Improving Transitions of Care in the Perioperative Setting: Developing Handoff Tools in the Age of the Electronic Health Record

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Background: Medical errors are a leading cause of morbidity and mortality in the United States. Handoffs and transitions of care are events during which communication failures may lead to errors. In the perioperative setting, surgical patients undergo multiple transitions of care in a short period of time involving multiple providers including the surgical and anesthesia teams and perioperative and inpatient nursing. Handoff improvement programs have been shown to reduce medical errors and elements of high quality oral handoffs have been well described. For surgical patients, structured handoff tools for transitions from the operating room (OR) to the intensive care unit (ICU) and to the post anesthesia care unit (PACU) increase the quality and reliability of information transferred. As hospitals adopt integrated electronic healthcare records (EHRs), there is a need for well designed tools that facilitate handoffs of care by improving communication and decreasing cognitive burden on healthcare providers.

Methods: As part of the Brigham and Women’s Surgical QUALity REDesign (BSQUARED) program, a multidisciplinary team was formed to develop a tool for improving handoffs between the OR, PACU, and inpatient care areas. In conjunction with the ongoing development of the electronic health record, workflows were developed for the handoff process using iterative plan-do-study-act cycles. Reliability of the handoff process will be measured via surveys of care team members including PACU nursing team, PACU anesthesia team, and the surgical ward team. Adverse event and safety reports will be monitored during the implementation of the tool to understand its effect on patient safety.

Results: The first iteration of this quality improvement project involved the implementation of a new EHR chart review tool. The tool pulls together a summary of the procedure, associated staff and care team members, contact information for pass-off, vital signs, fluid totals, active lines/drain/airways, imaging, nursing notes, discharge planning information, active and last administered medications, and a link to the anesthesia record.

Conclusion: Clear and efficient communication in patient handoffs can be facilitated with electronic tools that pull together disparate but crucial information. By providing the right information at the right time, errors in communication can be averted.
stakeholders from all areas of perioperative care there is great opportunity to develop tools to improve the reliability of patient care handoffs, streamline clinical workflow, and improve patient outcomes.

References:
