ERROR REDUCTION MODEL:
LAB CASE STUDIES

FACILITATOR: JULIE WEST, PHD
JUNE 2015

WHY ARE WE HERE TODAY?

- Become aware of the effect of lab technical errors
- Review several SOPs
- Review three specific cases of laboratory errors and specific safety items
- Move forward with renewed vigor to prevent errors in the laboratory

REMEMBER:

EVERY SPECIMEN REPRESENTS A PATIENT

THINK OF IT THIS WAY…

- Would you want your family member to experience a lab error?
- How would you feel? How would you respond if the lab did not take due care at EVERY step of the process?

VA CORE VALUES: I CARE

- **Integrity**: Act with high moral principle. Adhere to the highest professional standards. Maintain the trust and confidence of all with whom I engage.
- **Commitment**: Work diligently to serve Veterans and other beneficiaries. Be driven by an earnest belief in VA's mission. Fulfill my individual responsibilities and organizational responsibilities.
- **Advocacy**: Be truly Veteran-centric by identifying, fully considering, and appropriately advancing the interests of Veterans and other beneficiaries.
- **Respect**: Treat all those I serve and with whom I work with dignity and respect. Show respect to earn it.
- **Excellence**: Strive for the highest quality and continuous improvement. Be thoughtful and decisive in leadership, accountable for my actions, willing to admit mistakes, and rigorous in correcting them.

CLINICAL LABORATORY ERRORS

In general:

- Pre-analytic steps (order, transmission of the order to the lab, patient preparation and identification, sample collection, and specimen processing)
- Analytic (assay producing the result)
- Post-analytic steps (transmission of lab data to the provider)

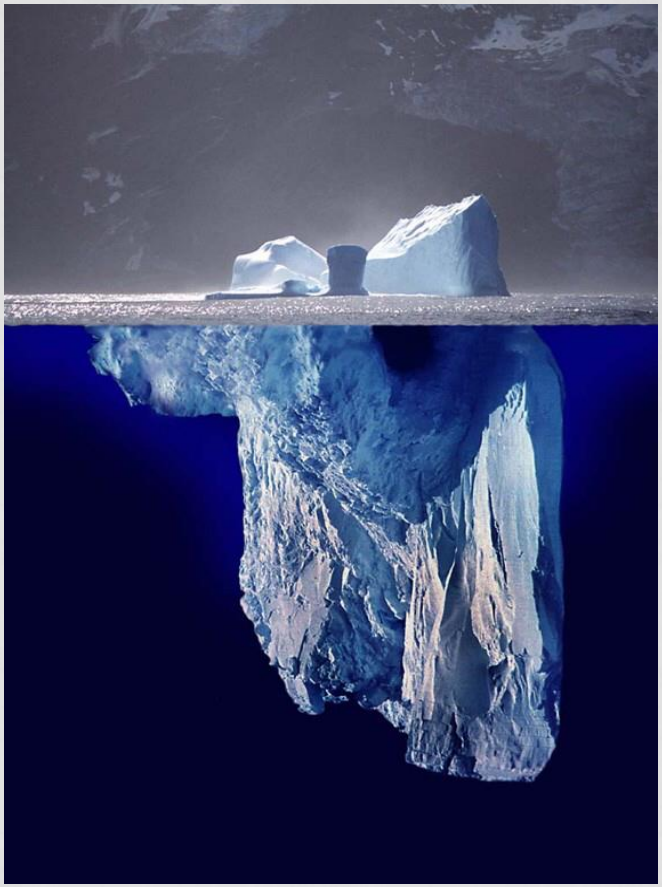
MOST COMMON ERRORS AT ATLANTA VAMC

- **Pre-analytic**: Mislabeled, unlabeled, hemolyzed, clotted (adversely affecting certain analytes… platelet count, coag – PT, APTT, potassium, enzymes…)

- **Analytic**: QC issues & errors, misinterpretation, failure to follow SOP

- **Post-analytic**: Manual data entry reporting errors, erroneously accepting interface flags without investigating; provider notification failure errors

ERRORS REPRESENT THE "TIP OF THE ICEBERG"...



