

# Ensuring On-Time First Case OR Starts by Preventing Registration Delay

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## INTRODUCTION

### Background

- The first case on time start (FCOTS) for the OR rate was 72% in February 2025.
- The seventh room opened in March 2025, and this FCOTS rate dropped to 38%.
- The expansion increased patient volume without corresponding adjustments to the registration process
- Registration delays prevented patients from being transferred promptly to the Surgical Processing Area (SPA), disrupting the start of the first cases and cascading into subsequent surgical delays

### Purpose:

- Modify registration process to reduce patient wait times and decrease wait times and decrease delays for first case start times.

### Framework:

- **PDSA Model – Surgical Registration Process Improvement**
- **Plan:** Identified inefficiencies in surgical outpatient registration impacting first OR case start times.
- **Do:** Implemented a new registration workflow—some patients registered in SPA, others in Registration.
- **Study:** Collected and analyzed data to track outpatient registration flow and pinpoint issues.
- **Act:** Adopted an improved process, enhancing patient satisfaction and increasing on-time OR starts.

### Objectives:

- After reading the poster the learner will...
- Summarize the importance of a streamlined registration process for ensuring on-time first case starts in the operating room.
- Explain how the patient registration process supports timely and effective preparation for surgery.

## METHODS

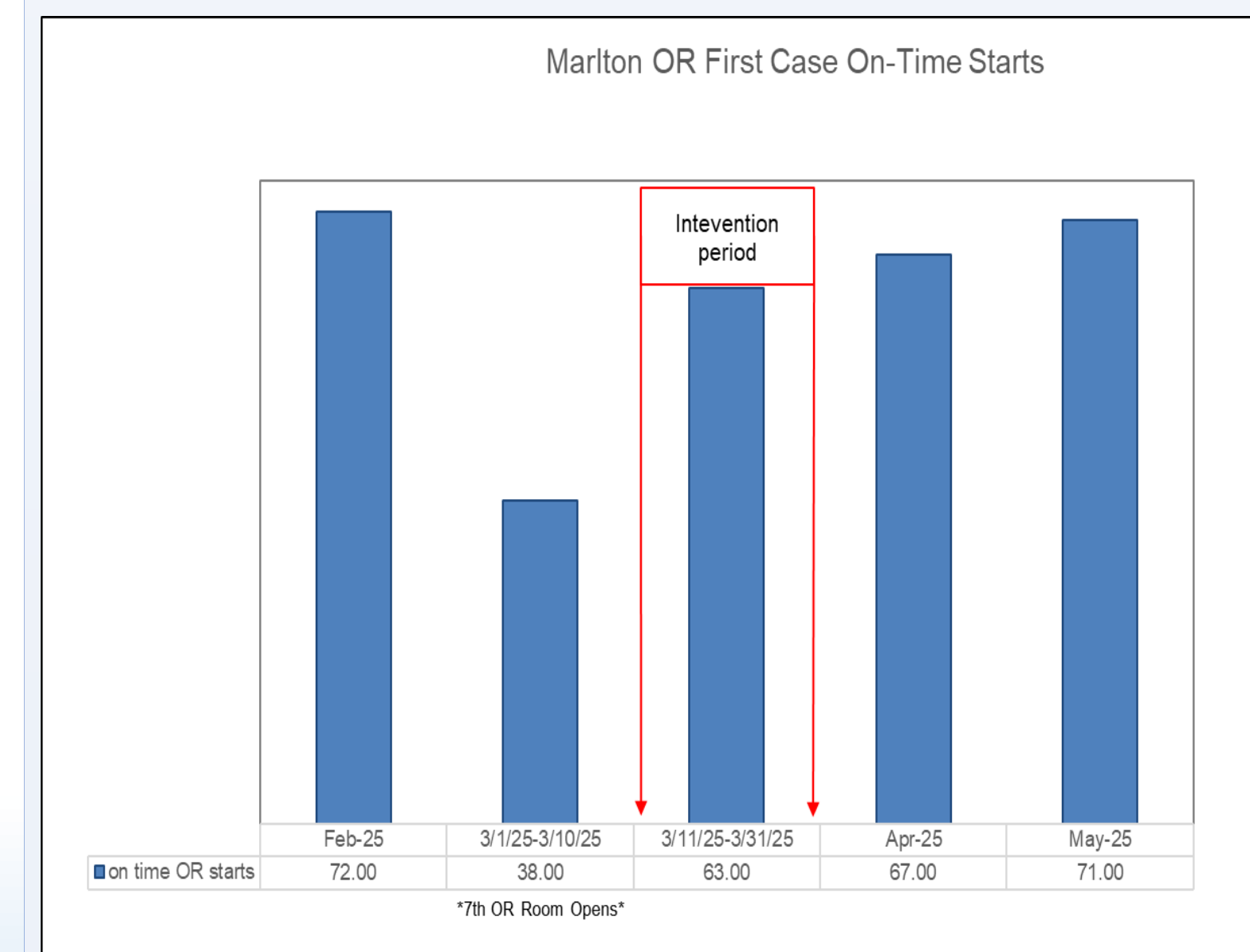
- On March 1, the patient liaison-responsible for guiding patients from hospital entry through registration to the surgical processing area (SPA) - was shadowed from 0530-1000.
- Patient flow was timed from arrival through registration to entry into the SPA for surgical preparation.
- Accessibility for patients requiring accommodation (e.g., wheelchairs, walkers, supplemental oxygen) was accessed.
- Communication among the patient liaison, registration staff, and SPA personnel was evaluated.



