# **2. Project Description**

Beth Israel Lahey Health Surgery Center Plymouth, LLC (“Applicant”), located at 41 Resnik Road, Plymouth, MA 02360, is filing a Notice of Determination of Need (“Application”) with the Massachusetts Department of Public Health (“Department”) to establish a freestanding ambulatory surgery center (“ASC”) to be located at the same address (“Proposed Project”). The Applicant is a newly formed joint venture between BILH Surgery Center Plymouth Hospital Holdco, LLC, a subsidiary of Beth Israel Deaconess Hospital - Plymouth, Inc. (“BID Plymouth” or “Hospital”), and Pilgrim ASC LLC, a subsidiary of Plymouth Bay Orthopedic Associates, P.C. (“PBOA”). The joint venture was created for the purpose of operating the ASC proposed through this Application.

BID Plymouth is a 170-bed acute care hospital serving the communities of Plymouth, Carver, Kingston, Middleboro, Duxbury, Marshfield, Bourne, Pembroke, Sandwich, Halifax, and Plympton. The Hospital provides a full range of comprehensive community hospital services including primary and preventative care, emergency services, inpatient acute care, inpatient psychiatric services, and specialty services. The Hospital joined Beth Israel Deaconess in 2014 and is currently a member hospital of Beth Israel Lahey Health (“BILH”).[[1]](#footnote-1)

PBOA is a full-service musculoskeletal practice, including orthopedic surgeons trained in the management of the full spectrum of musculoskeletal diagnoses. PBOA also offers interventional pain management, occupational and physical therapy, surgical and non-surgical treatment options, as well as urgent orthopedic care services. PBOA has offices in Plymouth, Duxbury, and Sandwich, and its surgeons primarily perform surgery at BID Plymouth.

The Proposed Project seeks to provide Plymouth and the surrounding communities with access to outpatient orthopedic surgery in a cost-effective setting close to home. The Applicant anticipates that the majority of the procedures performed at the proposed ASC will be clinically appropriate cases that can be shifted from the hospital setting to the ASC setting without compromising quality or outcomes. Moreover, the ASC will create ASC access for members of Beth Israel Lahey Health Performance Network, LLC (“BILHPN”) to receive the same quality services at lower costs in furtherance of the ACO’s mission. To that end, existing and future patients will experience increased access to ambulatory orthopedic surgery in their community at lower cost.

With respect to quality, the Proposed Project will improve access to high-quality outpatient orthopedic surgery and improve quality of life for patients seeking treatment for musculoskeletal pain and conditions. When compared to hospital-based surgery, ASCs provide patients with equivalent or better clinical outcomes, as well as a more convenient experience in their community. Moreover, the convenience provided in the ASC setting will improve access as well as patient satisfaction.

Finally, the Proposed Project will meaningfully contribute to Massachusetts’ goals for cost containment by providing cost-effective, high-quality outpatient orthopedic surgery in a convenient setting closer to home. As a freestanding ASC, the Applicant anticipates that services, such as total joint replacements (“TJR”) will be reimbursed at lower rates than if the same procedures were performed in a hospital, and therefore, the ASC will positively impact the cost growth benchmark set for the Commonwealth in furtherance of its goals of containing the rate of growth of total medical expenses (“TME”) and total healthcare expenditures (“THCE”).

In sum, the Proposed Project will facilitate access to high-quality ambulatory surgery in a more cost-effective setting. By shifting clinically appropriate patients from the Hospital to a freestanding ASC, the cost of care will be reduced for payers and patients, contributing to The Commonwealth’s goals for cost containment. Moreover, the Proposed Project will create access to outpatient orthopedic surgery in a more convenient setting in the community, leading to increased patient satisfaction and improved public health outcomes. Accordingly, the Proposed Project meets the factors of review for Determination of Need approval.

**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.**

1. Overview of Patient Panel Selection

The Applicant is a newly formed joint venture between BID Plymouth and PBOA through subsidiaries of each. As the Applicant is newly formed and does not have its own patient panel, the Applicant relied on patient panel data from BID Plymouth and PBOA to determine the need for the Proposed Project. In the following sections, the Applicant provides the demographic data for BID Plymouth’s Patient Panel as well as the demographics of both the Hospital’s and PBOA’s outpatient orthopedic surgery service. Given PBOA surgeons most frequently perform surgery at BID Plymouth, the surgical patient panels of PBOA and BID Plymouth overlap significantly.

1. BID Plymouth Patient Panel

*Overall Patient Panel*

In FY23, BID Plymouth’s overall patient panel included 82,191 unique patients. Patients aged 65+ were the largest patient cohort, making up 37% of unique patients. An additional 29% of patients were aged 46-64. 58% of patients were female, compared to 42% male. 88% of patients self-identified as White, 2.3% of patients identified as Black/African American and 0.6% as Asian. Approximately 6.7% of patients declined to report their race. Approximately 40% of patients were covered by a commercial insurance plan, compared to 34% who were insured through Medicare, 18% through Medicaid, and 8% who had another source of coverage.

**Table 1: BID Plymouth Patient Panel Demographics**

| **Demographic** | **2021**  **Count** | **2021 Percent** | **2022**  **Count** | **2022 Percent** | **2023**  **Count** | **2023**  **Percent** |
| --- | --- | --- | --- | --- | --- | --- |
| **Total** | **89,731** | **100%** | **83,796** | **100%** | 82,191 | 100% |
| Age - 0 to 17 | 7,662 | 8.54% | 7,171 | 8.6% | 6,747 | 8.2% |
| Age - 18 to 25 | 5,688 | 6.34% | 5,095 | 6.1% | 4,835 | 5.9% |
| Age - 26-45 | 18,599 | 20.73% | 16,955 | 20.2% | 16,649 | 20.3% |
| Age- 46-64 | 28,335 | 31.58% | 25,214 | 30.1% | 23,659 | 28.8% |
| Age - 65+ | 29,447 | 32.82% | 29,361 | 35.0% | 30,301 | 36.9% |
| Gender - Male | 36,446 | 40.62% | 33,501 | 40.0% | 34,689 | 42.2% |
| Gender - Female[[2]](#footnote-2) | 53,285 | 59.38% | 50,295 | 60.0% | 47,502 | 57.8% |
| Race - White | 77,891 | 86.81% | 74,669 | 89.1% | 72,742 | 88.5% |
| Race - Black or African American | 1,759 | 1.96% | 1,731 | 2.1% | 1,904 | 2.3% |
| Race - American Indian or Alaska Native | 75 | 0.08% | 69 | 0.1% | 100 | 0.1% |
| Race - Asian | 527 | 0.59% | 534 | 0.6% | 505 | 0.6% |
| Race - Native Hawaiian or Other Pacific Islander | 32 | 0.04% | 35 | 0.0% | 36 | 0.0% |
| Race - Other[[3]](#footnote-3) | 967 | 1.08% | 1,148 | 1.4% | 1,379 | 1.7% |
| Race - Patient Declined | 8,480 | 9.45% | 5,610 | 6.7% | 5,525 | 6.7% |
| Ethnicity - Hispanic/Latino | 562 | 0.63% | 1,364 | 1.49% | 1,600 | 1.88% |
| Ethnicity - Not Hispanic/Latino | 26,713 | 29.77% | 68,765 | 75.35% | 74,061 | 87.10% |
| Ethnicity - Unknown[[4]](#footnote-4) | 62,482 | 69.63% | 21,128 | 23.15% | 9,374 | 11.02% |
| Payer Mix - Commercial | 36,290 | 40.5% | 34,186 | 38.1% | 33,117 | 40.3% |
| Payer Mix - Medicaid | 15,655 | 17.5% | 15,329 | 17.1% | 14,560 | 17.7% |
| Payer Mix - Medicare | 27,550 | 30.7% | 28,114 | 31.3% | 27,996 | 34.1% |
| Payer Mix - Other[[5]](#footnote-5) | 9,741 | 10.9% | 6,053 | 13.4% | 6,469 | 7.9% |
| Payer Mix - Unknown | 431 | 0.5% | 114 | 0.1% | 49 | 0.1% |

