EDUCATION

STERIS UNIVERSITY

A Guide to

Competency Development for Healthcare Facilities

One Integrated Approach to Healthcare.

Description of the Study Guide Topic

Staff must be confident and competent in all that they do. Having the right training and assessment tools helps achieve this goal. Discover the tips and tricks necessary to create a competency-based training program that helps develop your staff to their greatest potential.

Key Terms (Blue Bold Font)

Key terms have been identified to help assure that the learner understands the basic language associated with this lesson. This helps to provide focus for the reader on vocabulary introduced and used extensively throughout this guide.

Objective:

This guide gives direction to help develop effective competencies and performance assessment tools. Upon completion you will be able to:

- Develop sterile processing competencies
- List 5 assessment methods used to evaluate competency
- Establish a program to deliver, assess, and review competency checklists

Intended Audience:

This guide is intended for Sterile Processing Managers, supervisors, educators, and other healthcare professionals interested in this topic.

Competency Training

Competency based training helps ensure that staff have the knowledge and ability to do their jobs effectively. It provides measurable accountability of performance expectations helping managers to bring out the best in their staff.

Competencies fall into two groups.

1. **Core Competencies** that identify the knowledge and skill needed for the organization to thrive
2. **Functional Competencies** that identify the knowledge and skills specific for a task or department

Typically, Human Resources and the facility's training organization develop core competencies. Examples of core competencies include fostering teamwork, communication, compliance with the Health Insurance Portability and Accountability Act (HIPAA), and Customer focus.

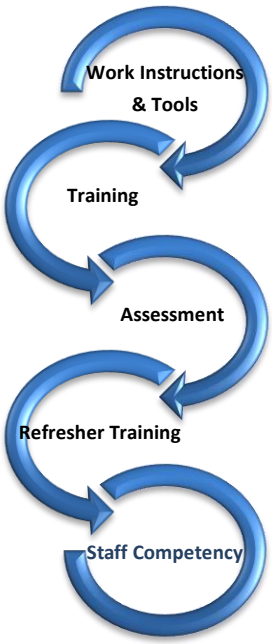
Functional competencies are developed by department supervisors and managers within a cross functional team. Sterile processing supervisors and managers have responsibility to develop functional competencies relevant to their staff. Examples include but are not limited to cleaning of surgical instrumentation, operation of steam sterilizers, and managing loaned instrumentation.

Training for competency is more than a checklist. It is a system that uses work instructions, training, and performance assessments, like checklists, to give staff the knowledge and confidence to effectively perform their jobs.

The path to staff competence starts with work instructions, tools, and job aides. Work instructions should be written in a sequential manner using simple, clear, concise language. Tools and job aides should clarify and enhance the staff members understanding of the task. They also serve as important reminders of critical steps in the task.

Training is critical to success. Training should include all aspects of the work instructions, relevant standards and guidance documents, all tools, and job aides. Training is most effective when the trainee can see and then perform the task. The trainer's responsibility includes initial training, periodic follow-ups, and final assessment of competence. Additionally, refresher training may be necessary to ensure peak performance of all staff members over time.

Figure 1: Path to Staff Competency



Competency Development

Functional competencies should be based on the departments processes, products, equipment, policies, and procedures. Competencies should also reference relevant industry guidance documents and standards, work instructions, job aides and tools, risk assessments, and staff's experience with performing the task.

Functional competencies within sterile processing fall into three general categories.

Process Competency – competency checklists with focus on actions and steps required to achieve a desired end. This includes any step in the Sterile Processing Department process flow beginning with Point of Use Treatment and ending with Sterile Storage.

Product Competency – competency checklists that focus on disposable items and surgical instrumentation. Examples include specialty instrument sets, e.g., Ophthalmology, Orthopedic, Neuro, Robotics etc., sterilization packaging, biological Indicators, automated cleaning chemistries, and high-level disinfectants to name a few.

Equipment Competency – includes any mechanical or electronic tool or device used in a process. Examples include but not limited to ultrasonic cleaners, washer-disinfectors, automated cleaning sinks, borescopes, sterilizers, automated endoscope reprocessors, endoscope cabinets, electronic documentation systems, etc.

