-NONCONTRAST
71250 - DIAGNOSTIC COMPUTED TOMOGRAPHY THORAX W-O CNTRST
70496 - CT ANGIOGRAPHY HEAD W-CONTRAST-NONCONTRAST
70498 - CT ANGIOGRAPHY NECK W-CONTRAST-NONCONTRAST
71271 - COMPUTED TOMOGRAPHY THORAX LW DOSE LNG CA SCR C-

Table 10: Ten Most Common CPT Codes for MRI Services at BMC in FY2023-FY2024

70553 - MRI BRAIN STEM W-O W-CONTRAST MATERIAL
70551 - MRI BRAIN STEM W-O CONTRAST MATERIAL
72148 - MRI SPINAL CANAL LUMBAR W-O CONTRAST MATERIAL
74183 - MRI ABDOMEN W-O AND W-CONTRAST MATERIAL
72141 - MRI SPINAL CANAL CERVICAL W-O CONTRAST MATRL
73721 - MRI ANY JT LOWER EXTREM W-O CONTRAST MATRL
70544 - MRA HEAD W-O CONTRST MATERIAL
72197 - MRI PELVIS W-O AND W-CONTRAST MATERIAL
73221 - MRI ANY JT UPPER EXTREMITY W-O CONTRAST MATRL
70547 - MRA NECK W-O CONTRST MATERIAL

Given the growing number of individuals who will be in the 65+ age cohort in the PSA, the Applicant projects that orthopedic and neurological conditions may be prevalent in local residents. The

Applicants asserts that the accessibility of imaging services within the PSA will allow patients to access care in a timely manner, which can lead to better outcomes.

Analysis: Public Health Value, Health Outcomes, and Quality of Life
Staff finds that MRI and CT imaging have many clinical uses and contribute to improved health outcomes for patients. The Proposed Project allows greater access to imaging for patients in the area. As a result, Staff finds that the Applicant meets the requirements of the Public Health Value: Health Outcomes part of Factor 1b.

Health Equity and Social Determinants of Health (SDoH)
Through the Proposed Project, the Applicant seeks to increase access to community-based, low-cost outpatient diagnostic imaging services for individuals in the PSA. In addition to the legal and regulatory requirement to provide language access services at no cost to patients, the Applicant outlined its plan to support equitable access to the imaging services by offering after hours appointments, as well as insurance and pricing considerations.

> *After-Hours Appointment Availability* - The new Tellica Imaging - Massachusetts facility will have extended hours of operation during the week and on Saturdays (7:00am to 7:00pm). The Applicant cites research that after-hours outpatient imaging has a positive impact on accessibility and health equity, providing under-resourced populations with access to needed care.[l] A study examining the effect of after-hours appointments on mammography found that younger patients, non-White races, non-English speakers, and individuals from lower-income zip codes were more likely to utilize after-hours appointments.[m] Offering after-hours appointments could significantly improve access for underserved populations and provide more opportunities for these groups to receive essential imaging services.[n]
>
> *Acceptance of Various Insurances and Transparent Pricing* - The Applicant states its commitment to accepting as many payors as possible to increase access, including participation in MassHealth, Medicare, TriCare, and commercial payors. For those not covered by insurance, the Applicant also provides price transparency via the Tellica Imaging web site, allowing potential patients to know the cost of care prior to an appointment. While the Applicant is unable to predict the actual payer mix for the new facility, they state they will be accepting all forms of insurance, including public and commercial payers, as part of their endeavor to maintain a high public payer mix.

The Applicant further stated that they have adopted an equity strategy first introduced by Intermountain Health, the parent company of one of the Joint Venture Partners, Tellica. The strategy includes the following ideas:

- The Applicant sees equity as both a Fundamental and a Value. Establishing equity as a fundamental – along with safety, quality, patient experience, access, and stewardship – is an important acknowledgement of existing disparities in health and access to quality healthcare resources.
- The Applicant seeks to hire leadership focused on equity. Intermountain Health has a chief equity officer to lead and manage equity work across the system, including at Tellica locations.

This role consults with executive leadership to develop an intentional strategy and cohesive approach, cultivating an environment that values and demonstrates commitment to equity.
- The Applicant uses equity advocates. This individual serves as an advocate and mediator, supporting equity among caregivers and patients.
- The Applicant has dedicated funding to support community well-being in areas like affordable housing, financial inclusion, and education. Funding is allocated through a portion of its investment pool, channeled into direct loans to local organizations and investments in financial intermediaries, like Community Development Financial Institutions (CDFIs).
- The Applicant works with other organizations in the community to address racism as a public health crisis to address clinical care, social determinants of health, healthcare access, and opportunities.