Of BID Plymouth’s patient panel, 58% originated from Plymouth and the immediately surrounding towns while 74% of patients originated from southern Plymouth County as detailed in Table 2.

**Table 2: BID Plymouth Patient Panel Geographic**

| **Town** | **FY2021** | **FY2022** | **FY2023** |
| --- | --- | --- | --- |
| Plymouth | 33,159 | 32,151 | 30,156 |
| Carver | 5,212 | 4,984 | 4,703 |
| Kingston | 4,772 | 4,663 | 4,546 |
| Middleboro | 3,707 | 3,677 | 3,799 |
| Duxbury | 3,437 | 3,718 | 3,172 |
| Marshfield | 2,967 | 2,734 | 2,727 |
| Buzzard's Bay | 2,177 | 2,163 | 2,025 |
| Pembroke | 2,100 | 1,979 | 2,002 |
| Sandwich | 1,629 | 1,533 | 1,376 |
| Halifax | 1,369 | 1,240 | 1,355 |
| Sagamore Beach | 1,338 | 1,307 | 1,190 |
| Plympton | 982 | 1,006 | 899 |
| Wareham | 965 | 912 | 895 |

*Outpatient Orthopedic Surgery Panel*

In FY23, BID Plymouth saw 2,542 unique patients for outpatient orthopedic surgery. The majority of patients were aged 65 and over (59%), followed by patients in the 46-64 age cohort (30%). The remaining 11% of patients were under the age of 45. 56% of patients were female. 97% of patients self-identified as White, 1% self-identified as Black/African American, and approximately 1.5% of patients either self-identified as another race or declined to self-identify.

**Table 3: BID Plymouth Orthopedic Surgery Panel Demographics**

| Variables | 2021 Count | 2021 Percent | 2022 Count | 2022 Percent | 2023  Count | 2023 Percent |
| --- | --- | --- | --- | --- | --- | --- |
| **Total Unique Patients** | **2,309** | **100%** | **2,417** | **100%** | **2,542** | **100%** |
| Age - 0 to 17 | 51 | 2.20% | 44 | 1.82% | 41 | 1.61% |
| Age - 18 to 25 | 55 | 2.40% | 36 | 1.49% | 46 | 1.81% |
| Age - 26-45 | 193 | 8.40% | 182 | 7.53% | 179 | 7.04% |
| Age - 46-64 | 779 | 33.70% | 800 | 33.10% | 775 | 30.49% |
| Age - 65+ | 1,231 | 53.30% | 1,355 | 56.06% | 1,501 | 59.05% |
| Gender - Male | 1,044 | 45.20% | 1,054 | 43.61% | 1,109 | 43.63% |
| Gender - Female | 1,265 | 54.80% | 1,363 | 56.39% | 1,433 | 56.37% |
| Race - White | 2,247 | 97.31% | 2,345 | 97.02% | 2,480 | 97.56% |
| Race - Black or African American | 31 | 1.34% | 37 | 1.53% | 24 | 0.94% |
| Race - Other [[6]](#footnote-6) | 21 | 0.91% | 35 | 1.45% | 38 | 1.49% |
| Race - Patient Declined | - | - | <11 | 0.0% | - | - |
| Ethnicity - Hispanic/Latino | 15 | 0.65% | 26 | 1.16% | - | - |
| Ethnicity - Not Hispanic/Latino | 2,244 | 97.18% | 2153 | 96.46% | - | - |
| Ethnicity - Unknown | 50 | 2.16% | 238 | 10.66% | - | - |

As shown in Table 4, approximately half (51.3%) of BID Plymouth’s orthopedic surgery patients originated from Plymouth, Carver, Kingston, Duxbury, and Middleboro. The remaining majority of patients originated from 11 towns in and around Plymouth County.

**Table 4: BID Plymouth Orthopedic Surgery Patient Panel Geographics**

| **Town** | **FY2021** | **FY2022** | **FY2023** |
| --- | --- | --- | --- |
| Plymouth | 869 | 870 | 823 |
| Carver | 136 | 149 | 143 |
| Kingston | 122 | 116 | 121 |
| Duxbury | 106 | 105 | 106 |
| Middleboro | 101 | 113 | 113 |
| Marshfield | 67 | 72 | 56 |
| Buzzard's Bay | 71 | 65 | 56 |
| Pembroke | 50 | 55 | 61 |
| Sandwich | 36 | 46 | 42 |
| Halifax | 43 | 43 | 51 |
| Sagamore Beach | 36 | 40 | 38 |
| Plympton | 23 | 30 | 32 |
| Hanson | 19 | 21 | 17 |
| Wareham | 22 | 21 | 28 |
| Mashpee | 29 | 20 | 44 |

C. Plymouth Bay Orthopedic Association

As noted earlier, most of PBOA’s surgical patients received care at BID Plymouth. As a result, PBOA’s Patient Panel largely overlaps with BID Plymouth’s outpatient orthopedic surgical Patient Panel.

In 2023[[7]](#footnote-7), PBOA treated 2,892 unique outpatient orthopedic surgery patients. Approximately 56% of PBOA’s patients were female. PBOA’s patient panel was predominantly comprised of adults aged 65 and older (62%), with 37% of remaining patients between the ages of 18 and 64. The majority of PBOA’s patients self-reported their race as white (75%), while approximately 24% of patients declined to self-report race/ethnicity data.

