Competency and Competency Assessment

Definitions

**Competency** is defined as the application of knowledge, skills, and behaviors used in performing specific job tasks (ISO 10015:1999).

Accurate laboratory test results depend on staff competent in performing a range of procedures that occur throughout the entire examination process.

**Competency assessment** is defined as any system for measuring and documenting personnel competency. The goal of competency assessment is to identify problems with employee performance and to correct these issues before they affect patient care.

Overview

This graphic is an illustration of the relationship between job description, competency assessment, and training.

An initial competency assessment may reveal the need for specific training of the employee. Competency assessment should be conducted at regular intervals during the employee’s tenure.

Competency assessments conducted either initially or periodically help to identify or prevent performance problems that may be solved through task-specific training.

Competency assessment methods include the following.

- Direct observation helps identify and prevent any performance problems:
  - The employee’s techniques are watched during the examination process, which allows the observer to see if the employee is following SOP.
  - To avoid subjectivity during a competency assessment, the observer uses a custom-designed checklist (Annex 12-B); checklists are used when there are specific, observable items, actions, or attributes to be observed.

Observation is the most time-consuming way to assess employee competence, but this method is advised when assessing the areas that may have a higher impact on patient care.

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Monitor records, e.g., review worksheets and logs prepared by the employee.

Review and analyze quality control records and results of proficiency tests performed by the employee being evaluated.

Retesting or rechecking results to compare results among personnel; discrepancies should be resolved.

Assess knowledge or problem-solving skills using case studies. Employees are asked to respond orally or in writing to simulated technical problems.

Methods for determining personnel competency may need to be adapted to local customs and concerns.

Policy writing for competency assessment is a critical quality systems issue and is the responsibility of the management. Each policy should be shared with everyone in the laboratory and assessments of all personnel documented.

An example of policy for competency assessment is: “Every employee shall regularly be assessed for competency for the tasks defined in his/her job description.”

Processes describe how the policy will be enacted. For example, the following questions should be addressed.

- **Who** will conduct assessments? Responsibility for conducting the assessment should be assigned to someone who has previously demonstrated competency in the area to be assessed. The responsible person must document and evaluate the results of the assessment.

- **What** will be assessed? Which job task or tasks and procedure performed in the pre-examination, examination, and post-examination testing process will be assessed? Critical competencies for each task should be identified. First-line supervisors should be involved in this step. Examples of critical competencies include:
  - patient identification
  - sample collection
  - evaluation of adequacy of samples
  - use of equipment
  - application of quality control procedures
  - interpretation of results.

- **When** will assessments occur (annually or biannually)? It is important to develop a timeline for periodic assessment of each employee. A period of training and then assessment should be implemented for everyone as new procedures and equipment are introduced into the laboratory.

Policies and processes should be reviewed annually and modified when necessary.
Procedures

Procedures describe specifically how each element of the processes will be performed. An employee competency assessment would follow these procedures, as per examples given below.

1. The assessor contacts the employee in advance to inform him/her that the assessment will be done at a pre-arranged time.
2. The assessment is done while the employee is performing tasks using routine samples.
3. The assessment is done by a specified method previously described (e.g., Annex 12-B) and is recorded in a log book (e.g., Annex 12-C).
4. The results of the assessment are shared with the employee.
5. A remedial action plan is developed defining required retraining. The plan should be written and the manager must insure that the plan is understood by the employee. The plan should outline specific steps to be taken to resolve or correct the problem with related deadlines. Needed resources should be clearly outlined in the plan. For example, the employee may need an updated version of the SOP.
6. The employee is asked to acknowledge the assessment, related action plan, and re-assessment.

If more than one person makes the same error even after training has occurred, consider root cause of error such as equipment malfunction and operating procedures ambiguity.

Competency assessment documentation

Standard forms (Annex 12-B) should be generated in advance and used so all employees are assessed the same way. This will prevent employees from thinking that the assessments are biased.

All competency assessments must be recorded (Annex 12-C) showing date and results and should be kept in a place where they remain confidential. These records are part of a laboratory’s quality documents, and should be periodically reviewed and used for continuous improvement.
Training & Continuing Education

Definitions

**Training** is a process to provide and develop knowledge, skills, and behaviors to meet requirements. In this context, training is linked to the job description and competency assessment and addresses identified gaps on specific tasks to be performed by the employee. Competency should be reassessed after any job-specific training.

**Retraining** is required when competency assessment reveals the need for improving an employee’s knowledge and skills.

**Cross-training** provides an opportunity for staff to acquire skills outside their own discipline. This allows for flexibility in shifting or reassigning personnel whenever needed; this may occur in crisis situations or with absences of staff due to illness or vacation.

**Continuing education** is an educational program that brings employees up-to-date in a particular area of knowledge or skills. Since laboratory medicine is constantly changing, keeping current takes effort on the part of both employee and management.

Rationale

Reasons for training and continuing education are to:

- achieve quality practices in the laboratory and produce accurate, reliable, and timely test results;
- help staff achieve personal career goals;
- improve the organization’s capabilities and achievement of quality objectives.

In laboratory medicine new testing methodologies and instruments are continuously introduced to the market place that could have implications for laboratory testing and improved patient care.

Methods

When planning a training or continuing education activity, consider:

- identification of training needs
- design of training
- provision of training
- evaluation of training results.

Activities can often be organized at low cost, for example:

- starting a journal club
- starting case study discussion groups
- watching videotapes and CDs
- researching a topic and presenting findings to colleagues
- interactive self-study programs including e-learning freeware or printed courses
- collecting and maintaining a set of teaching slides (e.g., haematology and parasitology).
This picture is from a laboratory with limited resources. It shows a staff member demonstrating how this laboratory approaches continuing education. The staff conducted education sessions once a week in this room.

**Resources**

**Local resources**—When organizing internal continuing education programs, local resources available from the healthcare community should be considered. Some of these resources include:

- quality assurance committee
- clinicians
- nurses
- pathologists
- infection control personnel
- epidemiologists / surveillance officers
- external assessors.

Each of these groups may offer specialized knowledge and experience they can share with laboratory staff. They can be invited to give lectures, lead discussions, and exchange information.

**External resources**—External continuing education programs can also be presented by topic experts such as those associated with:

- proficiency testing services
- manufacturers
- scientific societies
- World Health Organization
- U.S. Centers for Disease Control and Prevention
- nongovernmental organizations.