Title:
Reducing Mislabeled and Unlabeled Specimens in Acuity Adaptable Units

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Session Title:
Quality Improvement in the Clinical Setting
Slot:
F 15: Monday, 30 October 2017: 9:30 AM-10:15 AM
Scheduled Time:
9:50 AM

Keywords:
evidence-based practice, medical errors and mislabeled and unlabeled laboratory specimens

References:
Lippi, G., Plebani, M. et al. (2011). Identifiction errors in the blood transfusion laboratory: A stll relavent issue for patient safety. Transfusion and Aphoresis Science, 44 (2), 231-233.

Plepani, M., Sciacovelli, L., Aita, A., Padoan, A., ChiozzaM.L. et al. (2014) Pre-analytical quality indicators to detect errors in laboratory testing. Clinica Chimica Acta, 432, 44-48.

Raouf E. Nakhleh, Michael O. Idowu, Rhona J. Souers, Frederick A. Meier, & Leonas G. Bekeris. (2011). Mislabeling of cases, specimens, blocks, and slides: A College of American Pathologists study of 136 institutions. Archives of Pathology & Laboratory Medicine, 135(8), 969-974.

Seferian, E., Jamal, S., Clark, K. et al. (2014). A multidiciplinary, multifaceted improvement initiatve to eliminate mislabeled laboratory specimens at a large tertiary care hospital. BMJ, 23(8), 690-697.

Abstract Summary:

Attendees will gain valuable information about reducing mislabeled/unlabeled core lab and microbiology specimens in the cute care setting. The significance of mislabeled/unlabeled specimens and evidence-based interventions utilized to decrease mislabeled/unlabeled specimens will be included in the presentation.
Learning Activity:

LEARNING OBJECTIVES	EXPANDED CONTENT OUTLINE
Discuss the significance of mislabeled/unlabeled specimens.	Mislabeled/unlabeled specimens cause delays in diagnosis and treatment, misdiagnosis, missed or inappropriate therapy, increased cost and length of hospital stay, and may result in

	serious harm including death. Replacing specimens leads to patient discomfort and dissatisfaction. The average cost of a mislabeled/unlabeled specimen is $712.00.
Discuss the evidence-based interventions utilized to decrease mislabeled/unlabeled specimens.	Evidence-based interventions included: developing educational posters, a reminder checklist, and a copyrighted team-designed reminder slogan outlining proper lab draw procedure; posting monthly labeling results with a time-line and compelling stories about the dangers of lab draw errors; bathroom signs of “always and never” practices for blood draw procedure; real-time notification by lab personnel of mislabeled/unlabeled specimens; timely follow up/root cause analysis; a co-signing option for specimen validation by another staff before sending to the lab; roving unit-based in-services; journal club reinforcement; and consulting with the lab.

Abstract Text:

Significance: Mislabeled/unlabeled laboratory specimens causes delays in patient diagnosis and treatment, misdiagnosis, missed or inappropriate therapy or care, increased cost and length of hospital stay, and may ultimately result in serious harm including death. Replacing laboratory specimens may lead to patient discomfort and dissatisfaction. The average cost of a mislabeled/unlabeled laboratory specimen in the acute care hospital environment is $712.00. In 2015, the acuity adaptable units with 144 capable hospital beds at a safety-net hospital located in a large metropolitan area, reported an average of 40 mislabeled/unlabeled laboratory specimens per month. This number far exceeds the hospital and unit-based goal of zero. Each incidence of mislabeled/unlabeled laboratory specimens is a major patient safety concern in this already vulnerable patient population. The Joint Commission National Patient Safety Goal 1 is "improve the accuracy of patient identification", and use at least two patient identifiers when collecting blood specimens.

Purpose: To reduce mislabeled/unlabeled core lab and microbiology specimens in the acuity adaptable units at a safety-net hospital by implementing evidence-based nursing interventions.

Intervention: A team including a clinical nurse specialist, MSN student, a staff nurse, and 2 nursing managers collaborated to implement strategies for improvement. Evidence-based interventions included: creating two educational posters with a copyrighted team-designed reminder slogan outlining proper lab draw procedure and a reminder checklist; posting monthly labeling results with a time-line and compelling stories about the dangers of lab draw errors; bathroom signs of “always and never” practices for blood draw procedure; real-time notification by lab personnel of mislabeled/unlabeled specimens; timely follow up/root cause analysis; a co-signing option for specimen validation by another staff before sending to the lab; roving unit-based in-services; journal club reinforcement; and consulting with the lab.

Evaluation: The 2016 average monthly mislabeled/unlabeled laboratory specimens were significantly reduced in the combined acuity adaptable units to 29.5/month (post-intervention) from a 2015 average of 40/month.

Discussion: The multifaceted strategy approach was successful in reducing mislabeled/unlabeled laboratory specimens in the acuity adaptable units. Improving compliance with laboratory specimen collection procedures is a system-level quality improvement initiative appropriate for implementation of evidence-based nursing interventions.