

Boston Outpatient Surgical Suites, LLC
DoN # BOSS-22051213-AS

APPLICANT QUESTIONS #3

Responses should be sent to DoN staff at DPH.DON@State.MA.US

While you may submit each answer as available, please

- List question number and question for each answer you provide
- Submit responses as a separate word document, using the above application title and number as a running header and page numbers in the footer
- When providing the answer to the final question, submit all questions and answers in one final document
- Submit responses in WORD or EXCEL; only use PDF's if absolutely necessary. If "cutting and pasting" charts, provide them in a PDF so they can be clearly seen
- **Whenever possible, include a table with the response**
- **For HIPAA compliance Do not include numbers <11.**

Factor 1a: Patient Panel Need

- 1. The proposed facility does not include a procedure room.**
 - a. Why is the Applicant eliminating the procedure room?**
 - b. How will the volume from the procedure room be accommodated in the new facility?**
 - c. Are there any throughput or cost implications that will result from the elimination of the procedure room?**

Applicant Response: The Applicant did not include a procedure room in its plans for the proposed ASC in order to maximize versatility and flexibility for all ASC cases. Currently, pain cases can be performed in one of the Applicant's ORs or in a procedure room; however the majority of orthopedics cases can only be performed in an OR. If the project were to include a procedure room instead of an OR, the procedure room might be underutilized while at the same time the Applicant's ability to accommodate the anticipated growth of its orthopedic case volume would be constrained (since some of that growth could otherwise be accommodated in an OR when not fully utilized for pain cases). In the proposed facility, all cases will be performed in an OR at no additional cost to the patients or payers, as the Applicant is paid based on an ASC fee schedule, regardless of whether the case is performed in an OR or a procedure room. The Applicant does not expect any negative throughput implications resulting from the elimination of the procedure room.

- 2. The Applicant's Patient Panel was 3,282 in CY2023, and the number of cases was 3,388 in CY2023. Please explain the reason for the higher number of cases than patients.**

Applicant Response: The Applicant's cases in CY2023 were higher than the Applicant's patient panel in CY 2023 because some patients have more than one surgery in a year. For example, a patient may require bilateral knee replacement and have surgery on her left knee in one month and return a few months later to replace her right knee. Another patient may have shoulder surgery one month with an orthopedic surgeon and have a bunion surgery with a podiatrist

Boston Outpatient Surgical Suites, LLC
DoN # BOSS-22051213-AS

months later but in the same year. The count of cases is higher than the count of patients in prior years as well.

Year	# Patients	# Cases	Ratio of Procedures per Case
2019	3,618	4,794	1.33 to 1
2020	3,221	3,711	1.15 to 1
2021	2,719	3,353	1.23 to 1
2022	3,239	3,310	1.02 to 1
2023	3,282	3,388	1.03 to 1

3. The responses to DON questions states that the decrease in cases between 2019 and 2023 was due in part to surgical cases becoming more complex, requiring longer OR time (pg. 2 Responses to DoN Questions #2).

- a. Do you have the ability to use data to demonstrate increasing OR time due to increasing case complexity?
- **Applicant Response:** The Applicant has documented the year-over-year increases in average OR time from 2019 – 2023, as reflected in the table below.

Year	# Cases	% YOY change	Average OR time in minutes	% YOY change
2019	4,794		39.35	
2020	3,711	-22.59%	49.25	+25.15%
2021	3,353	-9.65%	59.09	+19.98%
2022	3,310	-1.28%	62.81	+6.30%
2023	3,388	+2.36%	68.00	+8.26%

Due to data limitations, however, the Applicant is not able to explicitly correlate increased average OR time to increasing case complexity. However, as examples of complex cases that have increased in volume, the Applicant can report that from 2019-2023, there were significant increases in the numbers of at least the following complex cases at Applicant's current site.

