Cincinnati Children’s Hospital Medical Center, Cincinnati, Ohio, USA

Cincinnati Children’s Hospital Department of Anesthesia provides anesthesia care to one of the busiest pediatric operating rooms in the United States. Approximately 38,000 children are anesthetized annually by 45 Anesthesiologists, 9 Pediatric Anesthesia Fellows and 39 CRNA’s making effective communication among team members crucial to patient safety. Breakdown in communication can occur during the handoff of patient care from one anesthesiologist to another. Our institution found that the anesthesia handoff process was inconsistent and lack of standardization of this process led to medical errors. An improvement team was formed to tackle the attending to attending safe handoff process in the operating room. For a period of three weeks, CRNAs scored the intraoperative handoffs of the anesthesiologists based on whether the handoff occurred in the operating room and whether all elements of a checklist were discussed. Both these objectives were met only 20% of the time. A Smart Aim to Improve the quality and reliability of attending intraoperative handoffs from 20% to 95% over a 6 month period was established and Key Drivers were identified (Figure 1). Reliability was defined as use of a standardized handoff checklist and a handoff where both anesthesiologists were present in the operating room. The checklist was rolled out to the anesthesia attendings (figure 2). Failure to comply with the handoff process was addressed in an email to the attendings involved. A follow-up phone call was also employed to ascertain the cause of the failure and reinforce the importance of the handoff initiative. Two months after the rollout of the checklist to the anesthesia attendings, the anesthesia department achieved 100% compliance with the handoff process as demonstrated in the run chart (figure 3). A key component of improving this process was not only a standardized handoff system, but ensuring situational awareness of the intraoperative environment and a team huddle approach among in-room and supervising providers. The handoff checklist has now been incorporated into the electronic medical record allowing for documentation of the handoff process. It is clear that QI methodology can be used to change a practice in the operating room and improve the outcome. Leadership support, team-work and transparency are critical elements to improving a process.
Intraoperative Handoff Checklist

Handoff in OR with both attendings present

- **General Demographics:**
  - Age
  - Weight
  - Allergies
  - Procedure

- **Medical History**

- **IV access/Invasive lines**

- **Anesthetic:**
  - Type (gas, TIVA, sedation)
  - Airway
  - Medications (antibiotics, narcotics)

- **Input/output**
  - Crystalloid/colloid
  - EBL/UOP

- **Labs:**
  - T&S/blood consent

- **Disposition:**
  - ICU vs PACU
  - Postop orders
  - Pain plan – regional, PCA

Attendings: __________________, __________________