

STAFF REPORT TO THE PUBLIC HEALTH COUNCIL FOR A DETERMINATION OF NEED	
Applicant Name	Beth Israel Lahey Health, Inc.
Applicant Address	20 University Road, Suite 700, Cambridge, MA 02138
Filing Date	October 23, 2024
Type of DoN Application	Substantial Capital Expenditure and Substantial Change in Service
Total Value	\$117,006,070.00
Project Number	BILH-24080714-HE
Ten Taxpayer Group	None
Community Health Initiative	\$5,850,303.50
Staff Recommendation	Approval with Conditions
Public Health Council	March 12, 2025
<p style="text-align: center;"><u>Project Summary and Regulatory Review</u></p> <p>Beth Israel Lahey Health, Inc. is filing a Notice of Determination of Need with the Department of Public Health, on behalf of Beth Israel Deaconess Medical Center, to (1) relocate and expand a satellite site for the provision of hematology-oncology and infusion services to be located at 10 Cordage Park Circle in Plymouth, Massachusetts, (2) establish a multispecialty satellite site to be located at 55 General McConville Way, Quincy, and (3) to add imaging equipment at the Quincy Satellite that constitutes DoN required equipment. The capital expenditure for the Proposed Project is \$117,006,070.00; the Community Health Initiatives (CHI) contribution is \$5,850,303.50.</p> <p>This DoN application falls within the definitions of Substantial Capital Expenditure and Substantial Change in Service, which is 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.</p>	

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Applicant Background and Application Overview

Beth Israel Lahey Health, Inc.

The Beth Israel Lahey Health, Inc (BILH or Applicant), is a Massachusetts, non-profit, tax-exempt corporation that oversees an integrated health care delivery system comprised of teaching and community hospitals, physician groups, behavioral health providers, post-acute care providers and other caregivers serving patients in Greater Boston and the surrounding communities in Eastern Massachusetts and Southeastern New Hampshire.

Collectively known as “BILH Hospitals,” BILH’s member hospitals include:

Table 1: BILH Hospitals

Acute Hospital	Type (Per CHIA Category ^{a, b})
Anna Jaques Hospital	Community Hospital
Beth Israel Deaconess Hospital–Milton	Community Hospital
Beth Israel Deaconess Hospital–Needham	Community Hospital
Beth Israel Deaconess Hospital–Plymouth	Community-High Public Payer Hospital
Beth Israel Deaconess Medical Center	Academic Medical Center
Lahey Hospital & Medical Center	Teaching Hospital
Mount Auburn Hospital	Teaching Hospital
New England Baptist Hospital	Specialty Hospital
Northeast Hospital	Community-High Public Payer
Winchester Hospital	Community Hospital

BILH operates Beth Israel Lahey Health Performance Network, LLC (BILHPN), a Massachusetts Health Policy Commission (HPC) certified Accountable Care Organization (ACO), which the Applicant states is a value-based physician and hospital network whose goal is to partner with other community hospitals and providers throughout Eastern Massachusetts to improve quality of care while managing medical costs.

Beth Israel Deaconess Medical Center (BIDMC)

BIDMC is a non-profit, academic medical center and teaching affiliate of Harvard Medical School located in the Longwood Medical and Academic Area in Boston. BIDMC offers a full range of adult clinical services to patients in Eastern Massachusetts including cardiovascular care, cancer care, care for digestive diseases, OB/GYN, neonatology, neurosciences, orthopedics, psychiatry/behavioral health, transplantation, and emergency services and the Applicant states that the Hospital is known for biomedical research, teaching, and community service.

BIDMC is contracted with BILHPN and currently participates in its subsidiary ACO, Beth Israel Deaconess Physician Organization, LLC (d/b/a Beth Israel Deaconess Care Organization (BIDCO).

Proposed Project

The Proposed Project includes three main components:

1. Relocate and expand the Hematology-Oncology and Infusion Clinic currently located at Beth Israel Deaconess Hospital - Plymouth, Inc. (BID Plymouth) to a new location at 10 Cordage Park Circle in Plymouth, Massachusetts (Cordage Park Satellite), resulting in a transfer of site by lease and equipping of an approximately 29,704 square-foot facility.
2. Relocate and expand specialty services at an approximately 100,000 square-foot, four story, multi-specialty site at 55 General McConville Way, Quincy (Quincy Satellite) that will provide primary care, urgent care, OB/GYN, orthopedics, hematology-oncology, cardiology, gastroenterology, lab, and diagnostic imaging services.
3. Include required equipment at the Quincy Satellite:
 - a) one computerized tomography (CT) unit
 - b) one magnetic resonance imager (MRI)

The Cordage Park Satellite and Quincy Satellites (collectively “The Satellites”) are expected to expand access to hematology-oncology and infusion, primary, specialty, and diagnostic care within the respective communities. The Satellites will be licensed as BIDMC hospital-based satellites and will be run as a hospital outpatient department (HOPD) of BIDMC, which will expand regional access to complex clinical services at a lower cost than many of the other Greater Boston academic medical centers.

Factor 1

In this section, we assess if the Applicant has sufficiently addressed Patient Panel need, public health value, competitiveness and cost containment, as well as community engagement for the establishment of the Satellites.

Patient Panel¹

The Applicant’s system-wide Patient Panel demographics, located in Appendix II, show that Patients aged 65+ were the largest patient cohort with greater than 30% of unique patients, the vast majority (over 75%) of the patients identify as white, and Not Hispanic/Latino, and the percentage of Medicaid/ Medicare patients was 46.1%. The Applicant provided data showing that the top 15 patient origins of their BILH system-wide Patient Panel included Plymouth, Woburn, Beverly, Peabody, Gloucester, Quincy, Boston, Cambridge, Billerica, Burlington, Dorchester, Arlington, Danvers, Medford, and Wilmington².

The Proposed Project is for two new Satellite sites. The patient population for the Proposed Project has yet to be fully established. However, each satellite site will incorporate some existing patient populations as those services are relocated. Additionally, the Satellites will

¹ As defined in 105 CMR 100.100, Patient Panel is the total of the individual patients regardless of payer, including those patients seen within an emergency department(s) if applicable, seen over the course of the most recent complete 36-month period by the Applicant or Holder...(2) If the Proposed Project is for a new facility and there is no existing patient panel, Patient Panel means the anticipated patients.

² This information is from the Center for Health Information and Analysis (“CHIA”) Massachusetts Acute Care Hospital Inpatient Discharge Dataset.

serve patients currently receiving care at the Applicant's member hospitals and community satellites Plymouth, Quincy, and surrounding communities. Therefore, the Applicant relied on patient population data from existing sites located at BID-Plymouth, Beth Israel Lahey Health Primary Care Quincy Square (BILHPC Quincy), BILH Urgent Care Quincy,³ and Beth Israel Deaconess Milton Hospital (BID Milton) to determine the need for the Proposed Project. Staff finds this is an acceptable way to define patient population for the proposed Satellites. Table 2 below shows the patient populations from Fiscal Year (FY)2019 through FY2023. The Applicant notes that the number of unique patients for BID-Plymouth⁴ and BILH Urgent Care Quincy declined largely because they had been Covid testing sites, a service which declined between FY2021 and FY2023.

Table 2: Overview of Unique Patients In Proposed Service Area⁵

System/ Hospital	FY2019	FY2020	FY2021	FY2022	FY2023
BID-Plymouth	80,912	75,625	88,269	82,530	81,364
BID-Plymouth Oncology	3,637	3,588	3,253	3,303	3,853
BILHPC Quincy ⁶	NA	NA	1,458	2,524	2,867
BILH Urgent Care Quincy ⁷	NA	NA	13,621	15,343	14,228
BID Milton	59,669	54,997	79,054	69,010	70,696

For the proposed Cordage Park Satellite, the Applicant provided patient origin data showing that approximately 80% BID-Plymouth's patients originated from Plymouth and other towns in Plymouth County. For the Quincy Satellite, the Applicant provided data showing that over 80% of the BILHPC Quincy Square and BILH Urgent Care Quincy's patient population originated from Quincy and from the towns immediately adjacent to Quincy. The Applicant also provided data showing that approximately 14% of BID Milton's patient panel originate from Quincy, with the remaining 60.3% originating from other towns in Plymouth and Norfolk counties, which overlaps the interests of both Satellites.

