Barcode Specimen Collection
Gain the Benefits with Real World Examples!
Introductions

Linda Trask
- Laboratory Solutions Manager, Iatric Systems, Inc.
- Over 20 Years of Laboratory Experience
- More than 75 Implementations of Barcode Specimen Collection systems

John Danahey
- Vice President, Iatric Systems, Inc.
- Over 20 Years Healthcare Experience
- 5 Year LIS Implementation/Support
- 3 Years Phlebotomy
What is Barcode Specimen Collection?
Why is it Important?
Benefits of Barcode Specimen Collection
The Road to Implementation

Questions and Audience participation are encouraged.
Barcode Specimen Collection

- Barcode Wristband
- Barcode Reader
- Point of Service Label Printing
“Laboratory medicine is a service that supports all aspects of patient care at Halton Healthcare Services… Our critical information forms the basis for over 80% of medical decisions.”

Dr. Nancy Liu
Medical Director
HHS Laboratory Medicine
Importance

• Incidence of mislabeling errors found to be as high as 7%  
  (Howanitz, PJ, Renner SW, Walsh MK)

• 34%-58% of total lab errors involve mislabeled specimens  
  (Bonini P, Plebani M, Ceriotti F, Rubboli F.)

• 1 of every 18 lab errors results in an adverse event. Extrapolated to nation’s hospital-based laboratories: 160,900 adverse events per year.  
  (Valenstein PN, Raab SS, Walsh MK)
They are not *specimens*. They are **patients**.
“On units where we use <barcode specimen collection>, there have been no draws on the wrong patient or mislabeled specimens since the implementation.”
Carol Muhlbauer - Assistant Director of Applications, Development and Support, Doylestown Hospital

“We had no mislabeled specimens in any of the areas using <barcode specimen collection> the very first month after go-live!”
Janet Johnson, BSN, MPH, RN-BC, Director of Nursing Informatics, Norman Regional Health System
Eliminate Mislabeled Specimens

Total Mislabeled Specimens
Post Wireless Phlebotomy: Units 4S, 3S, IMC, SSU, MCI, 1N, ICU, NICU
Day in the Life of a Phlebotomist

- Picking up work list
- Patient Encounters
- Interruptions
- Wandering the Halls
- Embarrassing Situations
The sample hospital reduced TAT from 65 minutes to 46 minutes per test. Taking advantage of 1 percent of the added capacity that was created by these time savings, the hospital netted about $1,028,600 in annual incremental revenue.

(Feist, Kelly)

The sample hospital reduced the LOS per patient in the ED by 10 minutes each. Taking advantage of even 10 percent of the added capacity created by this time savings netted about $263,600 in annual incremental revenue.

(Feist, Kelly)
Improve STAT Turn-around Times

Phelps County Regional Medical Center
Ordered to Collected Times
Improve STAT Turn-around Times

Doctors Community Hospital
Ordered to Received Times

- Received Within 30 Minutes: 70% Pre Implementation, 87% Post Implementation
- Received Within 60 Minutes: 73% Pre Implementation, 96% Post Implementation
Mobile Phlebotomist

- New orders received automatically
- No travel to lab or nursing stations to pick up or print labels
- Reduce unnecessary venipunctures (Cancelled Orders, Add-on Tests, Specimens already in Laboratory)
- Electronic transfer of collection date/time user to LIS

Moving to such a system allowed a hospital whose phlebotomists were spending 15 minutes per hour on travel, and whose lab techs were spending 10 minutes per hour on specimen receipt, to reduce these times by 60 percent and 100 percent, respectively, with an impact of $415,200 in annual productivity improvements. (Feist, Kelly)
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. Now collection times are accurate, so specimens pass instead of rejecting.

Kate Burger, MT (ASCP), Norman Regional Health System
Other Efficiencies

• Reduce Phone Calls to the Laboratory
  80% reduction in phone calls to the laboratory – Citizens Medical Center, Victoria, TX

• Time spent hand writing labels (Date/Time/Initials)

• Management time spent resolving labeling issues
  Average 1.5 hours average follow-up time per error

• Reduced recruitment, training and termination costs due to “zero tolerance policy”
  St. Joseph Medical Center, Towson, MD

• Collection Batch Printing/Sorting
  Average of 1 hour per day
Build the Right Team

• Laboratory (Management and Phlebotomy)

• Nursing

• Information Technology (Applications and Networking)

• Patient Centered – This is a Patient Safety Issue

They are not *specimens*. They are *patients*. 
Wireless

• How comprehensive is your network?
• Do you have wireless expertise in-house?
• Test handheld/printer connectivity everywhere!
• Wireless in the Laboratory
Invest in Appropriate Hardware

- Quantity of Devices
- Spares
- Service Contracts with Hardware Vendors
- Seek Recommendations on Devices
- Accessorize
Incorporate Into Current Platforms

- Especially important for nursing areas
- Reduce the Technology Learning Curve
- Already implemented BMV?
- Already implemented COWs?
Wristbands

- Quality will improve scanning success
- Barcode Size
- Check Digits?
- Test, Test, Test …
Pick Your Targets

- Phased Approach vs. Big Bang
- Phlebotomists Embrace – Nurses Resist
- Start in Areas with Management Support
- Use Success Factors to Convince Resistors
- Emergency Room - Special Support
Thank you for attending.

Questions?

Contact Information:
Linda Trask
Manager, Laboratory Solutions
Linda.Trask@iatric.com
(978) 805-4126

John Danahey
Vice President, Sales and Marketing
John.Danahey@iatric.com
(978) 805-4153

