**Boston Outpatient Surgical Suites, LLC**

**DoN Application # BOSS-22051213-AS**

Application for Determination of Need

for Transfer of Site, Substantial Capital Expenditure and Substantial Change in Service

November 21, 2023

**NARRATIVE**

# Additional narrative related to sections 1, 2, 8 and 13 (Factors 1, 2, 4, 5, 6) of the Application Form.

1. **About the Applicant**

Boston Out-Patient Surgical Suites, LLC (the “Applicant”), is a for-profit Tennessee limited liability company that owns and operates an ambulatory surgery center, currently located at 840 Winter Street, Waltham, MA 02451. The Applicant has been performing same day surgery (orthopedic, spine, podiatry, general surgery) and pain management procedures since 2004 at its current site and has been licensed by the Massachusetts Department of Public Health since 2009. Current ownership consists of AmSurg Holdings, LLC (“AmSurg”), which owns 51% of the Applicant, Atrius Health (“Atrius”), which owns 10% of the Applicant, BOSS Holdings, LLC (“Holdings”), which owns 38% of the Applicant, and Dr. Brian McKeon, who owns the remaining 1% of the Applicant. The Applicant anticipates that in connection with the commencement of operations of the new ambulatory surgery center, Holdings or its affiliate would acquire Atrius’s 10% ownership interest in the Applicant and Holdings or its affiliate would acquire a 26% ownership interest in Applicant from AmSurg, resulting in Holdings and its affiliate owning a 75% ownership interest in the Applicant and AmSurg owning a 25% interest. The aggregate shift in ownership interests contemplated will total 36%.

1. **Project Description**

2.1 Provide a Brief Description of the Scope of the Project

The Applicant operates a multi-specialty ambulatory surgery center, currently located at 840 Winter Street, Waltham, MA, 02451. Applicant is filing this application for a Notice of Determination of Need (“DoN”) with the Massachusetts Department of Public Health (the “Department”) for a transfer of site, substantial capital expenditure and substantial change in service. The Applicant proposes to relocate its existing surgery center approximately 3 miles from the current location to leased space at 71 Border Rd, Waltham, MA 02451 . The proposed new center will be in a newly constructed state of the art facility, will encompass approximately 38,453 gross square feet of space, and will be able to accommodate the Applicant’s proposed expansion to eight operating rooms, thirty pre/post procedure beds and adequate administrative, sterilization and storage capacity to support the proposed operating room capacity (“Proposed Project” or “Project”).

The building where the Applicant is currently located, at 840 Winter Street, has recently been sold and the Applicant has been notified that its lease will expire, without renewal rights, in May 2025. The impending expiration of the lease for the current location necessitates action to ensure that the current and future ambulatory surgery care needs of the local patient population will continue to be met.

The Project, with its expanded capacity, in addition to addressing current and projected increased patient demand, (i) will increase efficiency by accommodating additional physician block time[[1]](#footnote-1), (ii) will facilitate the Applicant keeping pace with the current industry trends toward more complex surgeries performed in an ambulatory setting, which require longer operating room (OR) time per procedure, and (iii) will accommodate potentially longer post-operative recovery time. The specialized equipment needed to perform these procedures and meet patient demand require greater OR size.

The relocation and expansion of Applicant’s ambulatory surgery center in Waltham will provide patients with improved access to convenient, state-of-the-art outpatient surgical services. The location of the Project, within three miles of the existing Applicant location, is superior in its accessibility and convenience for patients and employees as demonstrated in the following section 8. Transfer of Site: Primary Service Area Towns Served and Patient Access.

1. **Transfer of Site**

8.4 Compare the scope of the project for each element below.

Primary Service Area Towns Served:

76% of the Applicant's patients reside in 5 Massachusetts counties: Middlesex (35%), Norfolk (15%), Suffolk (10%), Plymouth (9%) and Essex (7%) – Applicant’s Primary Service Area. 17% of the Applicant's patients travel from other counties in Massachusetts and 7% of its patients travel from other states, including outside of New England. 20% of the Applicant's patients live in the following communities: Cambridge (4%), Waltham (2%), Somerville (2%), Boston (2%), Medford (2%), Watertown (2%), Arlington (2%), West Roxbury (2%), Quincy (1%), Brockton (1%), and Natick (1%) based on 2023 patient data.

Because the Applicant's proposed site is located 3 miles from its current site, the Applicant does not anticipate the Transfer of Site to result in any changes to its current Primary Service Area.

Patient Population (Demographics):

Please see the Factor 1 Narrative F1.a.1. for data detailing patient population demographics.

Patient Access:

The Applicant's proposed site in Waltham will be 3 miles from its current site and easily accessible from major highways including Routes 95, 90, 2 and 3. The Proposed Project will be easily accessible from the large enclosed free parking lot, and the waiting room will be comfortable for patients and their friends and family. The facility will feature a large, comfortable waiting room with workspaces, semi-private areas, and a café for patient family members to enjoy while their loved ones undergo their surgical procedure.

Patient wait times and access to timely outpatient surgeries will be improved with the Applicant's Transfer of Site and expansion of service from 3 operating rooms and one procedure room at its current site to 8 operating rooms at its future site.

Impact on Price:

The Applicant does not anticipate an adverse impact on price as a result of its Transfer of Site. The Applicant will continue to be reimbursed based on its existing payor contracts and existing free-standing ASC fee schedules.

Total Medical Expenditure:

The Applicant does not anticipate an adverse impact on medical expenditures as a result of its Transfer of Site. As noted above, the Applicant will continue to be reimbursed based on its existing payor contracts and existing free-standing ASC fee schedules. As a free-standing ASC, the Applicant is a lower cost option for patients than hospital outpatient surgery departments (HOPDs); therefore, the Applicant anticipates that Total Medical Expenditure for patients will decrease as more surgeries shift from HOPDs to free-standing ASCs.

Provider Costs:

The Applicant does not anticipate an adverse impact on provider costs as a result of its Transfer of Site. The payor contracts for the providers performing surgical procedures at the Applicant will not change as a result of the Applicant’s Transfer of Site.

Description:

The Applicant’s current free-standing ASC site encompasses approximately 9,300 gross square feet including: 3 operating rooms, 1 procedure room, 17 pre/post procedure beds, space for administrative, sterilization, storage and patient waiting area. The Applicant’s proposed free-standing ASC site will be in a newly constructed state of the art facility, encompassing approximately 38,453 gross square feet and will be able to accommodate the Applicant’s proposed expansion to eight operating rooms , thirty pre/post procedure beds and adequate administrative, sterilization and storage capacity to support the proposed operating room capacity.

**13. The Factors:**

# FACTOR 1: Applicant Patient Panel Need, Public Health Values and Operational Objectives

## **F1.a.i Patient Panel**

***Describe your existing Patient Panel, including incidence or prevalence of disease or behavioral risk factors, acuity mix, noted health disparities, geographic breakdown expressed in zip codes or other appropriate measure, demographics including age, gender and sexual identity, race, ethnicity, socioeconomic status, and other priority populations relevant to the Applicant’s existing patient panel and payer mix.***

The Applicant has been performing same day surgery (orthopedic, spine, podiatry, general surgery) and pain management procedures since 2004 at its current site and became licensed by the Massachusetts Department of Public Health in 2009. Same day surgeries require more care and complexity than offered in a typical doctor’s office, but do not require an overnight hospital stay.

The current patient panel data used in this application is derived from patients who have received care at the Applicant’s current facility from 2019 through June 2023. In addition to patient panel data, the Applicant relies upon demographic and service line specific demand projections, which support the need for ambulatory surgical services in the Applicant’s Primary Service Area (“PSA”). The Applicant defines its Primary Service Area as the 5 Massachusetts counties in which 76% of the Applicant’s patients reside: Middlesex, Norfolk, Suffolk, Plymouth, and Essex counties.

*Patient Panel Information*

Historical Patient Volume. Surgeons on the medical staff at Applicant’s facility had remarkably high surgical volumes and were consistently productive until the onset of the COVID-19 pandemic in 2020. Since that time, patient utilization has been recovering and increasing steadily with orthopedic surgical cases increasing 15% from 2020 to 2023.

The Applicant is currently experiencing pent up demand and has received numerous requests from surgeons affiliated with Holdings for increased access to surgical time, as well as interest from new Surgeons and a Pain Specialist requesting privileges when more block time becomes available. The Applicant is currently not able to meet the increased patient demand because of capacity constraints, resulting in longer wait times for patients to schedule their surgeries and pain procedures. Longer wait times negatively impact patient satisfaction as well as patients’ quality of life, because many patients endure pain as they wait for their surgeries to treat their orthopedic injuries.

