Problem Definition

• Errors in communication are responsible for over 30% of preventable adverse events.
  • Handoffs are critical transfers of information between patient care teams.
  • The IPASS handoff format:
    • Decreases medical errors by up to %23.
    • Decreases preventable adverse events by up to 30%.

• Postoperative neurosurgical patients are highly complex and typically managed in the NICU.

• We adopted a three-phase approach to improve handoffs in the NICU with IPASS using PDSA (Plan Do Study Act) cycles.

Aims For Improvement

Within one year of initiation of the process improvement plan, we wanted to improve:

• Direct communication of airway and hemodynamic concerns
• Direct communication of operative events, complications, and perioperative management goals.
• Attendance at postoperative handoffs
• Confirmation of information by receiving teams
• Staff perceptions of handoff efficacy and teamwork.

Intervention Phase 1 - Pre-intervention Phase

• Survey to assess perceptions and suggest improvements
• Preliminary observations of handoffs
• Creation of structured IPASS handoff
• Creation of standardized handoff process
• Education of staff and implementation of intervention

Intervention Phase 2 - Post-intervention Phase

• Serial observation of handoffs
• Repeat staff survey with identical questions
• Comparison of responses
  • Additional assessment of IPASS Process
• Further adjustment of processes
  • Initiation of 5 min “heads up” call
  • Streamlined patient transition

Intervention Phase 3 - Long Term Follow-up

• Long-term handoff observation in NICU - Incorporation of timing metric.
• Case-by-case review of processes and feedback.

Lessons Learned

• Changes in communication practice requires a multidisciplinary approach.
• Iterative process adjustment enables sustainable changes in the long-term.
• Communication practices reciprocally influenced the overall culture of patient safety in the NICU.