The Applicant also plans to promote health equity through its process of screening for barriers to care and connecting individuals to needed services, as described in greater detail in Factor 2: Service Delivery Transformation.

Analysis: Health Equity and SDoH

The DoN Staff reviewed the Applicant's efforts to provide equitable care. The Applicant demonstrates efforts to promote health equity through after-hours access to imaging, acceptance of a wide range of insurances, language accessibility, and the adoption of the parent company's health equity strategy. Staff finds that the Applicant has sufficiently outlined ongoing efforts to achieve health equity. As a result, Staff finds that the Applicant meets the requirements of the Public Health Value: Health Equity part of Factor 1b.

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

The Applicant states that the Proposed Project promotes continuity and coordination of care for its patients through use of its technology infrastructure. The Applicant offers a provider portal that utilizes two factor authentication for security compliance. Scans will be read within thirty minutes for STAT cases, two hours for urgent cases, and approximately one business day for routine cases. For critical test values/urgent findings, radiologists will escalate the results to the referring/treating provider. Community-based providers can register and gain access to test results for their patients and view their patient's images in the Applicant's Visage Viewer Picture Archiving and Communications System (PACS). Providers may also place orders and work on other administrative processes via this system. For larger hospitals and health systems, the Applicant establishes electronic medical record (EMR) connections to promote continuity and coordination of care. For those providers without technical resources, the Applicant receives orders via fax.

Analysis

Staff finds that that the Applicant's the Applicant's portal and EMR connections support continuity between all providers on the care team and may improve coordination between these providers. As a result, Staff finds that the Proposed Project meets the requirements of Factor 1c.

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. As a result, Staff finds that the Proposed Project meets the requirements of Factor 1d.

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

The Department's Guideline[9] 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."[10]

In May 2024, the Applicant held one meeting with BMC's Patient Family Advisory Committee ("PFAC") and two community meetings. The Applicant presented information on the Proposed Project and address their questions. In all meetings, attendees were encouraged to ask questions and provide feedback. There was discussion around the Proposed Project modalities and how this technology will meet patient needs. In support of the Proposed Project, PFAC members asked questions about accessibility, interpreter services, and the need for additional scanning capacity. The Applicant's representatives expressed their belief that the Proposed Project will allow the needs of the anticipated Patient Panel in the PSA to be met and provide patients in the region, including BMC patients, with additional access to diagnostic imaging services via a community-based outpatient facility, furthering efforts to provide accessible care in the geographic area and throughout BMCHS.

Analysis

Staff reviewed the information on the Applicant's community engagement and finds that the Applicant has met the required community engagement standard in the planning phase of the Proposed Project. As a result, Staff finds that the Proposed Project meets the requirements of Factor 1e.

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

The Applicant states that the Proposed Project will compete on the basis of price, total medical expenses (TME), provider costs, and other recognized measures of health care spending by providing the availability of low-cost diagnostic imaging services in the outpatient setting. The Applicant points to a recent study showing that shifting 10% of non-emergent hospital-based care, including imaging, to outpatient settings could save an estimated $125 billion per year.[o] Radiology, including the CT and MRI services that will be available at the new facility, is a unique specialty with the ability to shift non-emergent imaging services to outpatient centers. Savings are realized in the outpatient diagnostic imaging setting because, unlike hospitals, these sites of care do not have overhead related to "stand-ready capacity for emergencies," making services less costly. The Applicant noted that numerous studies have found that non-emergent imaging such as CT and MRI, conducted in the outpatient setting, is 30-50% less costly than in the inpatient setting (depending on the imaging modality and

[9] Community Engagement Standards for Community Health Planning Guideline.
[10] DoN Regulation 100.210 (A)(1)(e).

test).[p] The Proposed Project will allow for timely access to care, as well as cost-effective imaging for patients in need of services in the area.

