



Laboratory Quality Management System (LQMS)

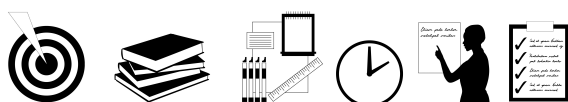
(Module 17)

Process improvement

Acknowledgements

This Module was prepared by Beatrice Orena

Part 17.0: Process improvement



PURPOSE: To provide an introduction to the concepts of process improvement and a description of some of the tools used to achieve process improvement.

LEARNING OBJECTIVE:

At the end of this module, participants will be able to:

- Relate the historical perspective of process improvement;
- Describe the importance of process improvement in maintaining quality;
- Explain the need for tools to monitor laboratory processes so that problems can be identified and improved.

MATERIALS:

1. PowerPoint slides or transparencies
2. Overhead projector or computer with an LCD projector
3. Prepared flipchart, white board, or chalk board
4. Paper cards, markers, and tape
5. Additional handouts as required.

TIMELINE: 90 Minutes

METHODOLOGY:

1. Lecture
- 2.** Discussion
- 3.** Exercise

ADVANCE PREPARATION:

1. Printing participant activity 17-1
2. Familiarize oneself with the slides
3. Read facilitators Notes and ISO 15189 Standard

FACILITATORS STEP-BY STEP INSTRUCTIONS:

1. Welcome and Introduction
2. Present module overview
3. Ask Questions in between the presentation to actively involve participants.
4. Continue the presentation
5. Recap presentation using the Assessment questions
6. Ask if there is any question.

FACILITATORS NOTES

Refer to the trainers notes attached

Refer to the trainer's activity guide attached

SLIDE OF POWERPOINT PRESENTATION



SITUATION ANALYSIS/ EXERCISES

Give the participants a copy of the following scenario and/or show it as a slide (Presentation 17, Slide 4).

“You have implemented a new test for TB in the laboratory. Your staff are trained and comfortable using it. It has been validated, results are being reported and it seems to be working well.”

Ask the question:

How do you know for sure the test works well now, and will continue to work well in the future?

ASSESSMENT REVIEW

Suggested test questions (with answers bolded) for this module include:

1. The source of **Plan, Do, Check, Act** as a means of process improvement was:

- a. ISO 15189
- b. W. Edwards Deming**
- c. CLSI
- d. Six Sigma

2. _____ are established measures used to determine how well an organization meets needs and operational and performance expectations.

- a. quality indicators**
- b. quality assurances
- c. opportunities for improvement

- d. Plan, Do, Study, Act
3. The process of optimizing space, time, and activity to improve the physical paths of workflow is known as:
- a. lean
 - b Six Sigma
 - b. The Deming Cycle
 - c. none of the above

REFERENCES

- CLSI – Standards, guidelines, and best practices for quality in medical testing
- WHO – Laboratory Quality Management System - Handbook
- ISO 15189 – Medical laboratories – Requirements for quality and competence