#### **APPLICANT RESPONSE #1**

Responses should be sent to DoN staff at <a href="mailto:DPH.DON@mass.gov">DPH.DON@mass.gov</a>

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
- We accept answers on a rolling basis however, when providing the answer to the final question, submit all questions and answers in order in one final document.
- Submit responses in WORD or EXCEL; only use PDF's if absolutely necessary. Whenever possible, include a table in data format (NOT pdf or picture) with the response.

In order for us to review this project in a timely manner, please provide the responses by April 16, 2024.

#### **Proposed Project**

1. The Change In Service Form indicates that the Proposed Project will include 16 "Pre/Post Operative beds". Are the pre and post operative beds going to be used interchangeably, or are there a specific number of beds allocated to each purpose?

**Response:** The pre/post operative beds will be used interchangeably to most efficiently and effectively accommodate patient flow.

2. The Factor 4 Form indicates construction for PACU. Please clarify if the PACU refers to the Pre/Post Operative beds noted in the Change In Service Form or if the PACU is a separate and distinct part of the ASC.

**Response:** The PACU refers to the pre/post-operative beds noted in the Change In Service Form.

#### Factor 1ai: Patient Panel

3. Table 2 provides the cities/towns where the top 72% of patients reside for FY2023 (based on 82,191 total number of patients). To better understand Patient Panel need for the Proposed Project, please include the cities/towns where up to 75% of the Applicant's patients reside from highest to lowest. (If the count is <11 use "Other" and specify which cities/towns are included in that category.)

Zip code	2023	% of Total	Cumulative %
02360	30,156	37%	37%
02330	4,703	6%	42%
02364	4,546	6%	48%
02346	3,799	5%	53%
02332	3,172	4%	56%
02050	2,727	3%	60%
02532	2,025	2%	62%
02359	2,002	2%	65%
02563	1,376	2%	66%
02338	1,355	2%	68%

02562	1,190	1%	69%
02649	916	1%	71%
02367	899	1%	72%
02571	895	1%	73%
02536	828	1%	74%
02537	741	1%	75%
02347	668	1%	75%

4. On Table 3, please provide the Payer Mix for the BID Plymouth Orthopedic Surgery Panel Demographics for FY2023.

Payer	2023 Patients	2023 %	
All Other	842	33.1	
Medicaid	243	9.6	
Medicare	1,457	57.3	
Total	2,542	100%	

5. Table 6 provides the cities/towns where the top 64% of patients reside for FY2023. To better understand Patient Panel need for the Proposed Project, please include the cities/towns where up to 75% of the Applicant's patients reside from highest to lowest. (If the count is <11 use "Other" and specify which cities/towns are included in that category.)

Primary Service Area	FY23
Total Patients	2892
Plymouth	948
Carver	187
Kingston	137
Middleborough	134
Duxbury	126
Bourne	123
Barnstable	116
Sandwich	97
Wareham	78
Marshfield	76
Pembroke	66
Falmouth	61
Halifax	60
Yarmouth	59
Dennis	47
Total Top Towns	2315
% of Top Towns	80%

6. Please provide alternative payment method (APM) contract percentages for both BID-Plymouth and PBOA for FY2023.

**Response:** Both BID Plymouth Hospital and PBOA contract through the Beth Israel Lahey Health Performance Network and hold the same contracts. The percentages for both types of contracts are the same for each provider.

Payment Method	BID Plymouth and PBOA FY23
ACO and APM contracts	2.6%
Non-ACO and APM contracts	97.4%
Total contracts:	100.00%

7. Narrative page 5 notes that, "PBOA's Patient Panel largely overlaps with BID Plymouth's outpatient orthopedic surgical Patient Panel." Please provide a breakdown of the PBOA patients who received orthopedic surgical care through BID Plymouth outpatient surgery from FY2021-FY2023.