The same study cited above also concluded that shifting appropriate imaging examinations away from hospital-based sites may have the dual benefit of providing efficient access for outpatients and potentially more efficient access for inpatients in need of urgent or emergent imaging.[q] When patients have timely access to appropriate imaging modalities, clinicians can improve health outcomes through expedited diagnoses and more accurately screen for certain conditions, such as cancer, leading to more appropriate therapeutic interventions and the effective monitoring of the efficacy of treatment, all of which lead to reduced costs.[r]

Analysis

The Proposed Project has the potential to reduce costs by providing timely access to outpatient diagnostic imaging services in a setting that is less costly than the hospital. Staff finds that, on balance, the Proposed Project will likely compete on the basis of price, TME provider costs, and other measures of health care spending and meets the requirements for Factor 1f.

Summary, FACTOR 1

As a result of the information provided by the Applicant and additional analysis, staff finds that the Applicant has demonstrated that the Proposed Project meets Factor 1. The Applicant proposed specific outcome and process measures to track the impact of the Proposed Project which Staff has reviewed, and which will become a part of the reporting requirements.

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

For Factor 2 the Applicant must demonstrate that the Proposed Project will meaningfully contribute to the Commonwealth's goals for cost containment, improved public health outcomes, and delivery system transformation beyond the Patient Panel.

Cost Containment

As detailed in previous sections, the Applicant asserts that the Proposed Project will contribute to the Commonwealth's goals for cost containment by providing timely access to imaging in an appropriate setting, which has been shown to reduce mortality and morbidity for chronic conditions. The Proposed Project will meet the cost containment goals in three ways.

1) An increase in CT and MRI capacity in the outpatient setting will allow the Patient Panel to seek services in a lower cost environment that does not compromise the quality of care, as previously addressed in Factor 1f. While the Applicant is currently in the process of contracting with health plans and does not have exact pricing for Massachusetts, the Applicant anticipates that outpatient CT and MRI scans will be 10-15% of the average cost of CT and MRI scans provided in the Massachusetts hospital setting.

2) Additional outpatient imaging capacity will allow for more timely access to care and treatment, supporting better patient clinical outcomes and reduced health care costs.[5] When patients have access to services through earlier diagnosis, both health outcomes and overall health care costs are improved based on cancer staging and the efficacy of treatment.
3) The Applicant asserts a 1.5T MRI was the best option for the new outpatient facility because a greater variety of patients may be scanned on this machine and this machine is associated with faster exam times, which facilitates improved throughput. These factors are likely to offer more efficient access to care for the majority of patients.

Analysis: Cost Containment

Staff finds the Applicant has adequately explained how it aligns with cost containment goals through lower cost access to imaging services, and potentially better client outcomes. . Staff notes that the savings noted in cost per scan cannot be fully assessed until contracts are negotiated with health insurance companies. Therefore, DoN Staff can conclude that the Proposed Project, with the addition of Condition 2, will likely meet the cost containment component of Factor 2.

Improved Public Health Outcomes

As detailed in previous sections, the Applicant anticipates the Proposed Project will improve public health outcomes by providing timely access to outpatient imaging. The Applicant anticipates that additional scanning capacity will improve patient experience. As previously discussed in factor 1b, the Proposed Project will provide the Proposed Service Area with access to imaging services for the orthopedic and neurologic conditions prevalent among the 65+ population. When patients have access to diagnostic imaging services, they may seek care sooner and are more likely to attend appointments. Expedited imaging can assist with appropriate staging of a disease and more timely access to therapies, as well as lead to less stress for a patient. Due to these factors, the Applicant anticipates the Proposed Project will improve public health outcomes.

Analysis: Public Health Outcomes

Staff finds the Proposed Project will provide patients within the PSA with timely access to imaging services that have the potential to improve health outcomes. Timely access can reduce delays in diagnosis and treatment that can adversely impact health outcomes. Therefore, DoN Staff can conclude that the Proposed Project will likely meet the Public Health Outcomes component of Factor 2.

Delivery System Transformation

When a patient contacts the Applicant to make an appointment, staff will inquire if translation or any other services are necessary or helpful. At this time, a patient may disclose a SDoH need, and the Applicant will work with the patient to ensure they receive necessary screenings (through BMC or other providers) and are linked to SDoH resources. Signage will also be posted at the Proposed Project Site that directs patients to inquire with front desk staff or a technologist if they have SDoH challenges and need assistance. If a patient seeks assistance from the Applicant's staff, they will be referred to a local hospital (including BMC) for screening and support. The new Massachusetts Tellica Imaging

facility expects to work with BMCHS to leverage its existing programming to provide appropriate linkages to social service organizations for its Patient Panel.

