What Color is Your Specimen?

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EHC Care Transformation

MAGNET RECOGNIZED AMERICAN NURSES CREDENTIALING CENTER

Background

Specimens retrieved from a sterile field during surgery must be properly processed to ensure that a correct diagnosis, treatment, and surgical procedure is performed. Specimen ordering, handling, collection, labeling, and transportation are essential responsibilities of the surgical team and can result in several errors in patient care. Mishandling of specimens can cause incorrect diagnoses, incomplete diagnoses, or the need for additional procedures and unnecessary surgeries. Errors that occur during specimen management are preventable. With communication and standardization, these errors can be decreased to provide the best outcome for the patient.

Purpose / Aim

The purpose of this project is to standardize and improve the specimen labeling and hand-off process to decrease specimen errors and specimen-related incident reports.

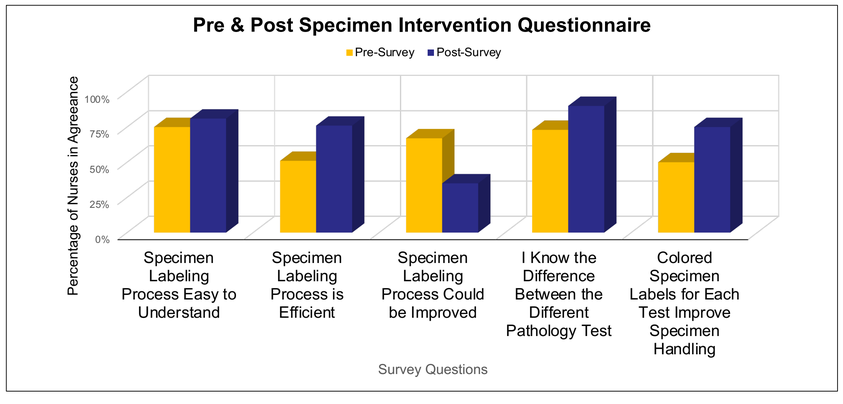
Methodology

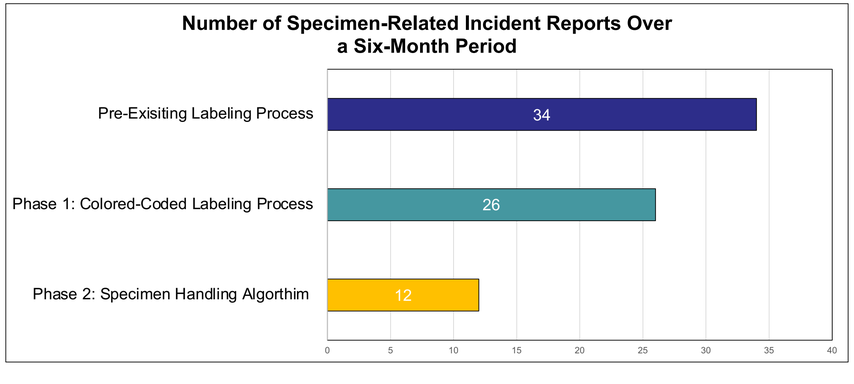
This project was divided into two phases.

Phase One: This phase consisted of a pre-survey that was given to OR nurses and pathology staff to identify problems of the pre-existing labeling process. This pre-existing method entailed a patient sticker with hand-written specimen information including date, OR room number, RN initials, surgeon name, specimen name, and times. Incident reports related to specimens were collected for a six-month period and reviewed to determine the common deficiencies among the specimens. Based on AORN guidelines and the facility policy, a standardized color-coded labeling process was implemented in which different color labels for each type of specimen were created with the required labeling fields. The nursing staff was educated on the use of the new labels and a post-survey was given six-months after implementation.

Phase Two: An algorithm was developed to identify, define, and standardize the intraoperative specimen handling process between the scrub personnel and the OR nurse. Staff was educated on this algorithm and laminated visual aids were placed in each OR. In addition, a specimen label restocking process was also developed to ensure labels were available in each OR for the staff to access during the surgical procedure.

Results





Discussion

After implementation of Phase 1, 81% of OR staff reported that the new specimen labeling process was more efficient that the pre-existing process. Staff also reported an increase in knowing the difference between the different pathology specimen orders/test(s), and that designated colored-coded specimen labels for each pathology exam improved specimen handling. Pathology and management tracked the compliance of the specimen labeling process and reported any deficiencies. Over a six-month period, there was a decrease of 23.5%, from 34 specimen-related incident reports to 26 reports. After implementation of Phase 2, there was decrease of 46.2%, from 26 specimen-related incident reports to 12 reports, over an additional six-month period.

Implications For Practice

Preventing specimen-related errors continues to be a priority among nursing staff and patient care. Improving the identification of specimens through a standardized process has demonstrated to be beneficial for staff satisfaction and understanding. More importantly, it has proven to increase patient safety and the quality of care they receive through decreased errors. This project took a multidisciplinary team approach, including pathology and the nursing staff at the center of creating, implementing, and driving this change.

Developing a colored-coded labeling process aided the staff with visual cues that assisted them in associating the type of specimen with the appropriate handling and requestion process. Creating labels that were pre-printed with the required fields needed to be completed by the nurse, improved labeling compliance per the facility policy and AORN Guidelines. Additionally, Phase Two ensured that the way in which the surgical team managed and handled specimens from the surgical field to the specimen receptacle provided support and education that ultimately decreased the amount of specimen-related incident reports even further.

Future implications for practice would suggest how this process can be incorporated with the new electronic medical record charting system as well