

# Diagnosing Specimen Collection Issues

Identifying specimen collection issues and  
learning how to prevent them

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# Specimen Collection: Facts

- Phlebotomy is the most commonly performed invasive medical procedure.
- Over one billion venipunctures are performed in the U.S. annually.
- Accurate venipuncture is the first step in accurate laboratory testing

# Specimen Collection: Is it Easy?

Not all venipunctures go as planned!

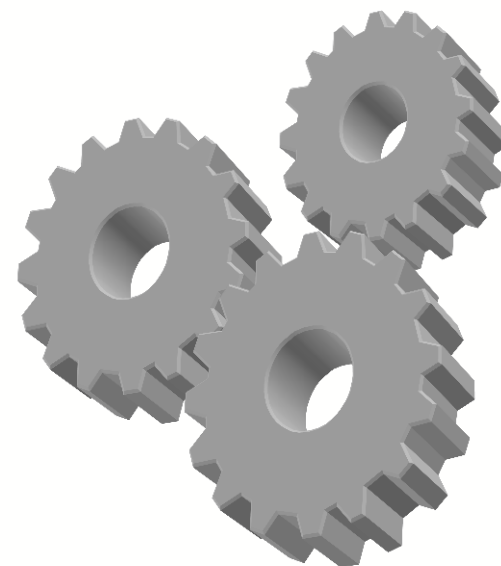
Blood Draw Fail



# Common Specimen Collection Issues

## Mechanical Errors

- Leaving tourniquet on too long
- Using inappropriate needle gauge
- Incorrect order of draw
- Non sterile techniques
- Inappropriate transfer from syringe



# Common Specimen Collection Issues

- Procedural Errors
  - Early or late collection of a timed draw
  - Failure to protect from light or place on ice
  - Inappropriate specimen type collected
  - Short Draws
    - Inappropriate fill ratio
    - Insufficient volume for testing



# Common Specimen Collection Issues

- Labeling Errors
  - Missing Date and Time
  - Missing phlebotomist initials
  - Incomplete Label
    - Missing part of name, DOB, MRN
    - Illegible



# The Cardinal Sin

**Drawing the wrong patient!**



# Quality: Why is it important?

- For the patient!
- Specimen Collection leads to accurate results
  - Garbage In = Garbage Out
- Lab credibility
  - Six Sigma = Less than 3.4 defects per million produced or 99.9997 %
    - So if you have 10000 venipunctures a month
      - One mistake every 16 months!



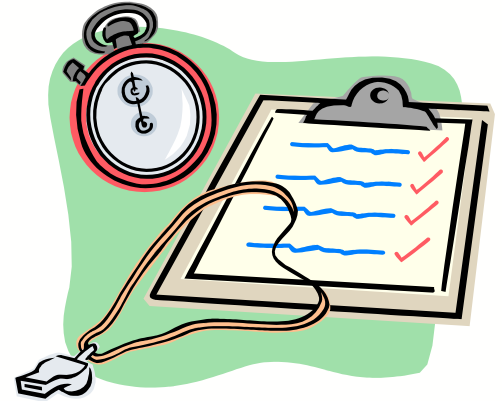
# The Three **T**'s of Improving Collections

- **Track Them**
- **Tell Them**
- **Train Them**



# Track Issues by Type

- Categorize issues
- Document when they occur
- Document who caused the issue



[Sample Exception Report](#)

# Tell them about it

- Tell the people who made the mistakes
- Report All Errors (Even when the outcome isn't affected)
  - To phlebotomists
  - To Nursing Staff
  - To Clients



# Train them to be accurate

- Give your new employees time to train
- Do continuing education and training based on issues you identify
- Provide training to nursing staff
- Present case studies of collection issues
- Give them observation with a trainer/mentor
- Use annual competency to be effective

# Other Solutions That Work

- Use lean processes with phlebotomy
  - Tray, Collection, Labeling, Transport
- Order of Draw card with inverting instructions
- Fill line card for nursing units
- Training Resource Webpage for hospital staff or clients
- Syringe transfer device (safety and hemolysis prevention)

# References

- Lusky, K, CAP today. Dec. 2003, *“Rooting out invisible blood collection errors”*
- Pandey P, et. Al., Transfusion Med. Oct 2007, *“”Predicatable and avoidable human errors in phlebotomy area”*