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Optimizing First Case On-time Starts in VA Operating Rooms: A Quality Improvement Initiative

Introduction: Operating room (OR) delays can result in high hospital expenses and dissatisfaction among patients and providers. We launched, the First Case On-Time Start (FCOTS) initiative, a quality improvement project aimed at enhancing the punctuality of initial case starts within the adult OR across all surgical services at a Veteran's Affairs (VA) hospital.

Methods: To achieve 85% first case on-time start, we adopted the 4 Disciplines of Execution (4 DX) model. Weekly data of start time percentages was assessed to evaluate pre-operative teams' performances. Our strategy involved assembling a multidisciplinary team, identifying delay factors, and introducing focused interventions such as preoperative care coordination and strategic OR case scheduling. We assessed delay causes and estimated the financial impact of first case delays in terms of lost dollars.

Results: From June to December 2023, 876 cases were scheduled as first cases of the day with 29% (252) experiencing delays. The percent of first cases starting on time was 72.7% at week 1, reaching an 84.9% at week 30, with a trough of 51.6% at week 8 and a crest of 93.8% at week 25. A process shift was noted in November and December coinciding with a significant change in room set up processes. The delays totaled 3,476 minutes, equivalent to a total cost of \$86,900 over the 7 months duration. Costs due to delays decreased from \$24,525 in June to \$3,375 in December. The major cause of delay was room set-up and equipment preparation (32%). Surgeons accounted for 26% of delays causes and anesthesia-related delays occurred in 10% of cases.

Conclusions: The imperative of preserving invaluable resources such as OR time holds paramount importance. The FCOTS initiative demonstrated a substantial improvement in first case on time start leading to considerable cost savings. Further continued monitoring is crucial to ensure the sustained success of this initiative.