**Introduction**

Effective communication among healthcare workers is crucial to providing safe medical care to patients. Studies consistently show that a breakdown in communication is one of the leading causes in adverse events. In addition, poor quality handoffs also leave practitioners dissatisfied. The 2009 AHRQ Hospital Survey on Patient Safety Culture found handoffs to have some of the lowest provider satisfaction scores of all patient safety composites. The landmark I-PASS study was critical in establishing the importance of standardized handoff system in improving patient safety, which led to its widespread adoption. However, its versatility is curtailed in an unique environment such as between the multidisciplinary perioperative and intensive care teams.

Our study examined the current hand off model between the perioperative and Pediatric Intensive Care Unit (PICU) teams for deficiencies as well as provider satisfaction. Then, we developed a formalized handoff tool. Deficiencies and provider satisfaction will be re-examined post intervention.

**Methods**

**Design:** Prospective cross sectional study

**Primary variable:** provider satisfaction

**Secondary variables:** number of deficiencies in handoff process

In a 2 month pre-intervention period, 15 handoffs from the perioperative team to the PICU team were observed. The data was gathered by a trained observer. A survey on provider satisfaction with the current handoff process was then administered to all stakeholders (anesthesiologists, CRNAs, PICU nurses, PICU frontline providers and surgeons). A formal handoff tool was developed after careful analysis of the I-PASS model and review of the current handoff. Education was implemented at Grand Rounds and online modules. Following introduction of the intervention, handoffs will again be audited to evaluate for reduction in number of deficiencies. A post-intervention survey will also be administered to evaluate improved provider satisfaction.

**Results**

- Fifteen pre-intervention handoffs were observed.
- Average handoff time currently is 7.6 minutes.
- Sixty percent of pre intervention handoffs experienced interruptions.
- The surgeon did not stay until the end of any of the observed handoffs, with post-operative surgical orders being finished 58% of the time.
- Only 47% of time was potential postoperative problems identified.
- In 40% of the observed handoffs, priority setting did not occur.
- In only 20% of encounters was there a clear transition of care from the operative team to the PICU team, with only 8% having a summary at the end of handoff.

**Discussion**

There are several areas of deficiency in the current process. The majority of handoffs did not have priority setting with team members assuming roles, often resulting in redundancy. Since surgical team members did not stay until the end of the handoff and with infrequent summarization at end of handoff, there was often no reconciliation that postoperative orders were completed. This led to PICU providers having to page the surgical team after handoff, resulting in delays in patient care. The lack of anticipatory guidance meant questions about patient safety were unanswered or delayed. Since the attending surgeon often did not stay until the end of the handoff process, junior staff were left with making presumptions in care.

Findings from pre-intervention audit as well as current hand off literature were used to design the formalized hand off tool.

**References**


2009 AHRQ Hospital Survey on Patient Safety Culture: “handoffs and transitions” among the worst of patient safety domains with 56% of staff reporting concerns.