Depending on the complexity of the process, process competencies may also include product and equipment competencies within the process competency. Inclusion of product and process competencies is dependent upon facility preference.

Consider combining competencies when …

- Only one type of product or equipment is in the department (ex: one ultrasonic cleaner in department)
- Product or equipment is specifically required for the process (ex: Olympus leak tester for testing Olympus endoscope)

Consider separating competencies when…

- Multiple products or equipment models may be used for the same task
- the equipment is used for multiple task
- the process is divided between multiple staff members

Competency development includes 6 steps:

1. **Identify processes, products and/or equipment that require competency.**

   A team including department supervisors, experienced staff members, facility educators, Human Resources and other departments (as applicable) should review all steps involved to complete a function or how to use an item per manufacturer's instructions for use. The team agrees to the critical steps, tasks, equipment, and processes to perform the task correctly, recognizing that, if done incorrectly, any one of these can have a negative impact on the outcome.

   Team members should also refer to any risk assessments that may have been performed. Risk assessments identify critical process steps or quality tools that if incorrectly performed or used could result in serious harm to patients or staff.

   Examples:

   - Failure to effectively clean results in residual soils that prevent sterilization leading to negative patient outcomes including infections, loss of limb, or loss of life.
   - Improper use of a sterilizer could lead to instrument damage or failures to sterilize, resulting in negative patient outcomes including but not limited to infections, loss of limb, and/or loss of life.

2. **Identify your facility competency template.**

   Facility training policies and procedures often have specific templates for preparing competencies. Be sure to use the appropriate template.

3. **Obtain tools to develop the desired competency.**

   All competencies should be evidenced based. Many tools are available when developing competencies. Examples include:

   - **OEM** Operator's Manuals
   - Manufacturer's Instructions for Use
   - Professional organization white paper and recommendations
   - National standards, guidelines, and recommended practices
   - Government Health Department guidelines

4. **Write competency criteria**

   Review tools and select steps, tasks and criteria that show competency. These are based on the team recommendations. Be sure to include related tasks or steps such as wearing appropriate personal protective equipment.

   Criteria should be specific and concise. Always consider the criterion's assessment method.

   > Example: Places biological indicator process challenge device over drain in steam sterilizer.

   It may not be necessary to rewrite instructions for use or authority guidance statements. Using references and ensuring the material is available during training, use and assessment is also acceptable.

   > Example: Demonstrates appropriate loading of washer-disinfector per section 2.4 of the operator manual.

   List all criteria chronologically based upon workflow.