CORRECTIVE ACTION TO DECREASE/ELIMINATE MEDICAL ERRORS

1. **Learning**: CEs, training (and enhanced vigilance), competencies

2. **Engineering controls**: Strategies to avoid lapse in memory, fatigue, distractions (use checklists, memos, warning labels, memory aids, highlighter)

3. **HR intervention**: Mismatch of technologist with job skills (temporary or long-term); reckless behavior

We will work with primarily with learning.

Reference: Post-analytic errors: Cases, Concepts, & Interventions
https://www.youtube.com/watch?v=8L61TLBDL3Y
Michael Astion, MD, PhD

VA National Center for Patient Safety.
Interventions may be difficult. Call center, software enhancements (IF they work), LEAN, interfaces (IF they work)

GOALS

- **Through learning:** Achieve error minimization using tools such as Total Quality Management (TQM), Continuous Quality Improvement (CQI), Root Cause Analysis (RCA), etc. along with our OCCURRENCE REPORTING SYSTEM

In order to:

- Improve the health of our veterans by providing timely and accurate laboratory results, and
- Improve the reputation of our laboratory in they eyes of our veterans, providers, and community as a whole

CASE STUDIES

Why case studies?

Personal – "hits home" because they relate directly to our laboratory

Learning tool – review the causes and reflect on outcomes

Moving forward – reflect on ways of thinking in order to promote WORKING TOGETHER to catch errors before they occur

CASE STUDY #1

- Wrong patient drawn by lab (Was safe patient ID performed?)
- Two patients with similar names on same hospital floor
- Specimens for hematology, chemistry, serology processed without question. Instrument printouts for hematology and chemistry – no instrument FLAGS – but, DELTA check was present on CBC, and suspicious chemistry values present when compared to the prior day's results in VISTA; released to chart. Serology: Positive HIV sent to referral lab for confirmation – confirmed as POSITIVE. Provider notified.

Errors became cumulative…

CASE STUDY #1: OUTCOMES

- Patient was highly upset (to be told he had a positive HIV, when he knew he was not positive)
- One specific provider (*not the lab*) detected the mix-up
- Providers were notified of corrected results (almost a week after initial incident)
- Delay in **proper** patient care
- Incorrect results are now a part of permanent patient record (and viewable under the "My Healthevet" website...
- Lab's **reputation** damaged
- Lab may open itself to litigation

WHAT HAPPENED?

FAILURE TO FOLLOW THE ESTABLISHED SOPS

STOP: REVIEW SOPS

1. SAFE PATIENT ID (What is it? How do we do it? IT IS A NATIONAL PATIENT SAFETY GOAL, and is monitored on a daily basis

2. FLAGS and DELTA checks …(In general: What SHOULD we do before we release results?)

Communication

What about checking with coworkers about same patient samples, suspect contamination or mismatch? Compare notes? Call for recollect?

DON'T GET STUCK THINKING INSIDE YOUR PERSONAL "SILO"

"attitude ...that occurs when groups do not want to share information or knowledge with other individuals in the same location"

Reference:
http://www.investopedia.com/terms/s/silo-mentality.asp#ixzz3d2ybHNd9

CASE STUDY #2

- Missing urine drug screen – came to lab via CBOC courier
- Noted on the CBOC log
- "NO SPECIMEN RECEIVED" by laboratory personnel (at end of shift, after reviewing incomplete log)
- Test was cancelled, encrypted email sent to provider

OUTCOMES: CASE #2

- **SPECIMEN WAS LOCATED** in microbiology specimen refrigerator with URINE DRUG SCREEN LABELS inside bio-baggie
  - -missed by accessioning personnel
  - -missed by individual placing specimens in microbiology
  - -missed by technologist who was looking for lost urine
  - -found next morning by Technical Specialist, before microbiology arrived; reordered and tested

- Delay in patient care
- Embarrassing to call provider (and patient)
- Visible in "*My Healthevet*" website...
- Did anyone check **VISTA** to see if any other urine orders were present (shared specimens/troubleshooting)???

