

# Laboratory Quality Management System

## Module 14: Accreditation

Venue:

Presenter:

Date:

# Introduction Laboratory Accreditation

## Laboratory Assessment - WHY?

- recognition as delivering accurate and reproducible results
- recognition of compliance with the quality standards and norms used for the assessment



# Learning Objectives

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

Compare and contrast accreditation, certification and licensure;

Describe the process involved in the development of standards;

Discuss the need for laboratory norms and standards.

# Module Outline

- Laboratory Accreditation
- Responsibilities
- Definitions
- Self-developed standards
- Standard bodies
- National Standards and Technical Guidelines
- Specific and National Norms, Standards and Regulations
- Elements of Accreditation process
- Process of Accreditation
- Accreditation outcomes

# Activity 14-1:

## Preparations Needed for a Laboratory Accreditation

### Purpose:

To provide an opportunity for participants to discuss preparations needed for a laboratory accreditation.

**Suggested time: 10 minutes**

# Scenario

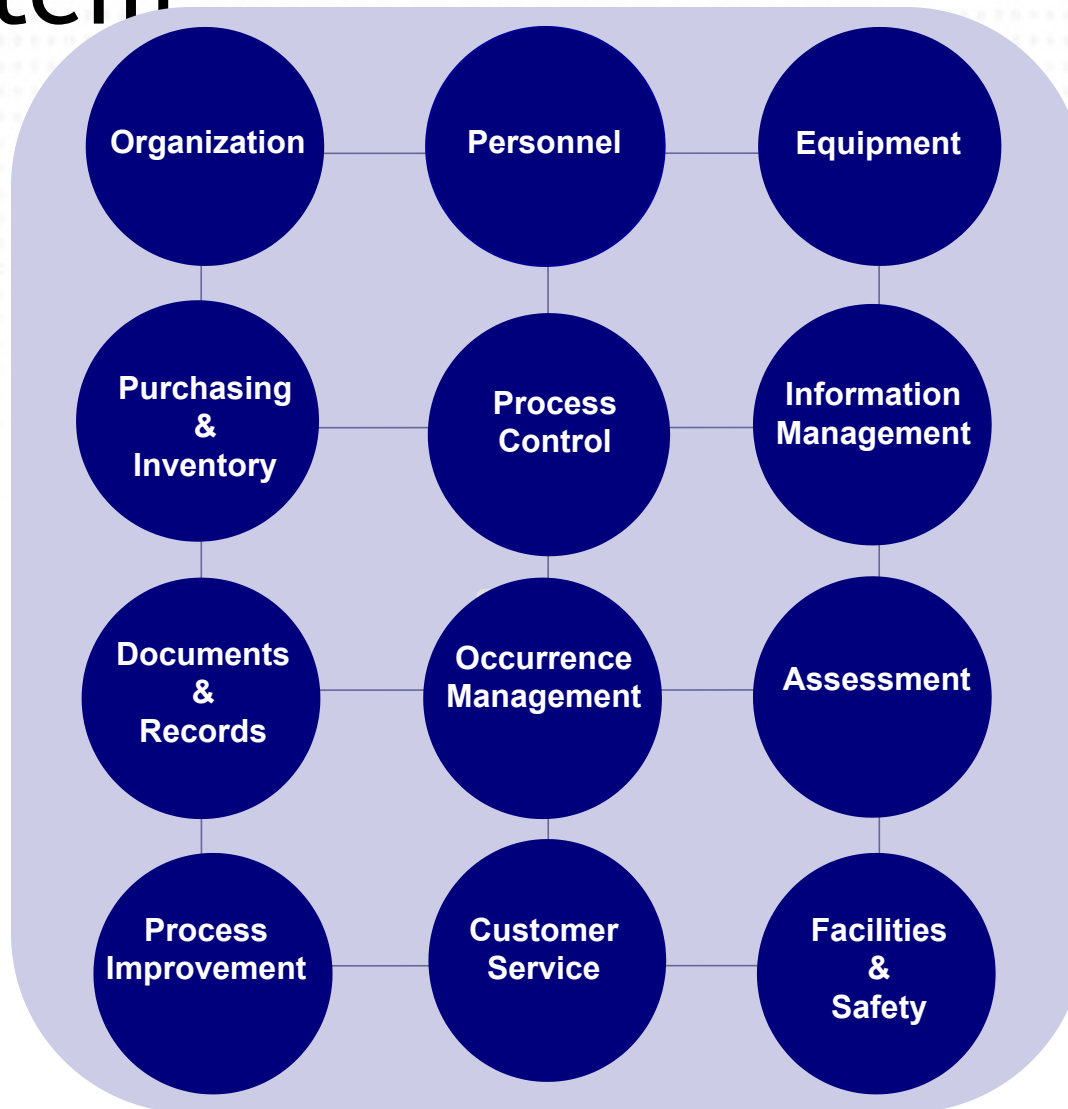
Your hospital administrator has asked you, the laboratory manager, to examine the possibility of having the laboratory accredited.