Table 3 shows the demographic characteristics of the BID-Plymouth, BID-Plymouth Oncology, BILHPC Quincy, BILH Urgent Care Quincy, and BID Milton. Staff notes the following observations:

- **Age-** BID Plymouth's Oncology patients are largely aged 65+ (63%), while all of the facilities examined see a majority of their patients (55% or more) in the 18-64 age range.

³ Two existing services will re-locate to the Quincy Facility, the Beth Israel Lahey Health Primary Care practice currently located at 100 Walter J. Hannon Parkway and the Beth Israel Lahey Health Urgent Care Center, also currently located at 100 Walter J. Hannon Parkway.

⁴ BID Plymouth Hospital offered Covid testing and an injectable antiviral clinic in FY2021, both of which ended in FY2022. Additionally, BID Plymouth Hospital moved its mammography service off its hospital financials in December 2022.

⁵ Patient panel data for BILHPC Quincy represents unique patients. Patient panel data for BILH Urgent Care Quincy represents total visits. Patient panel data for BID Milton Hospital represents total encounters.

⁶ BILHPC Quincy site was acquired in FY2021. As such, the Applicant does not have data prior to FY2021.

⁷ The BILH Urgent Care Quincy center opened in October 2020, which is FY2021. As such, the Applicant does not have data for this site prior to FY2021.

- **Race/Ethnicity-** The largest percentage of patients served identified as White. BID Milton had over 18% of patients identifying as Black/ African American and BILHPC Quincy had over 7% of its patients identifying as Black/ African American or Asian.
- **Payer Mix-** Over 60% of BID-Plymouth's Oncology patients are covered by Medicare, consistent with the primary age demographic served. BILHPC Quincy and Quincy Urgent Care's patients were over 50% Commercial insured and between 16-27% Medicaid. BID Plymouth and BID Milton's patients were over 30% Medicare patients.

Table 3: Patient Population Demographic Profiles In Proposed Service Area, FY2023

	BID-Plymouth	BID-Plymouth Oncology	BILHPC Quincy ⁸	BILH Urgent Care Quincy ⁹	BID Milton
Total Unique Patients	81,364	3,853	17,095	14,228	70,696
Gender					
Female	59.2%	58.0%	75.0%	0.0%	57.7%
Male	39.2%	41.9%	25.0%	0.0%	42.2%
Other ¹⁰	1.6%	0.1%	0.0%	100.0%	0.1%
Total	100.0%	100.00%	100.0%	100.0%	100.0%
Age					
0 to 17	8.0%	0.1%	5%	7.6%	3.8%
18 to 64	55.0%	36.7%	75.0%	67.2%	61.5%
65 and Older	37.0%		20.0%	23.9%	34.7%
Unknown	0.0%	63.2%	0.0%	1.3%	0.0%
Total	100.0%	100.0%	100.0%	100.0%	100.0%
Race					
American Indian or Alaska Native	0.1%	0.0%	0.1%	0.0%	0.2%
Asian	0.6%	0.4%	7.8%	0.0%	6.7%
Black or African American	2.3%	1.0%	7.7%	0.0%	18.6%

⁸ The Applicant notes that 3 of the 4 providers in the BILH Primary Care Quincy practice are female, which explains the higher percentage of female patients served.

⁹ The Applicant is not able to provide more detailed information regarding gender, race, or ethnicity of the patient panel receiving urgent care in Quincy based on the source data.

¹⁰ Includes genders other than male/female, as well as patients for whom a gender is not specified, and whose gender varies across visits over the time period.

	BID-Plymouth	BID-Plymouth Oncology	BILHPC Quincy ⁸	BILH Urgent Care Quincy ⁹	BID Milton
Native Hawaiian or Pacific Islander	0.0%	0.1%	0%	0.0%	0.0%
Other ¹¹	8.2%	4.8%	6.6%	0.0%	13.0%
White	88.7%	93.3%	38.5%	0.0%	61.5%
Unknown	0.0%	0.0%	3.1%	100.0%	0.00%
Patient Declined	0.0%	0.00%	36.2%	0.0%	0.00%
Total	100.0%	100.0%	100.0%	100.0%	100.0%
Ethnicity					
Hispanic or Latino	1.6%	0.4%	4.0%	-	3.7%
Not Hispanic or Latino	91.3%	96.2%	51.0%	-	86.5%
Unknown	7.1%	3.4%	45.0%	-	9.8%
Total	100.0%	100.0	100.0%	0.0%	100.0%
Payer Mix					
Commercial	38.9%	26.4%	57.0%	50.7%	42.7%
Medicaid	13.9%	7.1%	27%	16.5%	14.4%
Medicare	34.9%	60.3%	13.9%	22.7%	31.9%
Other ¹²	12.3%	6.2%	0.0%	10.1%	11.0%
Unknown	0.0%	0.00%	2.0%	0.0%	0.0%
Total	100.0%	100.0%	100.0%	100.0%	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. The Applicant demonstrated the Patient Panel need for the Satellites as follows:

Cordage Park Satellite - Need for Hematology-Oncology and Infusion Clinic

- 1) Impact of High Utilization on Access
- 2) Projected Growth and Future Need

1) Impact of High Utilization on Access

¹¹ "Other" is a choice for patients to select if they do not feel that their race/ethnicity is reflected in the list of choices.

¹² Includes self-pay, health safety net, and liability coverage other than worker's compensation for an injury event.

CHIA data cited by the Applicant indicate the need for health care services in the Plymouth region has grown over 12% over the past six years, which the Applicant believes is driven by a combination of an increase in population and an aging community.¹³ Despite the pandemic, Table 4 demonstrates that there has been a steady increase in the number of infusion treatments provided to the existing patient population at BID Plymouth, resulting in an approximately 9% increase from 2019 to 2023.

Table 4: Utilization of Infusion Treatment at BID Plymouth

Metric	2019 Count	2020 Count	2021 Count	2022 Count	2023 Count
Patient Visits for Chemotherapy by Infusion Treatment	12,890	12,532	12,865	14,322	14,360
Patients Visits for Non-Chemotherapy Infusion Treatments	6,719	6,097	6,340	6,263	6,997
TOTAL	19,609	18,629	19,205	20,585	21,357

As a result of this increase, schedules for infusion treatments at the fully staffed BID Plymouth Cancer Clinic are consistently fully booked. Currently, physicians prioritize hematology-oncology referrals based on acuity, and an appointment may not be available for up to 9 weeks. The average new patient appointment wait time to the hematology-oncology clinic in FY2023 was 50 days, which is greater than the national average of 26 days.^c Table 5 illustrates that the wait time has nearly doubled from 2019 to 2023.

Table 5: Average New Patient Appointment Wait Time for BID-P Hematology-Oncology Clinic

	FY2019	FY2020	FY2021	FY2022	FY2023
Wait time (In days)	26	25	18	27	50

2) Projected Growth and Future Need

As shown in Table 4, utilization of infusion treatment has increased. However, the Applicant asserts that the physical layout of the current BID Plymouth prevents expansion to meet the growing demand. The Applicant analyzed scheduling data to determine the proposed volume for the relocated and expanded hematology-oncology clinic at the Cordage Park Satellite. The data included a growth rate that assumes that additional hematology-oncology physicians and advanced practice providers would be hired to provide care at the new Cordage Park Satellite, resulting in projections demonstrated in Table 6. Growth projections were derived based on incremental provider and exam room capacity, at current-state provider and exam room productivity.

¹³ MA Centers for Healthcare Information & Analysis (2015-2021). This includes med/surg inpatient discharges from BID-Plymouth's total service area. This data only includes individuals 18 and older, and excludes psych and obstetrics.

Table 6 – Volume Projections for Cordage Park Satellite

Volume Projections (Outpatient)	2027	2028	2029	2030	2031
Hem/Oncology Clinic¹⁴	15,208	17,189	19,032	19,032	20,875
Infusion Clinic¹⁵	17,784	20,452	23,119	26,676	27,000

The Applicant notes that The Advisory Board Cancer Incidence Estimator expects that cancer incidence in Plymouth and surrounding counties will increase by nearly 17% between 2020 and 2030.^d Certain types of cancer already prevalent among BID Plymouth patients, such as hematologic cancers as well as lung and bronchus cancers, are expected to increase by more than 10% during this period.

The Applicant asserted the current need for hematology-oncology physicians in the Plymouth area exceeds the availability. To support this assertion, the Applicant used the STRATUS ambulatory planning tool through its contract with Real Estate Strategies (RES). The tool applies predictive analytics to a combined dataset of market demographics from Environmental Systems Research Institute, Inc and healthcare claims from IBM Watson to project patient demand and physician need for ambulatory services. Table 7 captures the results for the entire Plymouth region, showing that the supply of hematology-oncology physicians is only about one third of the projected need.

Table 7: Demand Versus Supply of Hematology-Oncology Physicians in Plymouth Region

Specialty	Market Demand¹⁶	Market Physician Need¹⁷	Physician FTE Supply	Market Unmet Demand (FTE)	BILH Physician FTE Supply
Hematology-Oncology	42,195	22.5	8.2	14.3	8.2

In order to better meet the needs of the community, the proposed Cordage Park Satellite will expand the services available through the addition of three new physicians, one new advanced practice provider, and five additional exam rooms (increasing from 12 to 17). Additionally, the existing clinic is expected to transfer in totality over to the new satellite. The Applicant anticipates transitioning seven physicians, two advanced practice providers, and 44 staff currently working at the BID-Plymouth Hematology and Oncology Clinic to the new Cordage Park Satellite.

¹⁴ This projection was derived by using current state scheduling data and projecting out based on incremental addition of physicians and advanced practice practitioners.

¹⁵ This projection was derived based on the benchmark of two infusions per chair per day in the first year that the clinic is in service, and ramping up to three infusions per chair per day in the clinics fifth year in service.

¹⁶ Market Demand reflects the 5-year forecasted demand for Hematology-Oncology outpatient services in the BID Plymouth service area. The calculation(s) used to forecast future demand is based on a proprietary methodology created by RES.

¹⁷ Market Physician Need reflects the FTE Hematology-Oncology physician need in order to accommodate the Market Demand defined above in the BID Plymouth service area. This is calculated applying the above defined 5-year forecasted Market Demand against a proprietary methodology of physician productivity by specialty created by RES.

Quincy Satellite - Need for the Primary Care, Specialty, and Diagnostic Imaging Services

- 1) Underserved region
- 2) Benefit of On-Site Diagnostic Imaging Equipment

1) Underserved Region

The Applicant's primary care providers have reported challenges with local specialty referral access to hematology-oncology, OBGYN, endocrinology, gastroenterology, pulmonology, and rheumatology. As such, current patients from the Quincy region must travel into BIDMC's Boston campus to receive these services. Additionally, the Applicant met with leaders from local community health centers (South Cove Community Health Center and Manet Community Health Center) and these centers note a need for cardiology, gastroenterology, hematology-oncology, and neurology among their patient base. The Applicant conducted a survey of market need and determined that, despite there being some baseline of physicians practicing in the region, there remains an under-supply in several specialties, including hematology-oncology, and OBGYN.^e The Applicant plans to offer all these services in the new Quincy Satellite to ensure local availability, support unmet market demand, and to coordinate care within the community and keep care local. Table 8 details the supply and demand for these specialties in the Quincy region, which was also derived using the STRATUS tool.

Table 8: Demand Versus Supply of Specialty Services in Quincy Region

Specialty	Market Demand	Market Physician Need	Physician FTE Supply	Market Unmet Demand (FTE)	BILH Physician FTE Supply
Hematology-Oncology	64,935	34.7	21.8	12.9	0.1
OBGYN	76,523	48.6	37.9	10.7	6.7

The Applicant asserts that Quincy is the largest city in Massachusetts without a hospital within its city limits to serve the healthcare needs of its population¹⁸. The Quincy region has a population of 340,000 that is projected to grow 3.3%, a rate that is significantly higher than the rest of Eastern Massachusetts at 2.5%.¹⁹ Given the current needs and projected growth, the Quincy Satellite is anticipated to provide greater access to these services as well as ensure local availability. The Applicant anticipates hiring 17 new providers, and 153 new staff to add to the 13 current providers and 34 staff expected to transition to the Quincy Satellite.²⁰

¹⁸ Staff notes that while there is not a hospital within Quincy city limits, there are hospitals within driving distance of Quincy.

¹⁹The Quincy region includes Avon, Braintree, Canton, Cohasset, Hanover, Hingham, Holbrook, Marshfield, Milton, Norwell, Quincy, Randolph, Rockland, Scituate, and Weymouth Population statistics from 2024 Sg2 Claritas Pop Facts. Population growth forecasted for 5-Years (2021 – 2026).

²⁰ The applicant notes that decisions to recruit new providers (e.g., physicians, PAs and NPs) or transition/rotate existing specialty providers are still under development. Additionally, over 100 physicians who provide rotating shift coverage for the current Quincy urgent care center will transition and continue to provide rotating shift coverage at the new Quincy Satellite and are not included in the above count. Lastly, the Applicant anticipates that the Quincy Satellite will serve as a destination site for services including imaging, infusion, lab and pharmacy which comprise 44% of new hires.

2) Benefit of On-Site Diagnostic Imaging Equipment

The Applicant demonstrated the need for imaging in the Quincy Satellite to support services and specialties that will be delivered. As mentioned above, the Applicant solicited feedback from local community health centers. South Cove Community Health Center, a non-affiliated provider also located in Quincy, underscored the high demand for ultrasound services for their patients. The Applicant also used referral ratios for imaging exams at their other ambulatory sites to project utilization of imaging services in the Quincy Satellite, as detailed in Table 9.

Table 9: Radiology Referral Ratios by Service and Modality

Specialty	Radiology Assumptions				
	Diagnostic X-Ray	CT	Ultrasound	MRI	Mammography
Urgent Care	29.9%	9.5%	6.4%	0.0%	0.0%
Primary Care	5.2%	1.6%	3.6%	1.5%	14.8%
Cardiology	7.4%	7.4%	1.6%	1.5%	0.0%
Neurology	7.4%	7.4%	1.6%	1.5%	0.0%
Ob/Gyn	0.0%	0.0%	12.0%	0.0%	0.0%
Orthopedics	35.0%	0.0%	2.0%	17.0%	0.0%
Endocrine Surgery	7.4%	7.4%	1.6%	1.5%	0.0%
ENT	7.4%	7.4%	1.6%	1.5%	0.0%
Gerontology	7.4%	7.4%	1.6%	1.5%	0.0%
GI	7.4%	7.4%	1.6%	1.5%	0.0%
Hematology/Oncology	7.4%	7.4%	1.6%	1.5%	0.0%
Infectious Disease	7.4%	7.4%	1.6%	1.5%	0.0%
Pulmonary	7.4%	7.4%	1.6%	1.5%	0.0%
Nephrology	7.4%	7.4%	1.6%	1.5%	0.0%
Podiatry	7.4%	7.4%	1.6%	1.5%	0.0%
Rheumatology	7.4%	7.4%	1.6%	1.5%	0.0%

The referral ratios suggest that having on-site diagnostic imaging equipment, such as the equipment requested in the Proposed Project, would complement the services anticipated at the Quincy Satellite. The Applicant states that co-locating imaging with primary and specialty care in a community setting provides patients with convenience targeted to improve the overall patient experience.

Analysis

Staff finds that the Applicant has demonstrated sufficient need for establishing both the Cordage Park and Quincy Satellites. Each Satellite will provide services to address current unmet need for specialty treatments among anticipated patient populations, as well as anticipate the predicted growth in volume in the area. The Cordage Park Satellite would support access to needed hematology-oncology and infusion services in the Plymouth Region. The Quincy Satellite would support access to needed hematology-oncology, OBGYN,

endocrinology, gastroenterology, pulmonology, and rheumatology in the Quincy regions, as well as provide on-site diagnostic imaging to complement those services. As a result, Staff finds that the Proposed Project meets the requirements of Factor 1a.

Factor 1: b) Public Health Value through 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.

Health outcomes and quality of life

By establishing the two Satellites, the Applicant expects that the Primary Service Area (PSA) will gain greater access to the variety of services, including reduction in travel time to these services to support improved access.

1) Greater Access to Specialty Services

The Applicant asserts that both Satellites will add to public health value by providing expanded access to specialty services, in a location more geographically accessible to the region, within the BILH network. The proposed Cordage Park Satellite will provide the Plymouth area with a greater capacity for infusion and hematology-oncology treatments. Research supports that infusion clinics help patients better manage and control their disease and associated symptoms by providing a continuity of care throughout their medical need, enhancing continuity of care and improving compliance.^f The Applicant states that the Quincy Satellite will provide the area with more access to needed specialty services. The Applicant cites several studies suggesting that access to specialty services, such as those in the Proposed Project, have the potential to improve timeliness of diagnoses, and improve overall prognosis and treatment outcomes.^{g,h} As previously stated, the Satellites will operate as an HOPD, which research suggests provides closer monitoring of patients receiving infusions, promote the coordination of care between a patient's primary care physician and specialists, and allow for care to be easily escalated to a hospital when appropriate.ⁱ

2) Reduction in Travel Time to Access Services

Travel burden, or the travel time or distance that a patient must travel, can result in delays in diagnosis and can negatively influence treatment choice for certain common cancers.^j An increase in travel distance is also associated with more advanced disease at diagnosis, inappropriate treatment, a worse prognosis, and a worse quality of life.^k Further, long delays or complete inaccessibility to primary and specialty care are common across the United States. Geographic access to health care is associated with increased use of preventative health and improved health outcomes for patients.^l The Applicant states that the Quincy Satellite, in particular, will provide a centralized location for specialized services, which supports reduced travel time for patients. Currently, patients living in the Quincy region are

traveling between 9 miles (28 minutes) from Quincy and 30 miles (55 minutes) from Marshfield to BIDMC in Boston for a number of the services that will be offered in the Quincy Satellite, such as hematology/oncology, cardiology, neurology and obstetrics gynecology. Patients with cancer, who currently receive hematology-oncology services from BID Plymouth and reside in Plymouth, are traveling 25 miles (30 minutes) to South Shore Hospital in South Weymouth, 40 miles (1 hour 10 mins) to BIDMC in Boston, 40 miles (1 hour 11 mins) to Brigham & Women's Hospital in Boston, and 41 miles (1 hour 6 mins) to Massachusetts General Hospital in Boston.²¹ Establishing the Satellites supports reduced travel for many patients in the Satellite regions and the Applicant predicts that this will improve patient access.

To assess the impact of the Proposed Project, the Applicant proposed both quality metrics and metric projections for quality indicators measuring quality of care. The measures include patient satisfaction, wait times, and clinical measures of the efficacy of specialty treatment. The measures are presented in Appendix I and will be reported to DPH on an annual basis following implementation of the Proposed Project.

Analysis: Public Health Value: Health Outcomes and Quality of Life

Staff finds that establishing the proposed Satellites has the potential to improve health outcomes for the patients in these communities. The Proposed Project addresses Public Health Value both by providing access to specialty services in areas that have been underserved and locating the specialty services in areas intended to increase local access to patients who would otherwise have to travel to receive care. As a result, Staff finds that the Applicant meets the requirements of the Public Health Value: Health Outcomes and Quality of Life part of Factor 1b.

Health Equity and Social Determinants of Health (SDoH)

The Applicant states that Proposed Project will work to reduce health inequity through increasing and improving access to specialty services in the community. The Applicant asserts that it does not discriminate on the basis of age, race, ethnicity, gender/gender-identity, physical ability, sensory or speech limitations, or religious, spiritual and cultural beliefs, nor a patient's ability to pay or payer source. The Satellites will implement the following initiatives to facilitate equitable access to its services:

- 1) *Language Accessibility:*** Translation services will be available 24 hours per day, seven days per week. Deaf and hard-of-hearing patients will access the same high-quality services through the interpreter service, via LanguageLine.
- 2) *Culturally Competent Staff and Services:*** The Applicant plans to employ a culturally competent staff at the Satellites to ensure each patient's experience meets their needs. All of the Applicant's employees and BILH-entity employees are required to pass two educational programs annually focused on 1) workplace harassment and

²¹ Travel distances and times are based on GlobeFeed.com Distance Calculator.

cultural diversity, and 2) healthcare equity. As such, all staff expected to transition to the Satellites meet this cultural competency. The availability of culturally competent staff recognizes the holistic needs of patients throughout their encounter at each Satellite.

- 3) *Data Collection and Research:*** The Applicant recently launched an initiative to consistently gather more detailed and complete demographic information from patients in furtherance of an organizational culture that embraces diversity, equity, and inclusion. Capturing patient diversity demographics, including gender and race, ethnicity, and language (REAL Data) is foundational to understanding and addressing health disparities in the community. The Applicant assembled a multidisciplinary team of representatives from across the Applicant's health system, including staff from patient access services, information services, nursing, social work, community benefits and community relations teams. Collaborating with patient representatives, the multidisciplinary team established a standard set of data along with best practices and processes in order to capture the data more consistently in the electronic medical record.

The Applicant has also created the Massachusetts Institute for Equity-Focused Learning Health System Science (Institute) in collaboration with leaders from other Massachusetts healthcare systems. Funded by a grant from the federal Agency for Healthcare Research and Quality, the Institute seeks to expedite equity-focused research to address health disparities and will work to ensure research of equity measures and social determinants of health is guided by common data standards and led by a diverse group of researchers representative of the Commonwealth's residents and their lived experiences.

Analysis: Health Equity and SDoH

Staff finds that the Applicant has sufficiently outlined ongoing efforts to advance health equity. The Applicant outlined significant efforts to advance health equity through language accessibility, improving the cultural competency of its staff, and a plan for data collection/research that provides a more accurate understanding of the race, ethnicity, and language of their patient population. 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

In this section, staff will assess if the Proposed Project will promote continuity of care, improved health outcomes, and enhanced quality of life. The Applicant demonstrated these factors as follows:

- 1) *Local Access Within Health System:*** The Applicant states that the Proposed Project will improve care continuity and coordination of care by providing access for specialty care patients who are currently seen at the Applicant's member hospitals, including BID

Plymouth, BID Milton and BIDMC in Boston. The Applicant states that the Proposed Project will allow patients to remain both within the BILH network and within their communities when accessing specialty services.

- 2) Technology Infrastructure:** The Applicant initiated the process of transitioning to Epic Electronic Medical Record (EMR) across all its hospitals, which will facilitate coordination of care for patients who receive services throughout the Applicant's system, including at the proposed Satellites. Race, ethnicity, language, gender, gender identity, disability accommodation needs, and health-related social needs will be collected for all patients, allowing the Applicant to have accurate and complete patient information at all BILH facilities. The transition to Epic will also create more opportunities for enhanced documentation capture of health-related social need screening for a patient population and will allow the Applicant to better connect patients with identified needs for internal and/or external supports.
- 3) MassHealth ACO Program:** The Satellites will participate in the MassHealth ACO Program through Beth Israel Deaconess Care Organization (BIDCO), part of Beth Israel Lahey Health Performance Network (BILHPN) and its clinically integrated network. BIDCO strives to increase access to high quality care for members who are more likely to have unmet SDoH needs than the commercially insured population. The Applicant notes that a significant portion of BIDCO's efforts to improve health care are accomplished through care coordination. Specifically, BIDCO's data analysis and risk management tools are provided to BID-P providers, including a Population Health Management Tool that helps primary care physicians monitor patients' health and manage chronic conditions. These primary care linkages will continue to enhance care for BID-P's patients, including timely access to radiology services that will be achieved through the Proposed Project.

Analysis

Staff finds that the Proposed Project's expanded access to specialty services within the network will allow for greater convenience among both patients and providers, contributing positively to efficiency, continuity, and coordination of care. The technology infrastructure for real time communication among the network of providers as well as the ACO program support the goal of improved care coordination for patients. 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

The Department's Guideline²² for community engagement defines "community" as the Patient Panel, and requires that at minimum, the Applicant must "consult" with groups representative of the Applicant's Patient Panel. Regulations state that efforts in such consultation should consist of engaging "community coalitions statistically representative of the Patient Panel."²³

The Applicant presented the Proposed Project presented to the following groups:

- BID-P's Patient and Family Advisory Committee (PFAC)
- BID Milton's PFAC
- BIDMC's PFAC
- BID-P's Community Benefits Advisory Committee (CBAC)
- BID Milton's CBAC
- BIDMC's CBAC

For all of the presentations listed, attendees had the opportunity to ask questions, and generally had positive reactions. There were no concerns raised about the Proposed Project. At one meeting, there was a question as to whether the Proposed Project would allow for the sharing of clinical resources for clinical care. The Applicant's representatives confirmed that the Plymouth staff would work together with specialized physicians from BIDMC to provide enhanced and new clinical offerings for cancer care, in particular, clinical trials and additional infusion treatments for different types of cancer. One participant inquired about the CHI funds. The Applicant representative shared that the BID Milton and BID Plymouth teams will be actively engaging with their communities to put together plans for investments.

