Development of a Standardized OR to PACU Handoff

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Introduction

- The Joint Commission reports that two-thirds of sentinel events are due to communication errors, with over half at a transfer of care, or “handoff”.
- In 2009, to reduce these events, their National Patient Safety Goal 2E stated accredited hospitals should implement a standardized process for face to face handoffs.
- Lucile Packard Children’s Hospital (LPCH) is standardizing all transfers of patient care between units using the previously published I-PASS format (Illness Severity, Patient Summary, Action List, Situation Awareness, Synthesis by Receiver) [Starmer 2012].

Results from Standard OR to ICU Handoff

- The first transfer of care dyad at LPCH to adopt the standardized I-PASS handoff was the OR to PICU.
- Standardization of the OR to PICU handoff decreased the average handoff time from 15 minutes to 6 minutes and resulted in improved quality of information transfer (Figure 1, Below).

Goals

- Primary: Increase information transfer by at least 25%, to impact handoff failures and handoff related adverse events.
- Secondary: Decrease handoff time, improve PACU nursing satisfaction with information transfer.
- Creation and implementation of the standard handoff format for OR to PACU dyad, with pre and post data collection to document impact.

Literature Guided Development of OR to PACU Handoff

• A Pubmed search regarding OR to PACU handoffs was completed. Two articles were identified to guide the development of our handoff.
  - 1. A recent, comprehensive review analyzing articles published between 1950 and 2012 included recommendations for components of an anesthesia to PACU handoff based on 31 articles [Segall 2012].
  - 2. An article published by the Joint Commission Journal on Quality and Safety describing the components of the surgeon and OR nurse handoffs to the PACU nurse [Petrovic 2012].
• The components presented by Segall and Petrovic were integrated and worked into an I-PASS format (Figure 2, Left).

Baseline Data Collection

• Audits of our current process to identify how often elements identified in Segall and Petrovic’s articles are missed (Figure 3, Below) and the average handoff time.
• PACU nursing satisfaction surveys of adequacy of information transfer.

Implementation [February 2013]

• Education: Prior to initiation of this PACU handoff, members of the team will be introduced to the new format using a standardized education module.
• Communication: The day of implementation will be well publicized, with study investigators onsite to assist the transition.
• Stabilization: Prior to initiation, audits will give feedback of team performance for 4 weeks. Thereafter, intermittent audits will provide team members with ongoing data on reliability of complete information transfer and time of handoff.
• Data Collection: To be collected after stabilization: 1. Timing, 2. Rate of failure, 3. PACU nurse satisfaction surveys. 4. Retrospective review of event failure rates and adverse events in the PACU for 3 months prior to initiation and 3 months after stabilization.

Figure 1
Reduction in Care Failures

Handoff Event Rate

23% to 2% (6 month average)

47% Reduction

Figure 2
OR to PACU Handoff in I-PASS Format

I - Illness Severity:
- Prompts team to patient’s condition.

P - Patient Summary:
- Pre-populated demographics pulled from electronic record.

A – Action List: OR nurse and surgeon handoff:
- Based on components previously published [Petrovic 2012] and site specific need.

A – Action List: Anesthesiologist handoff:
- Based on 31 articles regarding handoffs recently reviewed [Segall 2012].
- Commonly used drugs on check list to simplify for receiving PACU nurse.

S, S – Situation Awareness and Synthesis by PACU Nurse:
- Passers provide anticipatory guidance.
- Allow time for questions from PACU nurse.

Figure 3
Percentage of Handoff Components Present

Anesthesia Handoff
Surgical Handoff
OR Nurse Handoff