

# Mass General Brigham Incorporated

DON # MGB-23120414-AM

## APPLICANT RESPONSES #2

*Responses should be sent to DoN staff at [DPH.DON@State.MA.US](mailto: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
- 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 March 21, 2024.

### Project Description

In responding to the questions below, MGH understands the challenge in reconciling data across its original application, amendment, and various follow-up requests because there are at least three variables associated with beds that all intersect and overlap:

- Type of bed: Med/Surg vs Specialty (Pediatrics, OB, psychiatry)
- Level of bed: Med/Surg vs ICU
- Room Type: Single- or double-bedded configuration

The amendment focuses on Med/Surg only and requests 94 incremental licensed beds (54 Med/Surg and 40 ICU). If approved, MGH has a plan to close 12 inpatient units (277 beds) in aging facilities and a roadmap for how it might reconfigure beds within the remaining 18 patient care units to achieve this outcome. The combined approach would have a minor impact on the private room percentage of MGH's licensed beds (calculated here based on ICU and Med/Surg so it is higher than the commentary in MGH's prior submissions that isolated Med/Surg beds only).

1. **In response to question 2a of the first round of questions, the Holder stated, "If 94 requested beds are approved, MGH will close 277 beds in existing facilities and convert 111 existing doubles into singles in existing rooms (388 beds)." Please clarify: Is the intention to convert 111 beds in double rooms to 54 single rooms or would 111 beds be converted to 111 single rooms?**

To achieve the total count, MGH plans to convert 111 double-bedded rooms into 111 single-bedded rooms.

2. **In order to clarify the composition of single and double bedded rooms with the addition of 94 beds, please fill out the table below. Given that the new building is not yet in operation, please answer how many double and single bedded rooms are currently planned for the new building in the table.**

The table below was set up to show the significant improvement in the private room percentage (calculated on both Med/Surg and ICU) associated with the DON approval that allowed MGH to build 482 private rooms in the new building. The original DON approval with no additional beds cannot be achieved solely from converting doubles to singles and would also require select patient care units to be taken out of service. However, the amendment for 94 beds includes growth in ICU beds (single-bedded), so the delta between these two columns is only 5%.

# Mass General Brigham Incorporated

## DON # MGB-23120414-AM

---

	Today	Original DON w/ No Net New Beds	If Proposed Change is Approved
Single Bedded Rooms in New Building	NA	100%	100%
Double Bedded Rooms in New Building	NA	Not allowed by DPH regulation	Not allowed by DPH regulation
Single Bedded Rooms on the Rest of MGH Main Campus	45%	97%	92%
Double Bedded Rooms on the Rest of MGH Main Campus	55%	3%	8%
Total Med Surg Beds	900	900	994

3. **What methods does the hospital use to mitigate infection control concerns in the double-bedded rooms listed above?**

The new construction facilitates a significant reduction in the number of double-bedded rooms and there would be no change in infection control procedures associated with this Amendment Request. The MGH Infection Control and Prevention Program is designed to support safety by establishing policies and procedures that reduce the risk of acquiring and transmitting infection in patients, visitors, and healthcare personnel as well as standards for cleaning/disinfection.

When feasible, MGH manages the patient placement process to minimize the use of double occupancy rooms. However, having additional licensed beds to place patients in, even if doubles, was deemed preferable through the lens of infection control to boarding in an overcrowded emergency department.

As a reminder, no new double-bedded rooms would be created through this Proposed Change, and it is a substantial improvement over the Hospital's current state.

**10.5.d Provide a detailed narrative, comparing the approved project to the proposed Significant Change, and the rationale for such change.**

4. **To better understand the impact of ALOS on the current overcrowding situation at the Hospital:**  
**All data provided below is for Med/Surg patients only and does not include the specialty services.**

a. **Please provide information on how the current ALOS figures compare to the industry standard.**

There is no industry standard for ALOS as each hospital has a different mix of specialties and acuity profile. MGH reviews data on acuity adjusted length of stay (ALOS divided by case mix index) to ensure any increases in the unadjusted figures can be explained by clinical factors. It is important to note that ALOS will increase with more high acuity cases, but also as low intensity cases shift to outpatient and drop out of the numerator and denominator.

b. **What impact does the Holder anticipate the additional 94 beds would have on ALOS?**

MGH believes that a more efficient flow through the hospital associated with the 94 beds should improve operations and throughput. Any changes in wait times and delays (for the subset of patients now boarding) are likely measured in hours, not days and would be challenging to identify in the aggregate ALOS metric.

c. **Please fill out the table below for FY2019**

Methodology: Since patients move between Med/Surg and ICU beds throughout their stay, the most accurate measure of ALOS is total. However, MGH has provided additional insights by separating patients who had at least one night in the ICU from those who never received care in an ICU. Patients who spent

# Mass General Brigham Incorporated

## DON # MGB-23120414-AM

some time in the ICU have a significantly higher overall LOS compared to patients who were never in an ICU during their stay. The Case Mix Index (CMI) is for the entire patient stay and therefore corresponds to the Total ALOS.

