

**BOSTON MEDICAL CENTER
DON APPLICATION # BMCHS-23050914-RE**

APPLICANT QUESTIONS

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
- 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. **Include a table in data format (NOT pdf or picture) with the response.**

- 1. On Page 2, section 2.1 you state that all three existing units are operating at greater than 90% capacity. Please provide the formula used for determining that given that some units operate round the clock and others do not.**

Boston Medical Center ("BMC") calculates MRI capacity annually. The first step in this analysis is evaluating outpatient capacity for MRI scans – BMC reviews the total outpatient capacity for each MRI unit. Each unit operates 13.1 hours per day for outpatient scans and conducts approximately 1.5 scans per hour. Over the course of a year, the MRI units operate 357 days (holidays are excluded) for outpatient scans. Consequently, each MRI has the capacity to conduct 7,015 outpatient scans per year. If you multiply the total number of scans by the 3 MRI units – 21,045 outpatient scans are possible annually. In FY22, BMC performed 18,418 outpatient MRI scans, consequently outpatient scan utilization is approximately 88%.

Of BMC's existing MRI units, two units also perform inpatient MRI scans – when amalgamating inpatient and outpatient capacity – the hospital's MRI units are operating at greater than 90% capacity.

- 2. On Page 2, section 2.1 and elsewhere in the Application you state that the Applicant is the largest safety net provider in New England. Please cite and explain what measure is used to arrive at that statement. (For example, admissions, ed visits, NPSR payer-mix, etc.)**

There is no specific definition of a safety-net hospital, rather entities, such as the National Institutes of Health, define safety net hospitals as those providers that "organize and deliver a significant level of health care and other health-related services to patients with no insurance or with Medicaid."¹ Often referred to as providers of last resort, safety-net hospitals have historically assumed a major role in the provision of comprehensive services to medically and socially vulnerable populations."^{2 3}

¹ Sutton JP, Washington RE, Fingar KR, et al. Characteristics of Safety-Net Hospitals, 2014. 2016 Oct. In: Healthcare Cost and Utilization Project (HCUP) Statistical Briefs [Internet]. Rockville (MD): Agency for Healthcare Research and Quality (US); 2006 Feb-. Statistical Brief #213. Available from: <https://www.ncbi.nlm.nih.gov/books/NBK401306/>

² *Id.*

³ Lukas C, Holmes S, Harrison M. Can safety net hospital systems redesign themselves to achieve financial viability? Health Affairs Blog. Mar 16, 2015. [August 29, 2016]. <http://healthaffairs.org/blog/2015/03/16/can-safety-net-hospital-systems-redesign-themselves-to-achieve-financial-viability/>

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The Massachusetts Health Safety Net (“HSN”) makes payments to hospitals and community health centers for health care services provided to low-income Massachusetts residents who are uninsured or underinsured.⁴ The *Fiscal Year (“FY”) 2022 Health Safety Net Annual Report* outlines that BMC provided over \$102 million of care to patients qualifying for the HSN, making the hospital the largest provider of HSN care in Massachusetts.⁵ In comparison, the hospital with the second largest percentage of HSN care provided \$30.5M in services.⁶

Additionally, based on patient panel data outlined in Table 2 of the Determination of Need narrative, in FY22, approximately 46% of BMC’s patients were covered by Medicaid or the HSN and approximately 13% were covered by commercial or Fee-for-Service Medicare.⁷ The Center for Health Information Analysis (“CHIA”) qualifies BMC as a High Public Payer Hospital, noting its 2021 Public Payer Mix was 73.2% – one of the largest public payer mixes in the Commonwealth.^{8 9} Accordingly, BMC is the largest safety net provider in Massachusetts.

