Implementing an Electronic Perioperative Hand-off Tool

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Introduction: It is well known that hand-off between health care providers has an impact on patient safety. The Joint Commission (TJC) identifies that "Communication failures are among the most frequent causes of harmful medical errors. An estimated 67% of communication errors relate to handoffs" (TJC, 2024).

Identification of the Problem: In a pediatric perioperative department in an urban, tertiary care academic medical center, there was not a hand-off in place between the Pre-operative (Pre-op) and Operating Room (OR) nursing staff prior to anesthesia creating a safety risk.

EPB Question/Purpose: The PICO question was "Does a standardized Pre-op to OR hand-off utilizing the Electronic Health Record (EHR) improve staff perception of patient safety?" Results from a literature search using PubMed and CINAHL yielded evidence that hand-off should be standardized, allow the opportunity for questions between caregivers, and involve tools and technology when possible.

Methods/Evidence: An interdisciplinary team was formed to identify critical communication elements, create a new workflow, and create an electronic hand-off tool. Multiple approaches were used to educate and engage staff including daily huddles, staff meeting presentations with a script, signage, and individual education. Trials were conducted, staff feedback was integrated, and leadership support was strong throughout the implementation period. A survey using a 5-point Likert scale was utilized immediately pre-intervention, and at three months post intervention regarding the staff's perception of safety related to hand-off.

Significance of Findings/Outcomes: Post survey data showed an improvement in the staff perception of safety overall. Perceived effectiveness of the Pre-op to OR hand-off improved from 68% prior to 84% three months after the hand-off intervention. Compliance with the hand-off and documentation was 92%, 91%, and 90% in the first three months of implementation. Qualitative data from participant comments included themes around improved patient safety and opportunities to improve hand-off with other units.

Implications for perianesthesia nurses and future research: Practice can be advanced through further refinement of the process and expanding the scope throughout the hospital enterprise to other pre-op departments, as well as post anesthesia care (PACU) departments utilizing the same framework.