South Carolina Department of Health and Environmental Control

Promoting and Protecting the Health of the Public and the Environment

Training Non-Laboratory Professionals: A QA Opportunity

Presented by:

Roberta Bartholdi, QA Director & Laboratory Practices Consultant

Bureau of Laboratories, Columbia, SC

Topic 1: Asking Questions

- Who is collecting specimens? Find out EXACTLY who is collecting laboratory specimens in your County Health Departments (CHD)
- Who is training the people who collect specimens?
- Do they have standardized Training Checklists (TC)?
- Do they follow CLIA for competency?

Topic 1: Asking Questions

- Started asking everyone, “who collects samples that are submitted to the county health department (CHD) laboratory or the Bureau of Laboratories (BOL) for patient testing or epidemiological testing?” Ask the 5 Whys!

- Identified the following groups: APRNs, RNs, WIC staff, Disease Intervention Specialists (DIS), Epidemiology Nurses (Epi RN)

- Who did the training for these groups? Most training was done peer to peer and/or verbal tradition; some lab interaction

- How was training documented? Went to all CHDs and observed, asked questions, reviewed files

Topic 2: What To Do With Data?

- **First:** went to State Committees/CHDs and asked if there were any problems with collection and/or other lab issues? No, but lab had issues with not testing specimens they sent (hint #1)

- **Second:** went to BOL and CHD laboratories and asked staff if they were experiencing specimen issues? Yes, the CHDs did not collect specimens correctly, did not fill out requisitions correctly, did not ship specimens correctly and specimens were unsuitable, etc. (hint #2)

There was a disconnect somewhere!

Topic 2: What To Do With Data?

- **Third:** set up QA data project looking at specimen collection issues at the accession level for 3 months; who, where, what, why, and condition of specimen

- **Fourth:** Stopped at end of 1 month since so much data indicated collection issues, requisition issues, transport issues, and follow-up issues

- **Fifth:** Made contact with Nursing Committees (no laboratory representatives) at all levels to present data gathered

Topic 2: What To Do With Data?

- **Sixth:** presented data for limited analytes on Newborn Screening (NBS), TB chemistry panels, TB cultures, STD Probes, and RPRs

- **Seventh:** indicated collection issues (lysis, incorrect transport media/tube, etc.); requisition issues (80% CLIA required info not given); transport issues (80% packaging/20% no centrifugation); follow-up issues (random corrections/inconsistent); and repeats required

- **Eighth:** Nursing Committees realized had shared problems

Topic 2: What To Do With Data?

- **Ninth:** asked how we could work together and help solve problems, cut waste and cut re-work?

- **Tenth:** gave possible adverse outcomes for collection issues (lysis, incorrect transport media/tube, etc.); requisition issues (80% CLIA required info not given); transport issues (80% packaging/20% no centrifugation); follow-up issues (random corrections/inconsistent); and repeats required

- **Eleventh:** #1 issues were lack of standardized education, skilled training and evaluation methods

Topic 3: One Stop Shopping

- **First:** requested to work with RNs at state level to brainstorm how to address all issues; applied QA and Six Sigma Lean process

- **Second:** outcome from subgroups resulted in the recommendations to have 1 person in each Region responsible for laboratory tests; develop education for Program RNs, MDs, Region staff RNs, Lab staff, and DIS; develop standardized procedures, training checklists and competency evaluation; training in CLIA requirements

- **Third:** encouraged all Regions and State Committees which reviewed or had lab tests as part of their programs have at least 1 laboratory staff on the committee; start of QA Committees at grass roots

Topic 3: One Stop Shopping

- **Fourth:** identified stakeholders in the process and what they wanted in training; all stakeholders wanted to give input to the process and provide feedback when it did not work

- **Fifth:** all stakeholders are worried about more added to their full plate and how the logistics were to impact them

- **Sixth:** came up with the “One Stop Shopping” concept for Train the Trainers and staff

- **Seventh:** provided limited menu for types of delivery for education, training, follow-up to the “One Stop Shopping” concept

Topic 4: Training for Everyone

- **First:** addressed training and review of tools available in Regions and labs
  - Revamped specimen collection manual to be better user friendly
  - Put specimen collection manual on internet and intranet
  - Implemented standardized lab manual for CHD tests
  - Implemented standardized training checklists/competency
  - Teleconferences for stakeholders at State and Region levels
  - These improvements required multiple levels of cooperation

- **Second:** developed workbooks for initial training, intermediate training for specimen collection, specimen processing and specimen shipping

- **Third:** did immediate assessment following training but limited value
  - Followed up with calls to Regions, visits to CHDs and interviews on site with former attendees, professional staff
  - Provided my email to attendees, lab staff, State/Region staff

Topic 4: Training for Everyone

- **Fourth:** took the specimen collection training on the road to regions for specific specimen training

- **Fifth:** developed workbooks for initial training, intermediate training for specimen blood collection, specimen processing and specimen shipping
  - Trained Region lab staff first in venipuncture, capillary collection, infant heel sticks so all on the same page with standardized SOPs
  - Used Region lab staff to assist with lab sessions for all other training; lab staff have standardized SOPs, TC, CE in electronic form
  - Trained all APRNs and RNs in specimen collection with support from Region lab staff; lab staff have standardized SOPs, TC, CE in electronic form
  - Named the point person in the Regions—Region Laboratory Consultant
  - Repeated process until all APRNs and RNs were trained at a central location for the Region or at the Bureau of Laboratories
  - Now had a team of Trainers: the Region Laboratory Consultants