Patient Gender and Age. In 2023, approximately 42% and 58% of the Applicant’s patients are female and male, respectively.

| **Patient Gender** | **2019**  **#**  **Patients** | **2019**  **%**  **Patients** | **2020**  **#**  **Patients** | **2020**  **%**  **Patients** | **2021**  **#**  **Patients** | **2021**  **%**  **Patients** | **2022**  **#**  **Patients** | **2022**  **%**  **Patients** | **2023 Jan-June annualized**  **# Patients** | **2023 Jan-June annualized**  **% Patients** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Female | 1,550 | 43% | 1,361 | 42% | 1,147 | 42% | 1,302 | 40% | 1,456 | 42% |
| Male | 2,068 | 57% | 1,860 | 58% | 1,571 | 58% | 1,937 | 60% | 1,976 | 58% |
| Unspecified | 0 | 0% | 0 | 0% | 1 | 0% | 0 | 0% | 0 | 0% |
| **Grand Total** | **3,618** | **100%** | **3,221** | **100%** | **2,719** | **100%** | **3,239** | **100%** | **3,432** | **100%** |

In 2023, nearly 70% of the Applicant’s patients were aged 45+, reflecting the anticipated growth in procedures from the 45-64 population. This population will require more outpatient procedures as they age[[2]](#footnote-2). Of the remaining patients, approximately 30% were aged 18-44 and 1% were <18 years old.

| **Patient Age** | **2019**  **#**  **Patients** | **2019**  **%**  **Patients** | **2020**  **#**  **Patients** | **2020**  **%**  **Patients** | **2021**  **#**  **Patients** | **2021**  **%**  **Patients** | **2022**  **#**  **Patients** | **2022**  **%**  **Patients** | **2023 Jan-June annualized**  **# Patients** | **2023 Jan-June annualized**  **% Patients** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| < 18 | 30 | 1% | 26 | 1% | 35 | 1% | 44 | 1% | 46 | 1% |
| 18-44 | 941 | 26% | 800 | 25% | 837 | 31% | 963 | 30% | 1,032 | 30% |
| 45-64 | 1,757 | 49% | 1,603 | 50% | 1,290 | 47% | 1,496 | 46% | 1,618 | 47% |
| 65+ | 890 | 25% | 792 | 25% | 557 | 20% | 736 | 23% | 736 | 21% |
| **Grand Total** | **3,618** | **100%** | **3,221** | **100%** | **2,719** | **100%** | **3,239** | **100%** | **3,432** | **100%** |

Patient Origin. The Applicant is located in Waltham, MA, within Middlesex County, and 35% of the Applicant’s 2023 patients reside in Middlesex County. 20% of the Applicant's patients live in the following communities: Cambridge (4%), Waltham (2%), Somerville (2%), Boston (2%), Medford (2%), Watertown (2%), Arlington (2%), West Roxbury (2%), Quincy (1%), Brockton (1%), and Natick (1%) based on 2023 patient data. Although the Applicant defines its Primary Service Area as the 5 Massachusetts counties in which 76% of the Applicant’s patients reside, 17% of the Applicant's patients travel from other counties in Massachusetts and 7% of its patients travel from other states, including outside of New England.

| **Patient Origin by County** | **2023 Jan-June annualized**  **# Patients** | **2023 Jan-June annualized**  **% Patients** |
| --- | --- | --- |
| Middlesex | 1,214 | 35% |
| Norfolk | 530 | 15% |
| Suffolk | 334 | 10% |
| Plymouth | 302 | 9% |
| Essex | 242 | 7% |
| Other MA counties | 578 | 17% |
| Outside MA | 232 | 7% |
| **Grand Total** | **3,432** | **100%** |

| **Patient Origin by Town (top 20 %)** | **2023 Jan-June annualized**  **% Patients** |
| --- | --- |
| Cambridge | 4% |
| Waltham | 2% |
| Somerville | 2% |
| Boston | 2% |
| Medford | 2% |
| Watertown | 2% |
| Arlington | 2% |
| West Roxbury | 2% |
| Quincy | 1% |
| Brockton | 1% |
| Natick | 1% |

Surgeons performing procedures at Applicant’s facility draw patients from across Eastern Massachusetts (and throughout New England), which is reflective of the strong reputation of the Applicant’s medical staff in the industry, as well as their established relationships with surgery practices in Plymouth, Braintree, Dedham, Newton, Waltham, Boston, Cambridge, Somerville, Burlington, Peabody, and other communities. Notably, the surgical practices in these areas are exhibiting capacity and OR block time constraints which negatively impact patient access with longer wait times.

The Applicant's current site, similar to its future site in Waltham is easily accessible from major highways including Routes 95, 90, 2 and 3 and will be proximate to most of the surgeons’ patient populations.

Payer Mix. In the first 6 months of 2023, 74% of the Applicant's cases were paid by a commercial payer, 12% by Medicare, 13% by other insurance, and 1% by Medicaid, and self-pay. As noted above, it is anticipated that the Applicant's Medicare payer mix will increase gradually as patients in the 45-64 age cohort transition into Medicare coverage. The Applicant also anticipates an increase in Medicare and Medicaid payer mix with the addition of a pain management specialist who will perform procedures at the Proposed Project location upon its opening and when additional block time is available. 35% of the pain management specialist’s current patient panel are covered by government insurances (50% have Medicare, 45% have MassHealth/Medicaid and 5% have Tricare).

| **Insurance type** | **2019**  **# Cases** | **2019**  **% cases** | **2020**  **# Cases** | **2020**  **% cases** | **2021**  **# Cases** | **2021**  **% cases** | **2022**  **# Cases** | **2022**  **% cases** | **2023 Jan-June annualized**  **# Cases** | **2023 Jan-June annualized**  **% Cases** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Commercial | 3,166 | 66.0% | 2,470 | 66.6% | 2,470 | 73.7% | 2,510 | 75.6% | 2,552 | 73.5% |
| Medicare | 886 | 18.5% | 668 | 18.0% | 435 | 13.0% | 392 | 11.8% | 426 | 12.3% |
| VA/Workers Comp/Other/Self Pay | 653 | 13.6% | 486 | 13.1% | 412 | 12.3% | 405 | 12.2% | 474 | 13.7% |
| Medicaid | 89 | 1.9% | 87 | 2.3% | 36 | 1.1% | 14 | 0.4% | 20 | 0.6% |
| **Grand Total** | **4,794** | **100%** | **3,711** | **100%** | **3,353** | **100%** | **3,321** | **100%** | **3,472** | **100%** |

Procedures by Specialty. In the first 6 months of 2023, 94% of the cases were performed by orthopedic surgeons, and primarily involved sports, arthroscopy of the shoulder and knee, and approximately 5% were performed by general surgeons, primarily for hernia repair. Notably, the number of orthopedic surgery procedures has been increasing. The Applicant has experienced a 15% increase during the period 2020 to 2023. This increase is expected to continue in the coming years, driven by the aging population, the incidence and prevalence of underlying health conditions requiring orthopedic procedures, and a shift from hospital outpatient to ambulatory surgery site of service.

| **Specialty** | **2019**  **#**  **Cases** | **2019**  **%**  **Cases** | **2020**  **#**  **Cases** | **2020**  **%**  **Cases** | **2021**  **#**  **Cases** | **2021**  **%**  **Cases** | **2022**  **#**  **Cases** | **2022**  **%**  **Cases** | **2023 Jan-June annualized**  **# Cases** | **2023 Jan-June annualized**  **% Cases** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Orthopedic Surgery | 3,302 | 68.9% | 2,841 | 76.6% | 3,109 | 92.7% | 3,166 | 95.6% | 3,268 | 94.1% |
| General Surgery | 65 | 1.4% | 97 | 2.6% | 94 | 2.8% | 100 | 3.0% | 162 | 4.7% |
| Podiatry | 131 | 2.7% | 83 | 2.2% | 84 | 2.5% | 44 | 1.3% | 42 | 1.2% |
| **Total Surgical Cases** | **3,498** | **73.0%** | **3,021** | **81.4%** | **3,287** | **98.0%** | **3,310** | **100.0%** | **3,472** | **100.0%** |
| Pain Management | 1,296 | 27.0% | 690 | 18.6% | 66 | 2.0% | 0 | 0.0% | 0 | 0.0% |
| **Grand Total** | **4,794** | **100%** | **3,711** | **100%** | **3,353** | **100%** | **3,310** | **100%** | **3,472** | **100%** |

The decline in pain management procedures reflects the departure of a pain management specialist in 2021. As noted above, a new pain management specialist will be providing pain management procedures at the Proposed Project upon its opening. Based on his current patient panel, he anticipates performing over 1,100 pain procedures per year at the Proposed Project, primarily injections for spine, including cervical, thoracic, and lumbar.

Patient Diagnoses. The most prevalent patient diagnoses at the Applicant's current site are related to shoulder arthritis or injuries, followed by knee pain:

* Disorders of cartilage, shoulder
* Shoulder pain
* Impingement syndrome of the shoulder
* Complex tear of medial meniscus
* Rotator cuff sprains, tears, or ruptures
* Pain due to internal orthopedic devices
* Primary osteoarthritis of the shoulder, knee, hip

### **F1.a.ii Need by Patient Panel**

***Provide supporting data to demonstrate the need for the Proposed Project. Such data should demonstrate the disease burden, behavioral risk factors, acuity mix, health disparities, or other objective Patient Panel measures as noted in your response to Question F1.a.i that demonstrates the need that the Proposed Project is attempting to address. If an inequity or disparity is not identified as relating to the Proposed Project, provide information justifying the need. In your description of Need, consider the principles underlying Public Health Value (see instructions) and ensure that Need is addressed in that context as well.***

As noted above, the Applicant's request for DoN approval is based on increasing need of the existing and future patient panel for clinically appropriate surgical services of the kind the Applicant offers in its ambulatory surgery center.