	Med/Surg	ICU	Total Med/Surg and ICU	Total CMI	Total Adjusted CMI
<b>FY19</b>	5.3	12.4	6.57	2.4	2.8
<b>FY23</b>	6.5	13.4	7.85	2.8	2.8

- d. If there has been an increase in ALOS from 2019-2023, please provide an analysis for the cause of the increase.

The total CMI for Med/Surg patients increased from 2.4 to 2.8 this timeframe or 18%. The total Med/Surg LOS adjusted for CMI remained flat implying the change in ALOS is explained by acuity.

5. Table 2 on Page 4 of the Amendment Narrative provides an occupancy table for FY2023 if 94 beds had been added to the license, but appears to use patient day data from FY2019. Please update the table using FY2023 numbers.

The occupancy rates originally provided were calculated using FY2023 data. A corrected table with FY2023 inpatient and outpatient days is provided below.

**Table 2: FY23 with 94 Additional Beds**

Metric	FY23 Modeled with 94 additional Licensed Beds <sup>1</sup>
Licensed Beds	994
Inpatient Days	292,078
Bedded Outpatient Days <sup>2</sup>	12,013
Total Days	304,091
Inpatient Occupancy	80.5%
Bedded Outpatient Occupancy	3.3%
Total Occupancy	83.8%

6. In comparing Table 1 (p 4 of Amendment Narrative) to Table 3 (page 5 of Amendment Narrative), there appears to be a projection of lower Bedded Outpatient days than the 2019 numbers. Given that the new building will include 3 new OR's which will provide outpatient cardiac surgeries, please explain the lower projection in Bedded Outpatient days.

The projection for bedded outpatient days assumed they would remain flat with 2023 actual levels (noting 2023 was slightly lower than 2019).

Outpatients are placed in inpatient beds when a post-acute care unit or recovery bed is not available. The new building design includes 13 additional peri-operative bays to care for patients during recovery as well as expanded urgent care capacity in the oncology unit for observation care.

<sup>1</sup> Inclusive of medical/surgical and intensive care unit beds.

<sup>2</sup> Outpatient beds refer to outpatients occupying an inpatient bed (PPRs, Admit to Observation, including Short Stay Unit)

# Mass General Brigham Incorporated

**DON # MGB-23120414-AM**

**7. Please provide details on discharge delays caused by post-acute care placement and share any associated data.**

Like many hospitals in Eastern MA, MGH is experiencing delays in transitioning patients to post-acute facilities. MGH has just recently established a system to collect data on the number of patient days associated with these delays – inputting an indicator when patients are medically cleared for discharge. In the future, MGH intends to report on the number of delay days for both med/surg and mental health patient populations. Anecdotally, the Case Managers believe the most challenging patient placements involve mental health and inadequate insurance coverage which are more complicated social issues than staffing at the post-acute facilities. Since FY '22, MGB has sought to address the challenge of discharge delays by contracting for access to 69 leased skilled nursing facility (SNF) beds.

**8. Please provide a breakdown of the ED statistics in the table below for FY2019 and FY2023. Please specify whether the time is in minutes or hours.**

	Number of ED Boarders	Total number of Boarding patients identified in ED with a M/S diagnosis	Average time from ED arrival to ED departure for admitted M/S ED (mins)	Total number of patients identified in ED with a behavioral health diagnosis <sup>3</sup>	Average time from ED arrival to ED departure for BH patients by month (in mins)*
FY2019	23,100	22,385	715	8,606	See table below
FY2023	24,388	23,522	1,226	8,841	See table below

**Table A: Average time from ED arrival to ED departure for BH patients by month (mins)**

Month	FY19	FY23
Oct	1,230	2,122
Nov	1,310	1,952
Dec	1,299	2,063
Jan	1,138	1,864
Feb	1,165	1,883
Mar	1,043	1,851
Apr	1,068	2,020
May	1,188	1,883
Jun	1,124	1,846
Jul	1,372	1,892
Aug	1,275	2,025
Sep	1,193	2,052

<sup>3</sup> Behavioral Health are patients with only a BH diagnosis and are not in the ED for other medical treatment. These patients as a percent of total visits, understate the magnitude of mental health care in the emergency room as most patients have an acute medical issue and co-occurring BH needs.

# Mass General Brigham Incorporated

**DON # MGB-23120414-AM**

9. Amendment Narrative (p5) states that the Hospital was in either Code Help or Capacity Disaster status 93% of the time in 2023. The materials from the original DoN Application (page 13 of the Original DoN Narrative) state that in 2019, the Hospital was in Code Help 20% of the time.