Analysis: Delivery System Transformation

Central to the goal of Delivery System Transformation is the integration of social services and community-based expertise. The Applicant plans to use BMCHS's established procedures for connecting patients to needed resources. Therefore, DoN Staff can conclude that the Proposed Project will likely meet the Delivery System Transformation component of Factor 2.

Summary, FACTOR 2

As a result of information provided, staff finds that the Proposed Project has sufficiently met the requirements of Factor 2.

Factor 3: Relevant Licensure/Oversight Compliance

The Applicant has provided evidence of compliance and good standing with federal, state, and local laws and regulations and this Factor will not be addressed further in this report. Per 105 SMR 100.310, the Applicant will be subject to ongoing compliance with Standard Conditions upon approval of a Determination of Need. As a result of information provided by the Applicant, staff finds the Applicant has reasonably met the standards of Factor 3.

Factor 4: Demonstration of Sufficient Funds as Supported by an Independent CPA Analysis

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

The CPA assessed the reasonableness[11] of assumptions used in the preparation and feasibility[12] of the projections with regards to the Proposed Project. The CPA concluded that projections were reasonable, and that the Applicant 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.

Factor 4 Analysis

Staff is satisfied with the CPA's analysis of the Proposed Project's projections. As a result of information provided by the Applicant and additional analysis, staff finds that the Applicant has demonstrated that the Proposed Project has met Factor 4.

[11] Reasonableness is defined within the context of this report as supportable and proper, given the underlying information.

[12] Feasibility is defined as based on the assumptions used, the plan is not likely to result in insufficient funds available for capital and ongoing operating costs necessary to support the proposed project without negative impacts or consequences to the existing Patient Panel.

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

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 alternatives to the Proposed Project.

Alternative Option 1 - Establish mobile scanning service to the BMCHS hospital locations: The capital expense for this option would cost more than the Proposed Project over the course of the leased period, with monthly fees alone equivalent to the construction and implementation of equipment at a fixed site without accounting for operational costs. The Applicant found this alternative inefficient as mobile units have longer scan times and frequently more artifact. Consequently, scans may be a lesser quality and need to be repeated. Fixed suites tend to have higher outputs and faster rotations, allowing for high resolution images, and reduced scan times. Permanent scanners also have minimal mechanical interference (reducing artifact), and allow for the use of specialized applications.

Alternative Option 2 – Do not establish an outpatient diagnostic imaging facility and continue to serve patients through existing imaging resources: Although this alternative is not associated with any operating costs or capital expenses, it does not address the need for additional CT and MRI capacity in the PSA, and, therefore, quality outcomes, operational efficiencies, and cost containment measures anticipated to be achieved through the Proposed Project will not be realized. This alternative is inefficient as it does not provide additional access to necessary CT and MRI services in the PSA in the wake of a growing 65+ population Without additional capacity for these services, access challenges may ensue, and patients could face an increase in wait times, as well as delays in diagnosis and treatment.

Analysis

Staff finds that the Applicant has appropriately considered the quality, efficiency, and capital and operating costs of the Proposed Project relative to the potential alternative. As a result of information provided by the Applicant, 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 for this application: This project constitutes a DoN-Required Equipment acquired by an entity other than a hospital. As such, the Applicant is not required to submit CHI forms.

Analysis

Tellica Imaging will contribute their full CHI contribution to the Statewide Community Health and Healthy Aging Funds (CHHAF). With fulfillment of the below conditions, the Applicant will have demonstrated that the Proposed Project has met Factor 6.

Findings and Recommendations

Based upon a review of the materials submitted and with the addition of certain conditions, set out below and imposed pursuant to 105 CMR 100.360(A), the Department finds that the Applicant has met each DoN factor and recommends approval of this Application for Determination of Need.

Other Conditions

1. **Factor 6: CHI Contribution.** Payment should be made out to the Massachusetts Community Health and Healthy Aging Funds in the full amount of $292,499.60, and should be submitted within **30 days** from the date of Notice of Approval to:

   Health Resources in Action, Inc., (HRiA)
   2 Boylston Street, 4th Floor
   Boston, MA 02116 Attn: MACHHAF c/o Bora Toro
   DoN project: # TIM-25041809-RE

   Please send a PDF image of the check or **confirmation of payment** to DONCHI@Mass.gov and dongrants@hria.org.If you should have any questions or concerns regarding the payment, please contact the CHI team at DONCHI@Mass.gov.