To determine the number of ORs required to serve the projected volume at the Proposed ASC, in addition to actual case volumes currently being performed at other facilities by a number of members of Applicant’s medical staff , the Applicant established average surgical case times for each specialty. The times include surgical case and room turnover times. Surgeries are expected to have a total time of 90 minutes of surgery and a 15-minute OR turnover. Based on these surgical case times, the Applicant projects a sustainable utilization rate of 72% which is considered to be in the optimal utilization rate range[[3]](#footnote-3) by Year 3 of operation.

Ambulatory surgery volumes are projected to increase nationally in the coming years as practice patterns change, patient care technology evolves, and patients and insurers seek greater value and convenience.[[4]](#footnote-4) In fact, E. Munnich and S. Parente found in their study that “…ASCs are a high-quality, lower-cost substitute for hospitals as venues for outpatient surgery. Increased use of ASCs may generate substantial cost savings, helping achieve the Affordable Care Act (ACA’s) goals of reducing the cost and improving the quality of health care delivery.”[[5]](#footnote-5)

Timely access to surgeries is very important to the Applicant's patients given the nature of orthopedic injuries that can be quite painful and negatively impact mobility. The Applicant is currently limited in its capacity to meet current patient panel need because the Applicant is limited to 3 operating rooms at its current site. On average surgeons who perform procedures at Applicant’s surgery center report having 2-3 month wait times to schedule surgeries and joint surgeons have been reporting six month wait times to schedule surgeries at Applicant. The Applicant is currently experiencing an average utilization rate over 90% which is higher than industry standards and limits the ability for the Applicant to schedule surgeries sooner. With the additional 5 operating rooms, most of the surgeons will be able to book their surgeries sooner and the joint surgeons expect to be able to reduce their wait times to two months.

The Applicant has forecasted an increase in patient panel need based on the existing case volume, increasing interest from surgeons to schedule surgeries at Applicant’s facility when additional capacity becomes available, and the following 4 market factors.

1. population growth (particularly among older residents);
2. higher demand due to health conditions including obesity and arthritis;
3. value offered by ambulatory surgery over hospital-based services; and
4. consumer choice.

The Applicant has developed the following 5-year forecast based on patient need:

| **Applicant's ASC Case Volume Forecast** | **Year 1** | **Year 2** | **Year 3** | **Year 4** | **Year 5** |
| --- | --- | --- | --- | --- | --- |
| Existing Cases | 3,472 | 3,611 | 3,755 | 3,906 | 4,062 |
| New: Joint Arthroplasty | 856 | 916 | 980 | 1,049 | 1,122 |
| New: Spine | 320 | 333 | 346 | 353 | 360 |
| New: Orthopedics and Podiatry | 1,774 | 1,845 | 1,919 | 1,957 | 1,996 |
| New: General Surgery | 208 | 216 | 225 | 229 | 234 |
| New: Pain Management | 1,100 | 1,144 | 1,190 | 1,214 | 1,238 |
| **Total New Cases** | **4,258** | **4,454** | **4,660** | **4,802** | **4,950** |
| **Total Forecasted Cases** | **7,730** | **8,065** | **8,415** | **8,707** | **9,012** |

*Forecast assumptions:*

1. Year 1 starting volume is based on 2023 case volume (January-June annualized)

2. Year 1 new cases assume ramp-up of cases from existing surgeons with new block time, new surgeons and pain specialists and market shift in joint arthroplasty and spine cases from HOPD to ASC.

3. The Applicant has applied 2-7% growth by specialty based on aging demographic, increasing health conditions requiring orthopedic intervention, changing care patterns to increase value and consumer choice as noted below.

**Market data supporting 4 market assumptions:**

1. ***Increased demand due to population growth.***

The Communities in the Applicant's PSA are anticipated to experience population growth, leading to organic increase in demand. Much of this projected population increase is expected to be among older adults, who are heavy utilizers of surgical procedures.

*Overall population growth.* The total population in the Applicant’s PSA in 2020 was 4,462,737 persons and is projected to grow 3% (130,554 individuals) by 2025, and 5% (240,889 individuals) by 2030.

Growth is projected to vary by age cohort, with increases in the cohort aged 65+ being the most significant. The population aged 20-44 is projected to remain near its current level through 2020 and 2030. The population aged 45-64 is projected to decline 2% by 2025 and decline 1% by 2030, although a portion of this cohort's population decline is likely due to population aging into the age 65+ cohort. The population aged 65+ is projected to increase 17% by 2025 and 31% by 2030. This means that there will be 127,413 more elderly individuals by 2025, and 238,450 additional elderly individuals, in the PSA, by 2030.

**PSA Population Projections:**

| **2020 Population by County** | **All Ages** | **0-19** | **20-44** | **45-64** | **65+** | **45+** |
| --- | --- | --- | --- | --- | --- | --- |
| Middlesex | 1,613,960 | 349,248 | 561,165 | 433,258 | 270,289 | 703,547 |
| Suffolk | 821,840 | 172,021 | 370,767 | 176,126 | 102,926 | 279,052 |
| Essex | 790,034 | 179,825 | 241,108 | 220,430 | 148,671 | 369,101 |
| Norfolk | 718,394 | 160,465 | 224,631 | 201,802 | 131,496 | 333,298 |
| Plymouth | 518,509 | 118,239 | 147,850 | 148,505 | 103,915 | 252,420 |
| **5 County Total Population** | **4,462,737** | **979,798** | **1,545,521** | **1,180,121** | **757,297** | **1,937,418** |
| 5-yr Projected Change | 130,554 | 3,009 | 20,400 | -20,268 | 127,413 | 107,145 |
| 5-yr % Change | 3% | 0% | 1% | -2% | 17% | 6% |
| 10-yr Projected Change | 240,889 | 387 | 18,555 | -16,503 | 238,450 | 221,947 |
| 10-yr % Change | 5% | 0% | 1% | -1% | 31% | 11% |

*Source:* [*UMass Donahue Institute Massachusetts population projections*](http://www.pep.donahue-institute.org/) *accessed at* [*http://www.pep.donahue-institute.org/*](http://www.pep.donahue-institute.org/)

Population in the communities within ten miles of Waltham is projected to rise, with a significant increase in the older adult population. Communities within 10 miles of Waltham include: Arlington, Bedford, Belmont, Burlington, Cambridge, Concord, Lexington, Lincoln, Medford, Newton, Somerville, Sudbury, Waltham, Watertown, Wayland, Weston, Winchester, and Woburn in Middlesex County, and Brookline, Needham, and Wellesley in Norfolk County.

| **Population and Projected Growth for Towns within 10 miles of Applicant** | **All Ages** | **0-19** | **20-44** | **45-64** | **65+** | **45+** |
| --- | --- | --- | --- | --- | --- | --- |
| 2020 Population | 857,527 | 179,023 | 320,822 | 205,869 | 144,813 | 350,682 |
| 2025 Population | 872,048 | 178,824 | 321,115 | 208,462 | 163,647 | 372,109 |
| 5-Year Projected Growth | 21,521 | -199 | 293 | 2,593 | 18,834 | 21,427 |
| 5-Year Projected Growth % | 3% | 0% | 0% | 1% | 13% | 6% |
| 2030 Population | 892,100 | 173,401 | 323,810 | 216,264 | 178,625 | 394,889 |
| 10-Year Projected Growth | 41,573 | -5,622 | 2,988 | 10,395 | 33,812 | 44,207 |
| 10-Year Projected Growth % | 5% | -3% | 1% | 5% | 23% | 13% |

*Source:* [*UMass Donahue Institute Massachusetts population projections*](http://www.pep.donahue-institute.org/) *accessed at http://www.pep.donahue-institute.org/*

*Demand from an Aging Population.* Approximately half of older adults aged 65+ have at least one surgery[[6]](#footnote-6) and outpatient surgeries constitute 65.9% of total surgeries.[[7]](#footnote-7) Based on this information, an estimated 32% of older adults will have at least one outpatient surgery.

Given these trends, population growth in the PSA could drive an increase of 41,983 additional outpatient surgeries on patients aged 65+ over 5 years and 78,569 additional surgeries over 10 years.