## RESULTS

### Key Findings:

- The evaluation revealed registration delays were a barrier to patient flow.
- Patients arriving at 0530 did not begin registration until 0540 am. Manual processes including printing and annotation surgical schedules consumed valuable time.
- The physical layout of the registration desk posed accessibility challenges for patients using mobility aids.
- On the observed day, 3 patients in wheelchairs experienced significant delays. With 2 requiring over 15 minutes to reach SPA.
- A second registrar began work at 0630, which slightly improved throughput but was insignificant to prevent first case delays. Lack of coordination between registrar and liaison also leads to patients unnecessarily waiting in the lobby.



## DISCUSSION/IMPLICATIONS

- OR delays are costly, with estimates of \$20-150 per minute depending on location and surgical specialty (Blair et al., 2024). Timely patient arrival time to the surgical processing area (SPA) is essential for efficient pre-operative preparation and maintaining OR schedules.
- Registration delays disrupt workflow and delays administration of critical pre-op medications. For example, certain procedures require medications to be given 30 minutes prior to a one-hour infusion, which in turn must conclude an hour before incision – delays in registration make timely administration and FCOTS unachievable.
- To address these inefficiencies, nursing met with leadership from SPA and registration.
- On March 16, a new process was implemented: 2 registrars now begin at 0530, 1 stationed directly in the SPA to provide bedside registration upon arrival.
- SPA nurses now generate consolidated reports, including arrival and start times, eliminating the registrars need to manually compile and annotated schedules. These changes have improved communication, reduced registration – related delays, and increased FCOTS rates, with the potential to enhance both operational efficiency and patient satisfaction (Mitchell et al., 2025).
- These process changes increased our FCOTS rate to 63% for March 16-31, 2025, 65% for April 2025, and 71% for May 2025. We believe the change in the registration process greatly improved our FCOTS.

## REFERENCES

1. Blair, K., Mijatovic, O., Thompson, M., Monroe, M., & Davies, C.C. (2024). A Nurse Driven Plan to Diminish First-Case Operating Room Delays. *The Journal of Nursing Administration*, 54(9), 503-506. <https://doi.org/10.1097/NNA.0000000000001467> Click or tap here to enter text. 2. Click or tap here to enter text. <https://doi.org/10.1016/j.pcorn.2025.100473>
2. Mitchell, C.V., Anderson, A.R., Romito, K., Abadie, W.M., & Phillips, A.K. (2025). Employing lean six sigma strategies to improve operating room first case on-time starts: A case report. *Perioperative Care and Operating Room Management*, Elsevier, 38, 1-6.