Year	2019	2023	Increase	% Increase
Total Joint Arthroplasty	44	108	64	245%
Hip Arthroscopy	16	43	27	269%
Spine	4	7	3	175%
Total	64	158	94	147%

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4. **Procedures decreased between 2019 and 2023 (pg. 3 Responses to DoN Questions #2).**
a. **Please explain the reason for the decrease.**

- **Applicant Response:** The Applicant's procedure count declined between 2019 and 2023 due to a combination of more complex cases and limited OR capacity, the same reasons noted above and previously for the decline in the Applicant's case count and patient count. The Applicant has experienced a consistent ratio of procedures per case from 2019 to 2023. Please see the table below.

Year	# Cases	# Procedures	Ratio of Procedures per Case
2019	4,794	11,188	2.3 to 1
2020	3,711	8,917	2.4 to 1
2021	3,353	8,227	2.5 to 1
2022	3,310	8,003	2.4 to 1
2023	3,388	7,894	2.3 to 1

The number of procedures performed by a surgeon within each case can vary based on the type of case. For example, there may be 5 different procedure codes used in one shoulder surgical case (e.g., arthroscopy with rotator cuff repair, sub-acromial decompression, extensive debridement, synovectomy, and biceps tenodesis- all have distinct Current Procedural Terminology (CPT) procedure codes), whereas there may be only 1 procedure code for a total knee arthroplasty, and 1 procedure code for a pain case.

5. **The Applicant projects that increasing prevalence of obesity and arthritis will contribute to increasing need for BOSS' services.**
a. **Are there any data showing the portion of a population with one of these conditions that translates into a surgical case?**

- **Applicant Response:** The Applicant is not aware of data that specifies the portion of the population with one of these conditions that translates into a particular type of surgical case. However, the Applicant has provided multiple references within the Applicant's Application Narrative (pages 11-13) to support the correlation of obesity and arthritis to conditions requiring orthopedic surgery, including the American Academy of Orthopaedic Surgeons position statement that 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.¹ In addition to what has been shared in the narrative, the Applicant cites below a Journal of Arthroscopy, American Association of Hip and Knee Surgeons article stating, "by

¹ American Academy of Orthopaedic Surgeons Position Statement, "The Impact of Obesity on Bone and Joint Health", viewed at <https://www.aaos.org/contentassets/1cd7f41417ec4dd4b5c4c48532183b96/1184-the-impact-of-obesity-on-bone-and-joint-health1.pdf> on 3/28/24.

Boston Outpatient Surgical Suites, LLC
DoN # BOSS-22051213-AS

2029, ... ≥69% of primary TKA (Total Knee Arthroplasty) is estimated to be obese/morbidly obese."² Approximately 28% of the Applicant's current overall patients are obese or extremely obese and 42% are overweight. Also, "obesity is the major driver of increased operative time in total hip arthroplasty."³

6. The Applicant's ASC Volume Forecast includes estimated volume based on existing cases for Years 1-5.

	Year 1 2025	Year 2 2026	Year 3 2027	Year 4 2028	Year 5 2029
Existing Cases	3,472	3,611	3,755	3,906	4,062

a. To better understand need for OR capacity based on estimated increases in existing cases, explain how many ORs would be needed to accommodate Existing Cases shown in the volume forecast for Years 1-5. Please include an explanation of methodology used.

- **Applicant Response:** The Applicant assumed 3,472 existing cases from its current operations would transition to its new facility in year one of the Proposed Project and applied a 4% year-over-year multiplier for growth as noted in the forecast table on page 9 of the Applicant's Application Narrative. The existing case volume represents cases from existing surgeons within the limitations of the existing ORs and limitations on block time assignments of the Applicant's current site. The Applicant also assumed an additional 4,258 new cases in its year one volume assumptions, that represent new cases from existing surgeons who have requested additional OR time to perform more cases at the Applicant's ASC as well as new surgeons (including surgeons in the existing surgeons' practices and others) who would like to join the Applicant's medical staff to perform cases at its ASC. This question asks the Applicant to estimate the number of ORs needed to accommodate only Existing Cases in years 1 to 5—and not the number needed to also fully accommodate the anticipated increases in complexity of the Applicant's cases, and in the Applicant's surgical staff.