**Projected Increase in Demand for Outpatient Surgery by Older Adults in the PSA, 2020-2030**

| **Increase in Demand for Outpatient Surgery in PSA** | **Increase in 65+ Population** | **% having at least one surgery** | **% of all surgeries which are Outpatient** | **Estimated increase in Outpatient Surgeries on Persons aged 65+** |
| --- | --- | --- | --- | --- |
| 2020-2025 (5-year growth) | 127,413 | 50% | 65.90% | 41,983 |
| 2020-2030 (10-year growth) | 238,450 | 50% | 65.90% | 78,569 |

Industry orthopedic ASC averages suggest high concentrations of shoulder and knee arthroscopy, as a result, it is worth discussing the aging population’s demand for orthopedic procedures in particular. Regarding the shoulder conditions, prevalence of rotator cuff injuries (which condition is often corrected via arthroscopy) increases with age[[8]](#footnote-8), suggesting demand for pain management and procedures to repair rotator cuff tears will increase with growth in the older adult population of Eastern Massachusetts. Additionally, while knee arthroscopies are most prevalent in elderly patients, arthroscopy is becoming more common in middle-aged patients with knee symptoms.[[9]](#footnote-9) This will likely increase the demand for services in coming years.

1. ***Increased demand due to health conditions including obesity and arthritis.***

Rising obesity rates and increasing numbers of people with arthritis will result in higher demand for orthopedic procedures and pain management. Relieving pain will reduce barriers to physical activity, promoting improved health.

*Obesity.* Obesity is a risk factor for many health issues, including musculoskeletal conditions. The number of Americans who have obesity has been increasing for decades. Nationally, 31.9% of adults reported having obesity, including 24.4% of Massachusetts adults.[[10]](#footnote-10) Although the Massachusetts obesity rate is lower than the national rate, the number of residents with obesity is projected to grow.

Within the target counties, the number of obese adults is projected to grow by 4% over five years, including a 17% increase in older adults with obesity.

# Projected Obesity in the PSA - Population by Age

|  | **Age 20+** | **20-24** | **25-34** | **35-44** | **45-54** | **55-64** | **65+** |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Obesity Rates - USA | n/a | 19.50% | 30.90% | 35.50% | 38.10% | 36.30% | 29.30% |
| Obesity Rates - MA | n/a | 12.60% | 21.40% | 28.90% | 26.10% | 29.60% | 24.90% |
| 2020 PSA Population | 3,482,939 | 308,338 | 630,898 | 606,285 | 577,747 | 602,374 | 757,297 |
| 2020 PSA Estimate with Obesity | 867,049 | 39,159 | 135,015 | 175,216 | 150,792 | 178,303 | 188,567 |
| 2025 PSA Population | 3,610,484 | 288,174 | 619,827 | 657,920 | 564,193 | 595,660 | 884,710 |
| 2025 PSA Estimate with Obesity | 903,242 | 36,598 | 132,643 | 190,139 | 147,254 | 176,315 | 220,293 |
| 5-Year Change in Obesity | 36,193 | -2,561 | -2,369 | 14,923 | -3,538 | -1,987 | 31,726 |
| 5-Year % Change in Obesity | 4% | -7% | -2% | 9% | -2% | -1% | 17% |
| 2030 PSA Population | 3,723,441 | 37,272 | 601,266 | 669,331 | 608,314 | 555,304 | 995,747 |
| 2030 PSA Estimate with Obesity | n/a | 37,272 | 128,671 | 193,437 | 158,770 | 164,370 | 247,941 |
| 10-Year Change in Obesity | 240,502 | -1,887 | -6,341 | 18,220 | 7,978 | -13,933 | 59,374 |
| 10-Year % Change in Obesity | 28% | -5% | -5% | 10% | 5% | -8% | 31% |

*SOURCE:* [*UMass Donahue Institute Massachusetts population projections*](http://www.pep.donahue-institute.org/) *accessed at http://www.pep.donahue-institute.org/. Obesity estimates based on age-specific Massachusetts obesity rates from CDC Behavioral Risk Factor Surveillance System applied to population.*

Obesity increases risk of musculoskeletal issues. It contributes to osteoarthritis by increasing pressure on joints, places individuals at greater risk of musculoskeletal injuries including fractures and soft tissue damage during fitness activities and is a contributing factor in chronic overuse disorders of the foot and ankle which cause foot and ankle pain. Obesity also contributes to the risk of rotator cuff tears and the size of tears.[[11]](#footnote-11) The American Academy of Orthopaedic Surgeons estimates that obesity increases the likelihood of an individual needing a knee replacement by a factor of twenty. Patients with a higher BMI may also require greater operative time.[[12]](#footnote-12) Thus, an increase in the number of Eastern Massachusetts residents with obesity is expected to increase demand for many services offered in the proposed ASC and increase the surgical time per case.

*Arthritis.* Arthritis can reduce function, mobility, and the physical activity that contributes to overall good health. Joint pain, including arthritis, is a driver of joint replacement and pain procedures. The number of Eastern Massachusetts residents with arthritis and arthritis-related limitations is projected to grow over the next ten years.

Nearly one-quarter of Americans aged 18 years old or older nationally and 22% in

Massachusetts reported doctor-diagnosed arthritis. An estimated 10% of adults aged

18-64 report a work disability. Back or neck problems and arthritis/rheumatism are leading causes of these disabilities.[[13]](#footnote-13)

Within the PSA, the number of adults with arthritis-related limitation in activities is projected to grow by 13,270 (or 4%) over five years and 25,023 (or 7%) over ten years. Researchers report the rate of increase in arthritis and arthritis-related limitations in activities is growing at a faster rate than previously projected. This rapid growth is attributed in part to factors such as obesity and an aging population.[[14]](#footnote-14)

|  | **Adult**  **Population** | **Doctor-Diagnosed Arthritis - %** | **Doctor-Diagnosed Arthritis - Estimated Persons** | **Arthritis-Related Limitations in Activities: %** | **Arthritis-Related Limitations in**  **Activities: Estimated Persons** |
| --- | --- | --- | --- | --- | --- |
| 2020 PSA Population | 3,482,939 | 23.70% | 825,457 | 43.90% | 362,375 |
| 2025 PSA Population | 3,610,484 | 23.70% | 855,685 | 43.90% | 375,646 |
| 2030 PSA Population | 3,723,441 | 23.70% | 882,456 | 43.90% | 387,398 |
| Change 2020-2025 | 127,545 | - | 30,228 | - | 13,270 |
| 5-year % Change 2020-2025 | 4% | - | 4% | - | 4% |
| Change 2020-2030 | 240,502 | - | 56,999 | - | 25,023 |
| 10-year % Change 2020-2030 | 7% | - | 7% | - | 7% |

*SOURCE: Theis KA, Murphy LB, Guglielmo D, et al. Prevalence of Arthritis and Arthritis-Attributable Activity Limitation - United States, 2016-2018. MMWR Morb Mortal Wkly Rep 2021;70:1401-1407 with population from UMass Donahue Institute.*

Severe joint pain and limited physical activity are common in people with arthritis. Almost half (47%) of people with self-reported severe joint pain are physically inactive, compared to 32% of those with moderate pain and 23% of those with mild or no joint pain. These individuals may also have poor physical and mental health outcomes. For those with arthritis, pain or fear of pain presents a barrier to exercise. Physical activity can reduce the need for non-pharmacologic interventions for joint pain,[[15]](#footnote-15) support weight loss and maintenance, and reduce health risk in adults who are overweight or have obesity.[[16]](#footnote-16)

The number of Medicare beneficiaries utilizing interventional pain services has grown rapidly for more than a decade. Between 2000 and 2013, the rate of Medicare beneficiaries utilizing interventional pain services grew at a rate of 7.5% annually.[[17]](#footnote-17)

1. ***Increased demand due to changing care patterns that increase value for patients and payers.***

Pressure from government and payers seeking greater value, consumers seeking more convenient care with lower out of pocket costs, and emerging technologies which allow procedures to be performed in less resource-intensive settings are resulting in shifts of care from hospitals to community settings, including ASCs.[[18]](#footnote-18)

The shift from a hospital outpatient setting to ASCs will generate significant cost savings to consumers and insurers. Generally, the cost of a procedure at an ASC is far less than in a hospital outpatient department (HOPD), with Medicare providing ASCs 53% of the reimbursement for the same procedure performed in a HOPD.[[19]](#footnote-19)

**Medicare Procedure Payments and Copays for Common Orthopedic Procedures**

| **Common Orthopedic Procedures** | **ASC**  **(Average)**  **Total**  **Payment** | **ASC**  **(Average) Medicare Payment** | **ASC**  **(Average) Patient**  **Copay** | **HOPD (Average) Total**  **Payment** | **HOPD (Average) Medicare Payment** | **HOPD (Average) Patient**  **Copay** | **ASC**  **Copay**  **as % of**  **HOPD**  **Copay** | **ASC**  **Copay $**  **vs. HOPD Copay $** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Arthroscopy, shoulder, surgical; with rotator cuff repair  Code: 29827 | $4,029 | $3,223 | $805 | $7,364 | $5,891 | $1,473 | 55% | -$668 |
| Arthroscopy, knee, surgical; with meniscectomy  Code: 29881 | $1,887 | $1,509 | $376 | $3,389 | $2,711 | $677 | 56% | -$301 |
| Correction, hallux valgus (bunionectomy), with sesamoidectomy, when performed; with double osteotomy, any method.  Code: 28299 | $3,525 | $2,820 | $704 | $6,860 | $5,488 | $1,372 | 51% | -$668 |
| Suture of quadriceps or hamstring muscle rupture; primary  Code: 27385 | $3,552 | $2,842 | $709 | $6,887 | $5,510 | $1,377 | 51% | -$668 |

*SOURCE:* [*Medicare.gov website*](https://www.medicare.gov/procedure-price-lookup/)[*https://www.medicare.gov/procedure-price-lookup/*](https://www.medicare.gov/procedure-price-lookup/) *National average prices are based on 2019 Medicare payments and copayments, and do not include physician fees.*

CMS’s Medicare Procedure Price Lookup shows a significant difference in the average price and copay in an ASC versus a HOPD. Following are Medicare Fee for Service prices and copays for a sample of common orthopedic procedures.

