

# Systems Approach to Medical Education



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# Objectives

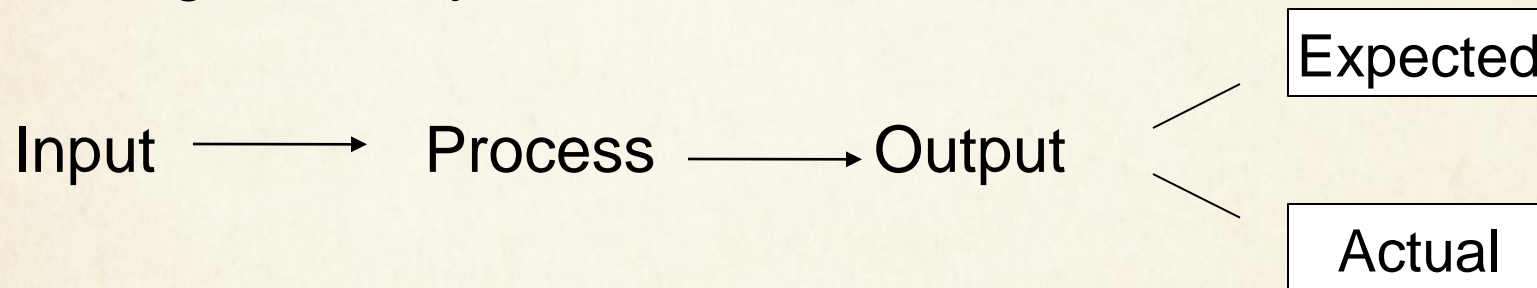


- Define a system
- Describe medical education from system perspective
- Discuss role of educator as system specialist

- A functional entity which consists of a number of interrelated components or subsystems
- To achieve its goals
- Influenced by environment

# Types of a system

- Open or Closed
- Stages of a system



# Medical college as a system



- System Goal: qualified health professionals
- Departments - interdependent and interrelated subsystems
- Institutional goals
- Socio-political realities