PBOA Outpatient Surgery Volumes <sup>1</sup>							
BID FY2021 BID FY2022 BID FY2023							
BID Plymouth 1,851 2,022 2,163							
South Shore 32 <11 <11							

#### Factor 1a.ii. - Patient Panel Need

8. Page 8 of the Narrative discussed the expansion of procedures allowed in an ASC setting. Based on the procedures that will be performed at the proposed ASC, please provide a breakdowns of the total surgical cases by age cohort and procedure type at both BID-Plymouth and PBOA for the fiscal years 2019-2023.

2019	0-25	26-45	46-64	65+	Total
2019: Foot & Ankle	12	26	71	55	164
2019: General/Other	<11	19	37	15	71
2019: Hand	38	44	152	100	334
2019: Joint Replacement	<11	<11	28	<11	28
2019: Joint Arthroscopy	19	80	207	99	405
2019: Spine	<11	21	45	41	107
2019: Trauma	<11	12	14	15	41
2019 Total <sup>2</sup>	88	192	539	331	1150

2020	0-25	26-45	46-64	65+	Total
2020: Foot & Ankle	<11	30	71	59	160
2020: General	<11	15	26	15	56
2020: Hand	34	40	134	124	332
2020: Joint Replacement	<11	15	71	134	220
2020: Joint Arthroscopy	26	66	169	79	340

<sup>&</sup>lt;sup>1</sup> To protect patient confidentiality, <11 is being used to denote numbers less than 11 and total surgeries are not being provided.

<sup>&</sup>lt;sup>2</sup> Please note the totals reflect the true of surgical cases for each category (age and procedure) even though counts with less than 11 patients have been moved to a related category to protect patient confidentiality.

2020: Spine	<11	20	38	40	98
2020: Trauma	<11	17	18	25	60
2020 Total	88	175	526	477	1266

2021	0-25	26-45	46-64	65+	Total
2021: Foot & Ankle	<11	26	60	47	133
2021: General/Other	<11	33	37	18	88
2021: Hand	52	39	144	139	374
2021: Joint Replacement	<11	12	160	321	493
2021: Joint Arthroscopy	28	59	184	104	375
2021: Spine	<11	25	58	76	159
2021: Trauma	<11	14	17	23	54
2021 Total	109	178	660	728	1676

2022	0-25	26-45	46-64	65+	Total
2022: Foot & Ankle	<11	22	41	41	104
2022: General/Other	<11	25	33	25	83
2022: Hand	42	33	133	161	369
2022: Joint Replacement	<11	18	182	444	644
2022: Joint Arthroscopy	20	52	224	104	400
2022: Spine	0	31	72	91	194
2022: Trauma	<11	<11	19	22	41
2022 Total	80	171	696	888	1835

2023	0-25	26-45	46-64	65+	Total
2023: General/Other	11	29	35	28	103
2023: Hand	36	38	139	169	382
2023: Joint Replacement	11	16	253	566	846
2023: Joint Arthroscopy	28	53	186	112	379
2023: Spine	<11	24	44	82	150
2023: Trauma	<11	11	19	13	43
2023 Total	93	164	676	970	1903

- 9. Page 9 of the Narrative notes that the current wait time to be scheduled for surgery at BID-Plymouth is 6 weeks.
  - a. Please provide data on the average wait time to be scheduled for surgery (from the decision to move forward with surgery) broken down by procedure for FY2019-FY2023.

**Response:** Historical surgical wait time data was not tracked and therefore cannot be pulled. The current wait time is 6 weeks.

b. By how much does the Applicant anticipate the Proposed Project be able to reduce wait times for surgery?

**Response:** The Applicant anticipates wait times for surgery will be reduced by up to 50% as a result of the Proposed Project.

c. Please include any industry standard/ national benchmarks for optimal wait times for the procedures performed.

**Response:** There are no industry standard/national benchmarks available for optimal wait times. Orthopedic surgeries performed in the ASC are elective, yet the conditions requiring surgery are causing people pain. Therefore, a wait time of between 2 and 4 weeks is reasonable to not only address people's pain in a timely fashion, but also to provide time for them to make accommodations for their post-surgical needs (e.g., time off from work).

