Enhancing Safety and Efficiency in the Perioperative Suite: A Multidisciplinary

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Background/Introduction

Perioperative teams continue to encounter workflow inefficiencies and communication gaps that jeopardize patient safety, elevate operational costs, and contribute to staff fatigue and burnout. Despite advancements in technology and the implementation of standardized safety protocols, first case on-time starts remain suboptimal, turnover times are extended, and communication-related adverse events persist. These persistent challenges underscore the need for structured, evidence-based strategies designed to strengthen team collaboration, streamline perioperative processes, and cultivate a robust culture of safety within the surgical environment.

Purpose/Objectives/Hypothesis

The purpose of this project is to identify and implement evidence-based strategies that improve perioperative team collaboration, streamline workflow processes, and enhance communication practices. By addressing systemic inefficiencies and reducing communication-related errors, the goal is to promote patient safety, optimize operational performance, and support staff well-being in the surgical environment.

Objectives

1. Increase the percentage of first case on-time starts by implementing standardized preoperative workflows and team coordination strategies.
2. Decrease average room turnover time by optimizing task sequencing and resource allocation.
3. Implement and reinforce standardized communication tools (e.g., time-outs, handoff protocols) to reduce errors and sentinel events.
4. Promote shared accountability and team-based training to improve collaboration among surgeons, nurses, and anesthesia providers.
5. Reduce stress and burnout by streamlining processes and fostering a culture of safety and efficiency.
6. rack key performance indicators (KPIs) such as on-time starts, turnover times, and staff satisfaction to measure the impact of interventions.

Method

First Case On-Time Starts

Implementation of the enhanced perioperative coordination model led to a 12% increase in first case on-time starts during Q1–Q2 2025, reflecting early improvements in workflow reliability and schedule adherence.

Average Turnover Time

Adoption of standardized processes, coupled with expanded coordinator oversight, resulted in a 5–9-minute reduction in average room turnover time per case, demonstrating greater operational efficiency and decreased non-productive room idle time.

Staff Engagement

Post-implementation staff surveys showed notable improvements in satisfaction and engagement. These gains suggest that strengthened communication pathways and consistent operational support positively influenced team morale and perceived workflow stability.

AORN Staffing Plan for Efficiency

RN Staffing

Label	Monday	Tuesday	Wednesday	Thursday	Friday	FTEs
Room 1	24	24	24	24	24	5
Room 2	16	16	16	16	16	3
Room 3	12	12	12	12	12	2
Room 4	12	12	12	12	12	2
Room 5	12	12	12	12	12	2
Room 6	12	12	12	12	12	2
Room 7	10	10	10	10	10	1
Room 8	10	10	10	10	10	1
Room 9	10	10	10	10	10	1
Room 10	10	10	10	10	10	1
Room 11	8	8	8	8	8	1
Room 12	8	8	8	8	8	1
Room 14	8	8	8	8	8	1
SP01	8	8	8	8	8	1
SP02	8	8	8	8	8	1
SP03	8	8	8	8	8	1
SP04	8	8	8	8	8	1
Float Team	8	8	8	8	8	1
Float Team	8	8	8	8	8	1
Float Team	8	8	8	8	8	1
Total	416	416	416	416	416	60

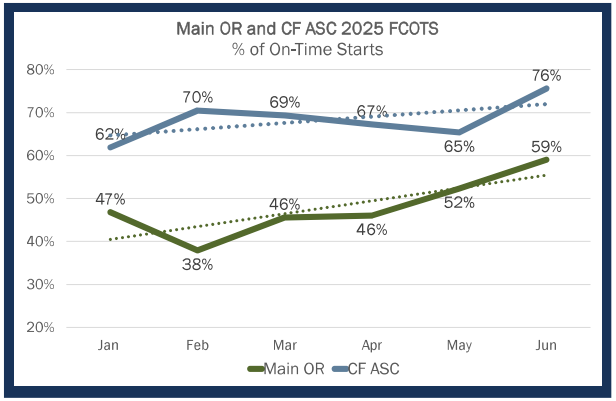
Coordinators

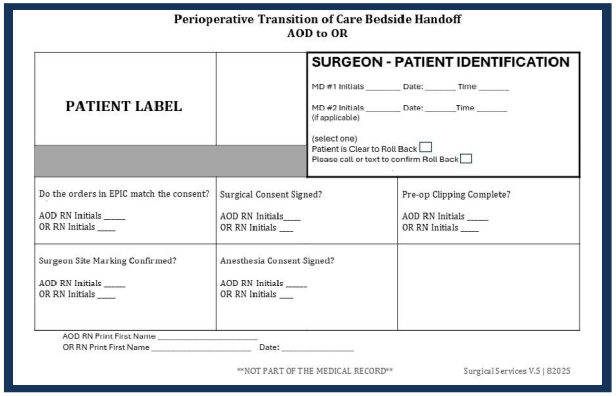
Label	Monday	Tuesday	Wednesday	Thursday	Friday	FTEs
Neuro	8	8	8	8	8	1
CV	8	8	8	8	8	1
Plastics	8	8	8	8	8	1
Ortho	8	8	8	8	8	1
Gyn/Urology	8	8	8	8	8	1
Total	80	80	80	80	80	10