# Medical college as a system

Input

Process

Output



# Medical college as a system



Input

Process

Output

Learners

Human  
resources

Infrastructue  
resources

Learning and  
teaching  
resources

# Medical college as a system

## Input

Learners

Human  
resources

Infrastructure  
resources

Learning and  
teaching  
resources

## Process

Aims and  
objectives

Teaching  
learning  
process

Scheme of  
assessment

## Output

# Medical college as a system

## Input

Learners

Human  
resources

Infrastructure  
resources

Learning and  
teaching  
resources

## Process

Aims and  
objectives

Teaching  
learning  
process

Scheme of  
assessment

## Output

Certified  
competent  
health  
professional

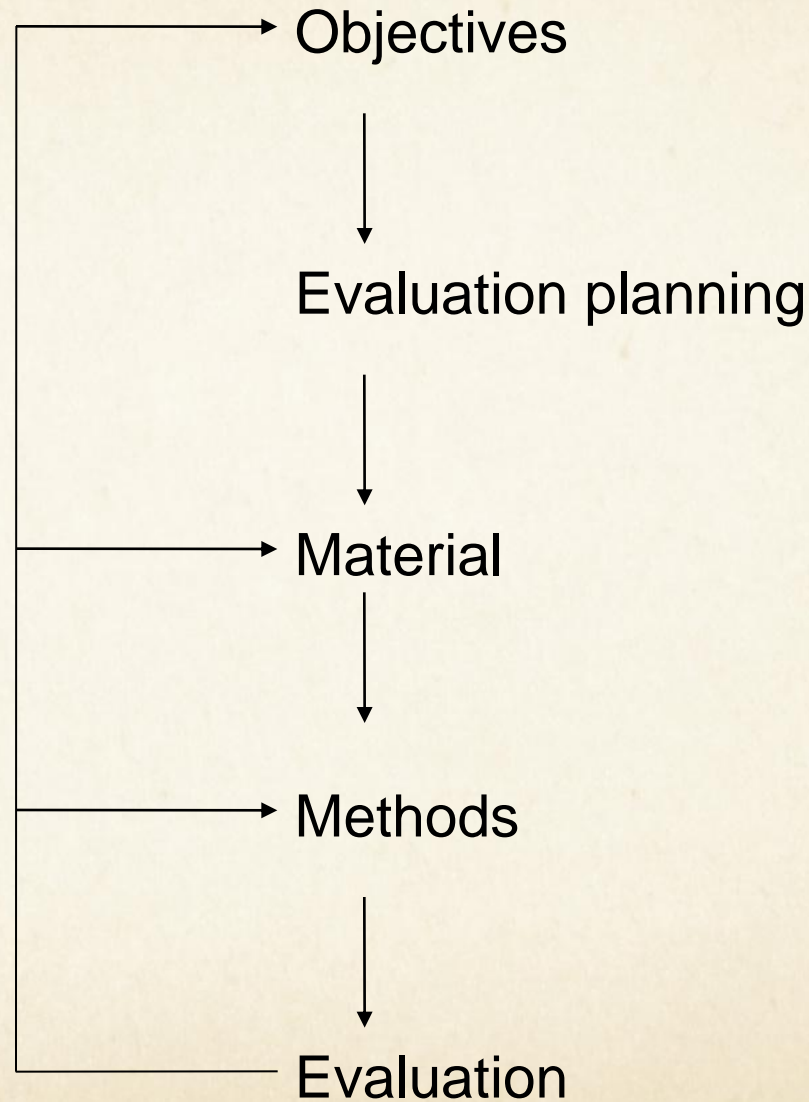
# The output

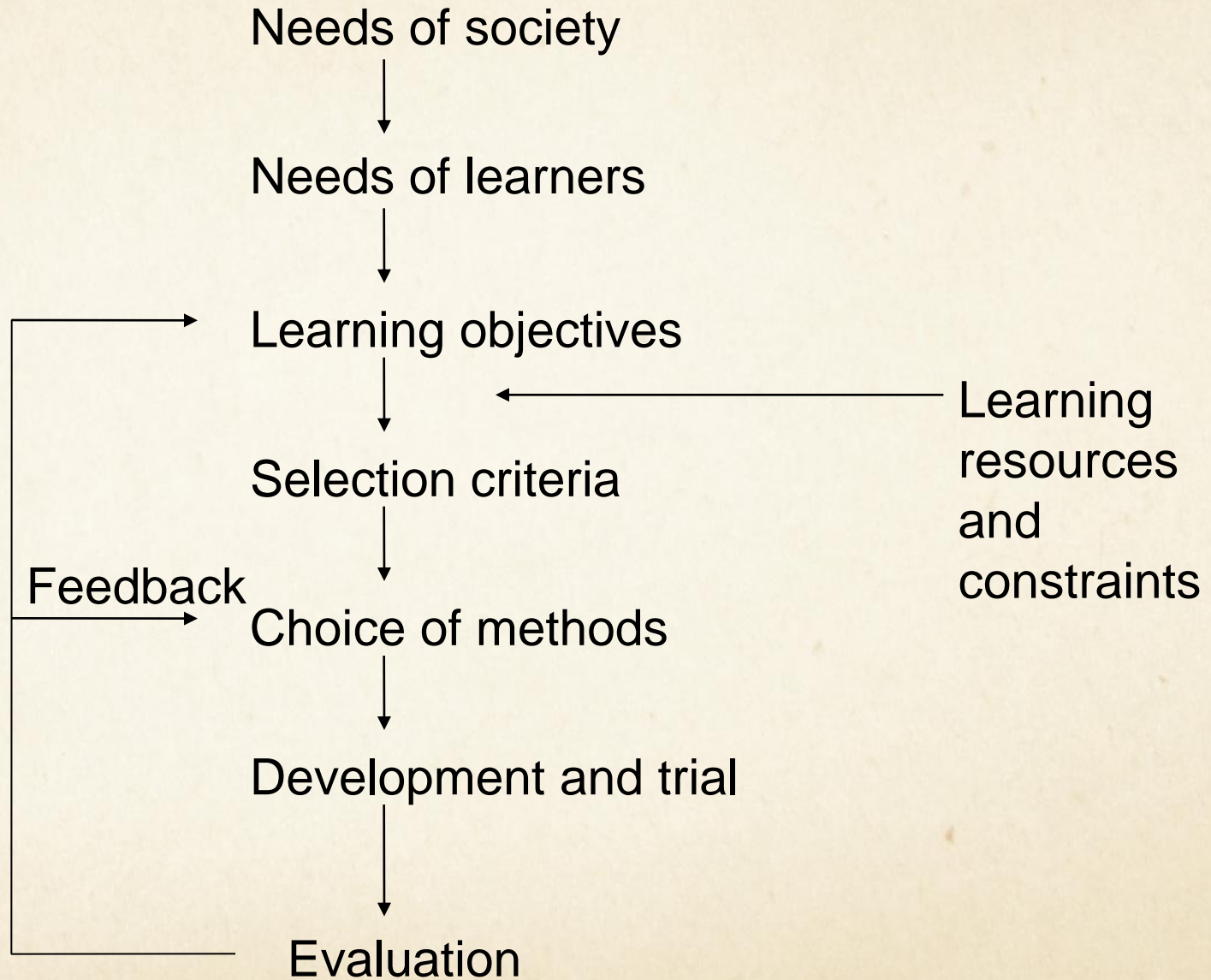


- Efficiency: Cost, time, and resources spent
- Effectiveness: quality of outcome
- Openness of educational system

