

# ENHANCING OPERATING ROOM EFFICIENCY WITH THE NEW OPTIMIZATION NURSE ROLE

Isabel Gonzales, BSN, RN, CNOR, Ashley Acosta BSN, RN, CNOR, Michelle Bedolla BSN, RN, CNOR, Kayla Woods, BSN, RN, Kathy Fisher MS, RN, CNOR, NE-BC, Renee McElligott MSN, RN, NEA-BC, CNOR, Louly Cardona, MSN, RN, CNOR

## INTRODUCTION

Operating room (OR) efficiency is essential for patient safety, staff satisfaction, and overall hospital performance. At LBJ Operating Room, several challenges were identified that prompted leadership to create a dedicated role to support staff and enhance OR quality measures:

- Novice, early career OR Nursing Staff
- Persistent challenges with first case on-time starts (FCOTS)
- Inconsistent turnover times (TO)
  - TO times exceeded 40 minutes in 5 of 8 months
- Workflow delays prompted the development of a new role—the Optimization Nurse (OP nurse)—to streamline processes and support frontline staff.

**Example of Responsibilities During OR Room Turnover**  
The Optimization Nurse supports the process by verifying that required tasks from the pre-op nurse, circulator, anesthesia team, and surgical team are completed accurately and efficiently.

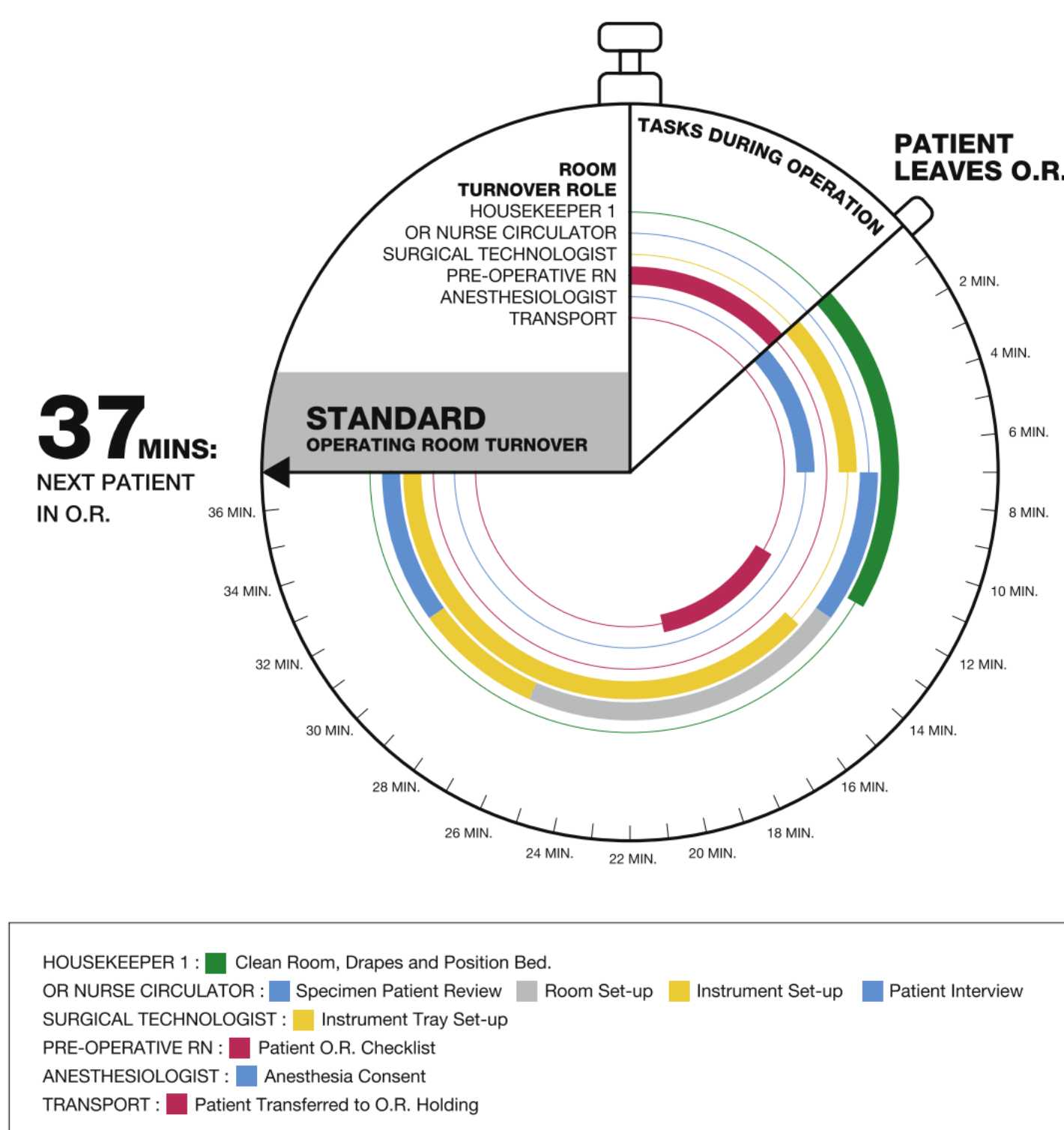
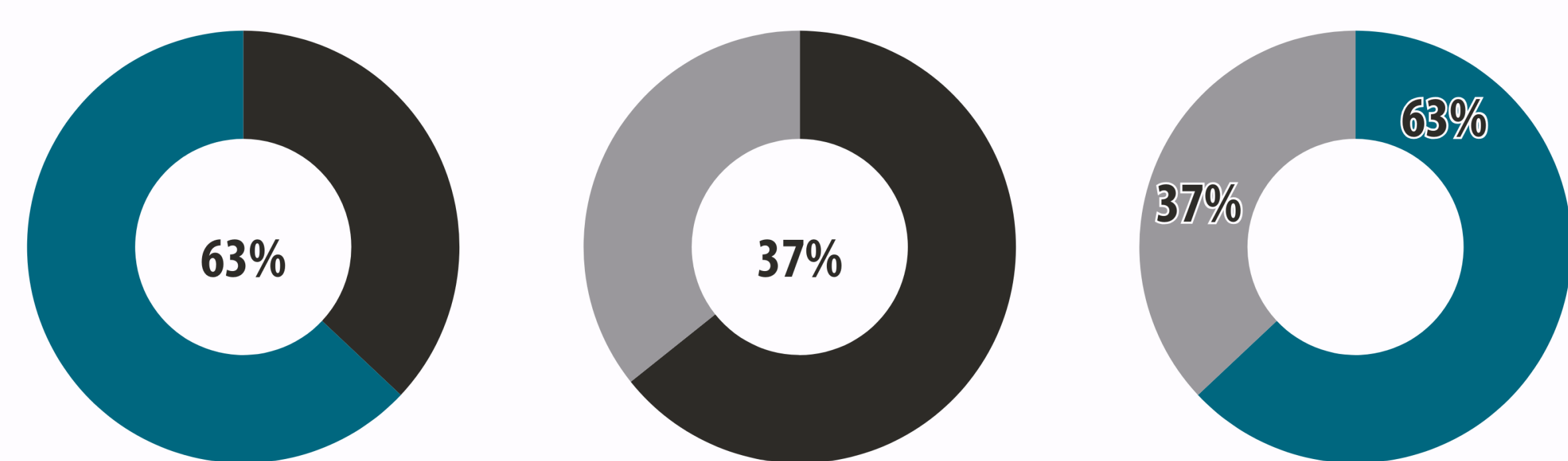