- Please verify that the 20% figure from 2019 is accurate. Yes
- Please provide an analysis for the drastic increase. Though it looks like a drastic increase when looking at FY19 and FY23 alone, increasing instances of Code Help and Capacity Disaster are part of a trend that has been well-documented. As noted in the original application, Code Help activations doubled in FY18 and again in FY19. Since FY19, the health care system has grappled with a global pandemic and its downstream impact, including deferred and delayed care resulting in significantly more patients seeking treatment for more acute conditions, often first seeking care through the ED. This experience is reflected in the table below.

	FY19	FY20	FY21	FY22	FY23
Code Help	19.3%	6.0%	19.9%	31.4%	13.3%
Capacity Disaster	3.9%	1.7%	15.2%	44.8%	79.3%
Combined Code Help and Capacity Disaster	23.3%	7.8%	35.1%	76.2%	92.7%

10. The Holder's response to question 5 in the first round of Applicant Questions reiterated the same description that had been provided in the Narrative on page 2. Given that the Holder is still experiencing unprecedented overcrowding with these strategies already in place and that adding additional bed capacity would not provide relief for several years, are there other strategies being considered in the Holder's multi-factor approach to alleviate overcrowding that were not addressed in the Narrative (increased staffing patterns, staff input across service lines on resolving overcrowding issues, patient education on the use of urgent care facilities, etc.)?

The strategies in place are in the early stages and the capacity generated will continue to ramp up over time. Specifically, MGH's agreement with Cambridge Health Alliance is intended to ramp up to a daily census of 15 beds and so far in FY'24, MGH has achieved the equivalent of five (5) beds. Similarly, the MGB Home Hospital program is working to hire staff and increase its capacity to accept new patients. This program has been running at a census of nine (9) FY '24 YTD at MGH but the MGB-wide program is consistently raising its census to accommodate more patients. Home hospital has no physical constraints to capacity, and it is all about phasing the growth in staff to meet projected demand of eligible patients. This program also allows community hospitals to free up capacity and accept appropriate transfers from the Academic Medical Centers.

MGH has a capacity leader on call every day to help eliminate barriers to patient flow (e.g., ensure a specific test can be scheduled and reviewed to get patient discharged). The individual interventions are tracked to look for any themes that might require more systemic improvements.

Additionally, MGH is currently constructing 17 bays adjacent to the emergency room that will be used as incremental space for boarded patients. This is the only physical location available to provide some improvement in the crowding or density. These bays are expected to come online in September.

Staffing is not a barrier that contributes to overcrowding.

## 10.5.c Describe the associated cost implications to the Holder's existing Patient Panel

11. Page 2 of the Narrative states, "The Proposed Change does not require any renovation or further construction and can be achieved without any additional expenditures."

# Mass General Brigham Incorporated

DON # MGB-23120414-AM

---

- a. **Please explain if there would be any fixture or equipment removal associated with converting double bedded rooms to single bedded rooms and outline the costs associated with such work.**

There would be no construction or renovation costs associated with these conversions from double to single-bedded rooms as MGH would retain the headwall (e.g., outlets, access to gases, etc.) in these rooms. There would be some minor, one-time operating expenses associated with using internal facilities staff to remove the second bed, furniture, and movable equipment.

- b. **In the conversion of the double bedded rooms, is the plan to use the vacated second-bed spot as surge space?**

Yes, it would be possible to use the vacated second headwall as a surge space but MGH does not have sufficient storage for a large supply of moveable equipment like beds and monitors. Providing flexibility for larger scale capacity peaks and surges is typically associated with maintaining these resources in licensed beds and operating them at lower occupancy percentage than was proposed in MGH's application.

Under the Proposed Change, MGH will be taking physical capacity from its legacy patient care units out of service, and it is not necessarily quick or simple to bring it back online for emergency situations. This is another example of a tradeoff considered when requesting 94 beds -- a reasonable allocation of beds relative to current and projected demand but it is not a cushion if Boston were to experience another major market shift in capacity at other hospitals or a pandemic.

12. **Page 2 of the Amendment Narrative states that, "...the Hospital expects that operating expenses associated with approval of the Proposed Change will be neutral or net positive because staffing needs will not change." While it is understood that maintaining the 94 beds on the main campus rather than relocating them to the new building would not result in additional staffing in their current location, please explain how the addition of 94 beds to the license would not result in additional staffing somewhere on the MGH Campus.**

Clinical staffing is variable and correlates to demand or patient days and not to licensed beds. MGH is requesting additional bed capacity to give an appropriate landing place for patients currently being cared for in the emergency department and the surgical post-acute care unit as boarders. The teams of nurses, physicians, and associated support personnel currently caring for these patients in an overcrowded setting would be shifted to provide similar care in licensed beds on an inpatient unit. There may also be cost efficiencies associated with reduced patient boarding – improved wait times and patient flow, lower length of stay, and better coordination of care.

If the amendment is approved, MGH would keep more legacy beds in service (94) and get better leverage on the existing fixed cost structure for resources like utilities, nurse leaders, and secretary roles already on patient care units.