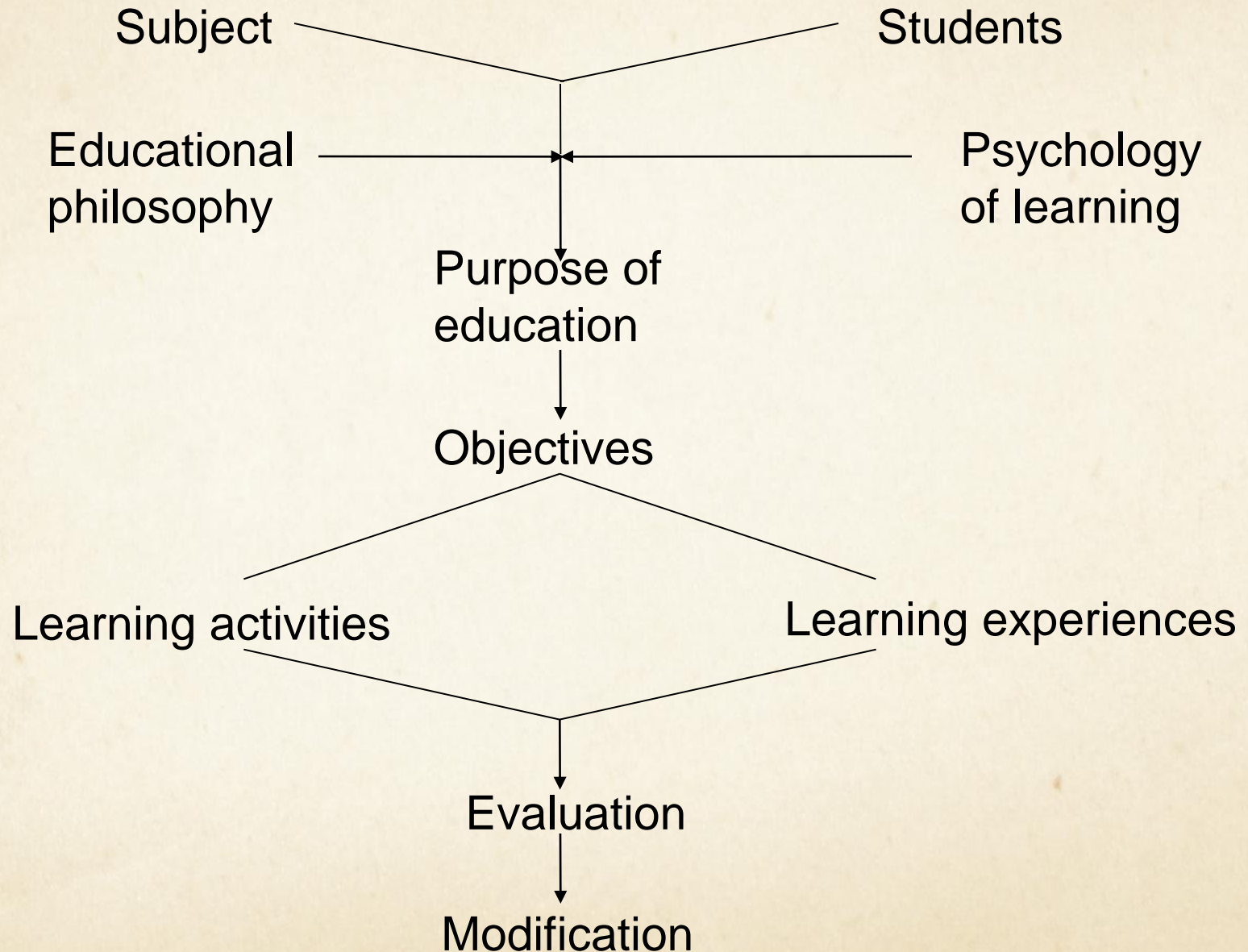


# Curricular components

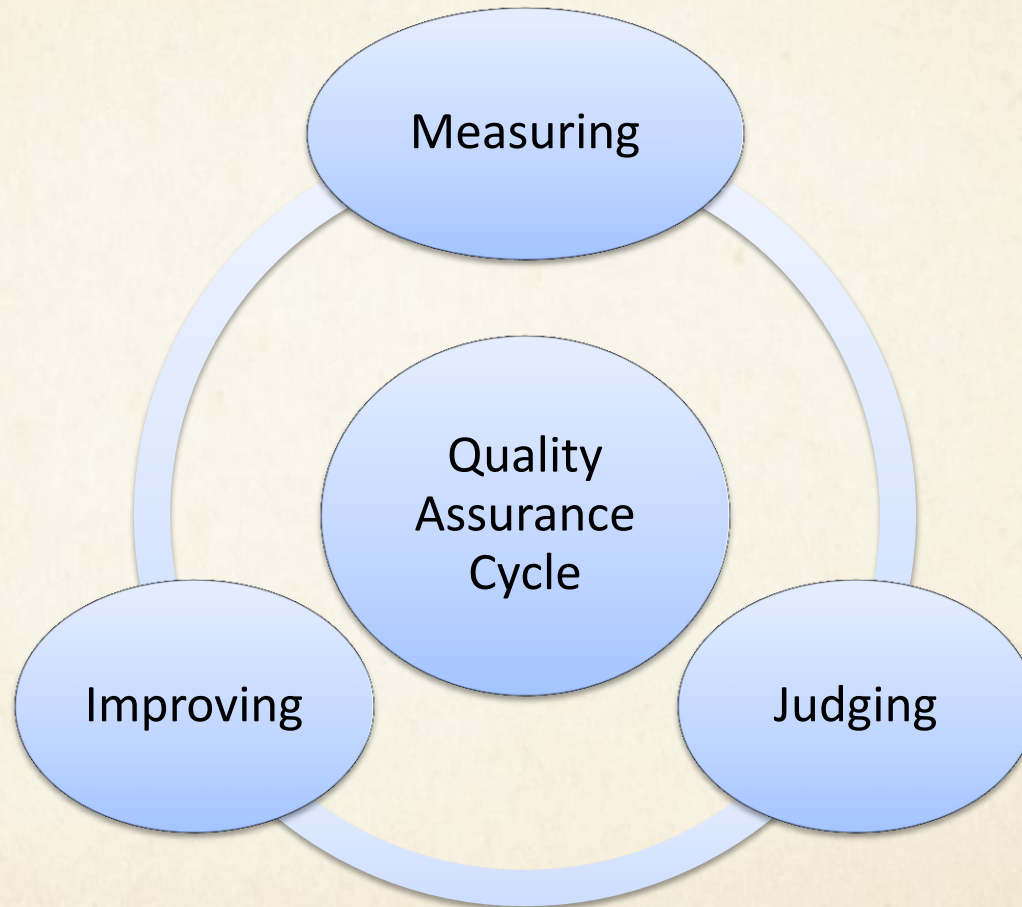




# Planning model



# Quality assurance cycle





Each product of a manufacturing process is of equivalent quality. So, inspection is made of process and its product.