10. Page 9 of the Narrative discusses the proposed hours of the new ASC. How does the 8 hours a day, 5 days a week, 50 weeks a year schedule for the new ASC compare to the current availability for surgery at BID-Plymouth?

**Response:** OR block time for surgeons is not scheduled differently for inpatient and outpatient surgeries – the blocks are combined as surgeons intermingle surgeries. PBOA surgeons have 169.4 hours weekly of OR block time for their inpatient and outpatient surgical cases which equals 8,470 hours per year. The proposed hours at the new ASC will offer 8,000 hours per year for outpatient cases.

In FY23, there were 2,717 orthopedic cases completed by PBOA in 8,470 hours, including 1901 outpatient cases, comprising 5,893 hours, and 818 inpatient cases, comprising 2,530 hours. The new ASC will increase OR time for outpatient procedures by 2,100 hours or 25% because the ORs will not need to also serve inpatient surgeries.

- 11. The CPA Report noted that 22 FTE's are needed to operate the ASC.
  - a. How many surgeons by specialty will be on staff at the proposed site?

**Response:** We anticipate at least 12 orthopedic surgeons on staff at the proposed site. Please note several current surgeons practice across multiple specialties.

- Two (2) Hand/Wrist/Elbow
- One (1) Shoulder
- Two (2) Sports
- Five (5) Joint Replacement
- Two (2) Spine
- b. How surgeons do you anticipate will accept MassHealth at the proposed facility?

**Response:** MassHealth will be accepted at the proposed facility by all providers, and equal access will be provided to all members of the community that are in need of services provided at the location.

c. Where will the new surgeons come from? Where are they currently performing their surgeries?

**Response:** New surgeons will be added to the existing integrated orthopedic service developed between PBOA and BID-P. PBOA is actively recruiting surgeons from outside the market to increase access for the community and better meet the orthopedic needs of its members. The list

above delivers the current team of orthopedic surgeons as well as the immediately anticipated additions for 2024. PBOA anticipates adding two joint replacement surgeons beyond the roster.

In addition to PBOA and BID-P, any orthopedic surgeon also serving the Plymouth community is welcome to utilize the facility. At this time there are no prospective candidates, but that is something that will remain open and available to all.

### Factor 1: b) Public Health Value, Improved Health Outcomes And Quality Of Life; Assurances Of Health Equity

12. Page 8 of the Narrative states that the proposed ASC is most likely to perform total knee arthroplasty, knee arthroscopy, shoulder arthroscopy, carpal tunnel surgery, and total hip arthroplasty as the procedures most prevalent among older adults because age is a contributing risk factor to the underlying disease or condition. Please provide data or research demonstrating improved health outcomes and quality of life resulting from these procedures.

See research noted below.

13. On page 8 of the Narrative, the Applicant cites an article from 2011 to support the statement that "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." If possible, could you please provide more recent research on this topic and data demonstrating improved health outcomes and quality of life resulting from these procedures?

#### A. Total Knee Replacement

• A new study by UMass Chan Medical School faculty found that while adult patients from all age groups reported improvements following total knee arthroplasty (*knee replacement*), patients aged 55 and younger were found to have less improvement in pain, function and quality of life following surgery compared with patients 75 years and older.

Ayers DC, Yousef M, Yang W, Zheng H. Age-Related Differences in Pain, Function, and Quality of Life Following Primary Total Knee Arthroplasty: Results From a FORCE-TJR (Function and Outcomes Research for Comparative Effectiveness in Total Joint Replacement) Cohort. J Arthroplasty. 2023 07; 38(7 Suppl 2):S169-S176. PMID: 37121490.

#### B. Knee arthroscopy for meniscal tear:

• Performing a knee arthroscopy with partial meniscectomy is associated with improved Knee injury and Osteoarthritis Outcome Score and Tegner Activity Score, relative to treatment with physiotherapy alone, at 2-year follow-up.