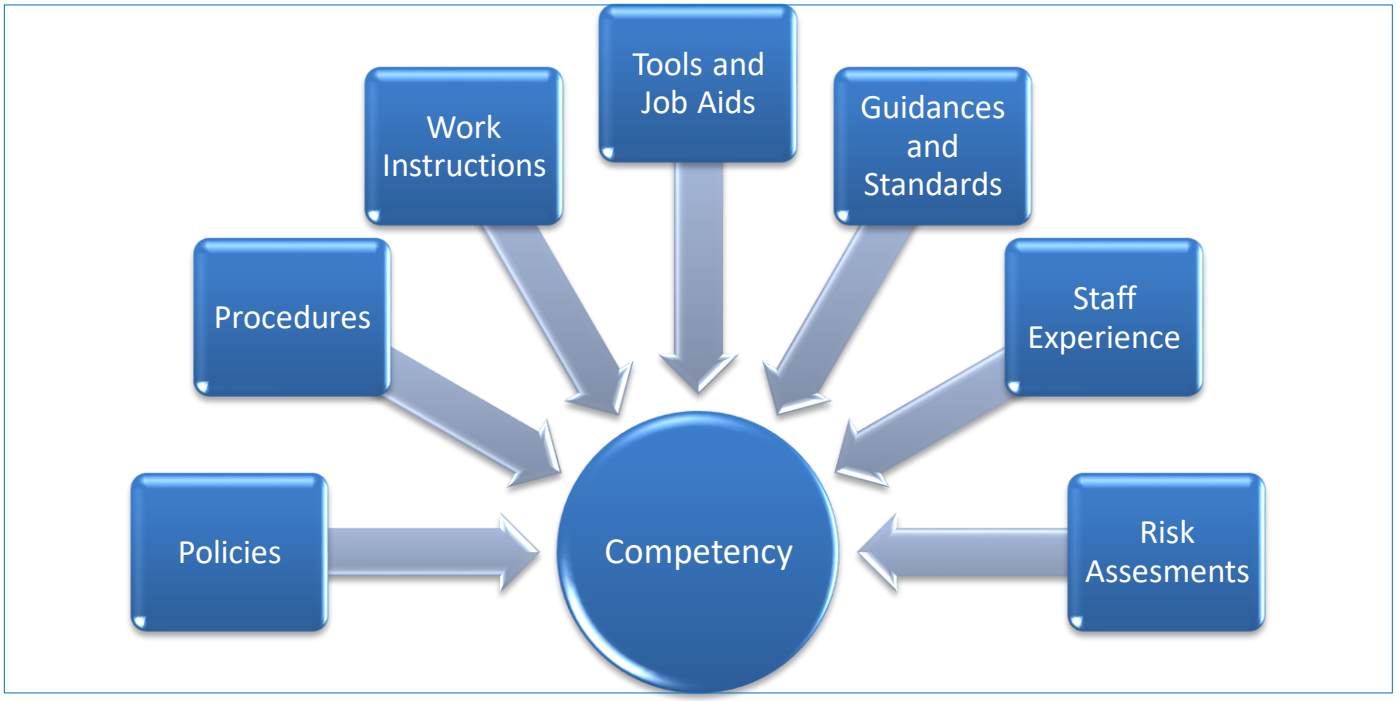
5. **List the assessment method for each criterion.**

   There are many ways to assess competencies. Some may be verbal or visual demonstration, while others employ tests or a combination of methods. Determine the best assessment based upon the criterion. A single competency may use several assessment methods.

6. **Submit for approval**

   Lastly, submit for approval following the facility's approval process.

Figure 2: Many elements are used to create competencies.



Assessment Methods:

Staff competency is first evaluated after initial training and at regular intervals as defined by the healthcare facility. Each criterion uses one of six assessment methods.

Monitor records – review worksheets, logs, and exception/error reports looking for errors or patterns that indicate additional training is required.

Observation – direct observation involves watching an employee performing a specific task using a procedure or work instruction to ensure an employee is performing the task as required. Observation is the

most time-consuming way to assess employee competence but is advised when assessing the areas that have the greatest impact on the process. It is a way to observe multiple competencies at one time.

Return demonstration – an educational technique in which an employee demonstrates what they have just been taught or had demonstrated to them.

Verbal – a way of assessing competency by having an employee explain a task or the steps in a process. This method would be used to observe one task at a time such as cleaning an endoscope.

Written test – tests are a good way to measure knowledge and skills required for specific tasks. Tests can be used to test knowledge of specific facts of a process that may not be shown during observation.

Verification/certification test – tests that evaluate the result of a task or process performed by staff. Unlike a written test, verification/certification shows that the work performed meets the criteria listed in the competency. An example would be using a protein detection cleaning test to show that the staff member is able to effectively clean a specific medical device.

Development Resources:

Many resources and tools are available for further information and to aid in creating competencies. These include:

- Facility Competency Templates, Documents, and Work Instructions
- Government Health Department Regulations and Guidances
- National Standards, Guidelines, and Recommendations
- Professional Associations' White Papers and Guidances
- Manufacturer's Instructions for Use, Labels
- Manufacturer (OEM) Operator's Manuals
- Safety Data Sheets
- Manufacturer In-servicing Guides
- Central Service Leadership Manual written by International Association of Healthcare Central Sterile Materiel Management (IAHCSMM)
- Sterile Processing: Knowledge, Skills, Competencies written by Terri Goodman, PhD, RN

Watch Outs

Items to look out for or to anticipate during competency development that may require additional assistance from manufacturers to complete include:

- Ambiguous facility policies and procedures
- Unavailable or ambiguous manufacturer IFUs
- Conflicting manufacturer IFUs between products and equipment within a process
- Outdated manufacturer IFUs
- Written manufacturer resources
- Lack of manufacturer collaboration
  - Resources
  - In-services
  - Education

Execution:

The path to staff competency starts with training and ends with competency assessment. The timing and frequency of competency assessment and the challenges faced during competency assessment will depend on the experience of the staff member.