- What does it mean to be accredited?
- Where can you get information?

**How would you get started?**



# The Quality Management System



LQMS/PP/014, Version 1.0, Effective date: 01-Jun-2019



# 1. Responsibilities





## 2. Definitions

- **Normative document**— provides rules, guidelines or characteristics for activities or their results
- **Standard document**—established by consensus and approved by a recognized body, that provides, for common and repeated use, rules, guidelines or characteristics for activities or their results, aimed at the achievement of the optimum degree of order in a given context
- **Regulation**—any standard that is mandated by a governmental agency or authoritative body

# 3. Self-developed Standards

Many agencies, organizations, or regions develop their own accreditation requirements rather than using internationally recognized standards.

- **Advantages:**

- optimized for local use, recognized local strengths and weaknesses
- can be developed in progressive steps
- can lead to full international recognition

- **Weaknesses:**

- may be narrow or biased
- may not be recognized by other organizations

# 4. Standardization Bodies

International organizations include:

 ISO

 CLSI

 CEN

 WHO

# International Organization for Standardization



📖 world's largest developer and publisher of international standards

📖 standards are applicable to many kinds of organizations including clinical and public health laboratories

# Clinical and Laboratory Standards Institute



📖 global, nonprofit, standards-developing organization

📖 promotes the development and use of voluntary consensus standards and guidelines within the health care community

📖 documents are developed by experts working on subcommittees or working groups

# European Committee for Standardization



European Committee for Standardization  
Comité Européen de Normalisation  
Europäisches Komitee für Normung

📖 national standards bodies in the European Economic Community and associated countries