**Table 5: PBOA ORTHOPEDIC SURGICAL PANEL DEMOGRAPHICS**

| **Variables** | **2021 Count** | **2021 Percent** | **2022 Count** | **2022 Percent** | **2023**  **Count** | **2023**  **Percentage** |
| --- | --- | --- | --- | --- | --- | --- |
| **Total Unique Patients** | **1,700** | **100%** | **2,644** | **100%** | **2,892** | **100%** |
| Age - 0 to 17 | 45 | 2.8% | 44 | 1.7% | 31 | 1.1% |
| Age - 18 to 64 | 807 | 49.4% | 1,055 | 39.9% | 1065 | 36.8% |
| Age - 65+ | 782 | 47.9% | 1,545 | 58.4% | 1796 | 62.1% |
| Gender - Male | 798 | 48.8% | 1,143 | 43.2% | 1276 | 44.1% |
| Gender - Female | 836 | 51.2% | 1,501 | 56.8% | 1616 | 55.9% |
| Race - White | 1341 | 82.1% | 2,030 | 76.8% | 2,156 | 74.6% |
| Race - Black or African American | <11[[8]](#footnote-8) | 0.0% | 23 | 0.9% | 13 | 0.4% |
| Race - Other[[9]](#footnote-9) | 28 | 1.7% | 25 | 1.0% | 22 | 0.8% |
| Race - Unknown/Patient Declined | 265 | 16.2% | 566 | 21.4% | 701 | 24.2% |
| Payer Mix - Commercial | 3,231 | 49.0% | 3,462 | 49.0% | 3,825 | 49.7% |
| Payer Mix - Medicare | 2,940 | 44.6% | 3,180 | 45.0% | 3,417 | 44.4% |
| Payer Mix - Medicaid | 116 | 1.8% | 101 | 1.4% | 99 | 1.3% |
| Payer Mix - Multiple Payers | 0 | 0.0% | 0 | 0.0% | 0 | 0.0% |
| Payer Mix - Other | 308 | 4.7% | 325 | 4.6% | 356 | 4.6% |
| Payer Mix - Total[[10]](#footnote-10) | 6,595 | 100.0% | 7,068 | 100.0% | 7697 | 100% |

As noted in Table 6, approximately half of PBOA’s patients reside in and around Plymouth, including Carver, Kingston, and Duxbury.

**Table 6: PBOA ORTHOPEDIC SURGICAL PANEL GEOGRAPHIC**

| **Town** | **2021** | **2022** | **2023** |
| --- | --- | --- | --- |
| Plymouth | 569 | 896 | 879 |
| Carver | 93 | 158 | 172 |
| Kingston | 80 | 130 | 132 |
| Duxbury | 80 | 96 | 103 |
| Bourne | 82 | 78 | 93 |
| Middleboro | 61 | 103 | 131 |
| Marshfield | 35 | 70 | 64 |
| Sandwich | 38 | 51 | 48 |
| Pembroke | 40 | 65 | 59 |
| Halifax | 28 | 45 | 53 |
| Plympton | 18 | 34 | 35 |
| Falmouth | 0 | 31 | 16 |
| Hanson | - | 24 | - |
| Mashpee | 20 | 34 | 44 |
| Harwich | 17 | 30 | 35 |

**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.**

The Applicant seeks DoN approval to operate a freestanding ASC to provide orthopedic surgery to better meet the needs of the BID Plymouth and PBOA Patient Panels. Through the proposed single-specialty ASC, the Applicant will meet the existing and future needs of patients in the service area seeking high-quality orthopedic surgery in a cost-effective setting closer to home. These objectives will be achieved by the ASC as further detailed below.

Freestanding ASCs provide patients with a level of convenience that is difficult to replicate in a hospital, contributing to demand by patients to receive care at an ASC. As with the proposed ASC, freestanding ASCs are often located independent from hospital campuses making parking and wayfinding more accessible. Moreover, because ASCs provide clinical outcomes equivalent to those achieved by hospitals, patients receive high-quality care when choosing services in a more convenient, cost-effective setting. The Applicant anticipates that the creation of a freestanding ASC in the community will improve access to outpatient orthopedic surgical services as the nearest freestanding orthopedic ASC for BID Plymouth’s Patient Panel is located almost an hour away from the Hospital. As patients must have reliable transportation on the day of surgery and have an accompanying adult, this distance may present a significant barrier for patients seeking an ASC for their treatment. Additionally, the Applicant projects significantly shorter wait times for surgery than what are currently available in the Plymouth service area.

Furthermore, reimbursement rates for procedures performed in an ASC are typically half of what Medicare reimburses a hospital for the same procedure.[[11]](#footnote-11) This translates into significant savings for payers, as well as patients with cost-sharing obligations such as co-insurance and deductibles. As a result of potential and actual savings, patients, insurers, and health care systems with risk contracts are increasingly relying on ASCs to reduce health care costs, further driving demand for access to ASCs. The proposed ASC will meet the Patient Panel’s and BILH’s need for access to a cost-effective setting that does not currently exist in the service area.

Insurance coverage is a significant driver of where a procedure is performed. Notably, Medicare recently removed several orthopedic surgeries from its inpatient-only list, allowing those procedures to be reimbursed by Medicare when provided in an ASC. Prior to this decision, those surgeries would only be eligible for Medicare reimbursement if performed on an inpatient basis. For example, Medicare added Total Knee Replacements to the ASC Covered List effective January 1, 2020. The decision to allow outpatient reimbursement for more orthopedic surgeries is prompting providers and patients to shift care to more cost-effective outpatient settings. Without local access to a freestanding ASC, the Patient Panel will face barriers to care as insurers increasingly promote the use of ASCs for certain surgeries.

Based on the orthopedic procedures most commonly performed on an outpatient basis at BID Plymouth, the Applicant expects the following procedures will also comprise the majority of procedures at the proposed ASC: total knee arthroplasty (“TKA”), knee arthroscopy, shoulder arthroscopy, carpal tunnel surgery, and total hip arthroplasty. These procedures are most prevalent among older adults because age is a contributing risk factor to the underlying disease or condition. As further discussed in F1.b.1, arthritis and obesity are increasingly prevalent among older adults and increase the likelihood of requiring surgical intervention. Therefore, as the populations ages, the Applicant anticipates more adults in the proposed service area will require orthopedic surgery to treat disease-related injuries, improve quality of life, and extend life expectancy.[[12]](#footnote-12)

As alluded to above, the majority of historical case volume at BID Plymouth and within PBOA’s Patient Panel arose out of the need to treat age-related conditions. To that end, more than half of patients who had outpatient orthopedic surgery at BID Plymouth were ages 65+. An additional one third of all outpatient orthopedic surgical patients were between the ages of 45 and 64. These age-based demand considerations are especially important for future planning for an orthopedic ASC. The population of adults over the age of 60 in Plymouth County is expected to increase over the coming decades. In the proposed service area, the 60+ age cohort is projected to grow 36% between 2015 and 2025 (UMDI Long Term Population Projections). Given that more than half of the patients who had outpatient orthopedic surgery at BID-Plymouth were ages 65+ and an additional one third were between the ages of 45 and 64, this anticipated growth in the Plymouth region will increase the number of older adults who are more susceptible to joint-related issues, further driving demand for these procedures.