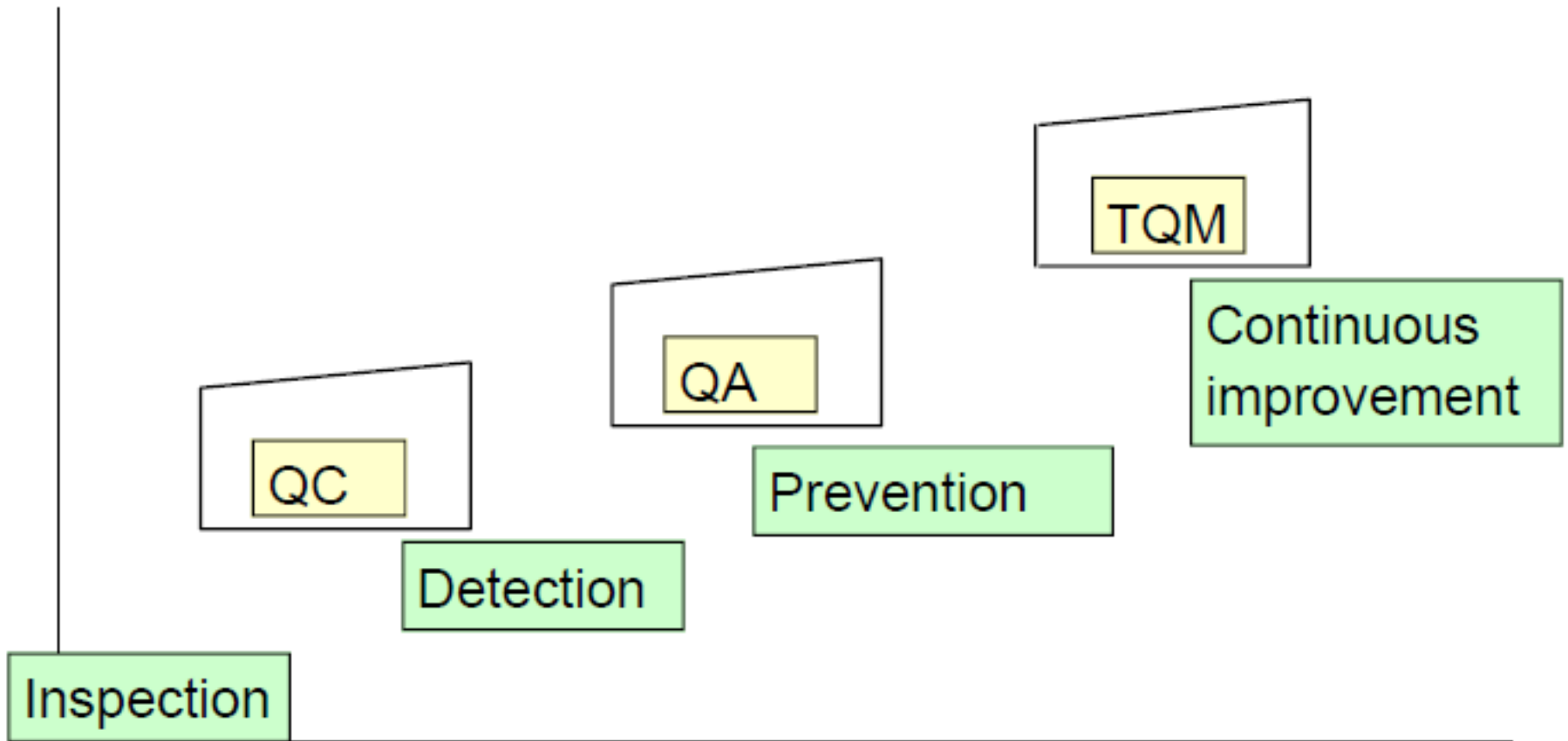
A process of supervision to prevent faults and defects on a product, “getting things right the first time, every time”. To do that a quality assurance system should be in place that allows one to apply the quality standards.

# Total Quality Management (TQM)



TQM incorporates the concept of quality assurance and goes beyond it. It is about creating a culture where every one in system is in charge of quality of their own behavior, and where “customer” is the center and one who determines the quality of the “service” given.

# QC, QA, TQM





**MINIMUM STANDARD REQUIREMENTS FOR  
THE MEDICAL COLLEGE  
FOR 150 ADMISSIONS ANNUALLY  
REGULATIONS, 1999**



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## WFME Trilogy of Standards: Areas

<b>Basic Medical Education (BME)</b>	<b>Postgraduate Medical Education (PME)</b>	<b>Continuing Professional Development (CPD)</b>
1. Mission and Objectives	1. Mission and Outcomes	1. Mission and Outcomes
2. Educational Programme	2. Training Process	2. Learning Methods
3. Assessment of Students	3. Assessment of Trainees	3. Planning and Documentation
4. Students	4. Trainees	4. The Individual Doctor
5. Academic Staff/Faculty	5. Staffing	5. CPD-Providers
6. Educational Resources	6. Training Settings and Educational Resources	6. Educational Context and Resources
7. Programme Evaluation	7. Evaluation of Training Process	7. Evaluation of Methods and Competencies
8. Governance and Administration	8. Governance and Administration	8. Organisation
9. Continuous Renewal	9. Continuous Renewal	9. Continuous Renewal

# What is a standard?



A **standard** is a generally agreed norm or requirement. It should describe what is normally regarded as good practice

# Types of standards



Process standards: how are things conducted?

Outcome standards: what should be the result of the education and training?

