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Hand-off Tool Implementation in Post-Anesthesia Care

Benjamin Nash

Introduction of the Problem

Problem

A problem identified by stakeholders at a 300-bed hospital in rural Illinois was inconsistent and inadequate hand-off report of patient information when patients were transferred from the OR to a floor other than to recovery in the PACU. A request was made to develop a standardized hand-off tool to supplement the traditional verbal report given at the bedside. The hand-off tool was designed to include a standardized format containing patient information including allergies, surgery, description of surgical site, medications given, and type of anesthesia used. An area was included for additional pertinent information related to the patient's procedures and outcomes.

The scope of change for this rural health care facility included implementing a written hand-off tool, when verbal post-anesthesia report is currently used. The institution's post-anesthesia report consisted of a non-standard, personal report that varied in detail and effectiveness from nurse to nurse. Inconsistencies in the manner of report, and the manner in which report was received lent to oversight, miscommunication, and missed information. The design and implementation of a written, standardized post-operative report was conducted to eliminate the inconsistency found in previous verbal reporting and to ensure all relevant patient information is shared.

Literature Review

A literature review was conducted to evaluate the available evidence regarding standardized hand-off tools and the impact that these tools have on post-operative anesthesia communication and patient safety. The literature addressed many problems encountered in hand-off of patient care. These problems included inconsistent, incomplete, informal, and

unstructured report (Nagpal, et al., 2010; & Piekarski et al., 2015). The inconsistent and inadequate transfer of information was recognized as a potential for harm when transferring care of patients (Gibney et al., 2017). Communication was improved when a standardized form, or hand-off tool was employed (Fabila et al., 2016, Salzwedel et al., 2013, & Zayalkoff, et al., 2011).

The use of a standardized hand-off tool improved patient outcomes such as decreased length of stay in post anesthesia care, decreased in-hospital mortality, fewer unplanned ICU admissions, fewer unplanned extubations, reduced ventilator time, fewer technical errors, and decreased preventable medical adverse events (Eicheberger et al., 2011, Joy et al., 2011, Kufman et al., 2013, Starmer et al., 2014). The themes of the literature overwhelmingly supported the use of a standardized hand-off tool to improve communication and expectation when exchanging information about patients in the post-operative setting.

Project Methods

The purpose of this post-operative hand-off tool was to improve the transfer of vital information regarding the patient and procedure, thereby, improving patient care and patient outcomes. The information included accurate details of the patient, surgical site, anesthesia, medications, complications, success, and required follow-up at the time of patient transfer. This project was subjected to IRB review and registration and was considered exempt.

The setting for this project was a rural 300 bed hospital, where there was no standardized report for the transfer of care from the anesthesia provider to the bedside nurse. The hand-off tool was meant to be used anytime there was a transfer of patient care outside of the post-anesthesia care unit or PACU. A hand-off tool was formed based on examples of SBAR tools and from an electronic hand-off tool example (Sears et al., 2014, Shah et al., 2019). The hand-

off tool was revised to meet the needs of the facility through communication and negotiation with a CRNA in the anesthesia group. The revised hand-off tool was implemented at the facility for three months and used with direct transfers from the OR to ICU or one of the step-down units.

Evaluation

The hand-off tool was implemented in September of 2018. During the three months of implementation, only 18 patients were transferred from the OR to the ICU or a step-down-unit. The evaluation of the hand-off tool included a survey that the anesthesia provider and the receiving staff completed, as well as a follow-up interview. The survey employed a seven question Likert scale requesting the anesthesia provider and the receiving staff to rate the effectiveness of the hand-off tool after the exchange of information. No patient information was recorded or stored during this process, and the standardized hand-off form that was created for this process remained in the possession of the receiving staff, to be disposed of in accordance to HIPPA and the facility's procedures for handling patient information.

The overall reception to the hand-off form was favorable with both anesthesia providers and the receiving staff. Some participating staff were concerned with abbreviations and acronyms on the tool, with most stating that they would like to eliminate acronyms because they felt acronyms contributed to confusion about the meaning of the word. A few providers suggested that the process could be streamlined even more, while others felt that the hand-off tool was appropriate in length and detail.

Follow-up interviews with anesthesia providers revealed that experienced providers, or providers with more than four-year's experience in the field of anesthesia, had already established their own method of transferring patient information, and were initially resistant to

change in their personal practice. Receiving staff reported that they appreciated having a form to complete and visually examine, allowing them to see gaps in the information and to ask follow-up questions regarding patient care. The hospital approved the protocol.

Impact on Practice

The outcomes of this process evaluation and the standardized hand-off tool were shared with the facility. Facility stakeholders approved the use of the tool and reported plans to use the tool in their hand-offs from the OR to ICU after revising the acronyms that lead to some confusion. The facility has also indicated that they intend to use a hand-off tool that will be revised further to work with the Labor and Delivery Department.

The impact on the organization and the practitioners, is beneficial and positive. Standardizing the hand-off report will likely lead to consistent transfer of information and expectations from the receiving staff. Alterations and changes moving forward include making sure that the information on the hand-off report is clear and concise, and that there is no confusion about acronyms or abbreviations. This rural facility utilizes computerized charting, and the expectation is that the hand-off report will eventually be transferred to an electronic format.

Conclusions

The facility now has a standardize hand-off tool in place that meets all the criteria for consistent and accurate transfer of patient information. The facility has already requested that a hand-off tool be developed for the labor and delivery department, based on the implementation of this hand-off tool. The hand-off tool for L&D would be similar in some respects to the tool already developed, but tailored to the medications delivered, type of delivery, type of anesthesia used for the procedure, and follow-up with the mother and infant. Developing an all-inclusive

hand-off tool was discussed with the facility, and the decision was made to develop separate hand-off tools in order to promote ease of use and avoid a cumbersome or cluttered document. The anesthesia staff supported the use and implementation of the tool at the facility and 88% indicated that they would use the tool for future transfers.

Author Contact Information

Benjamin H. Nash

508 S. Madison St.

Macomb, Illinois

61455

309-331-4582

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