Analysis

Staff finds that the Applicant sought to engage the community to elicit feedback representative of the Patient Panel regarding the Proposed Project meeting the required community engagement requirements.

Factor 1: f) Competition On Price, Total Medical Expenses (TME), Costs And Other Measures Of Health Care Spending

The Applicant asserts that the Proposed Project will compete on the basis of price, total medical expenses, provider costs, and other recognized measures of health care spending by improving access to hematology-oncology, infusion, primary and specialty care, urgent care, lab, and diagnostic imaging services without negatively impacting health care spending. As discussed throughout this Staff Report, establishing the Satellites will satisfy the unmet need for specialty services in the Plymouth and Quincy regions, and create a centralized environment for these services that are currently scattered across disparate sites.

²² Community Engagement Standards for Community Health Planning Guideline

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

The Applicant cites research to support that improving access to hematology-oncology, infusion, primary and specialty care, urgent care, lab, and diagnostic imaging services would reduce the cost of care. They state that foregoing or delaying appropriate and necessary care, particularly for chronic conditions, results in deteriorating health, exacerbated symptoms and an increase in overall costs to the health care system.^m In a study reviewing cost of care for breast cancer, which included two years of post-diagnosis claims data analyzed by stage at diagnosis, researchers found that the average cost per patient at disease stages III and IV were between 64% and 154% higher than the cost of those patients treated at Stage 0, I and II.ⁿ In addition, missed medical appointments, annual check-ups, and preventive screenings such as mammograms and colonoscopies, can result in unmanaged symptoms, particularly for individuals with chronic disease, leading to emergency room visits or hospitalizations that are far costlier than outpatient care.^o

Medication adherence may also be negatively impacted as a result of lack of transportation to and from a doctor's office and/or a pharmacy.^p One study concluded that the annual estimated cost of prescription drug morbidity and mortality resulting from non-optimized medication therapy, including medication non-adherence, was over \$500 billion in 2016 dollars.^q

The Applicant seeks to improve adherence to healthcare regimens by expanding services in the local community and reducing the need for patients to travel outside of their local community to receive care. A literature review of 61 studies concluded that transportation barriers, particularly for individuals with lower incomes or who are un- or under-insured, are a key barrier to healthcare access.^r

Additionally, the Applicant asserted that establishing the Proposed Project under the BIDMC license rather than either of the community hospital licenses is anticipated to result in significantly lower cost structures, overall. In particular, the Applicant stated that the transition to the BIDMC license supports acquisition of expensive cancer treatment pharmaceuticals at a lower and more sustainable cost than if acquired through either Satellite. Further, the Applicant asserted BID Plymouth's existing cancer center operates at a significant loss due to the high costs of the pharmaceuticals used in infusion therapies. The Applicant anticipates BID Plymouth's cancer center services will be unsustainable in the long-term under the current cost structure. Additionally, the Applicant explained expanded infusion pharmaceuticals (for both cancer and non-cancer care) would be cost-prohibitive.

In addition to the beneficial cost structures established by leveraging the BIDMC license for drug acquisition, the Applicant argued the BIDMC provider resources and operational structure supports the Proposed Project more efficiently than licensing under the closest community hospitals, BID Plymouth and BID Milton. In particular, the Applicant stated establishing and operating the Quincy Satellite as part of the BID Milton location would require significant resources to scale up to the size of the Proposed Project and support the scope of the proposed clinical ambulatory operations. The Applicant further explained that licensing under BIDMC eliminates the need for redundant expenditures. BIDMC anticipates extending its cancer and

ambulatory operational leadership to the Quincy Satellite and Cordage Park Satellite. This operational leadership structure aligns with current practice, as these staff oversee other BIDMC sites, and supports economies of scale. In addition, the Applicant stated BIDMC's existing clinical resources have capacity to expand into the Plymouth community, providing additional access and care quality. For example: BIDMC anticipates utilizing its centralized nurse navigators to staff the BID Plymouth cancer center, bypassing the need to hire additional of contract for nurse navigators.

In support of the Applicant's statement of a lower cost structure, the Applicant provided Table 10, showing that the net patient service revenue (NPSR) of the proposed Quincy Satellite versus the Applicant's other urgent care centers located throughout Eastern Massachusetts²⁴ is generally lower in comparison to the other community sites.

Table 10: Comparison of Quincy Satellite and Community Hospital Licensed Outpatient Center NPSR

	<u>Community Site 1</u>	<u>Community Site 2</u>	<u>Community Site 3</u>	<u>Community Site 4</u>	New Satellite
NPSR per visit for Urgent Care	\$ 148.96	\$ 145.00	\$ 142.00	\$ 165.00	\$ 143.38

When asked for the same comparison for the proposed Cordage Park Satellite, the Applicant stated they do not have data that can appropriately compare net patient service revenue across community hospital outpatient centers in the Plymouth region. The Applicant asserts that the Proposed Project will be providing timely access to critical healthcare services in a lower-cost outpatient setting. In addition, the research suggests that ensuring service availability in a location close to home is likely to reduce the cost of care.

Analysis

Staff finds that the Proposed Project will improve patient access to specialty services and this may reduce the overall cost of care by supporting earlier diagnosis of chronic illness, medication adherence, and preventative care. The data provided by the Applicant does not specifically identify a way that the Proposed Project will compete on the basis of price, TME provider costs, and other measures of health care spending compared to the current arrangement of services and have implemented Condition 3 to monitor specific future costs.

²⁴ The Applicant notes that these Community Sites are licensed as either an off-campus hospital outpatient department or a physician office billing for urgent care services

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 with the addition of Condition 3.

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

Cost Containment

As discussed in Factor 1f, the Applicant asserts that the cost for BIDMC to procure cancer/infusion pharmaceuticals is lower than BID Milton or BID Plymouth, and high pharmaceutical costs make the operation of HOPD's through the community hospital licenses cost prohibitive. The Applicant states that aligning clinical and operational oversight for the Satellites will reduce redundancy and support a more efficient clinical and financial operation, as outlined in the previous section.

With respect to reimbursement rates, the Applicant asserts there will be a reduction from existing Medicare reimbursement rates, as the new BIDMC hospital outpatient departments would be "non-excepted", meaning they will be reimbursed at the lower hospital off-campus outpatient rate. The Applicant expects MassHealth reimbursement to be the same, and commercial payor reimbursement is governed by the terms of existing payor contracts (whose cost impacts are annually monitored by CHIA and the HPC).

Community members are currently traveling into BIDMC's Boston campus for the services that the Applicant intends to provide at the Quincy Satellite, as previously discussed in Factor 1b. As a licensed off-campus outpatient department of BIDMC, specialty services and most ancillaries offered through the Quincy Satellite will be at a 40% lower cost to both patients and insurers, as illustrated in Table 11.²⁵

Table 11: Comparison of Average Cost of Specialty Services

Specialty	Net Patient Service Revenue (NPSR) per Visit Other BIDMC-Licensed Outpatient Centers			NPSR per Visit (Blended + Discount) ²⁶ Quincy Satellite
	Commercial	Medicare	Medicaid & Other	
Cardiology	418	199	236	181

²⁵ The Quincy pro forma assumes a 40% reduction in average net patient service revenue at the Quincy satellite as compared to the cost for the same services delivered at BIDMC-licensed outpatient centers in Chestnut Hill (200 Boylston Street), Lexington (482 Bedford Street) and Needham (310 Chestnut Street).

²⁶ The Applicant defines "Blended" as the sum of net patient service revenue per visit across three payer categories (Commercial, Medicare and Medicaid/Other) and the payer mix for each specialty. "+ Discount" then reduces the Blended rate by 40% percent to reflect off-campus Hospital Outpatient Department rates.

Gastroenterology	165	80	183	80
Hematology/Oncology	1,066	1,157	1,873	738
OBGYN	208	105	188	98
Orthopedics	161	222	186	114
Sports Medicine	65	133	110	60
Hand	89	126	126	66
Foot and Ankle	236	260	235	147
Spine	22	68	58	28
MSK	236	260	235	147
Podiatry	91	96	161	62
Endocrine Surgery	128	75	141	65
Gerontology	518	73	N/A	44
Infectious Disease	82	78	163	56
Nephrology	284	72	186	110
Neurology	82	78	163	56
Pulmonology	144	121	216	88
Rheumatology	82	78	163	56
Urology	152	111	149	81

The Cordage Park Satellite is expected to improve health outcomes, patient satisfaction, and quality of life by providing timely access to outpatient hematology-oncology and infusion services in a lower-cost²⁷ setting. The Applicant will maximize clinical and operational efficiencies through the use of dedicated cancer staff and streamlined overhead costs. The Quincy Satellite will allow for consolidation of the services currently provided through the Quincy Square site, resulting in reduced lease and operating expenses. The Proposed Project seeks to expand availability and support access to appropriate and necessary care for patients.

