

DEVELOPMENT OF A QI AUDIT TOOL FOR THE ON-SITE LAB

CARSON CITY HEALTH AND HUMAN SERVICES (NEVADA)

FTES AND PTES: 55/POPULATION SERVED: 58,000



PLAN

Identify an opportunity and Plan for Improvement

1. Getting Started

CCHHS began the QI process by identifying an area for improvement. Through results from the self-assessment, staff focused on Standard 9.2.2-B. The CCHHS Management Team decided to use this opportunity to develop a new internal audit process and tool for the on-site clinic lab.

2007 Audit Tool

Carson City Community Health Center
LABORATORY QUALITY ASSURANCE MONTHLY AUDIT

Audit Date: _____ Auditor Name: _____

Audit #	Documentation of Audit	Comments
1	Personnel Have all employees signed the laboratory personnel log? Are there signed employee competency logs for each individual staff in the laboratory? Patient Test Management for Quality Lab Teams Is the patient log log for lab tests being sent out, completed? Does the record show who performed each test by level of employee (RN)? Quality Control Can you answer environmental conditions for tests performed be shown? (e.g., refrigerator temperature checks for reagents, the expiration of reagents, C-reactive protein (CRP), etc.) Are test controls stored correctly & within the expiration date? Are there written instructions for each test performed? Are there written instructions for each test control performed? When necessary, are test controls performed each day using a different lot? Is there documentation of at least 2 weeks (quarterly) to confirm control test performance? Are patient results based on this log stored for 30 test performed (review in case of an "out" that the patient might have immediate attention)?	

2. Assemble the Team

CCHHS Management Team assigned members to the QI Team based on staff experience with QI and with the lab. The team included two representatives from Management, the former lab auditor, and the clinic manager who oversees the lab. In September, two outside consultants also became part of the team.

CCHHS Team Members:

Dustin Boothe, BS, REHS, Epidemiologist, Env. Health Supervisor
Neil Fox, PhD, REHS, CPO, CPI, Environmental Health
Roni Galas, RN, BSN, Senior Public Health Nurse
Marena Works, MSN/MPH, Director, CCHHS

University of Nevada School of Medicine (UNSOM) Consultants

Jennifer Bennett, MPH
Patty Charles, DrPH, MPH

AIM Statement

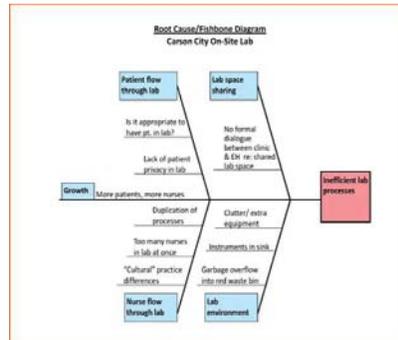
Between October 1 and November 15, 2010, CCHHS will develop a new quality assurance internal audit log for the on-site laboratory and test its ease of use and effectiveness at least three times. By November 15, 95% of components on the tool will pass the audit.

3. Examine the Current Approach

CCHHS utilized a bone diagram to clarify positive and negative factors influencing lab performance, and to depict ideal lab operation.



A fishbone diagram was created to determine root causes of the issues in the lab. Five major causes of lab problems included: patient flow, nurse flow, shared lab space, lab environment, and clinic growth. These led to the root cause of a lack of formal lab monitoring and upkeep.



4. Identify Potential Solutions

The team started with an old internal lab audit form and revised it to include some measures identified in the QI process that are pertinent to the lab operating smoothly. These factors may not be checked by outside auditors but will serve to maintain internal lab controls.

5. Develop an Improvement Theory

"If the monthly internal lab audit yields consistently high marks, then the lab will be operating in a high quality manner and all external audits will be successful." The team planned to develop a new audit tool and procedure, and conduct at least three test audits. Between each audit, the team discussed changes to be made to the lab and to the audit tool. These changes were addressed prior to the next scheduled audit. Revisions continued until the AIM statement was met (95% of audit items passing the audit with no changes needed).

DO

Test the Theory for Improvement

6. Test the Theory

A new audit form was developed through an in-depth discussion and review of the 2007 audit tool. The new tool was piloted a total of five times, with updates and changes between each subsequent audit.

CHECK

Use Data to Study Results of the Test

7. Check the Results

Data reveal that the course of action taken towards improving the audit tool and lab audit process was effective. With each subsequent audit, the percentage of audit items passing the audit increased. The goal of 95% passing is anticipated for our final audit in December.



ACT

Standardize the Improvement and Establish Future Plans

8. Standardize the Improvement or Develop New Theory

Improvements have been implemented in several ways, including audit tool development, lab changes as a result of the QI process, and implementation of a lab audit policy. The audit tool underwent major revisions, including editing, adding and deleting items, and clarifying text. It became more and more specific and directive with each revision. The current tool guides the auditor through the process and through the lab, noting exactly where all required items are located. CCHHS developed a policy to include the lab audit as a routine part of clinic operations, occurring on the first Thursday of each quarter, with the auditor reporting back to the clinic manager any issues that arise during the audit.

Final Audit Form (Pgs 1-2 of 7)

9. Establish Future Plans

The CCHHS lab audit QI process yielded greater benefits than had been expected. Not only did the team successfully implement a new audit tool, process, and policy, but the team also learned a great deal about the QI process and realized its importance in continuous growth and improvement for the agency. New directions include discussions about how to formally build QI into routine operations. A new energy around QI has become quite apparent with the staff involved, and CCHHS plans to build on the success of this project to ignite more quality improvement projects in moving toward voluntary accreditation, and building a "culture" of QI within the organization.