

Background

- Turnover time (TOT) is the time between the end of one surgical case and the start of the next in the same operating room (Association of periOperative Registered Nurses Foundation, 2016)
- Robotics cases take longer than other specialty areas increasing turnover time and costs (Cohen, 2022)
- Improved efficiency in the operating room improves patient safety, surgical satisfaction, and decreases operating room costs (Divatia & Ranganathan, 2015)

Purpose

- Improve TOTs to 25 minutes or less in robotics cases at a Pacific Northwest acute care setting
- Standardize the robotics turnover process to improve staff, patient, and surgeon satisfaction



Method

- Documented pre-implementation TOT average of 30-45 minutes
- Developed standardized workflow
- Evaluated the revised standardized workflow with team
- Revised staff roles and responsibilities
- Added float person
- Assigned zones during the cleaning phase
- Nurse transferred patient, interviewed next patient, & returned to room to assist with set-up
- Collected post implementation data for 19 days in 37 robotics surgical cases

Results

Post Implementation TOTs

Minutes	Cases
20-24	8
25-29	8
60-64	5
65-69	8
70-74	5
80-84	1
90-94	1
115-120	1

Discussion

- Goal of 25 minutes or less was not met in all cases
- TOT decreased to 20-24 minutes in 8 of 37 cases (21.6 %)
- Limitations to decreasing TOTs:
 - ✓ Pre-operative staff, surgeon & anesthesia late arrival
 - ✓ Missing staff
 - ✓ Extra room set-up time due to:
 - Obese patients
 - Instrument sterility
 - Missing equipment
 - Room cleaning
 - COVID protocol

Conclusion

- Project changes will continue in the robotics operating room
- Second robotics operating room will implement workflow improvements
- No current plan to implement changes in other operating rooms
- Robotics charge nurse will monitor TOTs
- Operating room staff education and TOT progress update scheduled for monthly staff meetings