Specific to commercial coverage of orthopedic procedures (which is anticipated to comprise the majority of the Proposed Project’s services), a 2022 study found that costs to commercial insurers were 26% lower for orthopedic surgical procedures at ASCs compared to HOPDs (even when controlling for differences in the patient populations).[[20]](#footnote-20)

There are many reasons for these price differences. ASCs typically provide a limited range of surgeries and procedures, allowing centers to design and staff for improved efficiency for those procedures and greater standardization of care. Ambulatory surgical visits including OR, surgical, and post-operative care, are completed 30% faster in an ASC than in a hospital setting.[[21]](#footnote-21)

Nationally, shifting appropriate procedures to ASCs may reduce healthcare costs by nearly $40 billion, including $5 billion to patients responsible for copayments and deductibles.[[22]](#footnote-22) Medicare and many commercial insurers are increasing coverage for services at ASCs. CMS continues to enable a shift to outpatient for services which can be safely provided in an ASC setting. In 2022, CMS removed CPT codes 22630 (Lumbar spine fusion), 23472 (Reconstruct shoulder joint), and 27702 (Reconstruct ankle joint) from the inpatient only list,[[23]](#footnote-23) meaning that Medicare will now cover these procedures if they are performed in an ASC.

1. ***Increased demand due to patient consumer choice.***

In the increasingly consumer-centric healthcare environment, patients are demanding greater convenience and control over their care.[[24]](#footnote-24) An ASC allows patients the choice to receive high quality surgical services at a lower out of pocket cost without having to travel to and navigate a large and confusing hospital campus.

As noted above, ambulatory surgery is a less costly alternative than outpatient surgery at a hospital-based setting (HOPD) and Medicare copays for procedures performed in an ASC are more than 50% lower on average than copays for similar procedures performed in a hospital-based setting. In addition to the cost savings, consumers are looking for other amenities. The Proposed Project will include amenities such as ample covered structured parking to ensure convenient access to the facility entrance and a spacious lobby with features that are designed to maximize the experience for waiting patients and family members, including dedicated workspaces, free wifi, and relaxing areas for comfort. In addition, there will be a café on site that will be open to family members during their stay.

### **F1.a.iii Competition**

***Provide evidence that the Proposed Project will compete on the basis of price, total medical expenses, provider costs, and other recognized measures of health care spending. When responding to this question, please consider Factor 4, Financial Feasibility and Reasonableness of Costs.***

The Proposed Project will have a positive impact on competition in the Massachusetts healthcare market based on price, total medical expenditures, provider costs and other recognized measures of health care spending. The Proposed Project seeks to offer high-quality surgical care through a lower cost alternative to outpatient surgery performed in an HOPD,[[25]](#footnote-25) which will contribute to Massachusetts’s goals for cost containment.

On average, the Medicare program and its beneficiaries share in more than $2.6 billion in savings each year when surgery is provided in an ASC. Medicare payment rates to ASCs are nearly half that of HOPD rates.[[26]](#footnote-26) Studies provide that if half of the eligible surgical procedures were shifted from HOPDs to ASCs, Medicare would save an additional $2.5 billion annually.[[27]](#footnote-27) Another study estimates the savings to commercial payors to be as high as $55 billion annually.[[28]](#footnote-28) Similarly, Medicaid and other insurers benefit from lower prices for services performed in the ASC setting.[[29]](#footnote-29) Patients also typically pay less with coinsurance for procedures performed in the ASC than in the hospital setting for comparable procedures.[[30]](#footnote-30) Savings are compounded by the differences in procedure length between ASCs and HOPDs. Procedures performed in ASCs take an average 31.8 fewer minutes than those performed in hospital, due to operating efficiencies. This means that ASCs encounter fewer costs.[[31]](#footnote-31)

Based on these statistics, the Applicant anticipates cost savings to patients, payers, and the Commonwealth to be significant as more ambulatory surgeries shift from hospitals to the Applicant and other free-standing ASCs.

## **F1.b.i Public Health Value/Evidence-Based**

***Provide information on the evidence-base for the Proposed Project. That is, how does the Proposed Project address the Need that Applicant has identified.***

The Proposed Project addresses the Need that the Applicant has identified by providing for increased patient access to high quality, lower cost outpatient surgical care in an 8 OR ASC that will replace Applicant’s current 3 OR ASC.

ASCs are more clinically and operationally efficient than traditional hospital outpatient surgery (which results in superior quality).[[32]](#footnote-32) ASCs are able to focus on a narrow subset of surgical procedures and are designed to provide care for specific categories of lower acuity surgical cases and for patients who have lower risk for complications following surgery.[[33]](#footnote-33) Hospital ORs, including those dedicated to outpatient surgery, must be designed with enough space to handle a wide range of procedures in multiple clinical specialties.[[34]](#footnote-34) Hospital-based ORs must be flexible enough to handle the range in services provided, with equipment to handle anything from a routine elective procedure to an emergency room patient in need of immediate invasive surgery. In contrast, ASCs are designed to accommodate specific surgical specialties, with the ORs appropriately sized to meet such needs. ASC ORs are equipped specifically for the types of procedures to be performed, with ORs frequently being used for the same type of surgery on a continuous basis each day.[[35]](#footnote-35)

In the case of the Applicant, the Proposed Project has been designed to be inclusive of all industry standards relating to quality and efficiency. All Operating Rooms will employ the SLD (Single Large Diffuser) AirFrame technology. This modular ceiling system is designed to provide laminar flow, while minimizing turbulent air over the surgical field. This is in part achieved by unique air pressure equalization ports that aid in minimizing particulates which contribute to surgical site infections (SSIs). In addition to efficiency enhancements provided by the Applicant’s EMR, Surgical Information Systems (SIS), the facility will utilize Ospitek, Inc. patient-tracking RFID technology. This new technology will allow for real-time patient tracking, allowing for communication with surgeons, staff, vendor representatives and patients’ family members. This will maximize patient care, allow for review of efficiency metrics, and enhance patient family member satisfaction.

The types of surgical procedures that may be performed in an ASC continue to increase over time, with estimates indicating more than half of outpatient surgeries are now performed in ASCs.[[36]](#footnote-36) Specifically, growth in minimally invasive or non-invasive procedures (which are lower acuity and have fewer complexities than other types of procedures, including fewer surgical cuts or incisions and decreased blood loss) has led to an increase in types of procedures that may be performed on an outpatient basis.[[37]](#footnote-37)

Hospital OR schedules are subject to disruption when an OR is needed for an emergent surgery, leading to delays in all subsequent surgeries scheduled for the day.[[38]](#footnote-38) ASCs only accommodate elective procedures and are not hampered by the schedule disruptions associated with a hospital surgical department.[[39]](#footnote-39) For this and other reasons, patients and staff benefit from the operational efficiencies of ASCs, with procedures performed in ASCs taking 31.8 fewer minutes on average when compared to HOPD procedures (i.e., 25% less time).[[40]](#footnote-40) Patients experience improved procedure scheduling and shorter wait times when an outpatient surgery is performed in an ASC.[[41]](#footnote-41) Recovery times for procedures performed in the ASC are typically shorter. A study of thirty-day outcomes from standalone minimally invasive surgery for Transforaminal Lumbar Interbody Fusion Patients in an ASC vs. Hospital setting concluded that ASC patients had the added benefit of significantly reduced length of stay over their hospital counterparts. Given the equivalency of the 30-day post-operative course for both patient cohorts, a substantial reduction in economic burden is likely for the ASC patients.[[42]](#footnote-42)

On average, ASCs are approximately 48% less expensive than a hospital.[[43]](#footnote-43) In one instance, a comparison of HOPD and ASC costs resulted in the finding that procedures performed in an ASC are 84% of the cost of the same procedure performed in the HOPD.[[44]](#footnote-44) Some of the savings is the result of lower overhead than a hospital surgical service. Fewer nursing, staffing, laboratory, medication, and imaging costs all contribute to lower overhead. Variation associated with the need for a hospital to be able to adapt to provide care within different specialties and for varying case complexities increases overall costs for hospital outpatient surgical departments.[[45]](#footnote-45) Additional ASC savings are derived from the elimination of an overnight patient stay. Overall, the ASC setting is associated with efficiencies that also reduce costs.

