EMERGENCY DEPARTMENT LABORATORY SPECIMAN THROUGHPUT PROJECT

Problem Statement: Laboratory specimens obtained within the Emergency Department environment were being mislabeled and/or the specimen’s arrival to the laboratory for testing was being delayed.

Project Description: Memorial Hospital created a team to review the process within the ED to obtain patient laboratory specimens, label them and deliver them to the laboratory for testing in a timely manner. This was a multidisciplinary team that used six sigma methodologies to identify the issues and brainstorm solutions that would utilize “forcing functions” to ensure patient safety and lean processes.

Results: We implemented a barcode scanning system which utilizes the patient’s wristband barcode as well as our SoftID system which ties the specimen barcodes to the patient without a specific test ordered. This process provides the nursing staff with the ability to obtain labs while starting an IV, avoiding additional sticks, as well as labeling the specimens and taking them to the lab immediately thus avoiding the opportunity for mix ups or delays.

Nursing staff will scan their badge ID to access the SoftID application and then scan the patient’s barcode bracelet after verbally validating their identity. Softlab will then generate ten generic testing labels with the patient’s identifying information. Once specimens are acquired, they will be labeled and scanned to tag each specimen with the nurses ID and collect time. The final step is to scan the patient’s armband one last time which submits only the collected specimens into the Soft Lab system. Once completed, specimens and any extra labels are taken immediately to the lab for testing upon CPOE order submission.

Conclusions: We learned that our staff collected specimens prior to orders being submitted by the physician. This caused labs to have to stay in the ED for periods of time and added the potential for specimen labeling errors. It was also observed that when collecting the specimens, staff did not always do the patient identification steps to confirm correct patient labeled to correct specimen. We have implemented this project as well as given all staff training on compliance with patient identification.

We identified within the Laboratory Department that they were typically labeling the specimens at the point of receipt as well. The scope of this project placed a forcing function on the Emergency Room Staff to prevent mislabeling. The new process then directly prints the orders to the lab staff who then marry the two within their testing zones.

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