*Historic Utilization*

Recognizing the significant overlap between patients of BID Plymouth and PBOA, the two organizations seek to provide their patients with a more patient-centered experience through the creation of a freestanding, single-specialty ASC. In FY21, BID Plymouth performed 2,051 outpatient orthopedic surgeries, representing a 35% increase from FY19 (FY19: 1,521; FY20: 1,578). Volume increased to 2,238 outpatient orthopedic surgeries in FY22, further demonstrating that demand for such services is increasing and support the need for the Proposed Project.

A significant portion of the growth in utilization between FY19 and FY21 is attributable to reimbursement driving the shift of some cases being performed on an inpatient to an outpatient basis. Specifically, in June of 2020, BID Plymouth began performing clinically appropriate Total Joint Replacements (“TJR”) as outpatient surgeries following a change in Medicare’s reimbursement policy. As a result, 63% of TJR cases in FY21 were performed as outpatient surgeries compared to just 1% in FY19.

Further contributing to the need for access to orthopedic surgery in an ASC setting is the significant wait times currently experienced by patients seeking outpatient orthopedic surgery at BID Plymouth. The current wait time to be scheduled for surgery from the decision to move forward with surgery is approximately 6 weeks. The long wait times are often due to the Hospital’s need to prioritize urgent surgeries so that outpatient surgeries are delayed or rescheduled. For patients in need of treatment for painful, joint-related conditions or injuries, such delays can significantly impact a patient’s quality of life and adversely impact outcomes.

*PROJECTED UTILIZATION*

The Applicant projects that the proposed ASC will perform 2,578 procedures in its first full year of operation, ramping up volume in subsequent four years of operation. The majority of cases at the proposed ASC will be outpatient orthopedic surgeries historically performed at BID Plymouth. The Applicant anticipates approximately 83% of orthopedic cases performed at the Hospital in FY22 could have been performed at the ASC and therefore this volume will shift once the ASC is operational.[[13]](#footnote-13) Additional volume will come from within the BILH system where patients in the service area historically had travelled for orthopedic surgery as the ASC will present a more convenient location closer to home. Lastly, the Applicant projects volume also will be derived at the ASC as a result of the factors discussed in the previous section including the reimbursement driven shift of cases away from hospitals and the projected growth in the service area’s older population.

**Table 7: Projected ASC Volume**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Projected ASC Volume** | **Year One** | **Year Two** | **Year Three** | **Year Four** | **Year Five** |
| Total Volume | 2,578 | 2,871 | 3,064 | 3,197 | 3,330 |

To determine the number of operating rooms needed to support the Patient Panel’s current and future need for an orthopedic ASC in Plymouth, the Applicant reviewed the average length of OR use for each of the subspecialities of the proposed ASC. The average procedure length time is 120 minutes, ranging from 65 minutes for average hand cases to 184 minutes for spine surgeries. These procedure times include surgical time, set-up, and turnover.

In order to accommodate the projections described above, the Applicant determined four (4) ORs would be required to meet demand based on available operating times of the Proposed ASC. Specifically, the ASC plans to be open 8 hours a day, 5 days a week, 50 weeks a year. This provides 120,000 minutes of operating time per OR. Based on the average times described above, four ORs will allow the ASC to operate at 64% capacity in Year One, ramping up to 86% capacity in Year Five.

In conclusion, the Proposed Project is needed to improve access to outpatient orthopedic surgery in the proposed service area and to improve health outcomes. Outpatient orthopedic surgery utilization in FY22 increased 9% compared to FY21, indicating demand is increasing and capacity within the community is necessary to ensure patients have access to care. The Proposed Project will meet the projected needs of the community by providing convenient, cost-effective care close to home.

**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 compete on the basis of price, total medical expenses (“TME”), provider costs, and other recognized measures of health care spending by offering outpatient surgery in a lower cost setting to the patient panel. By shifting outpatient orthopedic surgery to the proposed freestanding ASC from BID Plymouth’s surgical suite, costs will be reduced significantly. As a result, the Proposed Project will have a positive impact on price, TME, provider costs or other recognized measures of health care spending.

Each year, the provision of clinically appropriate surgeries in freestanding ASCs saves the Medicare program and its beneficiaries more than $4 Billion.[[14]](#footnote-14) Based largely on historical savings, it is projected that ASCs will reduce Medicare costs by $73.4 Billion from 2019 to 2028.[[15]](#footnote-15) These savings are a result of lower reimbursement rates for procedures performed in an ASC compared to those performed in hospitals. Reimbursement rates for an ASC are on average just half of what Medicare would pay for the same procedure if performed in a hospital.[[16]](#footnote-16) These savings are especially valuable for ACOs that can better promote cost savings, care coordination, and health management of its covered lives when an ASC is available in its network.

Moreover, the growing availability of high-quality orthopedic ASCs has led more insurers, including Medicare, to incentivize the provision of additional types of surgeries in the outpatient setting and by increasing the types of surgeries approved for ASC reimbursement.[[17]](#footnote-17) As a result, not only will cases shift from hospitals to ASCs, but its likely more patients will also seek care when needed due to the affordability of ASCs. Medicare recently removed several orthopedic surgeries from its inpatient-only list, allowing those procedures to be paid for when provided in an ASC. Table 8 below illustrates the shift in approved clinical settings for reimbursement by Medicare for total joint replacement procedures, beginning with hospital inpatient only (“IPO”), moving to hospital outpatient (“HOPD”), and ending with ASC.

**Table 8**: **Medicare Approved Clinical Setting for Reimbursement by Procedure**

| **CPT Code** | **Procedure** | **2017** | **2018** | **2019** | **2020** | **2021** |
| --- | --- | --- | --- | --- | --- | --- |
| 27447 | Total Knee | IPO | HOPD | HOPD | ASC | ASC |
| 27130 | Total Hip | IPO | IPO | IPO | HOPD | ASC |
| 23472 | Total Shoulder | IPO | IPO | IPO | IPO | HOPD |

IPO = Inpatient Only

HOPD = Hospital Outpatient & Inpatient

ASC = ASCs, Hospital Outpatient, Inpatient

Accordingly, it is expected that most orthopedic surgeries will be performed in an ASC within five years.[[18]](#footnote-18) The Proposed Project will ensure the Plymouth community has adequate access to outpatient orthopedic surgery in an ASC and therefore will compete on the basis of price, TME and provider costs.

