Objective: Patient safety is paramount at Norman Regional Health System. Specimen collection that incorporates positive patient identification and accurate bedside labeling was identified as a vital component of the organization’s overall patient safety plan.

Situation: The multidisciplinary team responsible for specimen collection at Norman knew they needed a solution that would reduce patient ID and specimen labeling errors. They also knew it had to be a solution staff would easily embrace since the organization had already experienced one failed implementation due to a prior system’s limitations.

Solution: MobiLab® helped Norman Regional accomplish its goals. Perhaps most importantly, MobiLab enabled real-time specimen label printing at the bedside, something the prior system failed to provide. Clinicians accepted MobiLab easily and are able to use their choice of hardware — wireless handheld devices, workstations on wheels (WOWS) and/or stationary PCs.

Results: MobiLab is being used by nurses, phlebotomists and respiratory therapists throughout all inpatient units and at off-site collection facilities. Patient ID and specimen labeling errors have significantly decreased. In fact, the implementation team measured results the first month after go-live and happily reported, “We had no mislabeled specimens in any of the areas using MobiLab.”

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**Norman Regional Health System** is a multi-facility healthcare organization serving the needs of patients throughout south central Oklahoma. It is comprised of 382-bed Norman Regional Hospital, Moore Medical Center and the HealthPlex campus with a new state-of-the-art specialty hospital.

Improving the way specimens were collected and managed was identified as a key part of Norman Regional’s overall patient safety plan. The organization needed a solution that would drive out patient identification and specimen labeling errors, prevent unnecessary needle sticks and eliminate inefficiencies on the patient floor and in the lab. It would also have to be user friendly and accepted by wary staff who had already seen a previous system fail to meet expectations.

A multidisciplinary team evaluated several vendors and chose MobiLab, a mobile phlebotomy solution that links a bar code on the patient’s wristband with test orders in the Laboratory Information System (LIS). Positive patient identification and real-time label printing prevent patient ID and specimen labeling errors, while improving productivity for phlebotomists, nurses, respiratory therapists and lab staff. Tight integration with Norman Regional’s MEDITECH LIS allows orders entered into the LIS to be presented to the user in real-time.

**How it Works**
MobiLab is designed to eliminate potential errors at every step in the collection process. Labels are produced at the point of care only after the patient is properly identified using bar code technology. Users collect samples in the order indicated on their screen, which also tells them which color tube to use and any special handling instructions such as whether specimens need to be kept warm or packed in ice. After specimen collection and labeling, bar code technology again is used to confirm that the appropriate specimens have been collected and correct labels have been applied.

“Users no longer need to handwrite their initials, date and time on the tube, and because MobiLab generates that information it’s all legible now,” explains Janet Johnson, RN, Director of Nursing Informatics for Norman Regional Health System. “They also love the collection instructions because it helps them prepare before they go into each patient’s room so they don’t have to go back and stick the patient again.”

MobiLab users also like the ability to choose what device they use. Phlebotomists use handhelds or desktops depending on whether they are on the floor or in an outpatient exam room. Nurses primarily use mobile workstations on wheels (WOWS), but use handhelds in isolation rooms since the devices can be bagged and disinfected after use.

Since draw lists can be limited to a nurse’s assigned list of patients, nurses don’t waste time trying to get to the right patient like they did with the previous system. Processes are simple, eliminating the need for end-user workarounds. Janet Johnson shared, “There were several nurses who saw MobiLab prior to our go-live date. They were excited about how easy it was to use and wanted to know when they could get it.” A further testament to the system’s ease of use was the lack of support calls after go-live. The implementation team core members were happy to report how quiet the weeks following go-live were.
Safety Benefits

Real-time label printing: This is perhaps the greatest single benefit for Norman Regional because it directly impacts the accuracy of patient and specimen identification and was something their previous system could not provide. "Over 550 specimens were collected in the first two days of going live and were 100% compliant with proper labeling," reported Diane Zellner, RN, one of the MobiLab implementation team core members. When statistics were compiled once more for the entire month after go-live, again there were no mislabeled specimens in any areas using MobiLab.

Specimen credibility: The ability to display appropriate draw orders and provide specimen handling instructions at the point of care enables busy staff to "get it right" the first time. "Knowing that MobiLab is placing tests in the correct order of draw gives you a real peace of mind and helps users be compliant," explained Judy Wampler, MT (ASCP) and Manager of Lab Outpatient & Outreach Services. Diane Zellner added, "This is especially helpful for our nurses – before MobiLab, we’d often have to call down to the lab to find out what order to draw or what tubes and how many to use."

MRI markers can alert staff to specific handling requirements such as drawing two tubes for a crossmatch on patients with multiple antibodies. Drawing and handling specimens accurately provides a higher degree of confidence in test results.

Laboratory Automation Benefits

Fewer Automation Line rejections: Prior to MobiLab, inaccurate collection times often caused specimens to reject on the Lab’s automation line. Rejections decreased the organization’s return on investment for that expensive capital purchase and caused test result delays, frustration for physicians and manual processing for lab staff. Kate Burger, MT (ASCP) and HIT Clinical Applications Analyst pointed out this important benefit and added, "Now collection times are accurate with MobiLab, so specimens pass instead of being rejected."

Faster STAT turnaround: MobiLab provides immediate, automatic notification of STAT orders, eliminating manual paging and phone calls. When physicians enter STAT orders, the orders pass immediately to MobiLab so users can get to work faster. When specimens are returned to the lab, accurately labeled tubes as well as electronic transfer of collection time and user ID allow them to be received and processed immediately. Turnaround times have improved, positively impacting physicians and other patient care providers. Providers who do early morning rounds, in particular, can see test results much sooner.

For Norman Regional Health System, implementing MobiLab has resulted in positive patient and specimen identification as well as benefits throughout the organization – from users who collect specimens to the laboratory that processes them, to providers who count on the results to give exceptional patient care. Specimen collection is safer, easier and faster for everybody.

To learn more about MobiLab and how it can help improve patient safety and staff productivity at your organization, please contact Iatric Systems using the information below.