## *WFME Standard 2.1 for basic medical education*

The medical school must define the curriculum models and instructional methods employed



## *LCME standard ED-21*

The faculty and students must demonstrate an understanding of the manner in which people of diverse cultures and belief systems perceive health and illness and respond to various symptoms, diseases and treatments.

# A process standard for your institution about communication skills training



# A process standard for your institution about communication skills training



*The medical school must have a method of gathering feedback about the quality of communication skills teaching.*

An outcome standard for your institution about communication skills



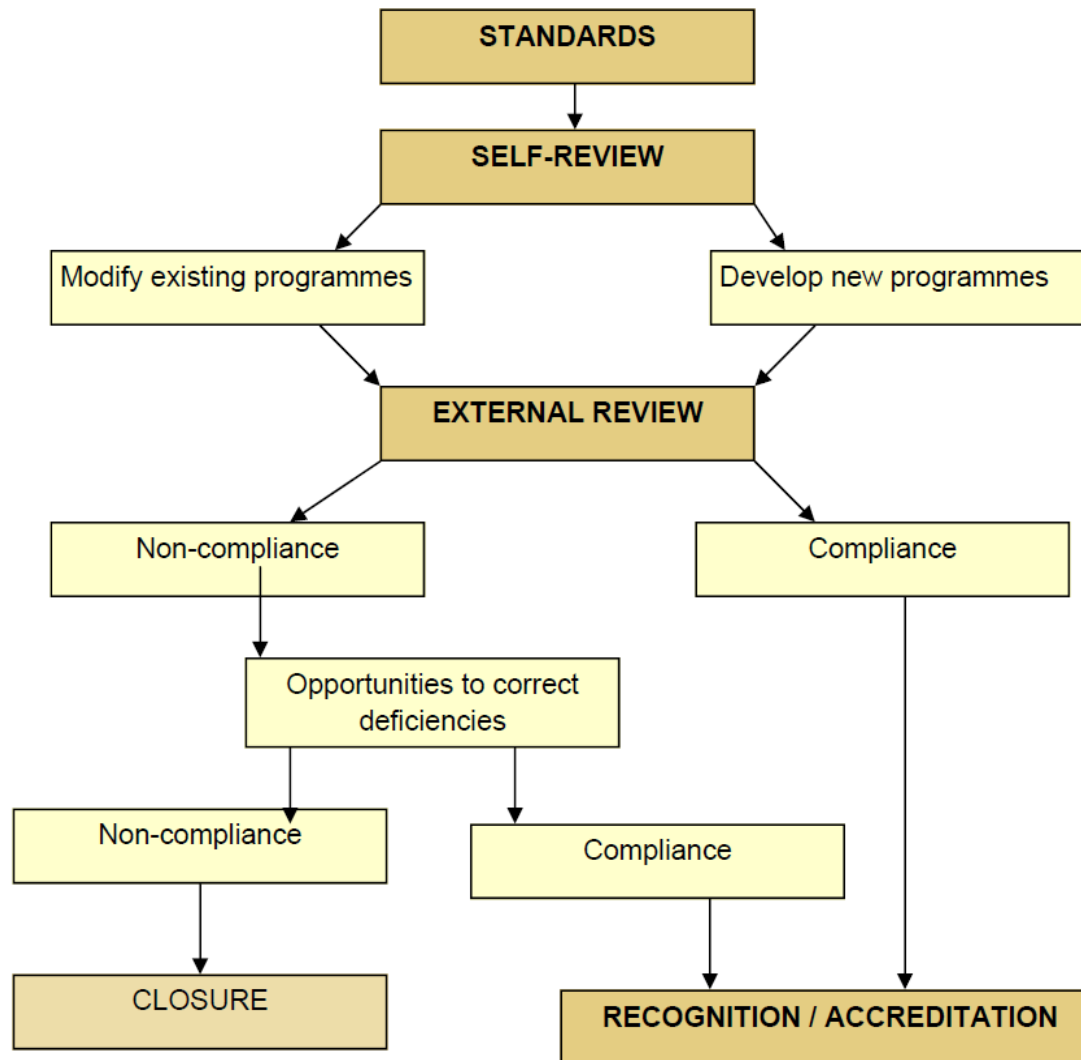
# An outcome standard for your institution about communication skills



*Students must at graduation be able to demonstrate effective communication skills.*



## USE OF STANDARDS FOR REGULATION







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- Plan, guide and implement systematic educational process in department
- Input-process-output model to systematise own teaching

Thank you

