

iatricSystems™

MobiLab®

**Barcode Specimen
Collection**

What is MobiLab?

MobiLab® barcode specimen collection is an integrated software solution that brings positive patient identification, positive specimen identification, and specimen label printing to the bedside.

Since 2004, MobiLab has helped more than 300 hospitals improve the patient experience by eliminating specimen labeling errors, decreasing turnaround times and increasing efficiencies for Laboratory and Nursing Staff.

Why is Barcode Specimen Collection Important?

- Incident of mislabeling errors are found to be as high as 7%. ¹
- 55.5% of total lab errors are contributed to mislabeled specimens. ²
- 1 of every 18 lab errors results in an adverse event. Extrapolated to nation's hospital-based laboratories: 160,900 adverse events per year. ²

1. Sandhu, Paramjit et al. "Effectiveness of Laboratory Practices to Reducing Patient Misidentification Due to Specimen Labeling Errors at the Time of Specimen Collection in Healthcare Settings: LMBP™ Systematic Review." *The journal of applied laboratory medicine* vol. 2,2 (2017)

2. College of American Pathologists et al. "Identification errors involving clinical laboratories: a College of American Pathologists Q-Probes study of patient and specimen identification errors at 120 institutions." *Archives of pathology & laboratory medicine* vol. 130,8 (2006): 1106-13. doi:10.5858/2006-130-1106-IEICL

Barcode Specimen Collection Reduces Mislabeled Specimens

- “Identification (ID) errors may result in patient harm and are completely preventable.” ¹
- “Barcoding is effective for reducing patient specimen and laboratory testing identification errors in diverse hospital settings and is recommended as an evidence-based best practice.” ¹
- Barcode specimen collection reduced mislabeled specimens and collection turnaround times in the emergency department, med-surg, critical care, and maternal health units of a community hospital in Maryland. ²

1. Snyder, Susan R. et al. “Effectiveness of Barcoding for Reducing Patient Specimen and Laboratory Testing Identification Errors: A Laboratory Medicine Best Practices Systematic Review and Meta-Analysis.” *Clinical biochemistry* 45.0 (2012): 988–998. *PMC*. Web. 3 May 2018.

2. Saathoff, April M. et al. “Effectiveness of Specimen Collection Technology in the Reduction of Collection Turnaround Time and Mislabeled Specimens in the Emergency, Medical-Surgical, Critical Care, and Maternal Child Health Departments.” *CIN: Computers, Informatics, Nursing* 36 (2018): 133-139. Web. 3 May 2018.

ROI Driven Statistics

- The average number of mislabeled specimens in the U.S. varies, but estimates suggest a rate of around 0.1% to 1% of all specimens. ¹
- **Minimum Cost:** For mislabeling errors, the College of American Pathologists (CAP) estimates the redraw cost to be about \$712 per specimen. ²
- **Maximum Cost:** Specimen identification errors that result in adverse patient events can be costly for U.S. hospitals. According to a report by the [ECRI Institute](#), these errors can cost hospitals approximately **\$200,000 to \$400,000** per error, depending on the severity of the adverse event and associated legal, medical, and corrective costs. ³

1. Sautter, Ronald L., et al. "The Effects of Barcode Technology on the Safety of Blood Transfusion: A Pre-and Post-Intervention Study." *Journal of Clinical Pathology*, vol. 71, no. 10, 2018, pp. 884-888.

2. Wagar, Elizabeth A., et al. "Specimen Labeling Errors: A Q-Probes Analysis of 147 Clinical Laboratories." *Archives of Pathology & Laboratory Medicine*, vol. 132, no. 10, 2008, pp. 1617-1622.

3. ECRI Institute. *Patient Identification: Evidence-Based Literature Review*. ECRI Institute, 2016, www.ecri.org/Resources/HIT/Patient%20ID/Patient_Identification_Evidence_Based_Literature_final.pdf.

MobiLab Improves Patient Safety

- ✓ Positive Patient Identification: Barcode identification at bedside
- ✓ Label Printing at Bedside: Wireless printer
- ✓ Positive Specimen Identification: Barcode identification at bedside

Additional Benefits

- ✓ Improved lab result turn around times
- ✓ Accurate collection times
- ✓ Decrease in lab receiving times

Improved Lab Result Turn Around Times

Reduces Phlebotomist Travel Time and Improves the Patient Experience

- No returning to Lab for labels
- Notification of missed draws
- See future orders to combine and eliminate unnecessary draws
- STAT orders received real-time with MobiLab

Improved Turn Around Times: Supporting Evidence



“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.”

- Norman Regional Health MobiLab Implementation Team

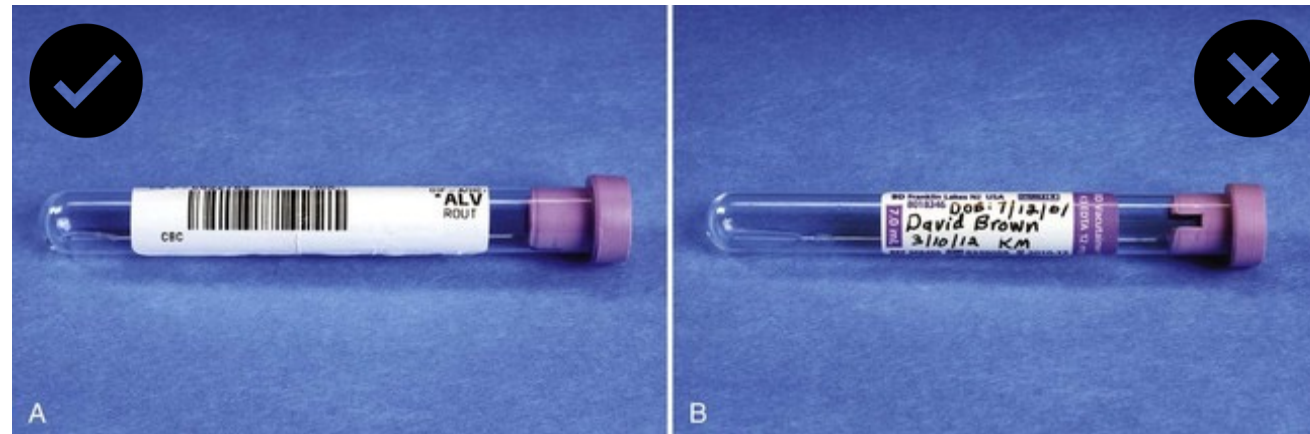
Improved Turn Around Times: Supporting Evidence

Norman Regional Health System

- 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.

Additional Benefits

- ✓ Improved lab result turn around times
- ✓ Accurate collection times
- ✓ Decrease in lab receiving times



Collection Times and Clear Documentation

- Clear documentation of Date/Time/User
- Removal of illegible documentation

“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.”

Additional Benefits

- ✓ Improved lab result turn around times
- ✓ Accurate collection times
- ✓ Decrease in lab receiving times

Decrease in Lab Receiving Times

- Streamlined Specimen Receiving in Lab
- Quick scan of barcodes
- Collection information (date/time/user) captured during specimen scan utilized in receive routine

Benefits

- Eliminates mislabeled specimens
- Improves patient safety
- Improves test results turn-around-times (reducing time to discharge from ED)
- Improves the patient experience
- Reduces hospital's exposure to liability
- Eliminates preprinted batch labels
- Reduces phone calls for lab and nursing
- Eliminates handwriting date/time/initials
- Reduces unnecessary venipunctures
- Eliminates manual data entry during receipt