2. **Factor 2:** To the extent feasible, the Holder shall provide a comparison of the average cost of outpatient MRI and CT scans at the Proposed Project Site with available inpatient imaging data for BMC system hospitals, and hospitals within the PSA. The Department will evaluate these data to better understand cost differences between outpatient and inpatient imaging sites. The Holder will make good faith efforts to provide comparison data annually to the Department for five years, beginning one year after project implementation.

   If the Department determines the Holder's average cost of outpatient MRI and CT scans at the Proposed Project Site is materially greater than the cost of hospital inpatient imaging within the PSA, the Holder will be afforded an opportunity to provide an explanation for the greater costs. After review of the Holder's justification, the Department may require the Holder to submit a plan to the Department to remedy the impact of the increase.

Appendix I: Measures for Annual Reporting

Outcome Measures

To assess the impact of the Proposed Project, the Applicant has developed the following outcome measures. The Applicant will report this information to the Department's DoN Program staff as part of its annual report required by 105 CMR 100.310(A)(12) following implementation of the Proposed

Project. For all measures, the Applicant will provide annual data. Reporting will include a description of numerators and denominators.

1. **Utilization:** Report on utilization for CT and MRI at the new facility and explain how it compares to the projected utilization in the Application.

   Measure: The number of scans completed by modality.

   Projections: The Applicant provided the following projections by modality:

Modality	FY2026	FY2027	FY2028	FY2029	FY2030
CT	1,273	2,590	5,270	7,560	7,560
MRI	848	1727	3,515	5,040	5,040
Total	2,121	4,317	8,785	12,600	12,600

2. **Patient Satisfaction:** The number of patient reviews that prompt follow-up by the Applicant's staff, based on a challenging experience or less than outstanding experience.

   Measure: Patient reviews receiving less than outstanding or note a challenge during the visit.

   For Reviews by MRI Patients: Baseline: 5%; Year 1: 4% Year 2: 4%; and Year 3: 4%.

   For Reviews by CT Patients: Baseline: 5%; Year 1: 4% Year 2: 4%; and Year 3: 4%.

   Monitoring: The Applicant will collect and provide data to the Department of Public Health ("DPH") on an annual basis beginning one (1) year following implementation of the Proposed Project.

3. **MRI and CT Wait Times:** The Proposed Project seeks to address the existing and future needs of the Applicant's Patient Panel in the PSA by providing increased access to timely, high-quality MRI and CT services.

   a. **Outpatient Access to Care:** Time to next available appointment.

   Measure: This measure will collect data based on the following calculation: Time interval (in days) from when the outpatient case was initiated for scheduling to the next available outpatient appointment. The Applicant will provide the following data to the MA Department of Public Health ("DPH"): Median number of days between initiating outpatient case for scheduling and performing a scan.

   MRI Projections: Baseline: 7 days; Year 1: 7 days; Year 2: 7 days; and Year 3: 7 days.
   CT Projections: Baseline: 7 days; Year 1: 7 days; Year 2: 7 days; and Year 3: 7 days.

   Monitoring: The Applicant will collect and provide data to DPH on an annual basis beginning one (1) year following implementation of the Proposed Project.

b. Time to Scheduling a Scan/Exam.

Measure: This measure will collect data based on the following calculation: Time an order is indexed (sent for scheduling, including prior authorization if needed) to the first attempt to call the patient.

MRI Projections: Baseline: 6 hours; Year 1: 6 hours; Year 2: 5.5 hours; and Year 3: 5 hours.

CT Projections: Baseline: 6 hours; Year 1: 6 hours; Year 2: 5.5 hours; and Year 3: 5 hours.

Monitoring: The Applicant will collect and provide data to DPH on an annual basis beginning one (1) year following implementation of the Proposed Project.

4. **Timeliness of Scan Interpretation:** The Proposed Project seeks to provide timely access to high-quality diagnostic imaging services for the identified patient panel. The Applicant will review the amount of time between when a routine scan is completed to the time review and interpretation are completed.

Measure: This measure will collect data based on the following calculation: Time from completion of a routine scan to time of completed review and interpretation by a radiologist.

MRI Projections: Baseline: 2-3 business days; Year 1: 2-3 business days; Year 2: 1-2 business days; and Year 3: 1-2 business days.

Monitoring: The Applicant will collect and provide data to DPH on an annual basis beginning one (1) year following implementation of the Proposed Project.

Appendix II Literature Review

Literature on the Benefits of MRI

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