**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 will provide the identified service area with access to high quality outpatient orthopedic surgery in a more cost-effective setting. The Applicant anticipates the ASC will improve health outcomes and promote patient satisfaction through reduced wait times, reduced costs, and convenient access outside of the hospital setting. The use of ASCs as an alternative care delivery site to hospital-based surgery is supported by extensive literature as described below.

*Cost-Effectiveness and Access to Care*

ASCs are able to create significant savings due to more efficient use of time and resources that are not available in the hospital-based setting.[[19]](#footnote-19) For example, single-specialty ASC are able to streamline overhead expenses through the use of consistent staffing, laboratory, medication, and imaging equipment.[[20]](#footnote-20) Further, the narrow scope of services provided by a single-specialty ASC allows for efficiencies than cannot be created in hospitals. As a result, ASCs are able to create savings that are reflected in procedure costs.

In addition, ASCs are reimbursed at rates nearly half of what the same procedure would be reimbursed at if performed by a hospital.[[21]](#footnote-21) As a result of lower procedure costs, patients with any form of financial responsibility will experience costs savings by opting to receive care in an ASC setting compared to a hospital. This includes patients with cost-sharing, as well as patients who self-pay for their care. Table 9 below demonstrates the significant costs-savings to Medicare beneficiaries for several of the orthopedic procedures expected to be performed in the Proposed ASC when compared to costs for the same services in an HOPD. Notably, when performed in an ASC, Medicare beneficiaries realize an average cost savings of 45% through a reduced copay as compared to having the same surgery in an HOPD.

**Table 9: Medicare Payment Comparison for Orthopedic Procedures by Setting[[22]](#footnote-22)**

| **Procedure Description** | **ASC**  **Procedure Cost** | **ASC**  **Medicare Pays** | **ASC**  **Patient**  **Copay** | **HOPD**  **Procedure Cost** | **HOPD**  **Medicare Pays** | **HOPD**  **Patient**  **Copay** |
| --- | --- | --- | --- | --- | --- | --- |
| Arthroscopy, knee, surgical; debridement/shaving of articular cartilage (chondroplasty) | $1,999 | $1,599 | $399 | $3,531 | $2,824 | $705 |
| Neuroplasty and/or transposition; median nerve at carpal tunnel | $1,272 | $1,018 | $253 | $2,241 | $1,793 | $447 |
| Arthroscopy, shoulder, surgical; biceps tenodesis | $3,873 | $3,098 | $773 | $7,208 | $5,766 | $1,441 |
| Arthroscopy, knee, surgical; with meniscus repair (medial or lateral) | $2,040 | $1,631 | $407 | $3,542 | $2,833 | $708 |

Furthermore, the cost savings generated through the availability and use of ASCs compared to hospitals is critical for the success of ACOs. Because ACOs must manage both costs and outcomes, the utilization of freestanding ASCs allow ACOs to reduce shared risk without compromising the ability to provide patients with high-quality coordinated care. For these reasons, ASCs provide significant financial benefits to patients and the health care system.

Lastly, in addition to creating cost savings for patients, ASCs may also increase access to orthopedic surgery for patients who previously delayed or avoided care due to cost or convenience. Approximately one in eleven adults (9%) reported delaying or not receiving care due to cost.[[23]](#footnote-23) The study also found that adults who are in worse health are twice as likely than those with better health to delay or go without care due to cost reasons.[[24]](#footnote-24) These figures demonstrate that the cost of care plays a significant role on the decision to receive or delay necessary medical care, and as a result, health outcomes. Moreover, convenient access to care greatly impacts the decision to receive care.[[25]](#footnote-25) One survey found that the majority of respondents (51%) identified convenience and access to care as the most important factor when choosing care. To that end, affordability and convenient access may play a large role in a patient’s decision of not only whether or not to obtain care, but also where to obtain the care.

*Surgical Utilization by Older Adults*

Adults ages 65 and older increasingly represent the largest share of ASC utilization based on age, in part driven by changes to Medicare’s reimbursement policies.[[26]](#footnote-26) Additionally, demand is driven by disease prevalence contributing to joint damage. First, arthritis is prevalent among older adults as a result of certain risk factors, including age, obesity, repetitive movements (e.g., repetitive knee bending), joint injury, and smoking.[[27]](#footnote-27) In 2012, nearly one in four adults in the US had arthritis, while almost 10% of all adults in the US reported at least one activity limitation in 2012. By 2040, 11.4% of all adults are projected to experience at least one arthritis-related activity limitation, representing 34.6 million adults.[[28]](#footnote-28)

Another prevalent disease linked to soft tissue damage and osteoarthritis is obesity. In Massachusetts, more than half of all adults are considered overweight, including 25% of all adults who are considered obese.[[29]](#footnote-29) Individuals carrying excessive weight are 20 times more likely to need knee replacement surgery than individuals who are not overweight due to the increased pressure placed on the body’s joints.[[30]](#footnote-30) As obesity rates in the US climbed in recent decades, so too have the number of TKA procedures for overweight individuals.[[31]](#footnote-31) Based on current and projected incidence rates of arthritis and obesity, demand for orthopedic surgical services necessary to treat joint-related issues is projected to increase over time. Furthermore, the majority of these surgeries are projected to be performed in the ASC setting since TJRs were approved for reimbursement by Medicare beginning in January 2021.

**F.1.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.**

To assess the impact of the proposed Project, the Applicant will report on the following measures of patient satisfaction and quality of care. The measures are discussed below and will be reported to DPH on an annual basis following implementation of the Proposed Project.

1. **Patient Satisfaction**: Patients that are satisfied with their care are more likely to seek additional treatment when necessary.

**Measure:** Patient satisfaction scores will be used to determine the impact of the Proposed Project on patient experience.

Numerator = Number of top scores, such as “likely to recommend” or “highly satisfied”.

Denominator = Total number of survey respondents

**Projections:** As the Proposed Project is to establish a new ASC, the Applicant will provide baseline measures and three years of projections following the first fiscal year of operation.

**Monitoring:** The ASC’s Administrator or their designee will review survey scores monthly and report quarterly to the governing board of the Applicant.

1. **Surgical Site Infection (“SSI”):** This measure will monitor the rate at which the ASC’s patients develop surgical site infections and aims to reduce or eliminate such incidences.

**Measure:** The percent of SSIs within 30 days of procedure.

Numerator = Number of SSIs

Denominator = Total number of procedures

**Projections:** As the Proposed Project is to establish a new ASC, the Applicant will provide baseline measures and three years of projections following the first fiscal year of operation.

