

INTRODUCTION

- Communication has been cited as a leading factor in medical errors and adverse patient outcomes, especially during transitions of care.
- In the Fall of 2023, there were several incidents where critical information was not communicated during the handoff process. These occurred during the transition of care, either when bringing a patient from the Critical Care Unit to the operating room or returning the patient from the operating room to the Critical Care Unit.
- When queried, a significant percentage of Anesthesia personnel, Critical Care nurses and physicians, and Post-Anesthesia Care Unit nurses raised concerns over the variability of information and process of handoffs. They cited gaps in information that was communicated which resulted in compromised patient care and safety.
- A number of incidents were reported through our One Link Incident Reporting system at Jersey Shore University Medical Center. Our Root Cause Analysis process identified communication issues as a causative factor in most of these safety events.
- A Task Force of Anesthesia personnel, Critical Care nurses representing each of our Critical Care units, PACU nurses, perioperative leaders, and Quality & Patient Safety Department representatives convened to establish a handoff tool and standardize the process of transitioning care between the operating room and our PACUs/ICUs.

METHODS

- A multidisciplinary task force was convened and developed a handoff form for transitions of care. This form was to be used during transfer of care of patients between providers in the O.R. and Critical Care units.
- The form is completed by the provider caring for the patient and serves as a template for essential information that is communicated to the accepting provider during the handoff process.
- Each unit was responsible for educating their respective staff about the form and the process.
- The use of the form was audited for compliance.
- Staff satisfaction with the process and information transfer was measured.
- Staff were encouraged to report noncompliance through our confidential One Link Incident Reporting system.

INTERVENTION

- For patient transfer from the ICU to the O.R., the ICU RN completes the form and reviews it with the O.R. circulating RN and anesthesiologist or CRNA at the bedside before transport of the patient to the O.R.
- There is a two-step process when transferring care from the O.R. to the ICU:
 - First, a brief report, called from the circulating RN in the O.R. to the receiving ICU RN as the procedure is concluding in the O.R. This allows the ICU team to prepare for patient arrival and transfer of care.
 - Second, a more detailed and complete report at the bedside in the ICU from the Anesthesia provider to the receiving ICU nurse, reviewing the operative course, anesthetic management, and postoperative plan.
 - The Anesthesia provider should complete the form intraop and review with the ICU receiving team. The form will remain with the patient so that subsequent hand-offs and transfers of care have information about the operative course and postanesthesia plan.

Jersey Shore University Medical Center
Anesthesia Transfer of Care (Hand-Offs) To & From Critical Care Locations
(BICU / Neuro ICU / MICU / CVICU / PICU / NNICU / Post-Anesthesia Recovery Areas)

THIS FORM IS NOT PART OF THE MEDICAL RECORD

REPORT CALLED FROM O.R./Procedure Area (By RN and/or Anesthesia Provider to accepting RN)	
☐ Patient Name	
☐ Surgeon Name and Procedure	☐ Confirm surgeon postprocedure discussion with Intensivist
☐ Patient Status	☐ Stable ☐ Unstable
☐ Infection Control/Isolation Status	
☐ Post Op Respiratory Status	☐ Extubated ☐ Intubated ☐ If Intubated, vent settings
☐ Invasive Lines / Monitors	☐ Arterial ☐ CVP ☐ PA catheter ☐ ICP monitor
☐ Infusions	☐ Sedatives / Narcotics ☐ Vasoactive agents ☐ Inotropes ☐ Antiarrhythmics
☐ Identify special needs for post-anesthesia care (i.e. CPAP/BIPAP, trash collar & tracheostomy care, cooling/warming blanket, new infusions, blood products needed in ICU/PACU, etc.)	
☐ Estimated Time of Arrival to Unit	

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REPORT AT BEDSIDE (by Anesthesia provider to Accepting RN AND ICU Physician/PA/NP)	
☐ Introduce self	Patient Label
☐ Identify patient using 3 unique identifiers	
☐ Past Medical History	
☐ Allergies	☐ Weight ____kg
☐ Surgical procedure	
☐ Type of anesthesia	
☐ Difficult airway or intubation?	
☐ Anesthetic/Operative course	
☐ Estimated blood loss	
☐ Intraop I's & O's	☐ Crystalloid_____ ☐ Albumin_____ ☐ Blood products PRBC_____ FFP_____ Plts_____ Cryo_____
☐ Last lab results and time	☐ ABG_____ ☐ CBC_____ ☐ Glucose_____ ☐ Potassium_____
☐ Intraoperative Medications	☐ Antibiotic and time of last dose ☐ Analgesic and time of last dose ☐ NMBS and time of last dose ☐ NMBS reversal ☐ Insulin_____ ☐ Beta blockers_____ ☐ Vasoactive drugs_____
☐ What intravenous lines does patient have	
☐ Infusions running currently	
☐ Plan for postoperative ventilation and vent settings ETT Size:_____, Taped at:_____,cm	
☐ Plan for postoperative analgesia	
☐ Intraop complications / adverse events	
☐ Ask "any questions or concerns?"	

THIS FORM IS NOT PART OF THE MEDICAL RECORD

DISCUSSION

- Effective communication and the utilization of handoff tools serve to prevent safety events that may result in patient harm by preventing errors due to communication gaps of essential information.
- Staff were overwhelmingly satisfied with the process and the quality of information communicated during the transition of care when the tool and process were utilized.
- We plan to address compliance through education of the staff and sharing of data to support the importance of this handoff tool and process during transitions of care.
- The process will be expanded to include transitions of care from the surgeon to the ICU team.
- We hope to expand the use of a similar tool during transitions of care between Anesthesia providers during intraoperative handoffs..

REFERENCES

- Evans, A., Yee, M.-S., & Hogue, C. (2014, March). Often Overlooked Problems with Handoffs From the Intensive Care Unit to the Operating Room. *Generalsurgerynews.com*.
<https://www.generalsurgerynews.com/Web-Only/Article/09-21/Improving-Communication-in-the-OR/64873#:~:text=Participate%20in%20hospital%20committees%2C%20especially,mot%20effective%20in%20improving%20relations>.
- Segall, N., Bonifacio, A. S., Schroeder, R. A., Barbeito, A., Rogers, D., Thornlow, D. K., Emery, J., Kellum, S., Wright, M. C., Mark, J. B., & Durham VA Patient Safety Center of Inquiry (2012). Can we make postoperative patient handovers safer? A systematic review of the literature. *Anesthesia and analgesia*, 115(1), 102–115.
<https://doi.org/10.1213/ANE.0b013e318253af4b>
- Shah AC, Oh DC, Xue AH, Lang JD, Nair BG. An electronic handoff tool to facilitate transfer of care from anesthesia to nursing in intensive care units. *Health Informatics Journal*. 2019;25(1):3-16. doi:10.1177/1460458216681180

POST-INTERVENTION RESULTS

- Compliance with the use of the form was only 50%.
- When the form was utilized, it served as a template for communicating essential information during the transition of care with fewer gaps in communication and fewer perceived adverse events as a result of information gaps.
- Staff were overwhelmingly satisfied with the form and the process when it took place.
- Staff felt that the process enhanced communication and team building.