Rates of revisit to the hospital one-week post-surgery are lower for ASC patients.[[46]](#footnote-46)  Infection rates for procedures performed in ASCs are half those for the same procedures performed in the hospital setting. Patients experience improved pain levels and less nausea when receiving surgery in an ASC.[[47]](#footnote-47)  There also are better thirty-day outcomes, including reductions in pneumonia, renal failure, and sepsis, as well as no demonstrated increase in morbidity, mortality, or readmission.[[48]](#footnote-48) In fact, major morbidity and mortality following ASC procedures are extremely rare.[[49]](#footnote-49) These are all factors associated with high quality surgical service delivery.

With regard to the Applicant, the Proposed Project plans to become accredited by CMS as well as the Accreditation Association for Ambulatory Health Care (AAAHC), ensuring it is held to the highest standards of quality care. The Applicant will also implement appropriate process improvement initiatives by reviewing quality of care outcomes, identifying best practices, and implementing necessary process changes to ensure high-quality services. Many of these metrics will be benchmarked against the national Ambulatory Surgery Center Association’s clinical and operational benchmarks.

The Applicant will utilize a technology called CareSense, which is a secure, bilingual digital navigation and data collection tool used to facilitate remote monitoring of patients, from pre to post surgery. This technology will enhance patient compliance, improve their satisfaction, as well as provide enhanced patient-physician communication. As discussed elsewhere in this Application, ASC outpatient procedures have been proven to be more efficient than those performed at an HOPD.[[50]](#footnote-50)

Anesthesia needs for these procedures can be met in an ASC due to ongoing developments in the delivery of anesthetics.[[51]](#footnote-51)  There have been many enhancements in anesthesia, including the use of medications that provide enhanced postsurgical local and regional anesthesia. Through the use of these medications and modalities, patients will have a more comfortable surgical experience and recovery.

With easy highway access and free structured parking, the Proposed Project will be convenient for patients as well as their friends and family who provide transportation for the patients who are unable to transport themselves due to post anesthesia limitations. The Proposed Project will be easily accessible from the covered parking structure and the waiting room will be comfortable for patients and their friends and family.

### **F1.b.ii Public Health Value/Outcome-Oriented**

***Describe the impact of the Proposed Project and how the Applicant will assess such impact. Provide projections demonstrating how the Proposed Project will improve health outcomes, quality of life, or health equity. Only measures that can be tracked and reported over time should be utilized.***

The Applicant plans to improve health outcomes and quality of life for patients by expanding access to high quality ambulatory surgical services. Please refer to Factor F1.b.i., for the public health benefits of shifting patients to a freestanding ambulatory surgery center for high-quality, lower cost surgical care.

### Assessing the Impact of the Proposed Project

To assess the impact of the Proposed Project, the Applicant developed the following quality metrics and reporting schematic, as well as goals for quality indicators that will measure patient satisfaction and quality of care. The measures are discussed below:

1. **Patient Satisfaction**: Patient experience will be one of the Applicant's primary concerns. The Applicant believes it is the patient’s right to have a positive experience. The Applicant will review patient satisfaction levels with the ASC’s surgical services.

***Measure***: The Outpatient & Ambulatory Surgery Community Assessment of Healthcare Providers and Systems (OAS-CAHPS) survey will be provided to all eligible patients; through a partnership the Applicant will maintain with Press Ganey. The OAS-CAHPS survey focuses on the following areas:

* Preparation for the surgery or procedure.
* Check-in and pre-operative processes.
* Cleanliness of the surgery facility.
* The surgery facility staff.
* Discharge from the facility.
* Preparation for recovering at home.
* Communication
* Overall experience and recommendation

***Monitoring:*** Quarterly reports provided by Press Ganey will be reviewed at both the employee and Governing Board level. Areas for improvement based on scores will be analyzed with changes in policy and practice instituted. Monitoring of improvements will occur.

1. **Clinical Quality:** Surgical Site Infection Rates (SSRIs): This measure evaluates the number of patients with surgical site infections and aims to reduce or eliminate such occurrences.

***Measure:*** The number of patients with surgical site infections.

***Projections:*** The ASC plans to achieve or be better than the national benchmark of 0.10% surgical site infection rates.

***Monitoring:*** SSRI’s and all fallouts will be reported within the RL6 software system on a monthly, and as needed basis. Root cause analysis required by the software will allow trending analysis to occur. These results will be reported at quarterly Quality Assurance Performance Improvement (QAPI) meetings and reported up to the Governing Board. All trends, and comparison to national benchmarks, will be included in reporting detail.

1. **Patient Satisfaction, Cost Effectiveness – On-Time Start**: Research shows that delays in the OR can lead to reduced efficiency, scheduling disruption, and increased costs (as the most widely accepted cost estimate of an OR minute is $62),[[52]](#footnote-52) as well as patient and provider dissatisfaction. From the patient perspective, starting their operation on time is essential. It avoids anxiety and dissatisfaction. [[53]](#footnote-53) This measure ensures that surgeries are starting on-time to optimize efficiency.

***Measure:*** The surgery begins at its scheduled time.

***Projections:*** The ASC will achieve a utilization of 72% or higher.

***Monitoring:*** Reviewed quarterly by clinical staff.

1. **Clinical Quality – All Cause Hospital Transfer/Admission:** This measure evaluates the number of post-operative patients who were transferred to the hospital from the ASC and aims to reduce or eliminate such occurrences.

***Measure:*** The number of patients transferred from the ASC to the hospital.

***Projections:*** The ASC plans to achieve or exceed the national benchmark of 0.851 hospital transfers/admissions per 1,000 ASC admissions.[[54]](#footnote-54) While some level of hospital transfer/admission is expected, as not all medical conditions requiring a hospital transfer/admission can be anticipated in advance and not all conditions requiring a transfer/admission result from the care the patient received in the ASC, the ASC will strive for zero hospital transfers/admissions.

***Monitoring:*** Reviewed quarterly by clinical staff.

1. **Clinical Quality – Patient Falls:** This measure, which is consistently assessed by CMS, the National Quality Foundation, and AAAHC, evaluates the number of patients who fall while in the ASC and aims to reduce or eliminate such occurrences.

***Measure:*** The number of patients who fall in the ASC.

***Projections:*** The ASC plans to conduct a fall risk assessment screening on 100% of ASC patients. The ASC plans to achieve or be better than the national benchmark of 0.166 falls per 1,000 ASC admissions[[55]](#footnote-55), ultimately reaching a target of zero falls.

***Monitoring:*** Clinical staff will monitor incidence of falls and injuries due to falls and compare rates over time at the quarterly Quality Assurance Performance Improvement (QAPI) meetings or sooner as needed.

### **F1.b.iii Public Health Value/Health Equity-Focused**

***For Proposed Projects addressing health inequities identified within the Applicant's description of the Proposed Project's need-base, please justify how the Proposed Project will reduce the health inequity, including the operational components (e.g. culturally competent staffing). For Proposed Projects not specifically addressing a health disparity or inequity, please provide information about specific actions the Applicant is and will take to ensure equal access to the health benefits created by the Proposed Project and how these actions will promote health equity.***

The Proposed Project is not specifically addressing a health disparity or inequity; however, the Applicant is committed to ensuring health equity for all patients, including underserved populations. As a free-standing ASC, the Applicant plans to increase access to patients in the PSA and beyond to lower cost, high quality ambulatory surgical services with the Proposed Project. Researchers have found that the highest-risk Medicare patients are less likely to visit an emergency department or be admitted to a hospital following outpatient surgery in an ASC setting.[[56]](#footnote-56) Moreover, provision of care in the ASC setting is associated with efficiencies, convenience, and cost savings, all of which promote patient satisfaction and lead to improved quality of life.[[57]](#footnote-57)

Communicating with patients is a high priority to reduce health inequity and ensure high quality care and patient engagement. The applicant will screen patients in advance of their surgery to assess their need for translation services and/or handicap accommodations. If a patient requires translation services, the Applicant will provide access through an iPad enabled translation service provided by Cyracom International. Cyracom offers translator services in over 300 languages as well as service for deaf and blind patients and has been well received by the Applicant's patients. The Proposed Project will be handicap accessible and staff are trained to assist patients with mobility challenges to ensure their comfort and safety.

### **F1.b.iv Additional Information of Proposed Project**

***Provide additional information to demonstrate that the Proposed Project will result in improved health outcomes and quality of life of the Applicant's existing Patient Panel, while providing reasonable assurances of health equity.***

The Proposed Project will allow for expanded access to surgical services in a free-standing ASC with 5 incremental ORs in Waltham and will ensure that the 3 existing ORs in Waltham (now housed at the Applicant’s current facility) can relocate despite the impending termination of leased space at the Applicant's current facility. This increased access to ambulatory surgery services will reduce patient wait times for surgeries and improve their quality of life as they receive treatment sooner for their pain and injuries. In addition to providing a lower cost, high quality alternative to ambulatory surgeries offered in a hospital setting, the Proposed Project will offer patient centric amenities such as ample covered parking to ensure convenient access to the facility entrance and a spacious lobby with amenities to maximize the experience for waiting patients and family members, including dedicated workspaces, free wifi, and relaxing areas for comfort. In addition, there will be a café on site that will be open to family members during their stay.

