

## Improving On-Time Starts for Non-Scheduled Acute-Care Surgery and Orthopedic Trauma OR Cases at Level 1 Trauma Center

Micaela McSpadden, MSN-Ed, RN, CNE, CNOR, Evangela Rice, MSN-Ed, RN, CST, Dan Seabold, MBA, BSN, RN, CNOR, Debra Sparks, MSM, BSN, RN, CNOR

### Introduction & Background

- Efficiency in the operating room has financial, access, patient, and staff satisfaction implications (Sohrakoff et al., 2014).
- Delays in first case start often cause downstream effects resulting in bottlenecking of inpatient units, prolonged patient *nil per os* time, and decreased patient satisfaction.
- It has been reported in current literature the cost of an OR ranges between \$21 - \$133 per minute, depending on the institution (Pashankar, 2020).

### Root Cause Analysis

- What identifiable internal and/or external patient factors contribute to on-time start delays (comorbidities, pre-op labs/tests, current in-patient, transportation, and access to care)?
- What significance does instrumentation and equipment have in delays of on-time starts?
- What portion of delays are attributed by surgeon and staff availability?

### Goal

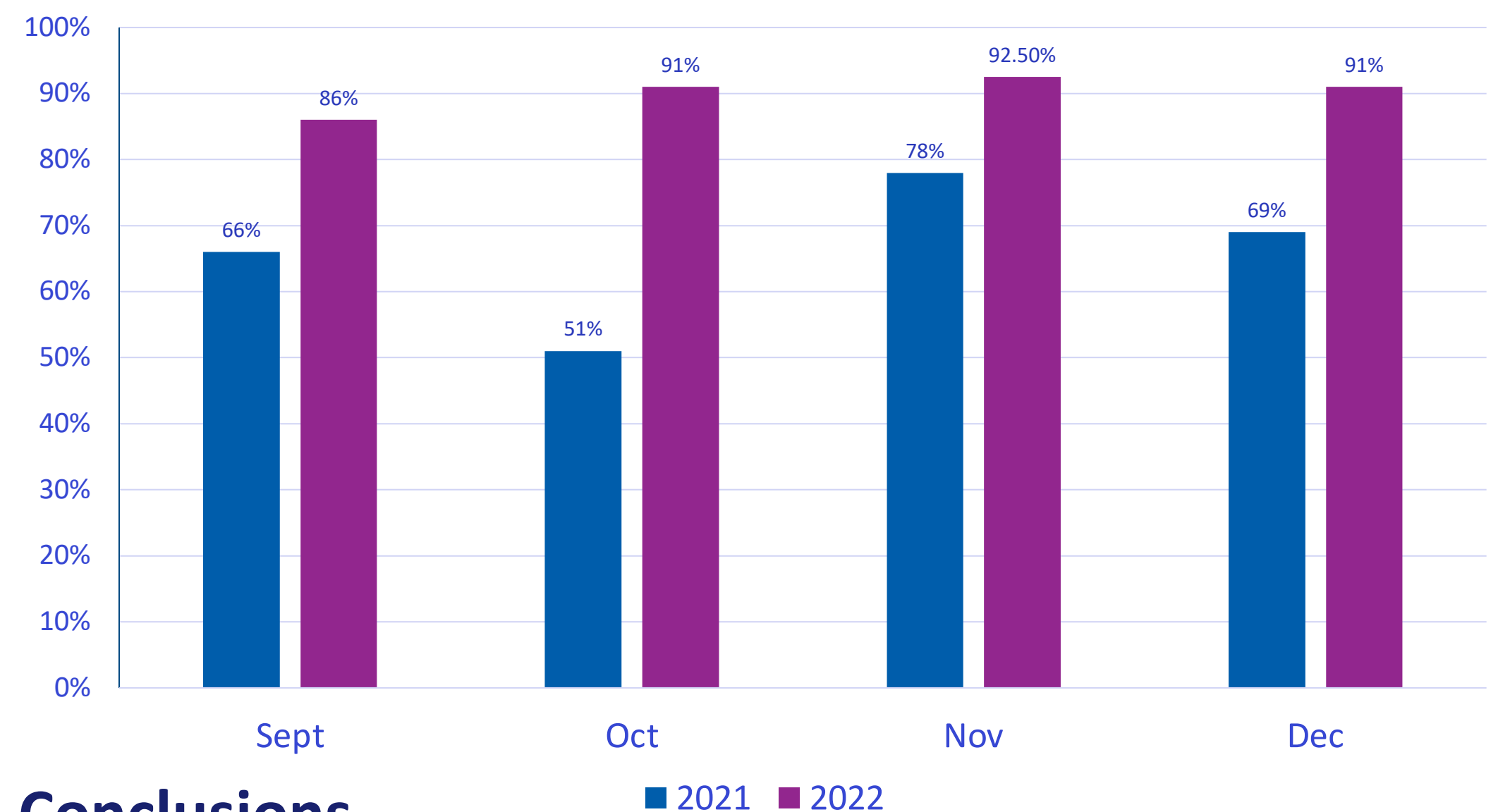
- Increase start times for non-scheduled acute-care surgery and orthopedic trauma cases from a baseline total average of 65% to 75% (approximately a 10% increase) for cases to start before the 8 o'clock hour by December 31, 2022.

### Interventions

- Early room allocation and initiation of patient transport based on an interdisciplinary process map.
- Implementation of a surgical clearance checklist to proactively resolve issues prior to patient transport to operating room.
- Encourage communication of reason for case delay.
- Weekly/monthly review of cases with Perioperative Leadership Team.

### Results

Comparison of Percentage On-Time Starts for Non-Scheduled ACS and Orthopedic Trauma Cases



### Conclusions

- This project exceeded our goal with an average on-time start percentage of 90% for non-scheduled acute-care surgery and orthopedic trauma OR cases 2022.
- This project helped decrease unnecessary patient NPO time, streamline inpatient discharges, and increase patient and staff satisfaction.
- The interdisciplinary approach to this project was pivotal to its success.

### References

- Pashankar, D. S., Zhao, A. M., Bathrick, R., Taylor, C., Boules, H., Cowles, R. A., & Grossman, M. (2020). A quality improvement project to improve first case on-time starts in the pediatric operating room. *Pediatric Quality & Safety*, 5(4), e305. <https://doi.org/10.1097/pq9.0000000000000305>.
- Sohrakoff, K., Westlake, C., Key, E., Barth, E., Antognini, J., & Johnson, V. (2014). Optimizing the OR: A bottom-up approach. *Hospital Topics*, 92(2), 21-27.