📖 general terms include openness and transparency, consensus, and integration



# World Health Organization

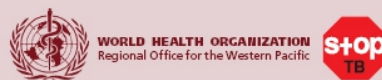
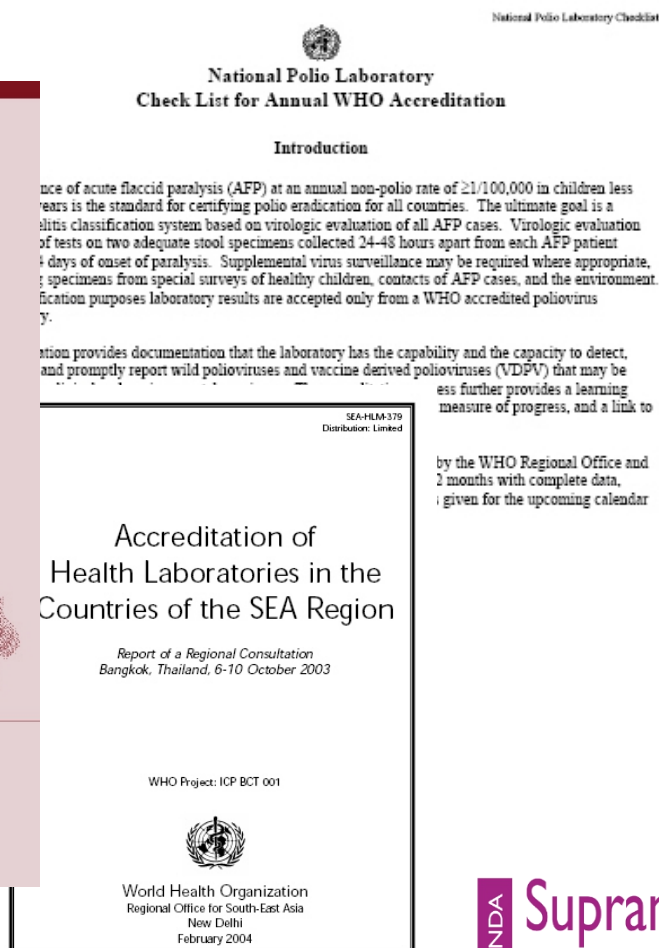
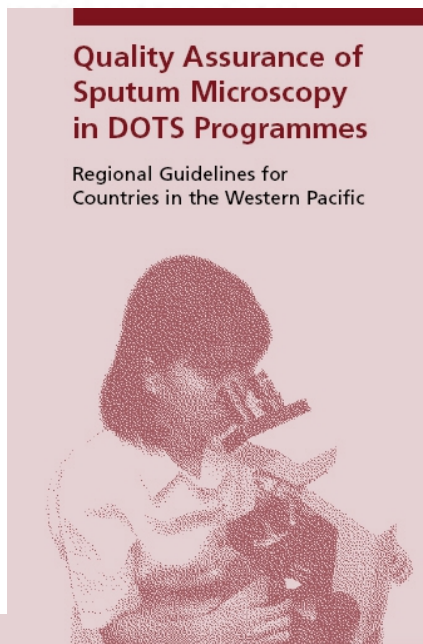
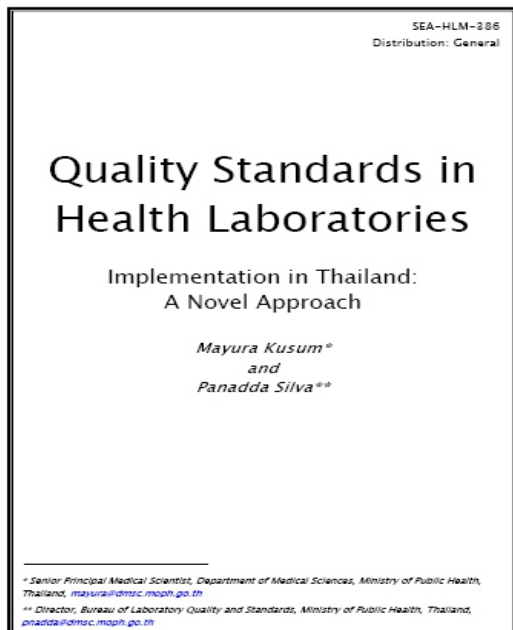


📖 has developed several standards for disease-specific diagnostic laboratories, such as polio, tuberculosis, influenza, measles

# 5. National Standards and Technical Guidelines

- **Country-specific standards**
  - ↻ based on international standards
  - ↻ adapted to the culture and general condition of the country
- **Guidelines**
  - ↻ supplement ISO standards with technical guidance for use in laboratories
  - ↻ can address a specific kind of testing

