

# Handoffs and Transitions in Critical Care (HATRICC) QI project

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## INTRODUCTION

### Background:

In the healthcare system, transferring patient care and handoffs between providers are widely recognized as significant risk factors for adverse events, such as medication errors and delays in diagnosis or treatment, which come with a high level of accountability. These handoffs are common in medicine due to the specialization of care among various providers, disciplines, and care settings.

### Purpose:

1. Provide clear guidance to ICU and OR clinical staff and providers on best practices for handoffs and transitions of care.
2. Adapt and implement a standardized OR-to-ICU handoff process

### Objectives of Poster:

- The learner will develop a communication model aimed at enhancing handoffs in critical care using the HATRICC tool.
- The learner will recognize the significance of effective communication between the operating room (OR) and the intensive care unit (ICU).
- The learner will implement a standardized handoff process based on research by Lane Hall to address knowledge gaps within the ICU team.

OR to ICU / PACU HANDOFF	
All Team Members At Bedside Introduction: "Welcome, welcome, welcome! We're glad you're here!" "Hi again, each team member introduces themselves!"	
<b>S</b> Situation	<b>Context</b> <ul style="list-style-type: none"><li>• Review simple vitals stability (i.e. stable, watch, unstable)</li></ul> <b>History</b> <ul style="list-style-type: none"><li>• Surgery &amp; procedure</li></ul>
<b>B</b> Background	<b>History</b> <ul style="list-style-type: none"><li>• Surgical site</li><li>• Surgical events, complications, and results (i.e. T/C, % resection)</li></ul> <b>Current</b> <ul style="list-style-type: none"><li>• PAIN, medications, allergies</li><li>• Airway issues during case</li><li>• Hemodynamics during surgery and transport</li><li>• Fluid summary (AOP, etc. backboard products received)</li><li>• Pain medications given</li><li>• Timing of last antibiotic dose</li></ul>
<b>A</b> Assessment	<b>History</b> <ul style="list-style-type: none"><li>• Post-operative neurological exam</li><li>• Expected pain operative exam</li><li>• Presence of drains / catheters (i.e. JP, EVD, Shunt)</li></ul> <b>Assessment</b> <ul style="list-style-type: none"><li>• Current respiratory status</li><li>• Lines in place</li><li>• Active infusions</li></ul>
<b>R</b> Recommendations	<b>History</b> <ul style="list-style-type: none"><li>• Vitals checks</li><li>• BP goals</li><li>• Imaging plan</li><li>• Plan current recommendations</li><li>• Wound / dressing plan</li></ul> <b>Assessment</b> <ul style="list-style-type: none"><li>• If indicated, plan for evaluation</li></ul> <b>Recommendations</b> <ul style="list-style-type: none"><li>• Discuss or discuss recommendations for the next 24 hours</li><li>• Who should be contacted for questions</li></ul>