Analysis: Cost Containment

The Proposed Project has the potential to achieve cost containment goals by providing lower cost specialty services in a geographically convenient locations for patients. The data provided by the Applicant does not specifically identify a way that the Proposed Project will meet cost containment goals compared to the current arrangement of services and therefore the Department has implemented Condition 3 to monitor specific future costs.

Improved Public Health Outcomes

The Applicant asserts that the Proposed Project will improve public health outcomes by providing local access to convenient outpatient hematology-oncology, infusion, primary and specialty care, urgent care, lab, and diagnostic imaging services in the communities that are being served. The Satellites will expand capacity for hematology-oncology services, including

²⁷ HOPD's typically have lower operational costs than hospitals due to a more streamlined focus on outpatient procedures, less need for extensive staff and facilities, and often benefit from "site-neutral" payment policies that reimburse at a lower rate for services provided outside of a traditional hospital setting

physician consultation, and chemotherapy and infusion services, to be performed in the community. The Proposed Project will also support local clinical offerings in the Satellite regions, including oncology clinical trials, infusion treatments and sub-specialized oncology physicians from BIDMC. Additionally, the Satellites are expected to maintain access to complex, high-cost pharmaceutical infusion treatments and sub-specialized physicians from BIDMC that would not be available if the Satellites were licensed under the local hospitals. This is predicted to enhance the patient experience by allowing for local access to hematology-oncology services with shorter wait times for appointments and procedures in a non-hospital-based setting. This local, timely access is expected to improve patient satisfaction, and patient outcomes.

Analysis: Public Health Outcomes

Staff finds the Applicant demonstrated the locations of the Satellites support timely access to care and avoid delays in treatment that can adversely impact health outcomes. The Satellites are anticipated to serve the current volume of patients in need of specialty services, as well as meet the growing needs of the community. Therefore, DoN Staff can conclude that the Proposed Project will likely meet the Public Health Outcomes component of Factor 2.

Delivery System Transformation

The Applicant will collaborate with patients and primary care providers to ensure patients are linked to appropriate social service organizations. The Applicant plans to address identified or suspected social determinants of health through appropriate referral resources and notification to the patient's primary care provider, as appropriate, to encourage necessary follow-up. As previously discussed in Factor 1c, the transition to Epic will allow the Applicant to better connect patients with identified needs for internal and external supports, including community-based services. The Applicant also anticipates that its transition to Epic across its network will facilitate linkages among its hospitals to HOPDs, such as the Satellites.

Analysis: Delivery System Transformation

Staff finds the Applicant has demonstrated the Proposed Project will support the Delivery System Transformation component of Factor 2. The Applicant outlined the integration of social services and community-based expertise in its service delivery. SDoH screening is integrated into the Applicant's care processes so that linkages can be made to community resources to address health risks and improve health outcomes.

Summary, FACTOR 2

As a result of information provided, staff finds that the Proposed Project has sufficiently met the requirements of Factor 2, with the addition of Condition 3.

Factor 3: Relevant Licensure/Oversight Compliance

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

Factor 4: Financial Feasibility

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

The Applicant submitted a CPA report compiled by Meyers Brothers Kalicka, Certified Public Accountants. The scope of the analysis included review of the five-year financial projections, five-year projected cash flow statements, historical²⁸ volumes for infusion services volume at Lahey Hospital & Medical Center (Burlington” and Lahey Medical Center, Peabody (Peabody), historical hematology- oncology volume at Beth Israel Deaconess Hospital – Needham (Needham) and BID-P Oncology Cancer Center, historical volume at Beth Israel Lahey Health Primary Care Quincy Square (Primary Care) and Beth Israel Lahey Health Urgent Care Quincy (Urgent Care), historical ED revenues and expenses for the above listed services, historical revenues and expenses at Beth Israel Deaconess Healthcare - Chestnut Hill (Chestnut Hill), Beth Israel Lahey Health, Inc. and Affiliates audited consolidated financial statements (FY2022 and FY2023), lease agreements, and project costs. The CPA assessed the reasonableness²⁹ of assumptions used in the preparation and feasibility³⁰ of the projections with regards to the Proposed Project.

Revenues

Cordage Park Satellite: The Infusion clinic is estimated to increase 13% to 15% annually in total patient visits from FY2028 through FY2030 and leveling off at an approximate 1% growth in 2031 when the clinic will operate at full efficiency. In hematology-oncology, it is anticipated that, with the addition of three physicians and one nurse practitioner over the five-year projection, that patients seen will increase between 10% and 13% annually. The CPA Report states that projected revenue for both infusions and hematology-oncology is consistent with historical reimbursement rates.

Quincy Satellite: Using historical volume levels from existing BILH locations to estimate

²⁸ “Historical” refers to FY2022 and FY2023.

²⁹ Reasonableness is defined within the context of this report as supportable and proper, given the underlying information.

³⁰ 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.

patient volume capacity across the multispecialty services, the Quincy Satellite location is projected to operate at 48% of projected volume capacity in FY2027. From FY2028 through FY2031, volume is anticipated to rise from 67% to 100% of projected volume capacity. Net revenue is based on the average of Commercial (44%), Medicare (40%), and Medicaid/other (16%) reimbursement rates, which is based on historical reimbursement rates for existing BILH locations.

Both Satellites are predicted to increase net patient revenue in the five-year projections. The CPA Report states that the revenue projected by the Applicant is a reasonable estimation based primarily upon the historical patient volume.

Operating Expenses

The CPA analyzed Salaries and Benefits, Supplies, Professional Fees, Rent, Depreciation, and Other Operating Expenses for reasonableness and feasibility as related to the Proposed Project.

Cordage Park Satellite

Salaries and Benefits: Salaries were based on an estimate of 71 full time employees (FTE) and Benefits were calculated as 22% percent of salaries using historical data (based on FY2022 BID-P fringe benefits). Total FTEs are projected to increase by 8 annually through FY2031 to support an increase in volume. Projections assumed a 2% cost of living adjustment every year. Projected salaries and wages are based on historical average salaries for BID-Plymouth for FY2022.

Supplies: Supplies include the cost of drugs and other medical supplies. Drug costs are estimated at approximately 15% of gross revenue from FY2027 through FY2031. The projection is based on historical drug costs of approximately 15% of gross revenue for FY2022 and FY2023 for Burlington and Peabody.

Professional Fees: Professional fees in FY2027 include 7.5 FTEs for physicians, plus additional administrative costs to operate the hematology-oncology clinic. Management projects one incremental physician to be added in FY2029 and FY2031. A 7% cost of living adjustment is predicted annually for the period of the projections. Projected professional fee expenses are based on historical physicians and administrative costs for FY2022 at BID-Plymouth.

Rent: The hematology-oncology and infusion clinics will operate in an approximately 30,000 square foot leased facility. The base rent is subject to annual increases over the prior year's rent based on the consumer price index but in no event shall base rent increase more than 5% annually. Projections assume a 4% increase annually from FY2028 through FY2031.

Depreciation: Project costs will be depreciated over 15 years, beginning in FY2027.

Other Operating Expenses: Other operating expenses include costs for inventory, small equipment, maintenance and other contingency costs. Other operating expenses are estimated at approximately 10% of total expenses, excluding depreciation. Projected operating expenses are based on historical information FY2022 and FY2023 for Burlington and Peabody.

Quincy Satellite

Salaries and Benefits: Salaries were based on an estimate of 147 full time employees (FTE) and Benefits were calculated as 25% percent of salaries using historical data (based on FY2022 and FY2023 fringe benefits at Primary Care and Urgent Care). There is no anticipated increase in FTEs as the Satellite increases patient volume. Projections assumed a 3% cost of living adjustment every year. Projected salaries and wages are based on historical average salaries at existing BID locations for FY2022.

