**Please Respond by Friday, August 29th, 2025.** *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;
* When providing the answer to the final question, submit all questions and answers in one final document;
* Submit responses in WORD or EXCEL; include a table in data format (NOT pdf or picture) with the response.
* When providing a table of data, provide a narrative explaining the trends or significance of that information (such as what reason for the year-over-year changes are attributed to and how it relates to information already provided.)
1. We are trying to understand if the wait times have increased or been the same over the reporting period (2023-25). You provided an important explanation and context regarding the factors influencing it, (below). However, the question concerning the previous years has not been answered fully.

*“Order-to-scan time is shaped by a combination of patient, clinical, and operational factors. Patient considerations such as work schedules, transportation, childcare, or need for sedation can affect availability. Exam-related factors, including contrast use, complexity, required lab work, implant clearance, or coordination with prior imaging, may add delays. Operational constraints such as scanner capacity, staffing, radiologist coverage, and scheduling hours further influence how quickly a patient can be scanned. The 18.5 days is primarily being driven by Abdomen (34.6 days) & Arthrogram (45.7 days) exam types. Abdomen exams often require contrast, breath-holding sequences, and requires fasting, lab tests for renal function for contrast, and coordination with referring physicians, which adds scheduling constraints compared to other exam types. Arthrograms require coordination of multiple providers/resources (usually a radiologist for joint injection with contrast) and the MRI scanner afterward so exams are limited to specific days/times. Not all sites or technologists perform arthrogram injections, so patients have fewer locations to choose from creating an increased backlog. When excluding these exams, the average wait time from ordered to scanned drops to 16.6 days*.”

* Response to Question #1:

Order to Scan by calendar year represented below indicates that we have seen increasing wait times at the location. The additional day of service will help to increase access to patients and will contribute to reducing wait times.

* + 2023: 16.2 days
	+ 2024: 18.5 days
	+ 2025: 22.5 days (YTD June)

Please provide data on the average annual wait-times from time ordered until time scanned, that is the same data set as the 18.5 days, for both 2023, and 2024, if available.

1. You provided the following table of historical scans from 2023 and 2024 and the projected scans for 25-28. How do those volumes compare to what was projected in your original DoN submission. If there is a significant difference, please provide an explanation.

 **Heywood MRI Projected Volumes (2025-2028)**

|  |  |
| --- | --- |
| Specialty | **2023** | **2024** | **2025** | **2026** | **2027** | **2028** |
| Abdomen | 457 | 674 | 730 | 788 | 852 | 920 |
| Arthrogram | 24 | 43 | 47 | 50 | 54 | 59 |
| Brain | 1,333 | 1,943 | 2,104 | 2,272 | 2,454 | 2,650 |
| Cervical | 421 | 721 | 781 | 843 | 911 | 984 |
| Chest | 6 | 1 | 1 | 1 | 1 | 1 |
| Head/Neck | 125 | 128 | 139 | 150 | 162 | 175 |
| Lower Extremity | 698 | 1,044 | 1,131 | 1,221 | 1,319 | 1,425 |
| Lumbar | 801 | 1,219 | 1,320 | 1,426 | 1,540 | 1,663 |
| Pelvis | 85 | 150 | 162 | 175 | 190 | 205 |
| Thoracic Spine | 153 | 222 | 240 | 260 | 280 | 303 |
| Upper Extremity | 418 | 634 | 687 | 742 | 801 | 865 |
| Total | **4,521** | **6,779** | **7,342** | **7,929** | **8,564** | **9,249** |

* Response to Question #2:

Actual volumes have surpassed the year 5 MRI projected volumes which have contributed to the capacity issues experienced leading to the application for the additional day of service to accommodate the patient needs for imaging. This aligns with the increasing wait times for exams as evidenced in the previous question as demand exceeded expectations of the original DoN submission.

* Year 1: 4,999 / Year 2: 5,213 / Year 3: 5,358 / Year 4: 5,575 / Year 5: 5,751

**Additional questions.**

**What year is Year 1? We note significant increases from 23-24. To what do you attribute these changes? For example: Are these patients coming from other facilities that they previously went to? Have you recruited new specialists? Please explain**

| Specialty | 23-24 | v |
| --- | --- | --- |
| Abdomen | 47.5% |
| Arthrogram | 79.2% |
| Brain | 45.8% |
| Cervical | 71.3% |
| Chest | -83.3% |
| Head/Neck | 2.4% |
| Lower Extremity | 49.6% |
| Lumbar | 52.2% |
| Pelvis | 76.5% |
| Thoracic Spine | 45.1% |
| Upper Extremity | 51.7% |
| Total | 49.9% |

* The go-live for the location was April 18th, 2023. The increases noted were due to a partial month/year of service vs. a full year of service the next year. The hospital’s MRI services were previously done by a different vendor that operated MRI services at Heywood Hospital in Gardner as well as Athol Hospital. Athol Hospital was under utilized and the existing patient panel was shifted to Heywood Hospital. This volume was included in the projected annual volume of the approved application based on historical volume data. The growth of the location is attributed to the investment in a new AI equipped magnet and the quality of Shields provided services that have increased patient preference to visit the site.
1. How can you do 20 scans per day on Saturday if the unit operates 7.8 hours and the average  time per scan is 26.5 minutes? It seems like 15-16 is the capacity?

- Avg slot time of 26.5 minutes is the annual average. Saturdays is an average of 22.2 minutes slot duration which leads to a capacity estimate of 20 exams. This is due to radiologist and contrast availability on the weekends. During this day, the template is filled with more routine exams/protocols, lowering the average duration compared to the typical weekday.

1. It looks like you still have capacity because your response to #2d said annual capacity is 7,902. Please provide the calculations. (My calculations of 2 per hour came to 7,344. Also, by my calculations, based on your 51 weeks operating per year, times 7 days you’d be operating ~357 days per year and capacity is then 8568 scans. However you project 9249 scans per year. Are you projecting that you will operate 365 days per year by 2028?

- Capacity calculations were based on the full year 2024 open operating minutes by day of the week divided by the total scans done by day of the week over 52 weeks in a year to reach a current capacity of 7,902 scans per year. We are projecting to complete 7,342 exams in 2025 and 7,929 scans in 2026. Based on these projections we will be over capacity from our current operating model in 2026, indicating the need for the additional day of service. For future years, we anticipate shorter exam durations with increased advancement of AI scanning technologies creating faster exams and allowing increased throughput.

| **Day** | **Open Min** | **Daily Slot Time**  | **Daily Capacity** |
| --- | --- | --- | --- |
| Mon | 35,980 | 27.2 | 25 |
| Tue | 37,840 | 27.7 | 26 |
| Wed | 37,200 | 27.3 | 26 |
| Thu | 36,635 | 26.5 | 27 |
| Fri | 39,050 | 26.9 | 28 |
| Sat | 22,805 | 22.2 | 20 |
| **Annual** | **209,510** | **26.5** | **7,902** |