First Case On Time Start (FCOTS) Quality Initiative

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Introduction

The first case on-time start (FCOTS) is one of the key indicators of OR efficiency, as delays tend to cascade throughout the day, affecting patient throughput, staffing schedules, and hospital resource utilization. Previous studies have shown that even minor delays in the first case can lead to significant downstream effects, including patient dissatisfaction and increased hospital operating costs [1,2] Many confounding factors often influence operating room delays and lead to detrimental downstream effects for the patient, providers, and the overall hospital system. A delay in the first case on-time start often leads to OR delays for the entire day.[3] This subsequently impacts the patient's satisfaction, anxiety levels, and overall expectations.[3,4] For the hospital system, delays in OR start times can lead to increased expenses and opportunity costs. Given the repercussions on FCOTS on the patient, providers, and hospital system, many quality improvement studies have been implemented to identify the percentage of FCOTS and primary causes of first case delay for elective procedures across different hospital systems.[1,4,5] At St. Vincent's Medical Center, a similar quality improvement project was initiated to improve OR efficacy and patient satisfaction by targeting barriers to the first case on-time starts.

Figure 1.

FCOTS T-Minus Table

T-Minus Table

T - 22 hours (Prior Day)	T –120 minutes	T – 90 minutes	T - 45 minutes	T – 30 minutes	T - 15 minutes	T - 10 minutes	T - 5 minutes	CASE START
All outside documentation must be in PST, including: H&P, outside labs and clearance	Surgical Patient arrives at guest services.	Surgical Patient arrives in Pre-Op. All orders received in EPIC.	All pre-op nursing activities completed i.e. database assessment, IV All patient activities completed.	Patient asked to use bathroom. Last bathroom break opportunity.	All anesthesia activities are completed. Surgeon has completed H&P, Consents, and Marking	OR Nurse receives report from Pre-OP Surgical checklist is complete	Anesthesia and OR Nurse leaves Pre-OP with Patient to OR	**Patient in Room** **OR Nurse documents wheels in EPIC.**

T plus +1 Minute = First Case of the day is LATE. Subsequent cases are at risk of being late.

FCOTS = FIRST CASE ON-TIME START

Methods

A multidisciplinary team was created at SVMC to evaluate barriers to the first case on-time start, collect data, and measure the percentage of first case delays. Multidisciplinary team meetings took place on a weekly to monthly basis over FY2022 - FY2024. The "T-minus criteria" system (fig 1) was developed to systematically track pre-surgical processes starting 22 hours before patient arrival, ensuring that all teams were aligned well before the scheduled case. According to the criteria, any delay of more than one minute (T+1 Minute) after the scheduled time marks the first case of the day as late, with subsequent cases becoming increasingly at risk for further delays. The start times and causes for delay for all first cases are monitored and analyzed daily to identify trends and implement timely interventions (fig 2).

Results

For the fiscal year (FY2022 - FY2024), data shows an overall increase in the percentage of on-time case starts from 74% to 86% (fig 3). The goal for FCOTS is 85% or higher. This goal was successfully achieved after identifying barriers to OR case delays with the creation of the T-minus criteria.

Figure 2.

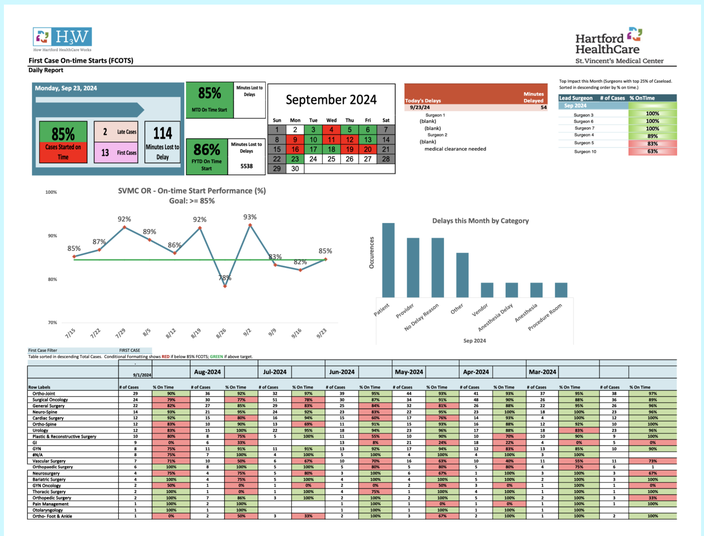
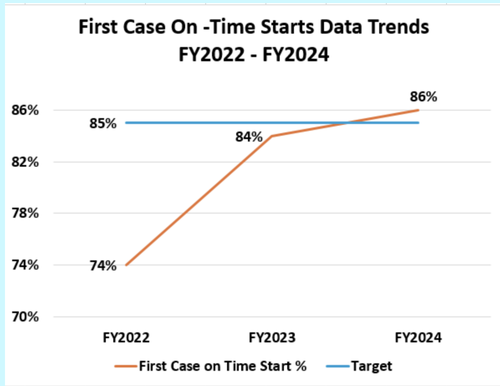


Figure 3.



Discussion

Delays to first case on time starts are due to a variety of factors related to the patient, anesthesia team, vendors surgical provider, procedure room set up, and many others. Via a multidisciplinary approach and creation of the T-minus table, we were able to identify and track barriers to FCOTS. Since the initiation of this QI project, we have seen an increased trend with percentage of FCOTS, specifically from 74% to 86% during FY2022 - FY2024. This suggests that continuous monitoring and collaborative efforts across departments are key to sustaining these improvements. Moreover, by addressing the most significant barriers to on-time starts, hospital management can ensure that both patient outcomes and financial efficiency improve. This is on an ongoing quality improvement measure that has shown to increase operating room efficiency.

References

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