New Hire: Staff should be trained in each area they will be working. Training should include the process, all products, and equipment they will be using. Staff competency is verified prior to performing the function without a proctor.

This same process is used any time a staff member is to perform a new function or utilize products or equipment for the first time.

Challenges:

1. Who will perform training?

   The trainer must understand the process, products, and equipment. They must demonstrate competence and be able to convey the competency criteria to the trainee.

   Examples:

   a. Designated Super-Users, Specialists, etc.

      - Facility should establish criteria for Super-User and Specialist qualifications e.g., extra training,

testing, etc.

- Ensure there is documentation for Super-User and Specialist qualifications for training. Surveyors may ask facilities to provide evidence of their qualifications.

b. Vendors if applicable and available. It is not realistic to expect them to train every new staff member. However, they can be invaluable for initial training on new equipment or products.

2. Who will assess competency?

Competencies are critical tools used to assess staff performance and ensure the safety of staff and patients. As such, the facility has a legal responsibility to ensure that the assessor can accurately perform the task. Assessors must be familiar with facility policies, procedures and all competency criteria identified by the facility.

Examples:

a. Super-Users, Specialists, etc.

b. Leads/Supervisors/Management

The assessor qualifications must be documented.

It is important to note that though vendors may provide training, they lack the qualifications to assess staff competency.

Routine: Staff competency should be assessed on a regularly scheduled basis. The frequency will be dependent upon the type of process, product, or equipment; reports of deficiencies; and past assessment performances of staff. The facility should determine the frequency. Many facilities use an annual timeframe.

Challenges:

1. Large number of staff members can make scheduling difficult. Depending on the number of competencies it may take a couple of days to complete 1 staff person's competencies.
2. Incorporating competency assessment into the already challenging daily tasks can be difficult.
3. With conflicting schedules and urgent needs, assessors may find it difficult to have the time needed to complete assessments.

Solutions:

a. Create a spreadsheet with staff names and competencies to be verified.

- Assign each staff member a date for competency assessment.
- Perform one competency type per month e.g., January – Sterilizers. This may be a bit more challenging as all staff may not be performing that function for that month.
- Do not do all staff in one day – spread it out.

Competency Reassessment:

In a perfect world, staff will always do all tasks and steps correctly. This is not a perfect world. Staff may develop habits or miss critical steps in a process without realizing it. This leads to **Process Drift** and/or **Non-Conformities** that require **Corrective Action**. It becomes necessary to reassess staff competencies and, in some cases, the competency program itself.

Challenges:

1. These are unplanned making it more challenging to incorporate into the routine of the schedule.
2. Brings into question the criteria for re-training & re-assessing competency?

Process Drift: Unplanned process drift is managed by performing department audits. Competencies become the audit templates for compliance. There should be established auditing rounds and schedule. During these rounds:

1. Identify when staff have drifted from established processes, proper use of products and equipment.
2. Determine if the process drift is isolated to a single staff member or if multiple staff members are involved. Re-training and competency assessment may be limited to a single staff member in the first case or may require expansion to the entire team in the second.

Non-conformity: Non-conformities are failures to meet predetermined specifications. For sterile processing, these include dirty instruments within sets, failing sterilization cycles, and discolored packaging to name

a few. A non-conformity may be identified by either an external or internal Customer.

1. External Customer – A different department finds non-conformities and communicates this to SPD.
2. Internal Customer – review of documentation, observation of process, or failed inspections and tests identify non-conformities within Sterile Processing Department.