In order to estimate the number of ORs needed to accommodate only Existing Cases, the Applicant has applied the following assumptions to its methodology:

- The applicant operates 250 days a year, 8 hours per day.
- One OR has 100% utilization potential of 2,000 hours or 120,000 minutes in a year.
- Three ORs have 100% utilization potential of 6,000 hours or 360,000 minutes in a year.
- Four ORs have 100% utilization potential of 8,000 hours or 480,000 minutes in a year.

² The Journal of Arthroplasty, American Association of Hip and Knee Surgeons, "Projected Prevalence of Obesity in Primary Total Knee Arthroplasty: How Big will the Problem Get?", viewed at [https://www.arthroplastyjournal.org/article/S0883-5403\(22\)00273-X/abstract](https://www.arthroplastyjournal.org/article/S0883-5403(22)00273-X/abstract) on 3/28/24.

³ The Journal of Arthroplasty, American Association of Hip and Knee Surgeons, "Morbid Obesity and Congestive Heart Failure Increase Operative Time and Room Time in Total Hip Arthroplasty." viewed at [https://www.arthroplastyjournal.org/article/S0883-5403\(15\)00970-5/abstract](https://www.arthroplastyjournal.org/article/S0883-5403(15)00970-5/abstract) on 3/28/24.

Boston Outpatient Surgical Suites, LLC
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- Five ORs have 100% utilization potential of 10,000 hours or 600,000 minutes in a year.
- The Applicant's count of joint arthroplasty cases will increase by 856 cases to meet its year one forecast for joint arthroplasty, replacing other cases, and the proportion of joint arthroplasty cases to other cases will increase accordingly, without changing the total number of existing cases.
- Average OR time for Arthroplasty cases equals 150 minutes including turnover time.
- Average OR time for Other cases equals 90 minutes including turnover time.

Given, these assumptions, the Applicant would require 5 ORs to accommodate just the Existing cases through year 5. Please see table below:

	Year 1 2025	Year 2 2026	Year 3 2027	Year 4 2028	Year 5 2029
Existing Case Count	3,472	3,611	3,755	3,906	4,062
% Utilization – 3 ORs	102%	106%	110%	115%	119%
% Utilization – 4 ORs	77%	80%	83%	86%	90%
% Utilization – 5 ORs	61%	64%	66%	69%	72%

Operating at or near 100% capacity every day is not realistic given many factors such as staffing, equipment, weather, cancellations, and other scheduling challenges. In fact, "Many experts have targeted 70-80% as an optimal utilization rate" ⁴ as noted in page 8 of the Applicant's Application Narrative.

As noted in the Applicant's Application Narrative, the Applicant is not able to remain in its current site because of the termination of its current lease and the repurposing of the existing property by the landlord. Most of the surgeons on the Applicant's medical staff will also be moving to the new site, along with other members of those surgeons' medical practices who have been seeking to, and are hoping to, perform their own cases at the new location. The proposal to locate the ASC on the same property as the medical offices is, among other things, intended to improve access for the patients of those practices (including patients of additional members of those practices), as well as patients of other local physicians who have sought to, but have been unable to, utilize the Applicant's current facility due to its limited capacity.

If the number of ORs in the Applicant's new facility is limited to meet only the needs of its existing case count (and cannot accommodate anticipated new cases from existing and new medical staff who want to perform their cases at the proposed ASC), many of the patients who would benefit from the efficiency and convenience of having their surgery in a location that is proximate to their surgeon's office, and proximate to needed therapy and other services that will be located in the same building, will not have that opportunity; and the practices' physicians

⁴ 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" 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>.

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will likely be obliged to use higher cost and/or less accessible facilities. In addition, the Applicant's ability to help relocate more complex procedures from hospital-based facilities to safe, efficient, lower cost free-standing ASC facilities - a desirable trend that has been acknowledged by the HPC and payers (among others) - will be constrained.