**Monitoring:** The ASC’s Administrator or their designee will review the incidence of SSIs monthly and report quarterly to the governing board of the Applicant.

1. **Fall Prevention:** This measure will monitor the number of patients who report a fall within 30 days of surgery and aims to reduce or eliminate such incidences.

**Measure:** The percentage of falls with injury 30 days of procedure.

Numerator = Number of falls with injury

Denominator = Total number of procedures

**Projections:** As the Proposed Project is to establish a new ASC, the Applicant will provide baseline measures and three years of projections following the first fiscal year of operation.

**Monitoring:** The ASC’s Administrator or their designee will review fall reports monthly and report quarterly to the governing board of the Applicant.

1. **Pre-Operative Time-Out:** This measure will monitor compliance with the surgical team’s performance of a time-out immediately prior to each procedure.

**Measure:** The percentage of time-outs completed each month.

Numerator = Number of time-outs completed

Denominator = Total number of procedures

**Projections:** As the Proposed Project is to establish a new ASC, the Applicant will provide baseline measures and three years of projections following the first fiscal year of operation.

**Monitoring:** The ASC’s Administrator or their designee will review time-out compliance monthly and report quarterly to the governing board of the Applicant.

**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 need­base, 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.**

As detailed throughout this Application, the Proposed Project will increase access to lower-cost, high quality outpatient orthopedic surgery for clinically appropriate patients in the proposed service area. The ASC will not discriminate based on 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 following initiatives will be implemented to facilitate equitable access to the ASC’s services.

First, the facility will be physically accessible to all patients. In addition, the ASC will offer multiple tools to address language barriers and emotional barriers at the point of scheduling. A key component will be translation and video interpretive services. This service 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. Furthermore, the Applicant will employ a culturally competent staff to ensure each patient’s experience meets their needs. Utilizing culturally competent staff recognizes the holistic needs of patients throughout their encounter at the ASC.

Prior to each scheduled surgery, the patient will be asked about their transportation arrangements to and from the facility for the day of surgery. Patients will be counseled on the need for an adult to accompany them home from surgery as they will not be able to drive after anesthesia. When needed, patients will be provided with referrals to potential community resources that may be able to assist with transportation, such as senior centers and houses of worship.

**F1.b.iv 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.**

As described throughout this Application, including the above section, the Proposed Project will improve health outcomes and quality of life for the patient panel by expanding local access to high-quality outpatient orthopedic surgery in a lower cost setting. The Applicant is committed to promoting health equity and will work to ensure the ASC’s services are accessible to all members of the community it serves. To that end, the Applicant will ensure patients can access its services, can effectively communicate with their providers, and will be connected to services outside of the ASC as required. As a result, the Applicant anticipates that the Proposed Project will result in improved patient experience and quality outcomes while promoting health equity.

**F1.c 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 Proposed Project will improve care continuity and coordination of care for ASC patients through procedures and processes to effectively identify and address individual patient needs. First, all patients will complete a pre-operative assessment with a Registered Nurse at the time of scheduling. During the assessment, the patient will be asked about potential discharge barriers, ability to afford postoperative medications, and access to transportation. All responses are recorded within the patient’s electronic medical record. If the assessment identifies specific barriers to care, ASC staff will work with the patient to identify appropriate community resources through the use of a community resource directory. Additionally, all responses will be included with the discharge summary and shared with the patient’s primary care provider.

Next, the ASC will ensure that each patient is screened by a registered nurse for post-operative complications and experience within 24 hours after surgery. Concerns raised during the call will be documented in the patient’s medical record and the patient’s primary care provider will be notified to maintain continuity of care. Furthermore, as part of the ASC’s quality improvement program, the ASC Administrator will review the ASC’s quality data on a quarterly basis with the ASC governing board and quality oversight committee in compliance with Medicare reporting requirements.

Lastly, the ASC will participate in the MassHealth ACO Program through BILHPN and its clinically integrated network. In furtherance of the goals of the Program, BILHPN strives to increase access to high quality care for members who are more likely to have unmet Social Determinant of Health (“SDoH”) needs than the commercially insured population. A significant portion of BILHPN’s efforts to improve health care are accomplished through care coordination. Specifically, BILHPN’s data analysis and risk management tools help participating primary care physicians monitor patients’ health and manage chronic conditions. Therefore, BILHPN patients who utilize the ASC’s services will benefit from the coordination of care efforts made possible through BILHPN. The linkages available to BILHPN members through participating providers will continue to ensure their care is well-managed, organized, and facilitating improved health outcomes.

**F1.d** **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 carried out a diverse consultative process with individuals at various regulatory agencies and departments regarding the Proposed Projects. The following individuals and agencies are some of those consulted regarding this Project:

* Dennis Renaud, Director, Determination of Need Program, DPH
* Elizabeth Kelly, Director, Bureau of Health Care Safety and Quality, DPH
* Jennica Allen, Manager of Community Engagement Practices, Division of Community Health Planning Engagement, DPH
* Elizabeth Maffei, Program Manager, Division of Community Health Planning Engagement, DPH
* Katelyn Teague, Specialist, Division of Community Health Planning Engagement, DPH
* Massachusetts Executive Office of Health and Human Services
* Health Policy Commission
* Center for Health Information and Analysis
* The Centers for Medicare & Medicaid Services

**F1.e.i** **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.**

As more fully described in Section F1.a.ii, the Applicant determined the need for the Proposed Project based on the historical surgical volume and projected demand for outpatient orthopedic surgery in the service area. Additionally, the Applicant presented the Proposed Project to the community in a number of forums to engage the community and solicit their feedback in the development of the Proposed Project.

During each of the presentations described below, attendees were educated on the Applicant’s proposed plans for the ASC, including the types of surgeries to be performed, the number of ORs, plans for patient experience improvement, and how the Proposed Project will meet the community’s current and future needs for orthopedic surgery. Following the presentation, attendees were able to share feedback and ask the presenters questions.

First, the Proposed Project was presented to BID Plymouth’s Community Benefits and Advisory Committee (“CBAC”) on May 17, 2022. The presentation was attended by seven (7) members of the CBAC and hosted by BID Plymouth’s President, Kevin Coughlin and Dr. Walter Stanwood from PBOA.

Next, Mr. Coughlin and Dr. Stanwood presented to BID Plymouth’s Patient and Family Advisory Council (“PFAC”) on June 8, 2022. The presentation was attended by seven (7) PFAC members.

Additionally, the Proposed Project was presented at BID Plymouth’s Annual Public Meeting on June 22, 2022, with 57 individuals from over 50 community organizations. The Proposed Project was widely publicized as an agenda item for the meeting through the Hospital’s extensive network and email listserv.