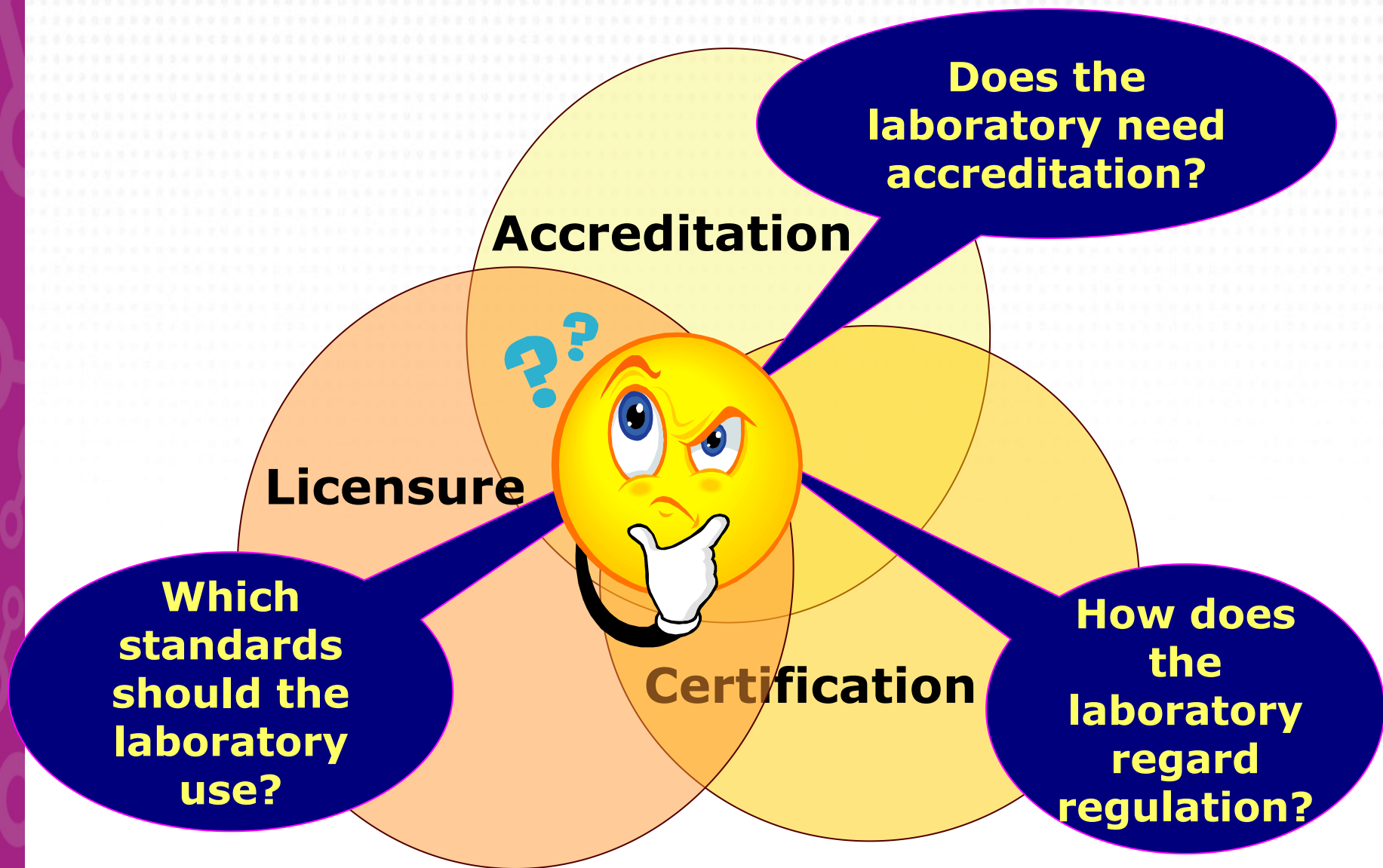
# 6. Specific and National Norms, Standards, Regulations



# Definitions

- Certification (ISO/IEC 17000)
  - Procedure by which a third party gives written assurance that a product, process or service conforms to specific requirements.
- Accreditation (ISO 15189)
  - Procedure by which an authoritative body gives formal recognition that a body or person is competent to carry out specific tasks.
- Licensure (Wikipedia 2007)
  - Granting of ability to practice provided most often by a local governmental agency, usually based on demonstrated knowledge, training and skills.







