CASE EXAMPLE/BACKGROUND:
A blood specimen is sent to the lab for type and screen. The lab finds a discrepancy between the name on the tube and the name on the requisition. The patient undergoes phlebotomy again to obtain another sample. As in this case, most labeling errors result in poor resource utilization. However, labeling errors can have significant clinical consequences, the most severe of which is a transfusion related death.

Safe specimen processing requires that at the time of acquisition the specimen label reflects the correct patient and the correct order. In 2014 the Joint Commission published a National Patient Safety goal to: “Reliably identify patients, use at least two patient identifiers when collecting blood samples and other specimens, and label containers used for blood and other specimens in the presence of the patient.”

Based on poor lab and blood bank satisfaction and a high rate of labeling errors (>1% per month), a decision was made to implement a new process for specimen labeling at UCSF called Collection Manager. Collection Manager integrates physician orders, patient identification with barcode technology, blood tube identification, and bedside label printers.

FMEA LEARNINGS AND ACTIONS:
Prior to roll out, a FMEA was done to proactively identify potential problems with new processes related to Collection Manager.

The FMEA was conducted by a multidisciplinary group including lab, blood bank, nursing, IT, patient safety and others.

Examples of Failure Modes Identified:
- Staff may not understand significance of adherence to procedures
- Without standard work for sequential steps in the process, human factors will contribute to errors
- Printing of labels and requisitions in different places and labels not printed by person collecting the specimen will lead to errors
- Multiple references for container type and volume of sample will be confusing

Examples of Solutions Implemented:
- Developed standard work for labeling process and trained to standard work using simulation.
- Label printers installed in patient rooms
- Added final safety check of specimen label and patient ID
- Added container and volume requirements to order/requisition

IMPACT:
- 56% decrease in labeling errors on specimens sent to blood bank
- 51% decrease in labeling errors on specimens sent to clinical lab

FMEA (Failure Modes and Effects Analysis)
- A method used to prospectively identify error risk within a particular process.
- A process for proactively assessing what could go wrong (failure modes) and the potential consequences (effects)
- Used to capture insights from content experts and frontline staff to assess and mitigate safety risks before a process starts
- Required by The Joint Commission to be performed once every 18 months

FMEA Process:
- Map out steps
- Identify failure modes
- Rank to determine probability of failure
- Prioritize highest ranking steps for error proofing
- Develop and implement solutions
- Measure outcomes

SAVE THE DATE
Patient Safety Grand Rounds
Key Strategies for Getting to Zero
March 13, 2015; 12-1p
HSW 302 & MB A1602B
Speaker: John Nance JD