Fig 1. Selected team member tasks during the standard (ie, historic) operating room (OR) turnovers. Note the median turnover time is 37 minutes. (MN = minute; RN = registered nurse.)

### Experience Level of OR Nurses LBJ Hospital



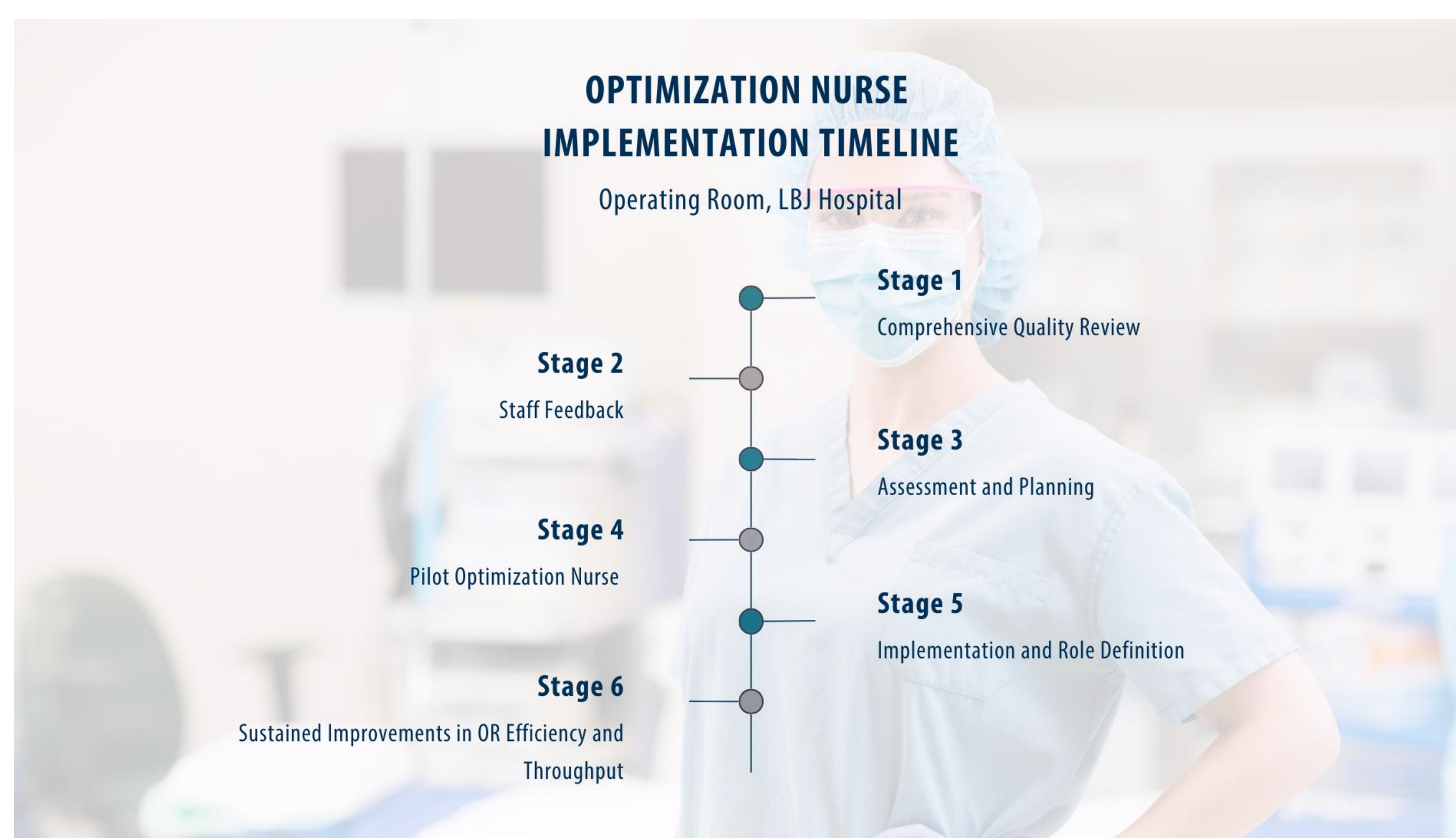
- 0-3 Years  
The Advanced Beginner (0-1 yr)  
The Competent (2-3 years)
- 3 or More Years  
The Proficient (3-5 years)  
The Expert (5+ years)

#### Conclusion

With most nurses still developing skills, additional support is essential to maintain safety, meet quality benchmarks, and reduce burnout among expert nurses. Dedicated roles like Optimization Nurses help bridge this gap by providing real-time guidance and sustaining throughput.

## METHODS

A multidisciplinary perioperative team designed and implemented the Optimization nurse role, focused exclusively on operational flow rather than direct patient assignments



### Optimization Nurse Responsibilities Include

- Proactively Identifying Missing Preoperative Documentation
- Facilitating Communication with Surgeons and Anesthesia, and Supporting Room Turnover and Readiness for Subsequent Cases
- Gathering Special Equipment or Supplies
- Communicating Resource Needs to Charge Nurses or Nurse Managers
- Ensuring accuracy of pre-operative requirements for items such as Pre-op note, History & Physical, Anesthesia & Medical Consent, etc.

A structured checklist was created to guide OP nurse tasks. A two-month pilot with three nurses was conducted, after which two were retained based on performance outcomes

## RESULTS

The OP nurse initiative led to sustained improvements in OR efficiency.

- TO times met the 40-minute benchmark in 3 of 4 measured months.
- Improvement in FCOTS and consistently meeting or exceeding the 80% benchmark
- The role enhanced workflow reliability, reduced delays, and improved staff collaboration.

**80 %** After Implementation, FCOTS consistently met and exceeded the benchmark of 80%

**40 min** Turnover Time met or exceeded benchmark 3 out of 4 Months

## CONCLUSION

Integration of the OP nurse role significantly improved FCOTS and TO, demonstrating its effectiveness in enhancing OR efficiency and patient flow.

This role provided real-time support, bridged communication gaps, and optimized processes across the surgical continuum.

While scalability and manual data collection remain limitations, the initiative highlights the value of role specialization in perioperative nursing and supports expansion of this model to improve operational performance and patient outcomes.