In regard to BMC’s status as a safety net provider within the New England hospital market, data from 2021 reflect that Yale New Haven provided more uncompensated care in this specific year, making BMC – one of the largest safety net providers in New England based on total uncompensated care.¹⁰

- 3. Similar to question #2, On page 1 of Factor 1, F1.a.i.B Overview of BMC’s Patient Panel, you state that BMC is the busiest trauma center in NE, please cite and explain what measure is used to arrive at that statement.**

BMC is one of two providers in Massachusetts with accreditation as both a Level 1 Trauma Center for Adults and a Level II Trauma Center for Pediatrics. Trauma cases are compared based on “trauma activations per year.” CHIA does not separate trauma activations within its health system performance data books to compare numbers of trauma cases, nor within its claims database. However, given that BMC is only one of two providers to have these noted designations in the Commonwealth and the only Trauma Center within Region IV to have these designations – BMC is one of the busiest trauma centers in Massachusetts.¹¹

In regard to the statement that BMC is one of the busiest trauma centers in New England – data from 2016 provide that BMC was a busy provider of trauma and emergency services in the region, with more than 130,000 emergency visits and approximately 2,000 trauma activations per year based on hospital data. However, given a lack of recent publicly available data regarding trauma activations, it is difficult to provide a new source for this statement.

- 4. On Page 7, Table 5 Historical Volume please list ED MRI Scans separately (while leaving observations, and bedded outpatients within that category, per FN 25). Additionally, if**

⁴ Fiscal Year 2022 Health Safety Net Annual Report: www.mass.gov/doc/hsn-annual-report-january-2023/download

⁵ *Id.*

⁶ *Id.*

⁷ This number does not take into account accountable care organization contracts.

⁸ Center for Health Information Analysis – Hospital Profile – Boston Medical Center: <https://www.chiamass.gov/assets/docs/r/hospital-profiles/2021/bmc.pdf>

⁹ Center for Health Information Analysis – Massachusetts Hospital Profiles, May, 2023: www.chiamass.gov/assets/docs/r/hospital-profiles/2021/FY21-Massachusetts-Hospital-Profiles-Compendium.pdf

¹⁰ <https://www.definitivehc.com/resources/healthcare-insights/hospitals-highest-total-uncompensated-care-costs>

¹¹ Center for Health Information Analysis: www.chiamass.gov/assets/Uploads/Trauma-Centers-May-2021.pdf

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possible add additional months, beyond March, of historical volume to the Source Origination portion of the table. (By specialty is not necessary.)

The revised Table 5 inserted below includes historical scan volume with Emergency Department (“ED”) MRI scans listed separately. Additionally, the FY23 year-to-date (“YTD”) scan volume is provided through June, 2023.

Table 5: BMC MRI Historical Scan Volume				
	FY20	FY21	FY22	FY23 YTD¹²
Total MRI Scans	18,100	22,565	23,331	19,044
Source of Origination				
Inpatient MRI Scans ¹³	4,113	4,837	4,913	3,818
Outpatient MRI Scans	11,913	15,714	16,218	13,388
Emergency Department MRI Scans	2,074	2,014	2,200	1,838

5. **On page 11 Table 6 MRI Projections, differentiate projections for ED, Inpatients, and Outpatients (while leaving observations, and bedded outpatients within that category, per FN 25).**

The revised Table 6 inserted below differentiates projected MRI scan volume by category:

Table 6: BMC Projected MRI Scan Volume					
Category	FY24	FY25	FY26	FY27	FY28
Emergency	2,451	2,550	2,601	2,653	2,653
Inpatient	5,091	6,212	6,316	6,929	6,929
Outpatient	17,692	21,966	22,753	23,015	23,015
Total	25,234	30,728	31,670	32,597	32,597

6. **On page 9 you note that in FY 22, 400 patients were impacted by MRI downtime and that YTD this year 100 have been impacted YTD. What months does the YTD encompass? How were the patients impacted? For example, were they rescheduled and/or did they experience extended wait-times.**

As noted within the Determination of Need narrative, when the current MRI units at BMC experience downtime, patients are impacted in a variety of ways. First, impacted patients require rescheduling, so appointments are made for another day. Second, the rescheduling of appointments exacerbates wait times for MRI scans. Since patients with emergent health needs are prioritized for MRI scans, those patients awaiting routine or other MRI scans experience longer wait times, and potential delays in treatment.

¹² BMC's FY is from 10/1 – 9/30. FY23 data is provided YTD through 6/2023 and, therefore, is subject to change.

¹³ Please note that the inpatient number provided also includes ED patients, observation patients, and bedded outpatients.

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In regard to the noted 100 patients that were impacted over the last year, this time period includes October 2022 – June 2023.