iatricSystems

Phelps County Regional Medical Center Improves Patient Safety and Reduces Turnaround Times with MobiLab®



OBJECTIVE:

Phelps County Regional Medical Center needed safer and faster specimen collection as part of its overarching goals of patient safety and quality of care. Positive patient identification, bedside label printing and improved result turnaround times were the organization's principal objectives.

SITUATION:

The manual specimen collection process in place at Phelps County created potential for errors. Phlebotomists would pre-print a batch of labels for multiple patients at the start of their shift then go to the floor to draw, so it was possible to inadvertently attach the wrong patient's label to a specimen tube. This manual process also resulted in delays in turnaround times and unnecessary venipunctures, since cancellations and orders placed after labels were printed weren't available.

SOLUTION:

iatricSystems™ MobiLab® solution combined barcode technology, bedside label printing and wireless communications to provide Phelps County with safer, faster specimen collection. Barcode scanning of the patient's wristband and bedside label printing ensure that the right specimen is linked to the right patient. MobiLab provides immediate notification of stat, add-on and cancelled orders, minimizing phone calls and helping staff avoid unnecessary venipunctures. User initials and collection date/time are printed automatically on labels at the bedside, eliminating illegible handwriting and the need to enter that data manually during lab receiving.

RESULTS:

Phlebotomists on all inpatient units and in the Emergency Department are using MobiLab to eliminate errors and improve turnaround times. An audit of stat orders confirmed significant improvements. Prior to implementing MobiLab, order-to-collection times for select stat chemistry/hematology tests ranged from 25–28 minutes. Within the first month after going live with MobiLab, turnaround times for the same tests dropped to 15–17 minutes.

"As a supervisor, I am very impressed with how our specimen collection process has improved."

Cathy Skyles
 Specimen Processing Supervisor
 Phelps County Regional Medical
 Center









Patient safety and quality of care are top of mind at Phelps County Regional Medical Center, serving over 150,000 residents in south-central Missouri. That's why the hospital uses iatricSystems MobiLab barcode specimen collection system to prevent errors and reduce result turnaround times.

Improved Patient Safety and Quality of Care

Phelps County had previously relied on a manual collection process that will be familiar to many laboratories. At the start of their shift, phlebotomists would grab a stack of pre-printed labels and go from floor to floor to draw their patients. Lab orders placed after labels were printed weren't available to phlebotomists, nor were stat or cancelled orders. It was a flawed process, and concerns were growing – around the risk of using the wrong label, of working with outdated information and of encountering illegible handwriting on specimen tubes.

Phlebotomists now use MobiLab to eliminate errors. The system combines bar code scanning for patient identification, bedside label printing and wireless communications to provide Phelps County with safer specimen collection. Cathy Skyles, Specimen Processing Supervisor in the Laboratory at Phelps County Regional Medical Center, appreciates the safety benefits of MobiLab's bedside label printing. "It's a huge improvement over going to the floor with a stack of labels." Labels are printed at the bedside only after scanning the patient's wristband and ensuring positive identification.

Lynne Krewson, LIS Coordinator and a member of the MobiLab implementation team, indicated that comments and handling instructions displayed in MobiLab also play a very important role in the new process. "Before MobiLab, staff would have to remember to write comments down at the bedside and then enter those comments into the computer at a later time," Lynne said and added, "Staff don't always remember all of the special handling instructions, either." Using MobiLab, staff are prompted for comments at the bedside, and special handling instructions appear on users' screens automatically.

Saving Time at the Bedside and in the Lab

Ranked #1 in KLAS "Specimen Collection Barcoding" category three years in a row, MobiLab also provides Phelps County with faster specimen collection. Scanning the employee badge once links the phlebotomist with all specimens collected. Orders are transmitted in real-time to the user's handheld device. Stats, add-ons, and cancellations are delivered immediately, eliminating lag times and phone calls to the lab. Collection information is wirelessly transmitted back to the hospital's primary Laboratory Information System (LIS), with collection time and user name stamped automatically.

"MobiLab has cut down our turnaround time from order to collection," reports Cathy. "Phlebotomists can instantly see add-ons and cancellations, or verify that a patient was drawn earlier without having to call the lab. As a supervisor, I am very impressed with how our specimen collection process has improved."

Cathy also appreciates MobiLab's productivity reports and audit logs that provide managers with more accurate data on staff performance. "I get a much clearer picture of how many draws were done within a particular timeframe."



Using MobiLab, Phelps County Regional Medical Center stat order-to-collection times dropped significantly, from 25-28 minutes to 15-17 minutes.





Stat TAT Order to Collection

Month

15

10





Ord-Col HGB

Measuring the Results

Using MobiLab, Phelps County has seen stat order-to-collection times drop significantly. Prior to implementing MobiLab, order-to-collection times for select chemistry/hematology tests ranged from 25 – 28 minutes. Within the first month after going live, times dropped to 15 – 17 minutes, as shown in the chart at right. "We always had good turnaround in general, but the outliers were really skewing our statistics. We pretty much eliminated the outliers with MobiLab," explains George Vella, Director of Laboratory Services.

Iatric Support and Knowledge-Sharing

The project also gave Phelps County an opportunity to compare support services. The hospital had previously explored another solution but was unable to bring it live, due in part to minimal support for hardware and the hospital's wireless network. In contrast, the iatricSystems MobiLab team gave Phelps County the comprehensive support it needed – for MobiLab software, MEDITECH dictionary modifications, as well as hardware and wireless network troubleshooting. "With iatricSystems, we had support from A to Z," George observes.

What's Next (and Some Simple Advice)

Phelps County is now considering extending MobiLab coverage to other users and departments within the hospital, and would like to extend it to affiliated nursing homes as well. Multiple hardware options including handheld devices, laptops and computers on wheels provide the proper fit for different caregivers in various environments.

"With bedside label printing, positive patient ID, and, of course, real-time information, we have all the elements we need in place to achieve our safety and turnaround time improvement goals," Cathy adds. When asked if she has any advice for other hospitals considering a similar solution, her answer is simple: "Do it!"

"With iatricSystems, we had support from A to Z."

MobiLab Go-LIVE

George Vella Director of Laboratory Services Phelps County Regional Medical Center



Phelps County Regional Medical Center's Implementation Team:

Lynne Krewson, LIS Coordinator George Vella, Director of Laboratory Services Cathy Skyles, Specimen Processing Supervisor