A WORD ABOUT NSRS...

- No Specimen Received (**NSRs**) are the biggest contributor to phlebotomist and technologist time wastage in our lab (approximately 5 hours per specimen to investigate). Applies to all sections of lab.

- Every NSR means that a provider and patient must be notified (embarrassing; adversely affects lab **reputation** among all)

- WE CAN DO BETTER!

CASE STUDY #3

- **Corrected chemistry result** report made in VISTA
- NO NOTIFICATION OF PROVIDER ATTEMPTED; notification performed a week later by Technical Specialist (after review of initial occurrence report)
- Provider had already copied/pasted tests ordered into a letter to the patient, with incorrect results

OUTCOME CASE #3

- **Provider** very upset – Put yourself in his shoes: He now has to notify patient that his letter was incorrect
- **Patient** can view correction on the "*My Healthevet*" portal
- Damage to provider reputation, as well as **lab reputation**

WHAT HAPPENED?

FAILURE TO FOLLOW THE ESTABLISHED SOPS

A WORD ABOUT NOTIFICATIONS…

- Follow Lab General SOPs
- Notification in VISTA (and name of provider notified required for cancelled, corrected, and critical values)
- Use professional language in VISTA

  Real examples of unprofessional language: "my finger slipped on the keyboard…", "phlebotomist error", or misspelled words

  Instead: "Patient ID in question"; check GOOGLE for correct spelling

- Remember:

Visible in "My *Healthevet*" website…

(Refer to the June 2015 LAB NEWSLETTER for SOP citations…)

THE MAJORITY OF THE TIME…

- We provide good patient care
- **We are professional, intelligent, and caring** in our processing and resulting of patient specimen results
- We strive to locate all specimens, and process them in a timely manner
- We adhere to I CARE (VA CORE VALUES)

BUT, PROBLEMS DO OCCUR…

One seemingly minor error can:

- mushroom into a full-blown incident, reportable to the national VA database (Patient Event Reporting system)

- can (and often does) damage our lab reputation among coworkers, providers, and veterans

- cause patient **harm** in ways that we may never know

YOUR ERRORS CAN AFFECT COWORKERS, TOO…

- How would you feel? How would you respond if lab coworkers did not take due care at EVERY step of the process?
- What action(s) would you take in the following situations?

a) overfilled sharps containers

b) clutter in work area

c) biohazards in regular trash

WHAT DOES IT ALL MEAN?

- Added **stress**?
- **Frustration**?
- Shared areas are too messy – **cannot think**?
- Feeling that you have to clean up after coworker?

Leads to

MORE stress, and additional ERRORS


http://www.elgalabwater.com/blog/wp-content/uplo
elgalabwater.com
Real lab safety
Pizza Order
GLUG... GLUG
I think we need to do another risk assessment
HAZMAT
Ewww ?
Soda
NO COFFEE NO WORKEE
QUIET GENIUS AT WORK
© ELGA LabWater 2014

IN CLOSING…

- TROUBLESHOOT (CAP states that we must judge competency for troubleshooting abilities among all lab staff members)
- QUESTION EVERYTHING (one problem usually means there is more than one specimen involved…)
- DOCUMENT properly (use professional language when cancelling in VISTA – remember, your comments are Visible in "My Healthevet" website…)
- ANTICIPATE OUTCOME (**anticipate a mix-up**; the sooner we act, the better the patient outcome)
- If you see a problem, report it. FIX IT if you are able. Notify supervisor.

AND,

COMMUNICATE with one another

"Coming together is a beginning; keeping together is progress; working together is success."

-Henry Ford

Thank You