**F1.c Evidence That Proposed Project Will Work Efficiently**

***Provide evidence that the Proposed Project will operate efficiently and effectively by furthering and improving continuity and coordination of care for the Applicant's Patient Panel, including, how the Proposed Project will create or ensure appropriate linkages to patients' primary care services.***

The Applicant owns and operates a free-standing ambulatory surgery center and therefore many of the activities related to continuity of care and coordination with the patients’ primary care services will occur outside of the surgery center at the respective surgeon’s offices. However, the Applicant's management will also utilize processes that are intended to ensure continuity and coordination of care, including engaging surgeons in developing policies and procedures that assist in increasing communication with primary care physicians (PCPs) and other providers.

The Proposed Project’s EMR has the capability of interfacing with other provider networks and ensuring operative reports can be transmitted electronically. Operating room video technology allows for the transfer of surgical images and videos to the patient through their secure portal or email. Additionally, the medical record is also present in the surgeon's office, and the surgeon can discuss the patient's outcomes with the patient and their primary care provider even when outside the Proposed Project.

As discussed further above in Factor F1.a.i, the Applicant will be able to increase patient access by virtue of its location near several major thoroughfares, at the same time as its freestanding status will allow for relatively easy navigation compared to a large hospital campus. The more efficient nature of ASC services will also provide increased patient access. Being more efficient (i.e., by spending less time in surgery), the ASC can move patients to the recovery rooms sooner, which allows for more procedures to be performed in a day, thereby increasing OR availability for patients. Notably, it has been found that this enhanced efficiency results in higher quality care, because patients are under anesthesia for less time and are exposed to potential infections for less time. These factors may be some of the reasons that contribute to ASCs being found to provide higher quality care for outpatient procedures than hospitals (and at lower cost).[[58]](#footnote-58)

Further, in an effort to improve care efficiencies and coordination, the Applicant has partnered with CareSense to enhance patient communication and clinical coordination. Upon discharge a patient will be provided with access to information from a patient experience mobile application, which will allow patients to receive automated phone calls, text messages, and email, through which they can receive alerts, answer questions, and learn about their conditions. Through this means, the providers will be able to track patient progress, receive alerts about potential patient problems, and adjust care accordingly. This affords the Applicant and the surgeon the opportunity to arm patients with timely, appropriate information about their status and facilitate a safe and speedy recovery. These types of mobile applications have proven to be successful at other ASCs (resulting in fewer missed appointments, enhanced patient education, and increased patient compliance), and facilitates continuous communication with the patient, thereby improving patient satisfaction and quality of care.

**F1.d Evidence of Consultation**

***Provide evidence of consultation, both prior to and after the Filing Date, with all Government Agencies with relevant licensure, certification, or other regulatory oversight of the Applicant or the Proposed Project.***

The Applicant has consulted with the following individuals at Government Agencies as well as local elected officials to further inform planning and provide feedback for the Proposed Project.

* Department of Public Health:  Determination of Need Program; Dennis Renaud, Program Director; Alison Mehlman, Chief Deputy General Counsel; Rebecca Kaye, Senior Deputy General Counsel
* Department of Public Health:  Health Care Facility Licensure and Certification, Daniel Gent, Director, Plan Review
* Department of Public Health:  Office of Community Health Planning & Engagement: Jennica Allen, Katelyn Tieg
* Department of Public Health:  Office of Health Equity: Samuel Louis, Program Manager, Interpreter Services
* Health Policy Commission:  Deborah Devaux, Chair, HPC Board of Commissioners
* Center for Health Information Analysis: Lauren Peters, Executive Director
* City of Waltham:  Jeannette A. McCarthy,Mayor
* City of Waltham:  John Lawn,State Representative

After approval of the Proposed Project, the Project will require Department of Health review and approval of architectural plans as well as a building permit from the City of Waltham. After completion of the building, the Applicant will obtain a Certificate of Occupancy from the City of Waltham, a Certificate of Inspection from the Waltham Fire Department, and a Certificate of Inspection from the Department of Public Safety. The Applicant will then request a DPH survey and approval to operate the facility.

**F1.e.i Process for Determining Need/Evidence of Community Engagement**

***Process for Determining Need/Evidence of Community Engagement: For assistance in responding to this portion of the Application, Applicant is encouraged to review Community Engagement Standards for Community Health Planning Guideline. With respect to the existing Patient Panel, please describe the process through which Applicant determined the need for the Proposed Project.***

The Applicant conducted two informational sessions/community forums, the first on June 23, 2022, and the second on August 31, 2022, to engage patients and members of the community in accordance with the community engagement standards set forth by the Department of Public Health. These forums were publicized at individual practice locations, email invitations were sent to patients, public notice was posted in the Boston Globe and letters were sent to abutters within 500 feet of the Proposed Project. The Applicant provided information on the Proposed Project and the benefits of ambulatory surgery centers and solicited feedback from participants. The presentations used at these community forums are attached to this submission. The Applicant met with Jeannette A. McCarthy, Mayor of the City of Waltham, who expressed her excitement and support for the Proposed Project. The Applicant also met with State Representative John Lawn who also expressed positive support for the Proposed Project.

**F1.e.ii Evidence of Community Engagement**

***Please provide evidence of sound Community Engagement and consultation throughout the development of the Proposed Project. A successful Applicant will, at a minimum, describe the process whereby the “Public Health Value” of the Proposed Project was considered, and will describe the Community Engagement process as it occurred and is occurring currently in, at least, the following contexts: Identification of Patient Panel Need; Design/selection of DoN Project in response to “Patient Panel” need; and Linking the Proposed Project to “Public Health Value”.***

As noted in F1.e.i, the Applicant engaged patients and members of the community, including elected officials to ensure sound community engagement and consultation throughout the development of the Proposed Project.

The Applicant publicized and conducted two information forums with Jeannette A. McCarthy, Mayor of the City of Waltham, various City of Waltham public officials and area residents on June 23, 2022, and August 31, 2022. All participants expressed overwhelming favor of the Proposed Project and appreciation to have the Applicant expanding its ASC services at another location in Waltham.

For detailed information on these activities, please see the Appendix which includes the presentation explaining the public health value of the proposed project.

# FACTOR 2: HEALTH PRIORITIES

**F2.a Cost Containment**

***Using objective data, please describe, for each new or expanded service, how the Proposed Project will meaningfully contribute to the Commonwealth's goals for cost containment.***

The goals for cost containment in Massachusetts center on providing low-cost care alternatives without sacrificing high-quality services. As stated on the mass.gov website, "The Massachusetts Health Policy Commission (HPC) is an independent state agency charged with monitoring health care spending growth in Massachusetts and providing data-driven policy recommendations regarding health care delivery and payment system reform. The HPC’s mission is to advance a more transparent, accountable, and equitable health care system through its independent policy leadership and innovative investment programs. The HPC’s goal is better health and better care – at a lower cost – for all residents across the Commonwealth."

The HPC continues to monitor performance toward this goal and at the HPC Board meeting on June 7, 2023, the Board included the following finding in its Selected Preliminary Findings from Cost Trends Report Chapters:

* Massachusetts has fewer than half as many ASCs as the average state; the same surgeries are typically paid 50-100% more when taking place in HOPDs.[[59]](#footnote-59)

The Proposed Project will meaningfully contribute to the Commonwealth's goals for cost containment by relocating the Applicant’s current free-standing ASC site and expanding the Applicant's existing ASC OR capacity from 3 to 8 at its new site, thereby allowing for increased patient access to high quality cost effective surgical services in eastern Massachusetts. As noted in section F1.a.ii Need by Patient Panel, specific to commercial coverage of orthopedic procedures (which is anticipated to comprise the majority of the Proposed Project’s services), a 2022 study found that costs to commercial insurers were 26% lower for orthopedic surgical procedures at ASCs compared to HOPDs (even when controlling for differences in the patient populations).[[60]](#footnote-60) Ambulatory Surgery Center Association (ASCA) studies provide that if half of the eligible surgical procedures were shifted from HOPDs to ASCs, Medicare would save an additional $2.5 billion annually. Similarly, Medicaid, other insurers and patients benefit from lower prices for services performed in the ASC setting due to lower levels of reimbursement and lower coinsurance payments.

**F2.b Public Health Outcomes**

***Describe, as relevant, for each new or expanded service, how the Proposed Project will improve public health outcomes.***

The Proposed Project will improve public health outcomes by increasing patient access to high-quality, cost-effective free-standing ambulatory surgical care in Eastern Massachusetts. Patients will receive expert outpatient surgical care, with shorter wait times and lower health care costs along with high-quality outcomes and patient experience. The Applicant is committed to high standards of quality patient care and proud to be accredited by the Accreditation Association for Ambulatory Health Care (AAAHC), as well as the AAAHC Advanced Orthopaedic Certification at its current site. The Applicant will continue to prioritize and measure patient experience and the Proposed Project will provide patients with convenient access to the facility, ample parking, and fast and efficient scheduling as well as interpreter services. The Applicant believes that focusing on positive patient experience and engaging patients in their care helps to minimize their stress and improve their surgical outcomes.