Lastly, the Proposed Project was presented at BID-Plymouth’s Quarterly Legislative Breakfast on June 22, 2022. State Senator Susan Moran and State Representatives Matthew Muratore, Kathleen LaNatra, Joshua Cutler, Steven Xiarhos were in attendance.

**F1.e.ii 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".**

For materials related to the activities described in the previous section, please refer to Appendix 3, which includes copies of the presentations. In addition, the Applicant published a legal notice for the Proposed Project in the Old Colony Memorial on October 5, 2023 and posted a copy of the legal notice prominently on BID Plymouth’s and PBOA’s websites.

**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 Proposed Project will meaningfully contribute to The Commonwealth’s goals for cost containment by providing high-quality care in a lower cost setting than currently available in the community. The Proposed Project will meet these goals by establishing a freestanding ASC and shifting clinically appropriate cases from BID Plymouth and its affiliate hospitals to the ASC. As previously discussed in F1.b.1, reimbursement rates for procedures performed in ASCs are approximately 60% of the rate for the same outpatient procedures performed in a hospital setting.[[32]](#footnote-32) Through the Proposed Project, patients will be able to access high-quality surgical services in a lower cost setting in their community. Accordingly, the Proposed Project will reduce health care spending in furtherance of The Commonwealth’s cost containment goals.

**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 providing access to affordable and convenient outpatient orthopedic surgery. First, the proposed ASC will provide capacity for more surgeries to be performed in the community. As a result, patients will experience improved convenience through local access to ASC care with shorter wait times for scheduling procedures in a non-hospital-based setting. This local, timely access will contribute to improved patient experience and satisfaction. Moreover, the cost of surgery at the ASC will be significantly lower than if the same procedure were performed at the Hospital, which is currently the local access point for outpatient orthopedic surgery for patients in the Plymouth service area. As discussed previously, approximately 9% of adults delay or avoid care altogether because of the cost of care. By reducing costs through the provision of care in a freestanding ASC, the Proposed Project seeks to expand access to patients of all financial means, limiting the impact that cost of care plays in the patient’s decision to receive necessary care. To that end, the Proposed Project will improve health outcomes, patient satisfaction, and quality of life by providing timely access to outpatient orthopedic surgery in a lower-cost setting.

**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.**

The Applicant will work with patients and primary care providers to ensure patients are linked to social service organizations as needed. If concerns around social determinants of health are identified or suspected during pre-procedure screenings and appointments, staff will provide the patient with referral resources and notify the patient’s primary care provider as appropriate to encourage necessary follow-up.

**Factor 5: Relative Merit**

**F5.a.i 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 seeks to create a freestanding, single-specialty orthopedic ASC in Plymouth, Massachusetts.

**Quality:** The Proposed Project will improve quality of care through improved access to outpatient orthopedic surgery. The Applicant anticipates that with lower costs as well as improved convenience, more individuals will seek and receive necessary care. Furthermore, the proposed ASC will greatly reduce wait times, further improving access as well as patient satisfaction. Accordingly, the Applicant believes that the proposed ASC will provide patients with high-quality care within their community.

**Efficiency:** As a single-specialty orthopedic ASC, the Applicant will maximize clinical and operational efficiencies through the use of dedicated staff, streamlined overhead costs, and reduced scheduling disruptions when compared to hospital-based surgery.

**Capital Expense:** $16,349,011.00

**Operating Costs:** $17,092,929

**Alternative Proposal:** An alternative to the Proposed Project would be for outpatient orthopedic surgery to continue to be performed at BID Plymouth.

**Alternative Quality:** Quality of care under this alternative is not inferior, but patient satisfaction may be lower in the hospital-setting due to scheduling delays as well as higher costs.

**Alternative Efficiency:** Under this alternative, operational efficiency cannot be maximized because BID Plymouth’s operating rooms will continue to be used for outpatient, inpatient, and emergency surgeries, as well as for a range of specialties.