Topic 4: Training for Everyone

- **Sixth:** seeing the success, people started contacting me with their needs for training and developing standardized SOPs, manuals, workbooks, TC/CE
  - Disease Intervention Specialist (DIS) training for venipuncture
  - DIS training for RPR screening and Darkfield Microscopy
  - APRN training for Wet Preps and 10% KOH
  - APRN training for Gram stains in females and males
  - APRN/RN training for extragenital collection for STD GenProbes
  - APRN/RN training for oropharyngeal collection for strep cultures
  - APRN/RN training for NP collection for DFA or IFA identification procedures
  - WIC staff collection of capillary specimens for HemoCue
  - APRN/RN/WIC staff collection of capillary specimens for infant heelsticks
  - Understanding CLIA Changes for the Region Laboratory Directors & staff

Topic 4: Training for Everyone

- **Seventh:** poised for the greatest challenge of all, NBS training for RNs in hospital nurseries, NICUs, pediatric practices, family practices and CHDs
  - Developed "Train the Trainer Workbooks" for hospital nurseries (2004-2015)
  - Developed electronic QA Kit (another version of "One Stop Shopping") for professional offices; released only after a request (2013-2015)
  - Developed training and workbook for 2 hour CEU, on site (2004-2015)
  - 2013-2014 worked with SCDHEC, SC Hospital Association (SCHA), and NBS to develop webinars, teleconferences for QA fast track initiative for NBS Unsatisfactory Specimens
  - 2013-2014 worked with SCDHEC, SC Hospital Association (SCHA), Developed QA Monitors with SCHA for fast track QA Improvement to get 100% compliance with state law

Topic 4: Training for Everyone

- **Seventh:** poised for the greatest challenge of all, NBS training for RNs in hospital nurseries, NICUs, pediatric practices, family practices and CHDs
  - 2013-2014 worked with SCDHEC, SC Hospital Association (SCHA), developed QA Monitors with SCHA for a Hospital Report Card
  - Identified 3 areas of concern for hospital Unsatisfactory Specimens: no consistent trainer or standardized SOP; no QA program; no follow-up to data on Unsatisfactory Specimens; no accountability since patient no longer available (follow-up to 2013 initiative by SCDHEC and SC Hospital Association, SCHA)
  - Continuous monitoring and revisiting process for delivery and lab acceptance (Unsatisfactory Rate) of NBS specimens with NBS section

Topic 5: QA Monitoring

- **First:** developed Regional QA Committees with laboratory as a component and reporting Region lab QA to members; “the lab is at the table”
- **Second:** developed annual meetings with Region Laboratory Consultants and Region Laboratory Directors with specific topics and revision of SOPs, forms
- **Third:** invite state RN Program Managers to present and/or interact with revision of SOPs and standardized forms at annual meetings with Region Laboratory Consultants and Region Laboratory Directors
- **Fourth:** make annual visits to Regions and actually visit CHDs to see “How’s that Working for You?”
- **Fifth:** make inspection trips to Region when CLIA site visit demonstrates noncompliance and/or recommendation; all stakeholders are involved with QA process to improve, not just lab

Topic 5: QA Monitoring

- **Sixth:** now on many state nursing committees to be the contact person for CLIA requirements and training requirements and lab testing coordination

- **Seventh:** working with eLearning, DHEC YouTube, IT for internet and intranet

- **Eighth:** engage stakeholders from companies (HemoCue), professional organizations (SCHA, State Physicians Groups), State Program Managers, Region staff, and BOL laboratory staff

- **Ninth:** QA Investigation (QAI) report forms developed (2004) and standardized for all noncompliant issues and/or variance and/or queries
  - All QAIs are reported to Region QA Committees for follow-up/action
  - All appropriate QAIs are forwarded to BOL QA Office Director for action, follow-up and/or investigation from a legal or QA point

- **Tenth:** Be patient! Change occurs slowly, so be willing to meet, phone, develop surveys, revise, revise, revise (started 2004 with QA initiatives to 2015)

Topic 6: Outcomes Matter

- **First:** CLIA site inspections have improved with no deficiencies since 2004; this validates the process for all CHDs
- **Second:** no PT failures at the CHDs laboratories since the process began in 2004
- **Third:** all Region Laboratory Consultants are confident trainers, compliant with CLIA documentation and valuable resource for on-demand training for non-laboratory professionals in the Regions
- **Fourth:** better compliance with lab requisition demographic data; better specimen processing and specimen transporting compliance
- **Fifth:** every CHD has current specimen collection manual; when I answer email questions I recite where the information is found, chapter, line and verse

Topic 6: Outcomes Matter

- **Sixth:** when nursing policies or skills practices conflict with SCDHEC Lab Manual, quick TAT for addressing discrepancies (from 2 years TAT to 1 month); work with all programs and levels to address issues and conflicts of information

- **Seventh:** emails from all levels are sent to State RN/DIS Managers and/or myself and quickly forwarded to appropriate programs, Bureaus for answers to questions, concerns and, if needed, to do a focus group for quick QA improvement; Clinical Services is connected to get QA accomplished

- **Eighth:** BOL TATs decreased per section; Panic/Critical Values better addressed with correct information on lab requisitions

- **Ninth:** the Team approach and multi-level communication/cooperation is there for the next crisis: Floods, SARS, Ebola, TB, STD, Enteric outbreaks, etc.

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Questions?

- Roberta Bartholdi email: barthork@dhec.sc.gov

- Remember to always approach training with a QA process
- Remember to always assign deadlines and accountability in your QA process—hold everyone to it, regardless of rank
- Remember to send “gentle reminders”
- Address every complaint or concern like you would want to be treated
- Always have options and backup plans for training
- Ask the trainees after they have been trained (about 4-6 weeks later), “How did the training help? How did the training NOT help?”

- Remember to always have a sense of humor, be patient and incorporate “say what you do and write/document what you say”—Good QA mantra

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