
Specimen Labeling

in a Medical/Surgical Unit

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Patient Safety Fellowship



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Background

- Labs in accredited hospitals nationwide make mistakes that significantly threaten the safety of the patients
- Hospital errors account for approximately 100,000 deaths/year
- About 3-5% of specimens collected each year are defective; which does not include lab specimens that are lost, mislabeled or inefficiently analyzed
- Flaws in process and in quality control system

Background (cont...)

- These mistakes result in wrong diagnoses, emotional distress, financial/legal costs and reduced efficiency
- In 2004, a Pittsburgh-based health system reduced the number of lab errors by standardizing protocols to collect specimens
- Systems still in need of perfection
 - Labeling
 - Handling

Business Case

- Unit XYZ* is experiencing difficulties with the efficiency of labeling and delivering specimens
- This causes mislabeled specimens and increases the likelihood of drawing repeated labs from patients; the patient's safety and comfort are threatened
- Financial costs that the hospital must pay regarding labs and medical errors tend to be higher

*name not disclosed to protect privacy

Proposed Goals

- To introduce a new labeling system to reduce the errors that Unit XYZ* is currently experiencing
- To suggest a revised system where the efficacy rate of the entire unit is substantially higher

*name not disclosed to protect privacy

Observation Findings

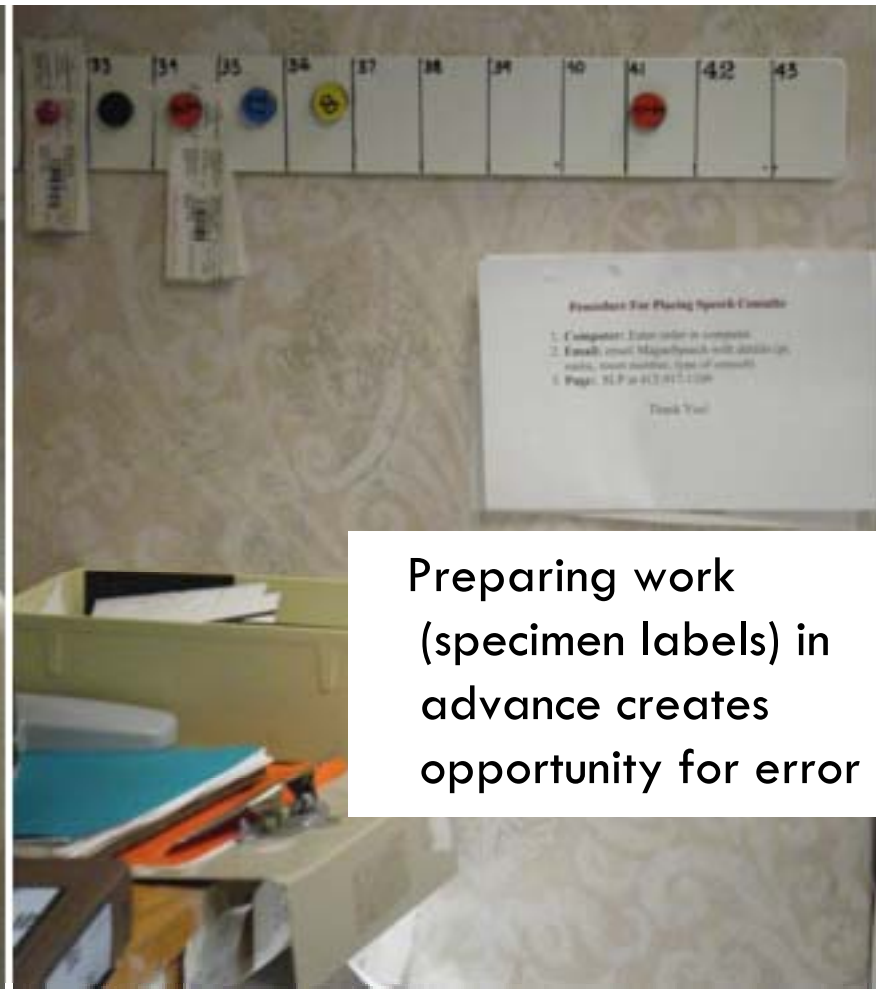
- The process of getting the correct labels to the correct room was elaborate and difficult for the busy staff
- There were unnecessary and confusing steps which created more opportunity for error
- Signs were located in areas that were not easy to recognize
- The organization and set-up of the unit clerks and other resources were inconvenient