<u>Mark D. Porter, MD, DSc, FACSP, FRACS (Orth)</u> and <u>Bruce Shadbolt, PhD</u>. Improved Outcome With Knee Arthroscopy Relative to Physiotherapy for Symptomatic Unstable Meniscal Tears: 2-Year Prospective Cohort Study <a href="https://doi.org/10.1177/19417381231156378">https://doi.org/10.1177/19417381231156378</a>

#### C. Knee ACL Repair:

• Improved functional knee scores, quality of life, and psychological status were achieved at anterior cruciate ligament reconstruction in patients older than 50 years of age.

Batuhan Çokyaşar M.D., Ozan Altun M.D, Uygar Daşar M.D. Anterior Cruciate Ligament Reconstruction Improves Functional Scores and Quality of Life in Patients Older Than 50 Years of Age https://doi.org/10.1016/j.asmr.2023.100806

#### D. Hand/Wrist:

- This study evaluated 950 CTR in 826 patients with self-reported symptom severity and function scores collected at 2 weeks, 6 weeks and 12 weeks post-operatively. The conclusions were "significant improvements in symptom severity and hand function may be expected after open carpal tunnel release in the general population regardless of age, medical comorbidities, or workers' compensation status."
  - Cagle, Paul J. et al. An Outcomes Protocol for Carpal Tunnel Release: A Comparison of Outcomes in Patients With and Without Medical Comorbidities. Journal of Hand Surgery, 2014; Volume 39, Issue 11, 2175 2180
- This study is a systematic review of carpal tunnel release surgery in patients with severe CTS. They reviewed 38 papers which consisted of 2,531 patients/2712 hands. All studies that assessed patient-reported outcome measures before and after surgery reported significant improvements. Patient-reported outcomes indicated symptomatic improvement and reduced disability.
  - Meyers, Abigail et al. A Systematic Review of the Outcomes of Carpal Ligament Release in Severe Carpal Tunnel Syndrome. Journal of Hand Surgery, 2023; Volume 48, Issue 4, 408.e1 408.e18
- This prospective study evaluated the outcomes from carpal tunnel release and comparing the outcomes to the preoperative nerve test. Data was collected at 2 weeks and 3 months post-operatively in 199 patients/256 hands. They found that all categories benefited from CTR in function and symptom related metrics, including the most severe cases. The greatest improvement was observed in the early preoperative period within 2 weeks for symptoms and within 3 months for functional parameters. Improvement in outcome scores was comparable in all groups, although some of the greatest improvement was noted in the moderate group.
  - Rivlin, Michael et al. Electrodiagnostic Grade and Carpal Tunnel Release Outcomes: A Prospective Analysis. Journal of Hand Surgery, 2018; Volume 43, Issue 5, 425 431

#### E. Wrist Fracture:

For non-geriatric patients (most commonly defined in studies as under 65 years of age), operative treatment for fractures with post reduction radial shortening >3mm, dorsal tilt >10 degrees, or intraarticular displacement or step off >2 mm leads to improved radiographic and patient reported outcomes.
 American Academy of Orthopaedic Surgeons/American Society for Surgery of the Hand Management of Distal Radius Fractures Evidence-Based Clinical Practice Guidelines. <a href="www.aaos.org/drfcpg">www.aaos.org/drfcpg</a> Published December 5, 2020.
 Accessed April 04, 2024. <a href="https://www.orthoguidelines.org/guideline-detail?id=1599&tab=all\_guidelines">https://www.orthoguidelines.org/guideline-detail?id=1599&tab=all\_guidelines</a>