**F2.c Delivery System Transformation**

***Because the integration of social services and community-based expertise is central to goal of delivery system transformation, discuss how the needs of their patient panel have been assessed and linkages to social services organizations have been created and how the social determinants of health have been incorporated into care planning.***

Prior to surgery, patients will be evaluated for health needs and potential safety concerns. The Applicant will continue to utilize an online Patient Assessment and Health Questionnaire provided by its EMR Vendor- Surgical Information Systems (SIS). If needs or concerns are identified, the Applicant will work with the patient's surgeon and primary care provider to support the patient in accessing home health services and social work resources. The Applicant and patients’ surgeons will work to ensure that patients are linked with appropriate community resources to address social determinant of health needs. The Applicant will utilize a Patient Care Navigator (PCN) for its more complex procedures and patients. This PCN will coordinate all aspects of the patient's care, pre and post-operatively; as well as resolve any concerns. As noted above, through the use of the App CareSense, patients will be able to communicate seamlessly through this App and care portal.

# FACTOR 4: Financial Feasibility and Reasonableness of Expenditures and Costs

***Applicant has provided (as an attachment) a certification, by an independent certified public accountant (CPA) as to the availability of sufficient funds for capital and ongoing operating costs necessary to support the Proposed Project without negative impacts or consequences to the Applicant's existing patient panel.***

**F4.a.ii For each Category of Expenditure document New Construction and/or Renovation Costs**

Because the Proposed Project is a leased space and the Proposed Project's MCE is based on Fair Market Value of the leased space, the Applicant does not have expenditures to include in this form.

# FACTOR 5: RELATIVE MERIT

**F5.a.i Describe the Process of Analysis and Conclusion of Proposed Project**

***Describe the process of analysis and the conclusion that the Proposed Project, on balance, is superior to alternative and substitute methods for meeting the existing Patient Panel needs as those have been identified by the Applicant pursuant to 105 CMR 100.210(A)(1). When conducting this evaluation and articulating the relative merit determination, Applicant 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.***

**Proposal:** The Proposed Project will include an eight (8) OR Licensed ASC at a new Waltham site.

**Quality:** As noted in prior sections, surgical services and related care provided in an ASC are high quality, with clinical outcomes that are equal to or better than HOPD surgical departments for the same procedures. The Applicant will pursue accreditation by the Accreditation Association for Ambulatory Health Care (AAAHC) as well as the AAAHC Advanced Orthopaedic Certification.

**Efficiency:** The specialization of services offered at the ASC will allow the Applicant to achieve clinical and operational efficiencies. Lower-acuity cases can be shifted from hospital outpatient surgical departments to the ASC, which will achieve cost savings and free-up space and surgical time at hospitals for more complex procedures and comorbidities. Clinical efficiencies will be achieved through the use of highly trained staff and the ability to maintain a more uniformed schedule, allowing for high quality patient outcomes.

**Capital Expense:** Establishment of the Proposed Project will result in an appropriate level of capital expenditures to construct and operate an ambulatory surgery center with 8 operating rooms.

**Operating Costs:** The incremental operating expenses anticipated for the first full year of operation are expected to be $20,493,787. The incremental operating costs are higher due to increase from 3 operating rooms and one procedure room to eight operating rooms, however a significant portion of the increase in operating costs is due to higher lease costs for the new site over the Applicant’s existing site. The lease rate at Applicant's existing site has not been increased in a number of years and is currently well under market price. Based upon current information known to Applicant, the Applicant will be paying current market price for its new lease space.

**Projected Savings:** Shifting volume from higher HOPD rates to lower freestanding rates will generate downstream savings for total medical expenditures to patients, insurers, and the Commonwealth.

**Alternative Option for the Proposed Project (1):**

**Alternative Proposal:** The Applicant ceases to operate its facility upon expiration of its lease or relocates to another site in the PSA that is smaller and/or that will not accommodate the volume and case mix that is contemplated by the Proposed Project.

**Alternative Quality:** This alternative is not sufficient to meet the combined patient panels’ need for low-cost and high-quality outpatient surgical services in the community. It also does not address the needs to upgrade ORs and equipment in order to stay operational, thereby negatively impacting quality outcomes. Over time, this alternative could result in a decrease in access to ambulatory surgical options for surgeons on the medical staff who have been serving patients within the PSA for over 20 years. Patients could be forced to receive ambulatory surgical services at higher cost hospital outpatient settings.

**Alternative Efficiency:** This alternative will result in continued clinical and operational inefficiencies due to the limitation in providing on-time surgical services in a hospital setting.

**Alternative Capital Expenses:** Capital expenses could be substantially different under this alternative but the lack of cost information for an alternative project makes this analysis impossible to complete and compare at this time.

**Alternative Operating Costs:** Alternative operating costs could be substantially different under this alternative but the lack of cost information for an alternative project makes this analysis impossible to complete and compare at this time.

Taking no or inadequate action to establish an ASC of the size and nature of the Proposed Project would result in the inability of some members of the Applicant’s medical staff to continue to offer high quality value-based care in the City of Waltham and surrounding communities, where such services have been provided for nearly 20 years. Taking no or inadequate action would also result in increased dependence on HOPDs which have higher operating costs and total medical expenditures than ASCs for patients served in the market and for the Commonwealth of Massachusetts.

**Alternative Option for the Proposed Project (2):**

**Alternative Proposal:** The Applicant considered partnering with another free-standing ASC to provide an alternative option. The Applicant reached out to another ASC to explore this alternative option, however, was not able to generate interest in this opportunity or identify another potential ASC partnership opportunity.

**Alternative Quality:** This alternative may have provided comparable quality; however, it is not available to the Applicant.

**Alternative Efficiency:** This alternative may have provided comparable efficiency; however, it is not available to the Applicant.

**Alternative Capital Expenses:** Alternative capital expenses would have been shared with another ASC partner; however, this alternative is not available to the Applicant.

**Alternative Operating Costs:** Alternative Operating Costs would have been comparable to Proposed Project.

# FACTOR 6: COMMUNITY BASED HEALTH INITIATIVES

***Does your existing CHNA/CHIP meet the minimum standards outlined in the Community Engagement Standards for Community Health Planning Guideline?***

As an ASC that is not Affiliated with an existing Hospital, the Applicant, BOSS, LLC is not required to submit CHNA/CHIP reports under the Department’s Guidelines. BOSS,LLC will be making a CHI payment $655,000 to CHI Statewide Initiative in 2 installments payable to Health Resources in Action (HRA) with the first 50% payment due upon approval of the DoN and the second 50% payment due one year anniversary from approval date.

1. Applicant assigns operating rooms to surgeons in half-day and full-day increments which is referred to as “block time.” Assignment of “block time” allows surgeons to schedule their surgeries more efficiently. [↑](#footnote-ref-1)
2. Data supporting assumption provided in section F1.a.ii Need by Patient Panel [↑](#footnote-ref-2)
3. Many experts have targeted 70-80% as an optimal utilization rate, with single specialty ASCs in the higher end of that range. Rachel Fields,

   “[Defining 'Full Utilization' of an Ambulatory Surgery Center: Q&A With Jim Scarsella of Anesthesia Staffing Consultants](https://www.beckersasc.com/asc-news/defining-full-utilization-of-an-ambulatory-surgery-center-qaa-with-jimscarsella-of-anesthesia-staffingconsultants)” Becker’s ASC Review,

   February 25, 2011, accessed at <https://www.beckersasc.com/asc-news/defining-full-utilization-of-an-ambulatory-surgery-center-qaa-with-jimscarsella-of-anesthesia-staffingconsultants> . html#:~:text=On%20the%20issue%20of%20overall,where%20we%20provide%20anesthesia%20services on 7/11/2022. “[Surgical Block](https://www.impact-advisors.com/implementation/surgical-block-utilization/)

   [Utilization](https://www.impact-advisors.com/implementation/surgical-block-utilization/)” Impact Advisors, accessed at <https://www.impact-advisors.com/implementation/surgical-block-utilization/> on 7/11/2022. [↑](#footnote-ref-3)
4. Lauren Dyrda, “[10 key trends for ASCs and outpatient surgery in the next 10 years](https://www.beckersasc.com/asc-news/10-key-trends-for-ascs-and-outpatient-surgery-in-the-next-10-years.html),” Becker’s ASC Review, 4/2/2018 accessed at

   <https://www.beckersasc.com/asc-news/10-key-trends-for-ascs-and-outpatient-surgery-in-the-next-10-years.html> on 7/11/2022. [↑](#footnote-ref-4)
5. Elizabeth L. Munnich & Stephen T. Parente, “Procedures Take Less Time At Ambulatory Surgery Centers, Keeping Costs Down and Ability To Meet Demand Up”, Health Affairs 33, No. 5 (2014): 764-769. [↑](#footnote-ref-5)
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   [Perspective](https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3597305/" \l "bibr4-2151458510394606),” Geriatric Orthopedic Surgery & Rehabilitation 2, No. 2 (Mar 2011): 56-64, accessed at <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3597305/#bibr4-2151458510394606> on 1/2/2019. [↑](#footnote-ref-6)
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