Supplies: Supplies expense include costs associated with the treatment of patients. Pharmacy costs, which are related to infusion services, make up 95% of total supplies expenses annually. The average pharmacy cost per encounter is expected to increase approximately 3% annually from FY2028 to FY2031. The number of pharmacy encounters estimated to increase 40% in FY2028, 38% in FY2029, and leveling off at 3% increases for FY2030 and FY2031. The average Projected pharmacy costs are based on average historical cost per encounter in FY2022 for Lahey Hospital & Medical Center and Lahey Medical Center, Peabody.

Rent/ Lease: Based on the provided lease agreement, base rent anticipates increases of 2% annually for projection years. The City of Quincy has granted a 40-year real estate tax exemption for medical use of the building. The existing operations at Beth Israel Lahey Health Primary Care Quincy Square (“Quincy Square”) will relocate to the new Quincy Satellite in FY2027. The new Quincy Satellite will assume the annual lease payments Quincy Square until lease termination in the year ending September 30, 2029. There is no early termination option included in the lease.

Depreciation: Total building acquisition and architectural costs, excluding the landlord’s turnkey contribution, will be depreciated over 20 years, beginning in FY 2027. Total construction costs and fixed medical equipment, including a 5% community health initiative fee and a 2% filing fee to the Commonwealth of Massachusetts based on the total project costs, will be depreciated over 7 years, beginning in FY2027.

Interest Expenses: Interest expenses are related to fit out costs, which will be financed over 20 years with interest payable at the FHLB Boston Five Year Regular Classic Advance Rate plus 350 basis points, which is estimated at 7.74%.

Other Operating Expenses: Utilities, repairs, and maintenance are expected to increase at an annual rate of 3% over the course of the projection period.

For both Satellites, the CPA concludes that the total expenses projected are a reasonable estimation.

Cash Flows

The CPA reviewed the cash flow for the project, noting that fit-out costs for the Quincy Satellite will be financed over 20 years with an interest rate of 7.74%. Of the total capital expenditures for the Project approximately 36% will be funded by the landlord of the Quincy lease as part of the fit out, and the remaining costs of approximately will be funded by available capital funds of the Applicant. The CPA Report stated that the capital needs and ongoing operating costs required for the relocation and expansion of the hematology-oncology and infusion clinics currently located at Beth Israel Deaconess Hospital – Plymouth, Inc. and the development of a new multispecialty ambulatory center are not likely to result in a scenario where there is negative cash flow over the five-year projected period. The Applicant has the resources to fund the capital needs and ongoing operating costs of the Satellites.

As a result of its analysis, the CPA concluded the following:

“We determined that the projections were not likely to result in insufficient funds available for ongoing operating costs necessary to support the Project. Based upon our review of the projections and relevant supporting documentation, we determined the relocation and expansion of the hematology-oncology and infusion clinics currently located at Beth Israel Deaconess Hospital – Plymouth, Inc. and the development of a new multispecialty ambulatory center is financially feasible and within the financial capability of the Applicant.”

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.

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 must provide 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).

The Applicant considered and rejected two alternatives to the Proposed Project:

Alternative Option 1: Two Separate Sites in Quincy

The Applicant considered opening two separate sites in Quincy. Four potential locations in North and South Quincy were considered. These alternative locations presented a variety of barriers including insufficient parking, poor access to public transportation, and limited space to serve the projected Patient Panel. This alternative does not provide the opportunity for the Applicant to consolidate its Quincy Square services into the new facility, resulting in duplicative overhead expenses from operating two separate sites in Quincy. The capital expense would be significantly higher because the Proposed Project is benefiting from the City of Quincy financing the build out of the adjacent parking garage to the Applicant's specifications, whereas the alternative sites require expansion of existing parking facilities to meet the Applicant's specifications.

Alternative Option 2: Expand the Hematology-Oncology and Infusion Clinics At BID Plymouth

Expanding the Hematology-Oncology and Infusion Clinics at BID Plymouth poses a challenge due to limited space availability at the hospital. Relocating the clinic is expected to open on-campus space for a needed expansion of the hospital's Emergency Department. The Applicant considered moving the same services into the same size footprint within a larger on-campus Medical Office Building (MOB). However, this alternative would have extended the timeline for project completion by at least an additional twelve months. Pushing out the timeline of the Emergency Department expansion, as well as the hematology-oncology and infusion clinics expansions would have resulted in many more years of insufficient emergency services, and hematology-oncology and infusion services for cancer patients. Constructing an on-campus MOB would be more costly than renovating an existing facility, because under the Proposed Project, this cost has been expended to finance the core and shell. The capital expense for this alternative would be approximately 30% to 40% higher than the proposed Cordage Park Satellite due to the need to construct an entirely new facility with core, shell and fit out, as opposed to the Proposed Project which will only require capital for fit out.

Alternative Option 3: License the Satellites under the community hospitals BID Plymouth or BID Milton

The Applicant considered the option of licensing the Satellites as HOPD's connected to their regional community hospitals BID Plymouth and BID Milton. The Applicant determined that the cost structure of the Cordage Park Satellite is expected to be significantly lower under BIDMC operations due to lower pharmaceutical expenses. The Applicant also notes that under BIDMC licensure, patients being cared for at the Cordage Park Satellite will have access to a greater number and variety of clinical offerings than BID Plymouth would be able to access on its own as an independent, community cancer center. The Applicant states that BID Milton does not have the provider resources nor operational structure to support the development of the Quincy Satellite, which is anticipated to add significant health services capacity in a region that is forecasted to have an increase in population growth and unmet healthcare demand in a number of areas. The Applicant explains that BID Milton does not have the experience nor bandwidth necessary to maintain and operate large ambulatory practices in cancer, infusion, cardiology and obstetrics & gynecology. Most of the subspecialty providers who currently

practice at BID Milton are from BIDMC. Due to these factors, the Applicant determined that clinical and operational oversight from BIDMC was the more effective manner to address both Patient Panel needs and cost effectiveness.

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 and additional analysis, staff finds the Applicant has reasonably met the standards of Factor 5, with the addition of Condition 3.

Factor 6: Fulfillment of DPH Community-based Health Initiatives

Summary, relevant background and context for this application: DPH and the Applicant agreed that BIDMC will carry out local CHIs in the satellite communities of Quincy and Plymouth. The Applicant will also contribute to the Statewide Community Health and Healthy Aging Fund. To fulfill Factor 6 requirements, the Applicant submitted required CHI forms for both BID-Plymouth (BIDP) and BID-Milton (BIDM) since Quincy is within BIDM's service area. The Applicant provided a CHI Narrative, Self-Assessment, 2022 Community Health Needs Assessments (CHNA) and 2023-2025 Implementation Strategies (IS), Partner Assessments and a comprehensive Community Engagement Plan. DPH also agreed that the Applicant can utilize their community engagement processes for BIDP's and BIDM's 2025 CHNA to simultaneously fulfill community engagement requirements for CHI project implementation. The Applicant will work with their community-specific Community Benefits Advisory Committees (CBAC) to select CHI health priorities and approve implementation strategies. DPH staff have determined that if the Applicant agrees to address community conditions and root causes while engaging in ongoing work with their CBACs, the CHI investment will align appropriately with the Health Priorities Guideline.

BID-Plymouth's 2022 CHNA assessed the communities of Duxbury, Kingston, Carver and Plymouth. **BID-Milton's 2022 CHNA** assessed the communities of Quincy, Milton and Randolph. Collectively, these cities and towns reflect diverse communities in terms of demographics (e.g., race, ethnicity, and age), socioeconomic (e.g., income, education, employment) and geography (e.g., suburban and semi-rural), which influences community needs. Using a health equity framework, both CHNAs focused on better understanding the needs of underserved communities, including individuals who speak a language other than English, those who are in substance use recovery and those who experience barriers and disparities due to their race, ethnicity, gender identity, age, disability status or other personal characteristics. With a focus on community engagement, the CHNAs analyzed primary and secondary quantitative and qualitative data capturing key demographics and social determinants of health. This process included community listening sessions, a community health survey, focus groups and key informant interviews.

Guided by the CHNA findings, BIDP and BIDM developed 2023-2025 Implementation Strategies (IS). Both IS focus on populations of young people, low resourced populations, older adults,

individuals with disabilities and racially, ethnically and linguistically diverse populations. Table X presents the community-specific and shared health priorities of Plymouth and Milton’s 2022-2025 CHNA/IS.