Scrub Tech Staffing

Label	Monday	Tuesday	Wednesday	Thursday	Friday	FTEs
Room 1	24	24	24	24	24	5
Room 2	16	16	16	16	16	3
Room 3	12	12	12	12	12	2
Room 4	12	12	12	12	12	2
Room 5	12	12	12	12	12	2
Room 6	12	12	12	12	12	2
Room 7	10	10	10	10	10	1
Room 8	10	10	10	10	10	1
Room 9	10	10	10	10	10	1
Room 10	10	10	10	10	10	1
Room 11	8	8	8	8	8	1
Room 12	8	8	8	8	8	1
Room 14	8	8	8	8	8	1
SP01	8	8	8	8	8	1
SP02	8	8	8	8	8	1
SP03	8	8	8	8	8	1
SP04	8	8	8	8	8	1
Float Team	8	8	8	8	8	1
Float Team	8	8	8	8	8	1
Float Team	8	8	8	8	8	1
Total	416	416	416	416	416	98

Results





Perioperative Transition of Care Bedside Handoff
AOD to OR

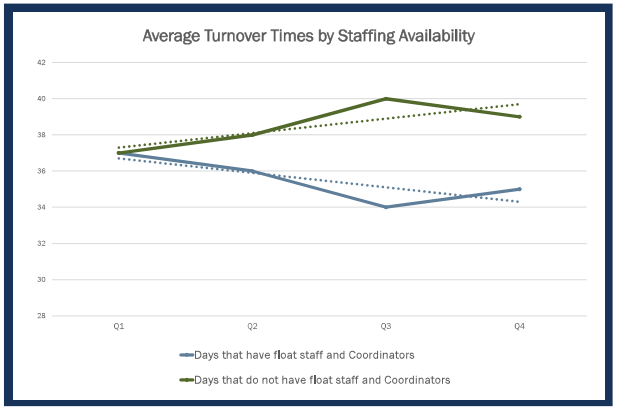
PATIENT LABEL

SURGEON - PATIENT IDENTIFICATION
MD #1 Initials _____ Date: _____ Time _____
MD #2 Initials _____ Date: _____ Time _____
(if applicable)
(select one)
Patient is Clear to Roll Back ☐
Please call or text to confirm Roll Back ☐

Do the orders in EPIC match the consent? AOD RN Initials ____ OR RN Initials ____	Surgical Consent Signed? AOD RN Initials____ OR RN Initials ___	Pre-op Clipping Complete? AOD RN Initials ____ OR RN Initials ____
Surgeon Site Marking Confirmed? AOD RN Initials ____ OR RN Initials ____	Anesthesia Consent Signed? AOD RN Initials ____ OR RN Initials ___	

AOD RN Print First Name _____
OR RN Print First Name _____ Date: _____

NOT PART OF THE MEDICAL RECORD Surgical Services V.5 | 82025



Results/Implications

First Case On-Time Starts

Implementation of the enhanced coordination model resulted in a **12% improvement in first case on-time starts during Q1–Q2 of 2025**, demonstrating early gains in workflow reliability and schedule adherence.

Average Turnover Time

Following adoption of standardized processes and expanded coordinator oversight, **average turnover time decreased by 5–9 minutes per case**, indicating increased operational efficiency and reduced non-productive room idle time.

Staff Engagement

Post-implementation survey data reflected **improved staff satisfaction and engagement**, suggesting that clearer communication pathways and consistent support positively influenced team morale and perceived workflow stability.

Future Actions

1. Scale the turnover team model across all surgical service lines.
2. Institutionalize quarterly audits of preference cards to sustain efficiency gains.
3. Deploy AI-enabled scheduling platforms for predictive case readiness and dynamic resource allocation.
4. Continue interdisciplinary training focused on standardized communication protocols to strengthen team cohesion and patient safety.
5. Work with performance excellence team for continued improvement of efficiency metrics

Acknowledgments

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