

## Introduction

- Timely initiation of the first surgical case in the operating room (OR) is crucial for maintaining the efficiency and effectiveness of surgical schedules. Delays in starting the first case can lead to cascading delays throughout the day, impact patient care and increase costs.
- Achieving 100% First Case On-time Starts (FCOTS) has proven elusive for our peri-op area. Many factors can be the cause, but nothing has been shown to be the main culprit.
- By providing a clear and detailed visualization of each step involved in preparing for the first surgery, Gantt charts will facilitate better coordination among surgical teams, anesthesiologists, and nursing staff.

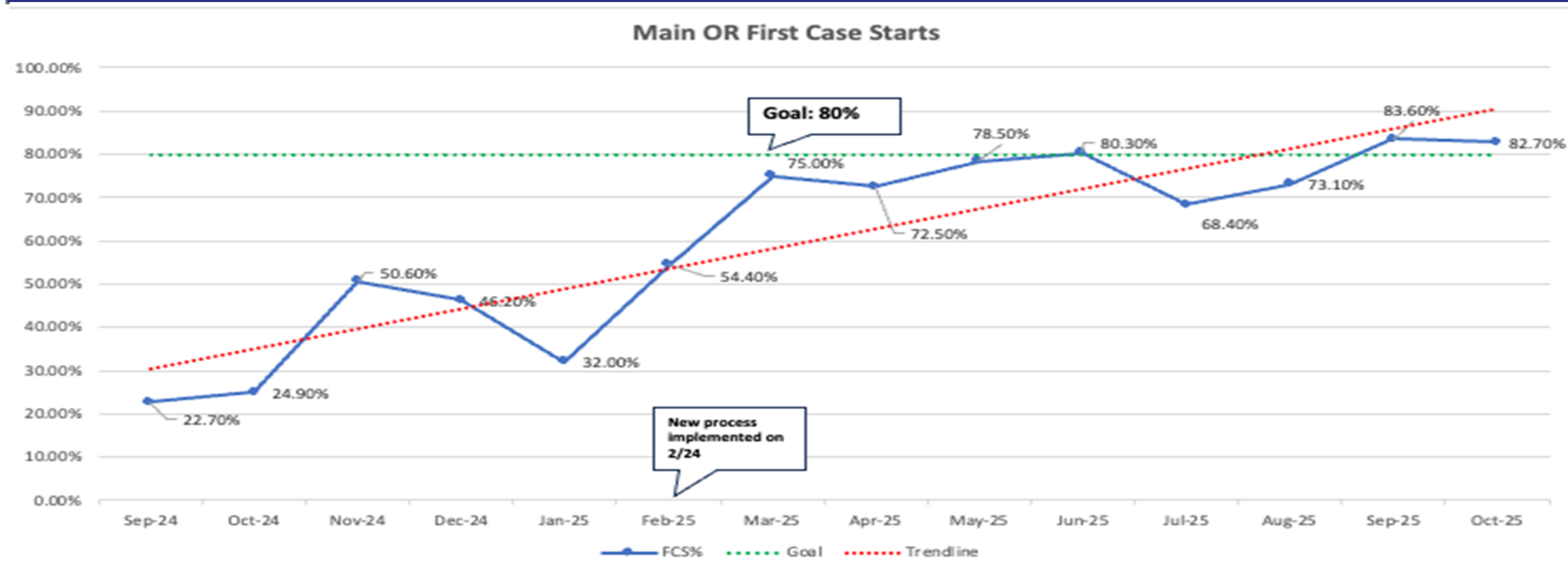
## Operational Definitions

- First Case On-Time Starts:** The percentage of the first surgical cases of the day that begin at or before their scheduled start time.
- Gantt Chart:** A chart in which a series of horizontal lines shows the amount of work done or production completed in certain periods of time in relation to the amount planned for those periods.

## Objectives & Design

- The study objective was to determine the effect of Gantt charts in increasing percentage of first case on time starts in the operating room of an academic medical center.
- This study used a cross-sectional design. Cross-sectional studies are observational studies that analyze data from a population at a single point in time. They are often used to measure the prevalence of health outcomes, understand determinants of health, and describe features of a population.

## Results



## Implementation

- The following procedures were performed in this study:
- Our EHR assigned a timestamp for each stakeholder impacting on-time first case starts and room set-up.
  - All stakeholders indicated when their respective tasks were completed in the EHR.
  - The patient was transported to the OR suite.
  - Nursing had their work “start-time”, moved up to 6:30 to accommodate for the timeline
  - The patient underwent scheduled procedure.
  - The percentage of on-time first case starts was compared with baseline data.
  - Actual start time was compared with the scheduled start time. The percentage of first case starts were compared with baseline data.

## Implementation (cont'd)

	6:50	6:55	7:00	7:05	7:10	7:15	7:20	7:25 Roll Back	7:30 In Room
Surgeon T-15									
OR Room T-20									
Anesthesia T-15									
Pre-Op T-10									

## Supporting Evidence/References

Crumley, S., Klopp, A., & Duffy, W. (2025, August). When every minute counts: Implementing a preoperative time-based target for perioperative nurses to decrease first-case on-time start delays. *AORN Journal*, 122(2), 82-91. <https://doi.org/10.1002/aorn.14381>

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Ramadan, S., Abu-Shams, M., Al-Dahidi, S., Odeh, I., & Almasarwah, N. (2025, January). A data-driven approach for predicting remaining intra-surgical time and enhancing operating room efficiency. *Journal of Industrial Engineering and Management*, 18(1), 145-166. <https://doi.org/10.3926/jiem.8543>