# 7. Elements of an Accreditation Process

- Accreditation Body
- Standards
- Assessors
- User laboratory



**Approved**

**Knowledgeable**

**Certification  
and  
Accreditation  
Bodies**



**Standards-  
based**

**Competent  
staff**

**Objective**



# Examples: commonly used standards

- **Certification standards**
  - ISO 9001:2000
  - ISO 14000
- **Accreditation standards**
  - ↻ ISO 17025
  - ↻ ISO 15189
  - WHO polio standards
- **Regulations**
  - US CLIA Regulations
  - French GBEA
  - UN Transport of Dangerous Goods Regulations

# Scope of ISO 17025

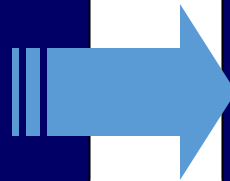


to confirm or  
recognize  
competence

**General  
requirements  
for competence**

tests  
calibrations  
sampling

testing /  
calibration  
laboratories



quality  
administrative  
technical systems

Does not cover compliance with regulatory and safety requirements  
for laboratory operations



THE REPUBLIC OF UGANDA  
MINISTRY OF HEALTH

# Scope of ISO 15189

Based on ISO  
17025:1999  
&  
9001:2000

**Medical  
Laboratory**  
Particular  
requirements  
for quality & competence



**to confirm or  
recognize  
competence**

laboratory QM  
technical  
processes

quality  
administrative  
technical systems



# Where is your Laboratory?



Laboratory

Laboratory

Reference  
Laboratory

Opening today!

Licensure

Certification

Accreditation



ISO 15189  
WHO POLIO



# Process for Accreditation

not one to be taken lightly  
or without forethought



commitment

planning

**Requirements**

knowledge

resources



# Accreditation Terms

## Consensus

📖 represents general agreement in the absence of strong and compelling objection

## Normative Statement

📖 required and essential part of the standard  
📖 includes the word “shall”

## Informative Statement

📖 information (often a ‘note’) that may be explanatory, or cautionary, or provide an example