#### F. Shoulder Arthroscopy:

- Elderly patients benefit as much from arthroscopic rotator cuff repair as their younger counterparts. Similar improvements in CS, Subjective Shoulder Value, pain, and satisfaction occurred for both elderly and control patients. Arthroscopic repair was safe and effective in both groups. Even elderly patients with massive tears showed clinically significant improvements. Arthroscopic rotator cuff repair should be considered as a valuable treatment irrespective of age.
  - Do elderly patients gain as much benefit from arthroscopic rotator cuff repair as their younger peers? Journal of Shoulder and Elbow SurgeryVol. 28Issue 6p1056–1065Published online: January 28, 2019 Caroline Witney-LagenGeorgios MazisJuan BrugueraEhud AtounGiuseppe SforzaOfer Levy
- G. <u>Inpatient/Outpatient Total Hip Replacement (THR) and Total Knee Replacement (TKR) (and Partial Knee Replacements):</u>
- "Overall, no significant differences between outpatients and inpatients were found for overall complications and readmission rates, and improvement in [patient reported outcome measures (PROM)]. By type of arthroplasty, only [total hip arthroplasty (THA)] in [outpatient] pathways were associated with fewer [adverse events] [OR = 0.55 (0.41-0.74)] compared to inpatient pathways. 92% of [out]patients were discharged on the day of surgery. [Outpatient joint arthroplasty] resulted in an average cost reduction of \$6.797,02."
   Safety and efficacy of outpatient hip and knee arthroplasty: a systematic review with meta-analysis Y F L

Bemelmans, M H F Keulen, M Heymans, EH van Haaren, B Boonen, M G M Schotanus <a href="https://pubmed.ncbi.nlm.nih.gov/33587170/#:~:text=By%20type%20of%20arthroplasty%2C%20only,cost%20reduction%20of%20%246.797%2C02">https://pubmed.ncbi.nlm.nih.gov/33587170/#:~:text=By%20type%20of%20arthroplasty%2C%20only,cost%20reduction%20of%20%246.797%2C02</a>.

- "Significant improvement occurred between preoperative and postoperative time points for all PROMs. The PROMs showed the greatest proportional recovery within the first month postoperatively, each improving by at least 1 minimal clinically important difference (MCID). Daily steps and flights of stairs took longer to reach at least 1 MCID (3 months and 1 year, respectively). Gait speed and walking asymmetry returned to baseline by 3 months..."
  The Journal of Arthroplasty 38 (2023) S65eS71, Recovery Curves for Patient Reported Outcomes and Physical Function After Total Hip Arthroplasty. Eleanor H. Sato, MD Kimberly L. Stevenson, MD Brenna E. Blackburn, MPH, PhD Christopher E. Pelt, MD Jeremy M. Gililland, MD Lucas A. Anderson, MD, Published: April 15, 2023D01: https://doi.org/10.1016/j.arth.2023.04.012
- "This paper demonstrates that patients who had undergone THA a mean of 16 years earlier have impaired self-reported physical HRQoL and hip functionality, but they still perform physically better than untreated patients with hip osteoarthritis. The hip functionality is a major determinant of physical HRQoL, but other relevant factors, such as the number of comorbidities, can also influence the ability of subjects. Despite the impairment in the HRQoL, the level of post-surgical satisfaction was high in this study group."

  https://bmcmusculoskeletdisord.biomedcentral.com/articles/10.1186/1471-2474-12-222
- "Both hip and knee arthroplasty resulted in a large increase in quality of life as measured in QALYs with use of either the EQ-5D or the SF-6D instrument. After primary arthroplasty, the average patient health-related quality of life was similar to values in the literature for healthy patients without osteoarthritis (<u>Table VI</u>)." https://journals.lww.com/jbjsoa/Fulltext/2018/09000/Quality Adjusted Life Years After Hip and Knee.8.aspx

#### Factor 1b.iii. Health Equity

14. Narrative page 15 states that translation services are available to the patient 24 hours/ day. Please state whether these interpretation services will be free to patients.

Response: Yes, translation services will be provided to patients of the ASC free-of-charge.

15. Given that the Patient Panel demographics do not reflect a high level of diversity, what efforts does the Facility plan to implement for the goal of Health Equity, beyond SDoH screenings and language translation services.

**Response:** The ASC will follow non-discrimination and diversity, equity and inclusion policies consistent with those of BID Plymouth Hospital relative to patient access to the ASC and employment policies. Employee recruitment practices will include strategies to ensure that staff are culturally and linguistically competent relative to market demographics. Staff and providers will participate in annual cultural competency training. Additionally, the ASC will have a Financial Assistance program to assist patients with applying for public assistance or other programs to help cover medical costs incurred at the ASC.

#### Factor 1c – Continuity of Care

- 16. Page 15 of the Narrative notes, "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."
  - a. Will the ASC be available to patients outside of BILHPN?

**Response:** Yes, the ASC will be available to all patients.

b. Please describe post-operative care coordination, including processes for sharing patient records with primary care providers and specialists, and coordination of follow-up care (such as PT/OT) – particularly for providers outside of the BILHPN.

**Response:** The surgeon will work directly with the patient to provide care coordination for post-surgical recovery/rehabilitation care (e.g., PT/OT). This care coordination begins before surgery and continues after surgery until the patient is recovered. The ASC discharge nurse will review discharge orders with each patient, including all post-op care instructions and orders for follow-up care, and will provide written instructions. The ASC will ensure the surgeon and referring provider(s) have access to the operating and discharge summaries. The performing surgeon will have direct access to the full patient record including the operative note and discharge summary via the electronic medical record. With patient consent, the ASC will provide the patient's referring provider and/or primary care provider with access to the patient record.

#### Factor 1e - Community Engagement

17. To better understand the Applicant's community engagement efforts, please provide a brief summary of questions and feedback raised from each of the presentations noted on page 17 of the Narrative.

**Response:** BID Plymouth and Plymouth Bay Orthopedic Associates leadership met with community members and local government through the four events noted in the narrative, as well as individual discussions with local government and business leaders. The questions addressed included the below. Feedback was positive with the perspective that the ASC would provide a lower-cost and more accessible option for outpatient orthopedic surgery, and that there would be no decrement of operating rooms at BID-Plymouth as a result.

- What is being proposed and why?
- How will the ASC benefit patients?
- What will happen to BID Plymouth Hospital?

#### **Factor 5: Relative Merit**

- 18. The Narrative (page 18) details that only one alternative option to the Proposed Project was considered.
  - a. Please provide information about any alternative options that were not reflected in the Narrative.

Please review: The Hospital considered expanding outpatient surgical capacity at its Main Campus through the construction of an on-campus HOPD. However, this option would not reduce health care costs because it would be reimbursed as a hospital outpatient department and not a freestanding ASC.

b. Describe any methods that may have been considered to manage the high volume of surgical referrals, and why those options were rejected.

The option described in the prior response was considered, but it was determined that option would not adequately address the cost concerns of the community. In order to provide the Plymouth community with timely access to outpatient orthopedic surgery, additional capacity is needed. The best option to provide the community with additional capacity is through a freestanding ASC that will provide convenient, high-quality care at a lower price than surgery performed at the Hospital.

c. Describe any methods that may have been considered to manage long wait times, and why those options were rejected.

**Response:** Please see the above response.

19. Are there other facilities within the BILH health system that could assist with the current outpatient surgical needs?

**Response:** Yes. However, using these sites would be more costly, time-consuming and less convenient for patients; would have a negative impact on access to orthopedic care in the Plymouth region; and, could potentially have a negative impact on continuity of care for patients in the Plymouth region.

Using other BILH sites, only one of which is an outpatient ASC located in Dedham<sup>3</sup>, would require that patients transition their care to surgeons outside the Plymouth region and travel outside the region for surgery. Or, assuming PBOA surgeons could secure surgical privileges at other BILH sites, use of these sites for surgery would require that PBOA surgeons travel long distances to perform surgery - which would reduce the time they were available to consult patients in their Plymouth office. This would extend appointment and surgical wait times, negatively impacting access for patients in the Plymouth region.

<sup>&</sup>lt;sup>3</sup> The New England Baptist Outpatient Care Center, a joint venture by New England Baptist Hospital and Constitution Surgery Alliance, is 40 minutes/40 miles away from BID Plymouth.