**Alternative Capital Expenses:** There are no capital expenses associated with this alternative.

**Alternative Operating Costs:** Operating costs would not change under this alternative.

1. BILH also includes Addison Gilbert Hospital; Anna Jaques Hospital; Beth Israel Deaconess Medical Center; Beth Israel Deaconess Hospital-Milton; Beth Israel Deaconess Hospital-Needham; Beverly Hospital; Lahey Hospital & Medical Center; Mount Auburn Hospital; New England Baptist Hospital; and Winchester Hospital. [↑](#footnote-ref-1)
2. For confidentiality, “Female” includes patients whose gender is other or unknown. [↑](#footnote-ref-2)
3. “Other” is a choice for patients to select if they do not feel that their race/ethnicity is reflected in the list of choices. [↑](#footnote-ref-3)
4. Due to how Ethnicity data is pulled and the timing of when FY22 data was pulled, a discrepancy exists between the patient totals for Ethnicity and overall patients. [↑](#footnote-ref-4)
5. Includes self-pay, health safety net, and liability is coverage other than worker’s comp for an injury event. [↑](#footnote-ref-5)
6. For confidentiality, “Other” includes all races not separately listed and/or other categories. [↑](#footnote-ref-6)
7. PBOA’s fiscal year follows the calendar year. [↑](#footnote-ref-7)
8. To ensure patient privacy, the notation “<11” has been used in any instance where the patient count is less than 11 individuals. Those patients have been included in another category so the total number of patients remains accurate but patient privacy is maintained. [↑](#footnote-ref-8)
9. For confidentiality, “Other” includes all races not separately listed. [↑](#footnote-ref-9)
10. Payer mix is based on total patient encounters. [↑](#footnote-ref-10)
11. [*Reducing Medicare Costs by Migrating Volume from Hospital Outpatient Departments to Ambulatory Surgical Centers*](https://www.advancingsurgicalcare.com/reducinghealthcarecosts/costsavings/reducing-medicare-costs), Advancing Surgical Care (Released October 2020), <https://www.advancingsurgicalcare.com/reducinghealthcarecosts/costsavings/reducing-medicare-costs> . [↑](#footnote-ref-11)
12. Relin Yang et al., [*Unique Aspects of the Elderly Surgical Population*](https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3597305/), PubMed (Mar. 2011), <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3597305/> . [↑](#footnote-ref-12)
13. FY22 actuals were not available at the time the Applicant determined projections for the Proposed Project and therefore annualized data was used. As a result, the Applicant projected only 76% of cases would shift. This figure was relied upon in the Applicant’s proforma and financial feasibility study. However, FY22 actuals show a higher percentage of appropriate cases that can be shifted from BID Plymouth to the proposed ASC. [↑](#footnote-ref-13)
14. [*Medical Cost Savings*,](https://www.ascassociation.org/advancingsurgicalcare/reducinghealthcarecosts/costsavings) Advanced Surgical Care, <https://www.ascassociation.org/advancingsurgicalcare/reducinghealthcarecosts/costsavings> (last visited Feb. 17, 2023). [↑](#footnote-ref-14)
15. *Id*. [↑](#footnote-ref-15)
16. Advanced Surgical Care, *supra* note 11. [↑](#footnote-ref-16)
17. For example, Empire BlueCross BlueShield in New York now requires medical necessity review for certain procedures if they're performed in a hospital outpatient setting instead of an ASC. Medicare indirectly incentivizes outpatient surgery through penalties for excessive hospital readmissions. [↑](#footnote-ref-17)
18. [*ASCs Projected to take 68% of Orthopedic surgeries by mid-decade*,](https://www.beckersasc.com/orthopedics-tjr/ascs-projected-to-take-68-of-orthopedic-surgeries-by-mid-decade-5-insights.html) Becker’s ASC Review (Oct. 22, 2020), <https://www.beckersasc.com/orthopedics-tjr/ascs-projected-to-take-68-of-orthopedic-surgeries-by-mid-decade-5-insights.html> . [↑](#footnote-ref-18)
19. Louis Levitt, [*The Benefits of Outpatient Surgical Centers*.](https://www.cfaortho.com/media/news/2017/06/the-benefits-of-outpatient-surgical-centers) The Centers for Advanced Orthopedics (Jun. 15, 2017), <https://www.cfaortho.com/media/news/2017/06/the-benefits-of-outpatient-surgical-centers> ; Michael Barbella, [*The ABCs of ASC Cost Savings*](https://www.odtmag.com/issues/2017-03-01/view_columns/the-abcs-of-asc-cost-savings/)*,* Orthopedic Design & Technology (Mar. 22, 2017), <https://www.odtmag.com/issues/2017-03-01/view_columns/the-abcs-of-asc-cost-savings/> . [↑](#footnote-ref-19)
20. Dennis C. Crawford et al., [*Clinical and Cost Implications of Inpatient Versus Outpatient Orthopedic Surgeries: A Systematic Review of the Published Literature*](https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4703913/pdf/or-2015-4-6177.pdf), 7 Orthopedic Review 116 (2015), <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4703913/pdf/or-2015-4-6177.pdf> ; David Cook et al., [*From ‘Solution Shop’ Model to ‘Focused Factor’ In Hospital Surgery: Increasing Care Value and Predictability*](https://www.healthaffairs.org/doi/pdf/10.1377/hlthaff.2013.1266), 33 Health Affairs 746 (2014), <https://www.healthaffairs.org/doi/pdf/10.1377/hlthaff.2013.1266> . [↑](#footnote-ref-20)
21. Advanced Surgical Care, *Supra note 11*. [↑](#footnote-ref-21)
22. [*Procedure Price Lookup*](https://www.medicare.gov/procedure-price-lookup/), Medicare.gov,[*https://www.medicare.gov/procedure-price-lookup/*](https://www.medicare.gov/procedure-price-lookup/)(last visited Feb.23, 2023). Totals reflect US average. [↑](#footnote-ref-22)
23. Shameek Rakshit et al., [*How does Cost affect access to healthcare?*,](https://www.healthsystemtracker.org/chart-collection/cost-affect-access-care/) Peterson-KFF: Access & Affordability (Jan. 30, 2023), <https://www.healthsystemtracker.org/chart-collection/cost-affect-access-care/> . [↑](#footnote-ref-23)
24. *Id.*  [↑](#footnote-ref-24)
25. Les Masterson, [*Convenience more important to patients than quality of care, survey finds*](https://www.healthcaredive.com/news/convenience-more-important-to-patients-than-quality-of-care-survey-finds/545365/#:~:text=NRC%20Health's%20Market%20Insights%20surveyed,quality%20of%20care%20(35%25), Healthcare Dive (Jan. 7, 2019), <https://www.healthcaredive.com/news/convenience-more-important-to-patients-than-quality-of-care-survey-finds/545365/#:~:text=NRC%20Health's%20Market%20Insights%20surveyed,quality%20of%20care%20(35%25> ). [↑](#footnote-ref-25)
26. [*Latest ASC Data Highlight Ambulatory Surgical Trends*](https://www.reliasmedia.com/articles/140663-latest-asc-data-highlight-ambulatory-surgical-trends), Relias Media (Jun. 1, 2017), <https://www.reliasmedia.com/articles/140663-latest-asc-data-highlight-ambulatory-surgical-trends> ; In 2010, patients over the age of 65 represented 33% of all ASC cases, while an additional 39% of patients were in the 45-64 age group. In total, adults over the age of 45 comprised 72% of all ASCs patients. [↑](#footnote-ref-26)
27. [*Arthritis* *Risk Factors*](https://www.cdc.gov/arthritis/basics/risk-factors.htm), Centers for Disease Control and Prevention: Arthritis, <https://www.cdc.gov/arthritis/basics/risk-factors.htm> (last reviewed Apr. 16, 2021). [↑](#footnote-ref-27)
28. *Id.*;Jennifer M. Hootman et al., [*Updated Projected Prevalence of Self-Reported Doctor-Diagnosed Arthritis and Arthritis-Attributable Activity Limitation Among US Adults, 2015-2040*](https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6059375/), PubMed, <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6059375/> (last visited Feb. 17, 2023). [↑](#footnote-ref-28)
29. [*Massachusetts Obesity Statistics*](https://www.mass.gov/service-details/massachusetts-obesity-statistics), Mass.gov, <https://www.mass.gov/service-details/massachusetts-obesity-statistics> (last visited Feb. 17, 2023); [*Obesity*](https://www.americashealthrankings.org/explore/annual/measure/Obesity/state/MA), America’s Health Rankings: Annual Report, <https://www.americashealthrankings.org/explore/annual/measure/Obesity/state/MA> (last visited Feb. 17, 2023). [↑](#footnote-ref-29)
30. [*The Impact of Obesity on Bone and Joint Health*](https://www.aaos.org/contentassets/1cd7f41417ec4dd4b5c4c48532183b96/1184-the-impact-of-obesity-on-bone-and-joint-health1.pdf), AAOS Position Statement, (Mar. 2015), <https://www.aaos.org/contentassets/1cd7f41417ec4dd4b5c4c48532183b96/1184-the-impact-of-obesity-on-bone-and-joint-health1.pdf> [↑](#footnote-ref-30)
31. *Id.* The number of TKA procedures performed on obese patients doubled between 2002 and 2009. [↑](#footnote-ref-31)
32. Levitt, *supra* note 19. [↑](#footnote-ref-32)