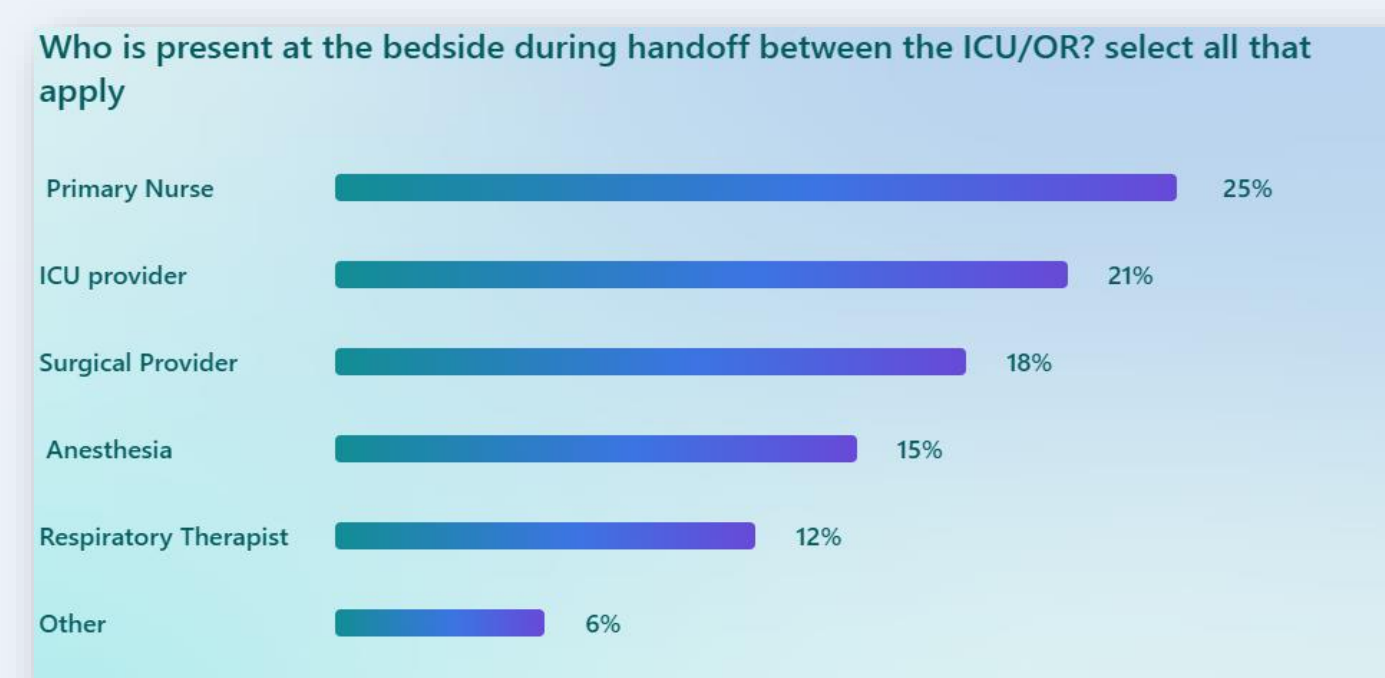
## METHODS

### Setting and participants:

The pilot program was conducted over a 30-day period within the critical care intensive care unit (ICU) specifically for neurosurgical patients. The participants included the leadership team, physicians, anesthesia staff, and the critical care team. A collaborative meeting was held to discuss the implementation of the HATRICC (Hand-off and Transition in Critical Care) protocols. The Director of Neuro Critical Care took an active role in coordinating with physicians, and the neurosurgical team was designated as the pilot group. The handoff team consisted of the surgeon, anesthesia provider, ICU nurse, and ICU ordering provider, ensuring a comprehensive approach to patient care during transitions. The standardized handoff protocols emphasized two crucial elements: a face-to-face bedside discussion and a structured checklist to facilitate the conversation.

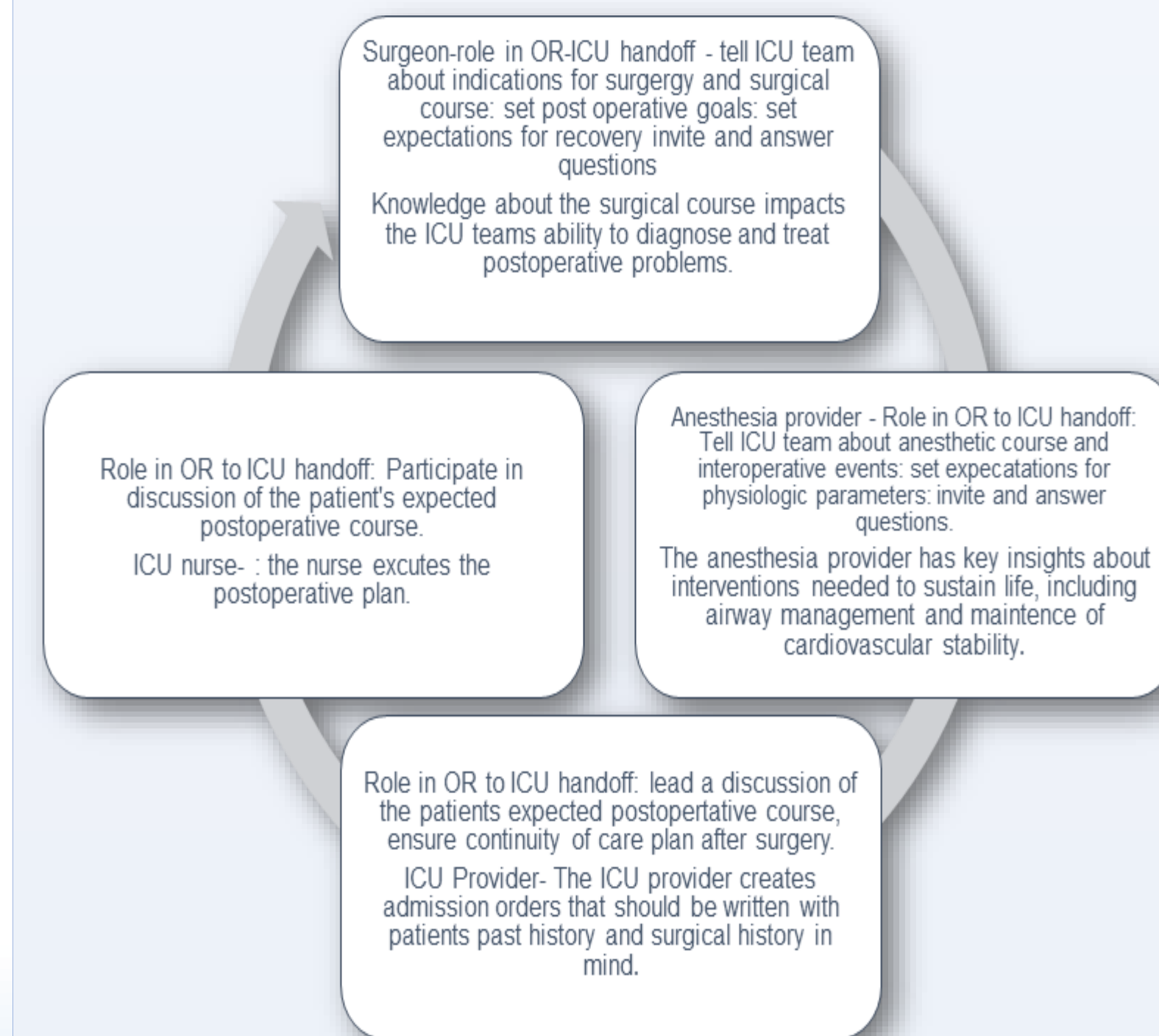
### Framework:

The communication model was designed to enhance handoffs and transitions in critical care using the Handoffs and Transitions in Critical Care (HATRICC) tool. Effective communication between the operating room (OR) and the intensive care unit (ICU) was crucial. We reviewed existing literature and selected HATRICC based on a study by Lane Hall. The HATRICC study evaluated a standardized handoff process from the OR to the ICU. Prior to implementing this process, many patient handoffs were poorly communicated, leaving the ICU team uninformed about incoming patients. This issue led to a quality improvement project and the further development of HATRICC.



## RESULTS

**Results:** A post-survey was conducted to gather feedback on the HATRICC process. During a staff huddle, employees were informed about how to scan a QR code to provide their input. The neurosurgical providers performed bedside handoffs 100% of the time; however, in 65% of cases, no overhead announcement was made when the patient arrived in the unit. Additionally, in 75% of instances, the operating room nurse informed the ICU that the patient was incoming. Although the survey was available to the entire medical team, only the nursing staff responded to the survey questions. The overall goal of this initiative was to improve communication with patients during the ICU handoff. The clinical nursing staff appreciated the operating room (OR) process, and the ICU team participated in the bedside handoff.



## CONCLUSIONS

### Interpretation:

The implementation of the HATRICC standardized handoff process has highlighted a tendency to overlook certain less critical, yet significant, patient information. While this standardized process may miss some of these details, it has also improved teamwork among various clinical teams. Clinicians have expressed satisfaction with the new approach, noting that it makes handoffs more efficient and easier compared to the previous unstandardized method.

### Relevance:

A standardized handoff process promotes consistency across shifts and among staff members, which can lead to a more reliable nursing practice and improved patient safety.

## REFERENCES

- Lane-Fall, M. B., Beidas, R. S., Pascual, J. L., Collard, M. L., Peifer, H. G., Chavez, T. J., Barry, M. E., Gutsche, J. T., Halpern, S. D., Fleisher, L. A., & Barg, F. K. (2014). Handoffs and transitions in critical care (HATRICC): Protocol for a mixed methods study of operating room to intensive care unit handoffs. \*BMC Surgery, 11\*, Article 1471-2482-14-96. <https://doi.org/10.1186/1471-2482-14-96>
- Lane-Fall, M. B., Pascual, J. L., Massa, S., Collard, M. L., Peifer, H. G., Di Taranti, L., Linehan, M., Fleisher, L. A., & Barg, F. K. (2018). Developing a standard handoff process for operating room to intensive care unit transitions: Multidisciplinary clinician perspectives from the Handoffs and Transitions in Critical Care (HATRICC) study. \*Joint Commission Journal on Quality and Patient Safety, 4\*(9), PMID: 30166035.

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