Depending on the severity of the non-conformity and the risk to patient safety, corrective action to prevent future occurrences may require a review with the staff member or a complete re-training and re- assessment of Competency. Work with your facility Quality Management Team to establish criteria for severity and risk assessment associated with the level of corrective action.

Revaluation of training and competency procedures may be called for whenever multiple staff members consistently do not meet one or more criteria identified in the competency during routine assessments. It may be necessary to increase the frequency of audits, retraining, and competency assessments.

Additionally, work tools, aides and work instructions should be reevaluated with a cross functional team including those that consistently to failed to meet criteria. Once changes have been implemented, staff competency should be monitored to confirm that the revised process has improved staff competency.

Summary

With the expectations of staff competency verification, it is important to have a systematic process in the development of competencies, training, and competency assessment. This should no longer be a last-minute thought or request to vendors for signed competencies in preparation for survey. Start today, and utilize this guide to establish a comprehensive, systematic competency program for your facility that has your department in a state of readiness at all times.

Glossary

Competency: a standard of knowledge, skills and abilities that is required for successful job performance.

Competency assessment: a system for measuring and documenting personnel competency. The goal of competency assessment is to ensure staff are competent to perform designated tasks, to reduce risk of negative outcomes.

Corrective action: (1) The implementation of solutions resulting in the reduction or elimination of an identified problem. (2) An action taken to eliminate the root cause(s) and symptom(s) of an existing deviation or nonconformity to prevent reoccurrence.

Inservice training: a program for professional training or staff development; usually where professionals are trained on a specific task, process, device or piece of equipment. It is a key component of continuing medical education for not only SPD staff but for physicians, pharmacists, and other medical professionals as well.

Nonconformity: The result of nonfulfillment of a specified requirement.

OEM: Original Equipment Manufacturer

Policy: a predetermined course of action that identifies a key activity and provides a general strategy; a written statement of intent.

Procedure: a written outline or list of steps needed to perform a specific task or function.

Process drift: the unintended, unexplained, or unexpected trend of measured process parameters away from the intended target or standard; the unintended trend to, over time, miss steps while performing a standardized task.

Professional organization: An association that is formed to further the interests of people engaged in a specific profession, to advance a particular profession, and serve the public good. Examples include International Association of Healthcare Central Service Material Management (IAHCSMM) and Association of periOperative Registered Nurses (AORN).

Stakeholder: an individual or group that has an interest in any decision or activity of an organization. ISO 26000

Training: the process of developing the knowledge, skills, and attitudes necessary for staff members to perform required job tasks. Competency-based training provides each employee with the skills

and knowledge to perform their work according to basic standards identified by the trainer.

Work instruction: a document that provides specific instructions to carry out an activity; a step by step guide to perform a single task. A work Instruction contains more detail than a procedure and is created if detailed step-by-step instructions for a complex task are needed.

References:

- AORN eGuidelines. (2020, July 16). *Guidelines and Tools for the Sterile Processing Team*. AORN eGuidelines. https://aornguidelines.org/books/otherbooks?view=guidelinesandtools
- Baltimore Department of Education (2005 October 13). *Guide for Writing Functional Competencies*. University of Baltimore. https://home.ubalt.edu/tmitch/651/PDF%20articles/Guide%20for%20Writing%20Functional%20Competencies%20(Annotated).pdf
- Goodman, T. (2015). *Sterile Processing: Knowledge, Skills, Competencies*. Association for the Advancement of Medical Instrumentation.
- International Organization of Standardization (ISO) (2010) *Guidance on social responsibility*. ISO
- International Association of Healthcare Central Service Materiel Management (IAHCSMM) (2010). *Central Service Leadership Manual*. IAHCSMM.
- Melvin, Erin (20189, June 9). *Getting Started with Competency-Based Training (CBT)*. eLearning Industry. https://elearningindustry.com/competency-based-training-cbt-getting-started

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STERIS
5960 Heisley Road
Mentor, OH 44060-1834 USA
800-548-4873

www.steris.com