Table 12: Overview of CHNA/IS Health Priorities for BID-Plymouth & BID-Milton

Plymouth-Specific	Shared	Milton-Specific
<ul style="list-style-type: none"> • Workforce Shortages • Digital Divide • Substance Use Stigma 	<ul style="list-style-type: none"> • Housing • Food Insecurity • Transportation • Racism & Discrimination • Cost & Insurance barriers • Mental health Needs & Stigma • Diversifying Provider Workforce • Culturally Responsive Health/Community Services • Treatment Programs for Co-occurring Substance Use/Mental Health Needs • Language Access • Navigating Healthcare System 	<ul style="list-style-type: none"> • Economic Insecurity • Navigating SDOH Resources & Barriers • Building Workforce Capacity • Sharing Information/Resources • Targeted Outreach & Engagement in DEI Issues • Lack of DEI Education • Diversifying Leadership • Community Engagement & Prevention • Caregiver support

Using the existing CHNA/IS and the upcoming 2025 CHNA findings, the Applicant will engage its Milton and Plymouth CBACs to select CHI health priorities and identify implementation strategies for the funds associated with this proposed project.

The Self-Assessment and Community Engagement Plan provided a summary of comprehensive community engagement processes and socio-demographic information, data and highlights related to topics and themes of community needs related to BIDP and BIDM’s existing CHNA/IS and upcoming 2025 CHNA. Through primary data collection such as community listening sessions, a community health survey, focus groups, key informant interviews and data analysis, the Applicant and participating community partners identified the key needs outlined in the CHNA/IS.

Partner Assessments (formally known as Stakeholder Assessments) submitted from Plymouth’s and Milton’s CBACs provided information on the individuals’ engagement levels (e.g. their personal participation and role) and their analysis of how the Applicant engaged the community

in community health improvement planning processes. The information provided in these forms was largely consistent with the self-assessment conducted by the Applicant.

The CHI Narrative provided background and overview information for the CHI processes, noting that the total local CHI contribution will be split between BIDP and BIDM. The Applicant provided a supplemental narrative that detailed how the contribution percentages will coincide with the total capital expenditure amount for each project. This means 41.5% of the local CHI funds will go to BIDP and the remaining 58.5% will go to BIDM. The CHI narrative also included the anticipated timeline for CHI activities, advisory duties for both Plymouth and Milton's CBACs, and planned use of funding for evaluation and administrative activities.

For a Tier 3 CHI project such as this one, the Applicant may retain up to 2% of the total CHI amount for administrative costs. The Applicant plans to also split the administrative funds between BIDP and BIDM and use the administrative dollars to address community engagement barriers (e.g., childcare), develop the request for proposals (RFP), advertise grant opportunities, provide translation and interpretation, and other needs. The timeline, multi-year funding RFP processes, and use of evaluation and administrative funds are all appropriate and in line with CHI planning guidelines.

Analysis

As a result of information provided by the Applicant and additional analysis, staff finds that with the conditions outlined below, and the ongoing communication on items for improvement outlined above, the Applicant will have demonstrated that the Proposed Project has met Factor 6.

Overall Findings and Recommendations

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

Other Conditions to the DoN

1. Of the total required CHI contribution of \$5,850,303.50
 - a. \$1,433,324.36 will be directed to the CHI Statewide Initiative.
 - b. \$3,869,975.76 will be dedicated to local approaches to the DoN Health Priorities.
 - c. \$117,006.07 will be designated as the administrative fee.
2. To comply with the Holder's obligation to contribute to the CHI Statewide Initiative, the Holder must submit a check for \$1,433,324.36 to Health Resources in Action (the fiscal agent for the CHI Statewide Initiative) within 30 days from the date of the Notice of Approval.
 - a. Payments should be made out to:
Health Resources in Action, Inc. (HRiA)

2 Boylston Street, 4th Floor
Boston, MA 02116 Attn: MACHHAF c/o Bora Toro
DoN project #: BILH-24080714-HE

- b. 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.

3. The Department, working with the Applicant, shall calculate for each year of the Reporting Period, the Holder's Cost Per Patient based on: Total Net Patient Revenue and Unit of Service, adjusted for patient volume, acuity, payer mix and service mix. Beginning with the second full fiscal year during the reporting period, the Department will compare the percentage growth, if any, in Cost Per Patient year over year (the "Cost Per Patient Growth Percentage").

If the Department determines the Holder's Cost Per Patient Growth Percentage has materially increased year-over-year, the Holder will be afforded an opportunity to justify such material increases. 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

Outcome Measures

Below is a list of outcome measures to assess the impact of the Proposed Project. 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 to the program a baseline upon implementation of each project component, along with updated projections, which the program will use for comparison with the annual data submitted. Reporting will include a description of numerators and denominators.

1. Provide the **Average New Patient Appointment Wait Time** for the Cordage Park Satellite, using the FY2023 average 50 day wait time for a new patient appointment at the Hematology-Oncology Clinic as a baseline.
2. **Patient Satisfaction:** Patients that are satisfied with their care are more likely to seek additional treatment when necessary.

- a. **Measure:** Patient satisfaction scores will be used to determine the impact of the Proposed Project on patient experience at both Cordage Park and Quincy Satellites.

Numerator = Number of top scores, for overall visit rating, such as "likely to recommend" or "highly satisfied."

Denominator = Total number of survey respondents

Numerator = Number of top scores for shared decision making with the clinician

Denominator = Total number of survey respondents

- b. **Projections:** As the Proposed Project is to establish two new Satellites, the Applicant will provide baseline measures for Cordage Park and Quincy and three years of projections following the first fiscal year of operation for each Satellite.
 - c. **Monitoring:** Each Satellite's Administrator or their designee will review survey scores monthly and report quarterly to the governing board of the Applicant.
3. **Blood Pressure Control:** Patients with a diagnosis of high blood pressure and/or diabetes are at a higher risk of coronary artery disease if their blood pressure is not controlled.

- a. **Measure:** Blood Pressure Control will be used to measure the Proposed Project's impact on patient outcomes at the Quincy Satellite.

Numerator = Number of risk patients with high blood pressure and/or diabetes whose blood pressure is within the control range

Denominator = -Number of risk patients with high blood pressure and/or diabetes

- b. **Projections:** As the Proposed Project is to establish two new Satellites, the Applicant will provide baseline measures and three years of projections following the first fiscal year of operation.
- c. **Monitoring:** Each Satellite's Administrator or their designee will review patient outcomes monthly and report quarterly to the governing board of the Applicant.

4. A1c Control and Compliance: Patients with diabetes must control their blood sugar levels to improve their health outcome.

- a. **Measure:** A1c Control and Compliance will be used to measure the Proposed Project's impact on patient outcomes at the Quincy Satellite.

Numerator = Number of risk patients with a diagnosis of diabetes whose A1c levels are within target range

Denominator = Number of risk patients with a diagnosis of diabetes

- b. **Projections:** As the Proposed Project is to establish two new Facilities, the Applicant will provide baseline measures and three years of projections following the first fiscal year of operation.
- c. **Monitoring:** Each Satellite's Administrator or their designee will review patient outcomes monthly and report quarterly to the governing board of the Applicant.

Appendix II

BILH System-Wide Patient Panel Demographics, FY2023

	BILH Overall Patient Panel
Total Unique Patients	1,398,921
Gender	
Female	58.6%
Male	41.0%

Other ³¹	0.5%
Total	100.0%
Age	
0 to 17	7.0%
18 to 25	12.1%
26 to 45	30.2%
46 to 64	18.3%
65 and Older	32.4%
Total	100.0%
Race	
White	75.6%
Black or African American	5.6%
American Indian or Alaska Native	0.1%
Asian	6.8%
Native Hawaiian or Other Pacific Islander	0.1%
Other ³²	4.8%
Unknown	5.6%
Patient Declined	1.4%
Total	100.0%
Ethnicity	
Hispanic or Latino	3.8%
Not Hispanic or Latino	88.8%
Other	2.2%
Unknown	4.8%
Patient Declined	0.4%
Total	100.0%
Payer Mix	
Commercial	50.5%
Medicaid	16.1%
Medicare	30.0%
Other ³³	3.3%
Unknown	0.1%
Total	100.0%

³¹ Includes genders other than male/female, as well as patients for whom a gender is not specified, and whose gender varies across visits over the time period.

³² "Other" is a choice for patients to select if they do not feel that their race/ethnicity is reflected in the list of choices.

³³ Includes self-pay, health safety net, and liability coverage other than worker's compensation for an injury event.

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