



# Imaging Self-Scheduling

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# Introduction

- **Problem Description:** Wait times for outpatient imaging exams are a critical quality metric that reflects system efficiency and patient access. Extended lead times from order to exam schedule and completion can delay patient care and contribute to network leakage.
- **Available Knowledge:** Rising volumes and clinical demands complicate access to healthcare services, influencing the efficiency of outpatient imaging services.



# Introduction

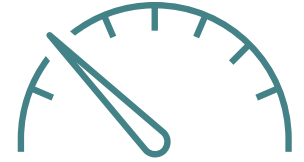
- **Purpose:** To perform a series of **scheduling optimizations to decrease the order-to-schedule time (OTS)** in the radiology department and simultaneously improve patient satisfaction with the scheduling experience.





## Methods

- **General:** This quality improvement project employed the **Plan, Do, Study, Act (PDSA)** cycle methodology, appropriate for iterative interventions.
- **Context:** The study was conducted at a large urban quaternary care academic healthcare system in the US South.
- **Interventions:** **scheduling slot optimization** through interchangeable templating with standard slot lengths and **enabling an online patient portal self-scheduling** feature for certain examination types.



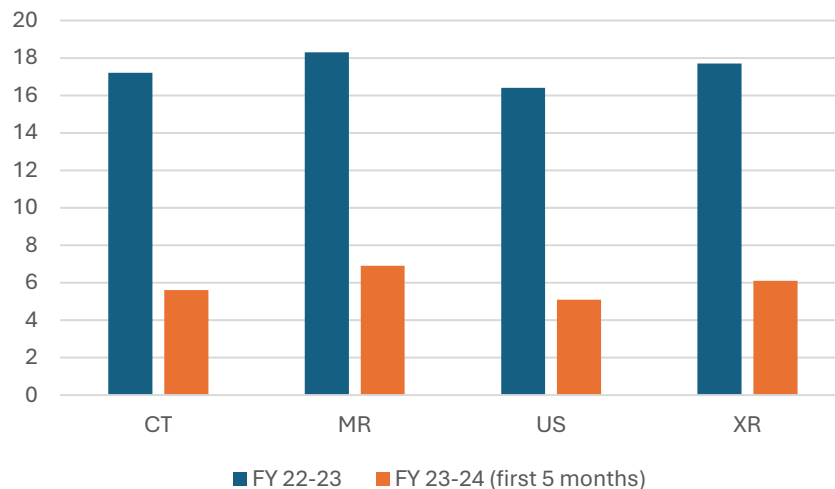
## Methods

- **Study of the Intervention and Measures/Metrics:**
  - The primary outcome measures: median OTS time (in days) and the percentage of OTS within 10 days by imaging modality (XR, US, CT, MR).
  - Rationale: direct reflection on scheduling efficiency and patient accessibility.
- **Analysis:** The quantitative analysis included a comparison of metrics before and after intervention implementation to draw inferences and understand data variation over the study period.

# Results

- The overall **median OTS time** improved from **16.9 days** in FY 22-23 to **5.6 days** in the first 5 months of FY 23-24.
- By modality, significant improvements were noted (CT: from 17.2 to 5.6; MR: from 18.3 to 6.9; US: from 16.4 to 5.1; XR: from 17.7 to 6.1).

