Reduce Misidentification of Patient Specimens and Improve Safety

A three site university hospital system in the Southeast United States wanted to implement a mobile specimen collection process in order to reduce misidentification of samples collected from patients.

Challenge

After installing a new electronic health record (EHR) system across all three hospital locations, including one site that had over 500 beds, the university hospital system needed a way to bring specimen collection and identification closer to the point of care. Across the entire United States, in a single year, there are 150,000 adverse events caused by the misidentification of specimens. Many hospitals output the labels for specimens in the lab, and then label multiple samples long after the sample was actually collected, which means that an incorrect label can easily be affixed to the sample.

Solution

Zebra provided a mobile solution, including a hand-held infection-proof mobile computer, a mobile printing device, and tracking software to better manage the collection process. A printer, a selection of labels for the sample vials, and service agreements for the maintenance were all critical aspects of the solution. The devices are produced with medical grade plastics that have been tested to work even after getting wiped down with leading disinfectants. Since these devices can be cleaned on a near continuous basis, this solution helps reduce pathogens moving from room to room.

The Zebra solution entails a simple five step process. When the clinician enters the room they begin by scanning the patient wristband. They then perform the sample collection and immediately output a label from a mobile printing device. Finally, the clinician scans the output label and then scans their own badge. As the sample is processed, clinicians know the ID of the patient, the correct sample, and even the clinician who collected the sample. All of this is linked within the EHR to ensure a specific sample belongs to the right patient. Additionally, since Zebra devices are tested to work with all of the leading EHR providers, the devices in the hospital settings work seamlessly with the new EHR.

Results

After implementing in their primary hospital, the healthcare provider is extremely happy with the solution and has ordered additional version of this solution for its two other location. Misidentified samples has been greatly reduced, and staff productivity has increased due to a real-time collection process at the patient's bedside.





Zebra Healthcare Solutions

Customer

A university hospital system

Industry

Healthcare

Challenge

A three site university hospital system needed to ensure samples collected across multiple sites were accurately labeled to avoid misidentification.

Solutions

- Zebra[®] QLn220HC
- Zebra MC40HC
- ZebraCare[®]

Results

- Reduction in misidentified samples.
- Increase in staff productivity due to a complete mobile workflow
- Reduction of hospital acquired infections