Current Condition

- Inefficient design of spaces result in disruptive workflow



Current Condition



Preparing work (specimen labels) in advance creates opportunity for error

Current Condition

- Reminders are generally ineffective
- Excessive use of signage dilutes the intent



Observation Findings

- The program used to print labels was inefficient
- No specific, ordered labeling system was implemented where unit clerks and nurses/technicians/doctors could communicate with each other
- Supplies to collect specimen were disorganized and not restocked properly
- Employees are punished for mistakes

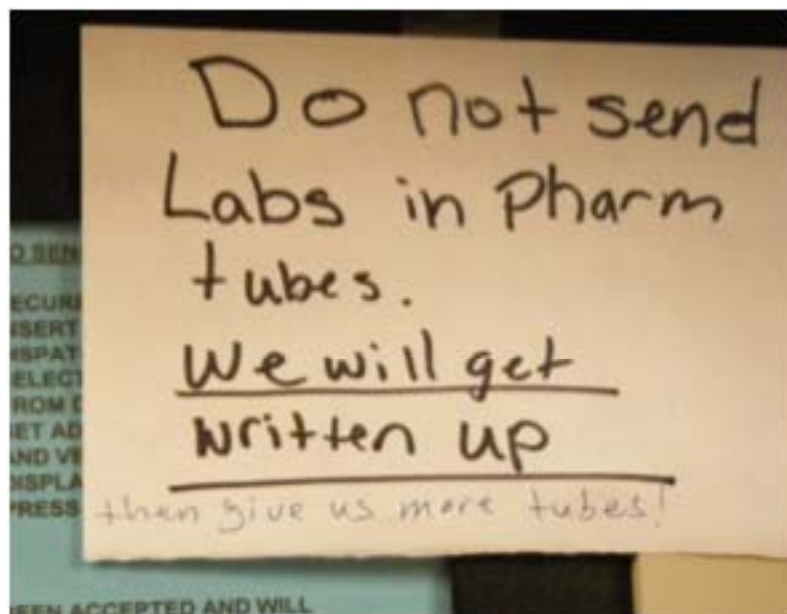
Current Condition

- Non-standardized, disorganized collection bins



Current Condition

- Punitive environment, rather than educational



Opportunities for Improvement

- Print individual specimen labels at the time and location where they are needed
- New electronic process – physician order entry system
- Supply area and distribution scheme
- Sign placement

Ideas for Improvement

- Printing a universal label along with a large sheet of paper
- New computer process where task does not disappear on task list and reminds nurses/technicians/doctors of their next step
- Stocking every room with supplies instead of having all the supplies in a single locked room
- Post visual cues for proper specimen labeling in all patient rooms

Target Condition

- Labels will correctly match the patients' information
- Tests desired by the doctors will be performed and the correct specimen will be collected
- There will never be a shortage of supplies
- An orderly environment for busy hospital workers!

Plan for Proposed Experiment

- This plan is targeted to be completed within 6 months
- We believe that this will ultimately reduce financial costs for Unit XYZ*

*name not disclosed to protect privacy



Learning

- We have learned a significant amount from
 - Observing Unit XYZ*
 - Observing the Emergency Department
 - Attending the Jewish Healthcare Foundation presentations.
- Reducing the number of steps and allowing for more communication and specific focused tasks with individuals will greatly improve the hospital environment

*name not disclosed to protect privacy

Thanks and Recognition

- Laura Mahood
- Unit XYZ* workers
- Unit Director, Medical/Surgical Unit XYZ*
- Unit Director, Emergency Department*
- Registered Nurse, Emergency Department*
- Jewish Healthcare Foundation
- The hospital where the observation was conducted*

*name not disclosed to protect privacy