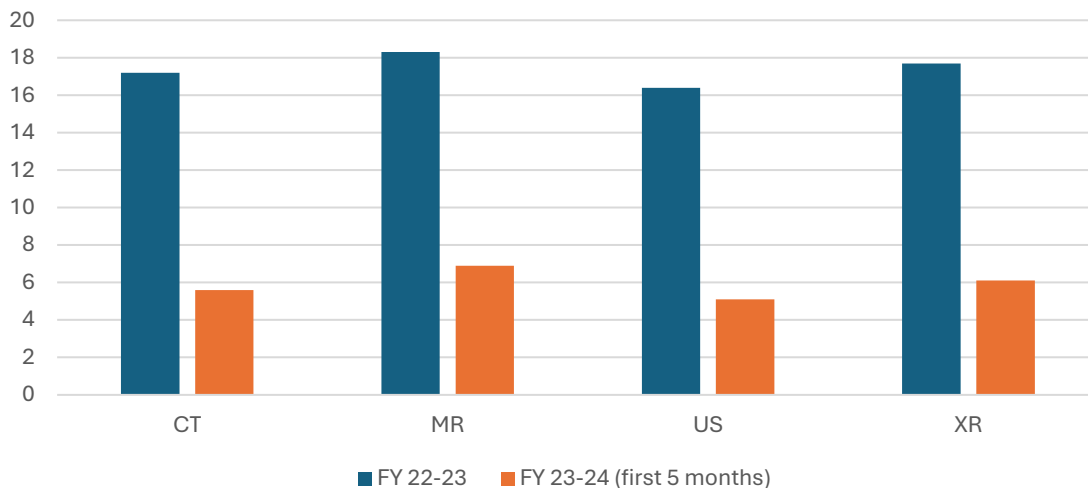
Median OTS time by modality for FY 22-23 vs. first 5 months of FY23-24



# Results

- The % of OTS times within 10 days increased across all modalities, with overall improvement **from 73% to 86%**.

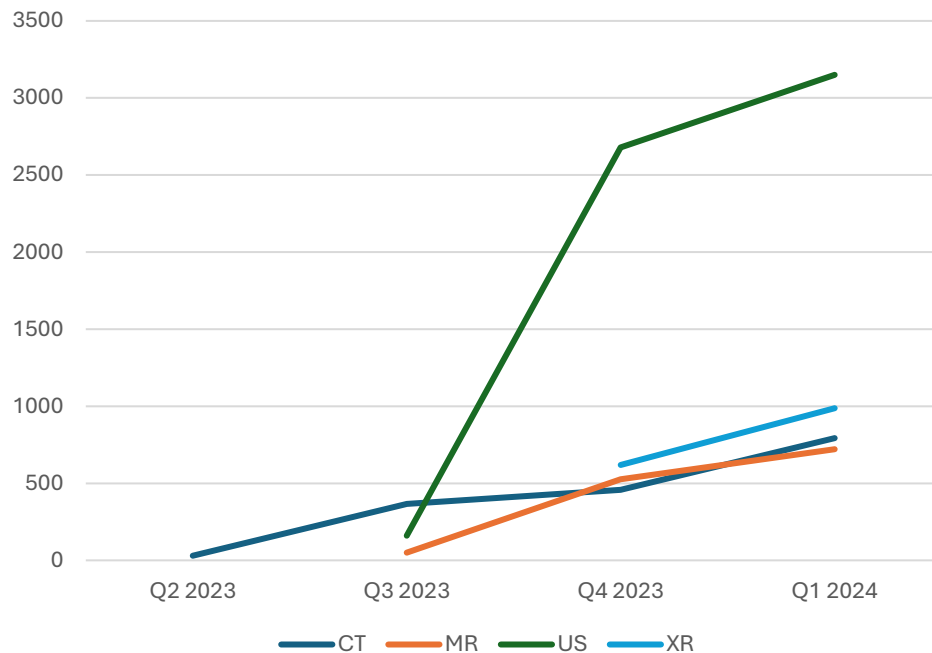
Median OTS time by modality for FY 22-23 vs. first 5 months of FY23-24



# Results

- The implementation of patient self-scheduling led to **19,950 self-scheduled exams**, distributed among the modalities.
  - US: 5,989
  - CT: 1,647
  - XR: 1,606
  - MR: 1,298

Self-scheduled Imaging Exams by Modality







## Discussion

- **Limitations:** The study is limited by its single-center design and the short duration of post-intervention follow-up.
- **Conclusions:** Scheduling slot optimization and the introduction of patient self-scheduling significantly decreased OTS time across all imaging modalities and improved patient scheduling experience.
  - Future directions include enhancing schedule-to-arrival times and enabling scheduling “fast-pass” (waitlist for earlier slots for patients with certain health insurances that do not require pre-authorization).



Thank You

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