Better handoff, Safer Care: ICU to OR

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Introduction

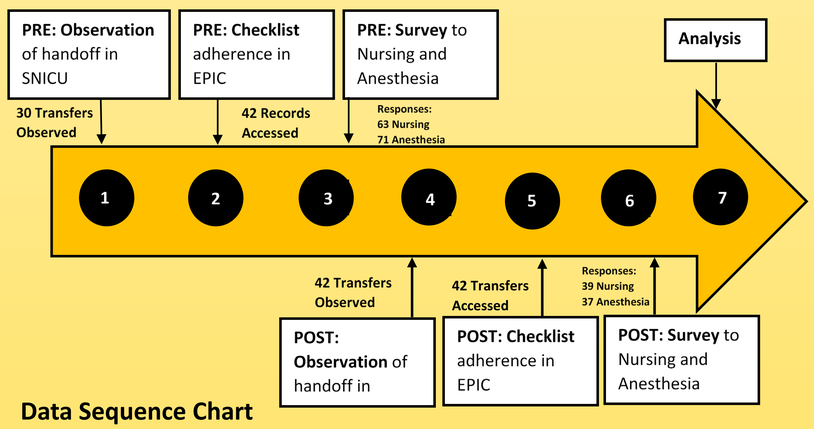
- Handoff without standardized protocols is prone to information loss and decreases patient safety
- Communication breakdowns lead to over 60% of reported patients sentinel events, with half of those occurring during patient transfers[1]
- Transfer of care (handoff) is an especially susceptible time for miscommunication between healthcare workers[2]
- Critical patient information needs to be communicated between healthcare providers in the pre-operative period to ensure continuity and quality of patient care
- A handoff quality improvement project that involved handoff from the OR to the ICU showed a significant reduction in handoff error with the use of a standardized checklist[2]
- I-PASS is a handoff program that decreased medical errors and preventable patient harm[3]

Purpose

- **Purpose**: To improve communication, decrease information loss and promote patient safety by introducing a standardized handoff tool when surgical patients transfer from the SNICU to the OR
- ***Outcome 1:*** The development and implementation of a standardized verbal handoff tool (I-PASS) between SNICU RNs and anesthesia providers when patients transfer to the OR
- ***Outcome 2:*** To increase nursing adherence with the pre-operative EPIC checklist in the electronic medical record (EMR)
- ***Outcome 3:*** To evaluate the newly adapted I-PASS handoff tool by eliciting input on interdisciplinary surveys

Methods

- Project was deemed not human subject research
- Sample: SNICU RN's and Anesthesia providers
- Setting: SNICU at the UIHC
- Population: Surgical patients transferring from the SNICU to OR



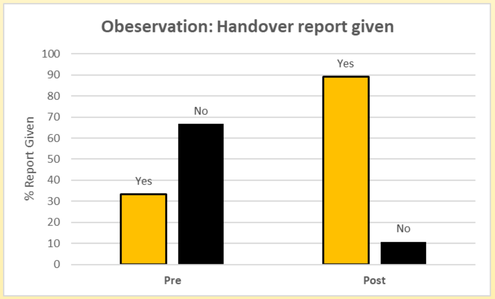
Data Sequence Chart

I-PASS, ICU to OR Handoff Guide

I-PASS, ICU→OR Handoff Guide
Illness and Patient Summary
Pt name, ID badge on?
Active issues (One-liner)
Vitals/Labs of note
Precautions (spine, positioning, contact)
NPO status (tube feeds off?)
Access and Airway
Lines (PIV, A-line, Central)
Drains/tubes (epidural, EVD, chest tube)
Trach/ETT details/Vent settings
Medications, Blood Products
Antibiotics (time of last dose)
Pressors, sedation
High risk (Heparin, Insulin, 3%,7.5% -NaCl)

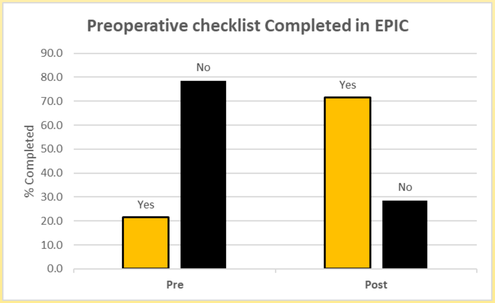
Outcomes

Outcome 1: I-PASS, Verbal Handoff tool



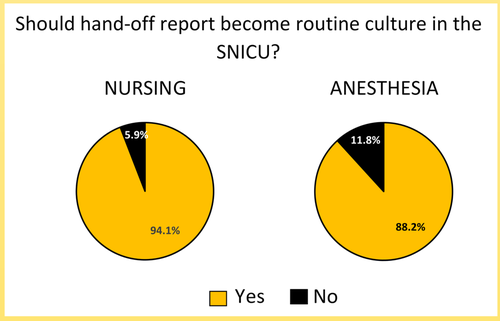
Handoff
Pre: 33%
Post: 89%

***Outcome 2*: Checklist Adherence in EPIC**



Completion:
Pre: 21%
Post: 71%

***Outcome 3*: Satisfaction Surveys. Anesthesia and Nursing**



Part of Routine Culture?
Nursing:
Yes: 94.1%
No: 5.9%
Anesthesia:
Yes: 88.2
No: 11.8%

Evaluation

- ***Outcome 1***: Goal of 60% utilization of the verbal handoff tool
  Results: Clinically significant improvement in handoff between RN's and Anesthesia, Pre- 33%, Post- 89%
- ***Outcome 2***: Goal of 50% adherence to completing the pre-operative checklist in EPIC
  Results: Clinically significant improvement in pre-operative checklist documentation, Pre- 21%, Post- 71%
- ***Outcome 3:*** Goal of 80% of multidisciplinary team rate the I-PASS tool needed in the SNICU
  Results: Exceeded goal with Nursing 94.1%, Anesthesia 88.2%
- Fewer surgeries and PPE restrictions limited access to I-PASS
- Possible confounder: Observational bias, accepted due to EBP goal of increasing compliance

Conclusions

- I-PASS tool applicable to many handoff settings/units
- I-PASS handoff tool was adapted and implemented in the SNICU
- Limitations: Observational bias, short implementation period
- COVID-19 impact: Less surgeries, PPE restricted access to cards
- Future projects: Document and track each step of verbal handoff, and pre-operative checklist in EPIC
- Sustainability: providing I-PASS badge cards with education to SNICU staff (done by UPC)
- Multidisciplinary collaboration was required for successful handoff and implementation of the I-PASS tool
- RN led multidisciplinary EBP
- RN's full partners of the healthcare team - 2010 Institute of Medicine Report on the Future of Nursing

References

1. Halladay, M. L., Thompson, J. A., & Vacchiano, C. A. (2019). Enhancing the Quality of the Anesthesia to Postanesthesia Care Unit Patient Transfer Through Use of an Electronic Medical Record–Based Handoff Tool. Journal of PeriAnesthesia Nursing, 34(3), 622-632.
2. Starmer, A. J., O'Toole, J. K., Rosenbluth, G., Calaman, S., Balmer, D., West, D. C., ... & Srivastava, R. (2014). Development, implementation, and dissemination of the I-PASS handoff curriculum: a multisite educational intervention to improve patient handoffs. Academic Medicine, 89(6), 876-884
3. Blazin, L. J., Sitthi-Amorn, J., Hoffman, J. M., & Burlison, J. D. (2020). Improving patient handoffs and transitions through adaptation and implementation of I-PASS across multiple handoff settings. Pediatric Quality & Safety, 5(4).

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