# Accreditation Terms

## Compliance

📖 meets both the text and the spirit of a requirement

## Non-conformity

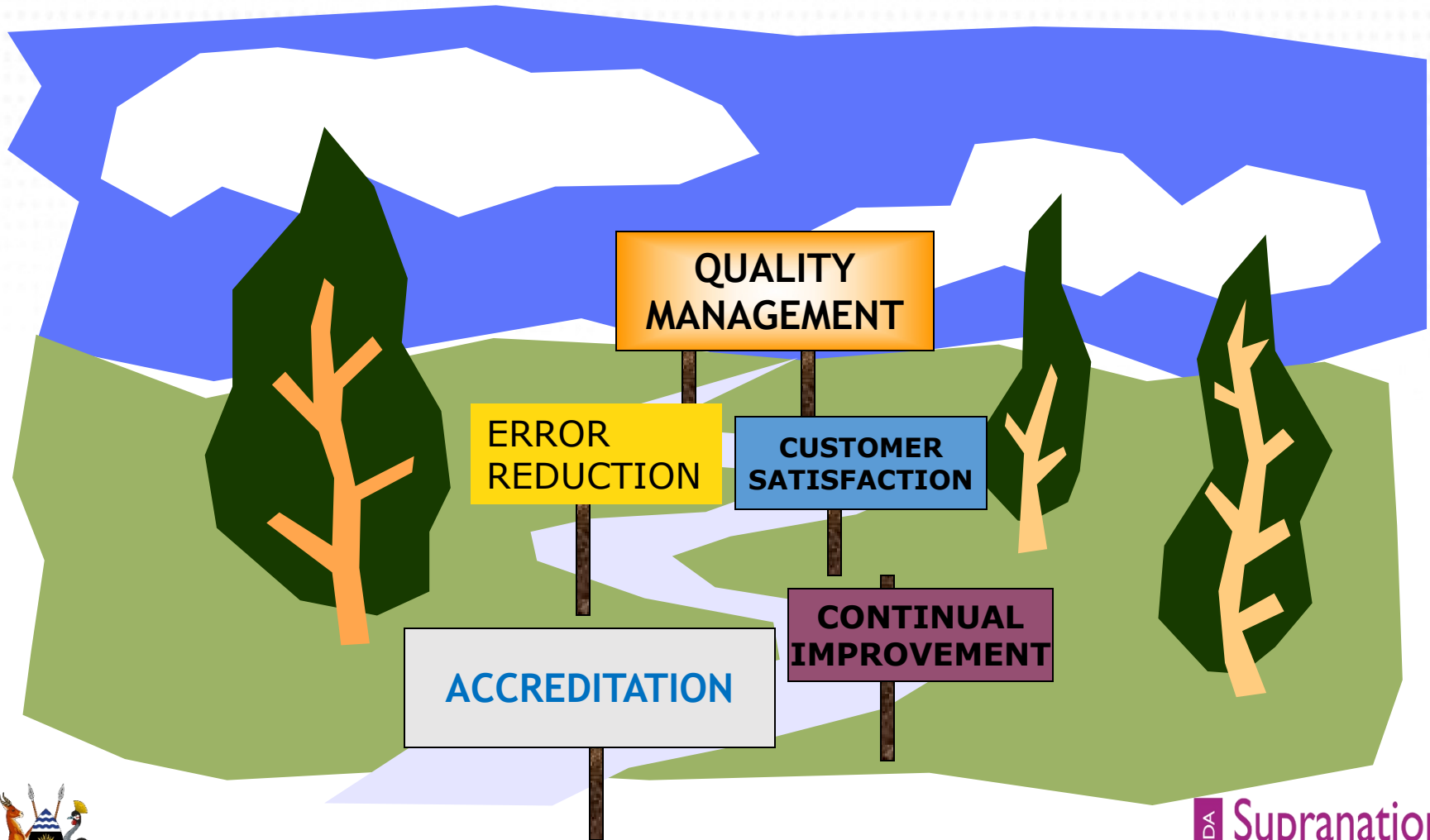
📖 failure to fulfill the requirements of a specified process, structure or service

📖 may be categorized as major (complete) or minor (partial)

## Verification of conformity

📖 confirmation by examination of evidence

Accreditation does not *guarantee* success,  
it is only **one step** along the quality journey



# 9. Accreditation outcomes

- 📖 strength and integrity of the quality system are measured
- 📖 continual monitoring of the quality system
- 📖 recognition for efforts

Accredited laboratories tend to:

📖 perform better on proficiency testing

📖 are more likely to have a working quality management system

# It is an accomplishment to receive accreditation







It is an  
**ACHIEVEMENT**  
to maintain  
**accreditation**

# Test Questions



Microsoft Word  
7 - 2003 Documer

# Assessment

1. compare and contrast accreditation, certification and licensure;
2. What are the process involved in development of standards;
3. discuss the need for laboratory norms and standards.

# Summary

📖 Standards provide guidelines that form the basis for quality practices. They are developed by organizations.

📖 Accreditation and certification are processes that recognize that a laboratory is meeting the designated standards.

📖 An active quality management program can assure the laboratory is in a constant state of “accreditation-readiness”.

# Key Messages

- Accreditation is an important step in the continual improvement of the quality management system.
- It is an accomplishment to be accredited; it is an achievement to maintain accreditation.

# References

## **ISO 15189:2012 Medical Laboratories - Requirements for Quality and Competence** **« Clause 4.14 »**

 **CLSI**

 **ASLM**



# Acknowledgement

