School of Medical and Allied Sciences

Course Code :BMLT3004

Course Name: Laboratory Quality Management

Introduction- Laboratory Quality Management System

GALGOTIAS UNIVERSITY

Program Name: B.Sc Medical Lab





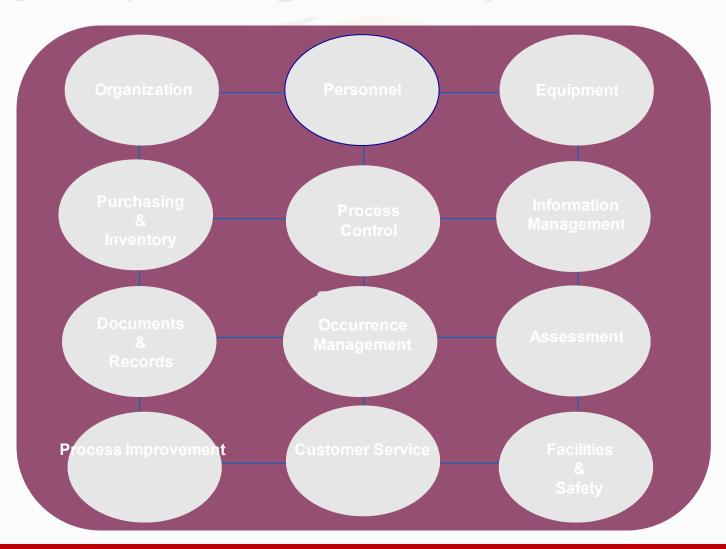
Illustrate the basic concept of laboratory quality management and its importance

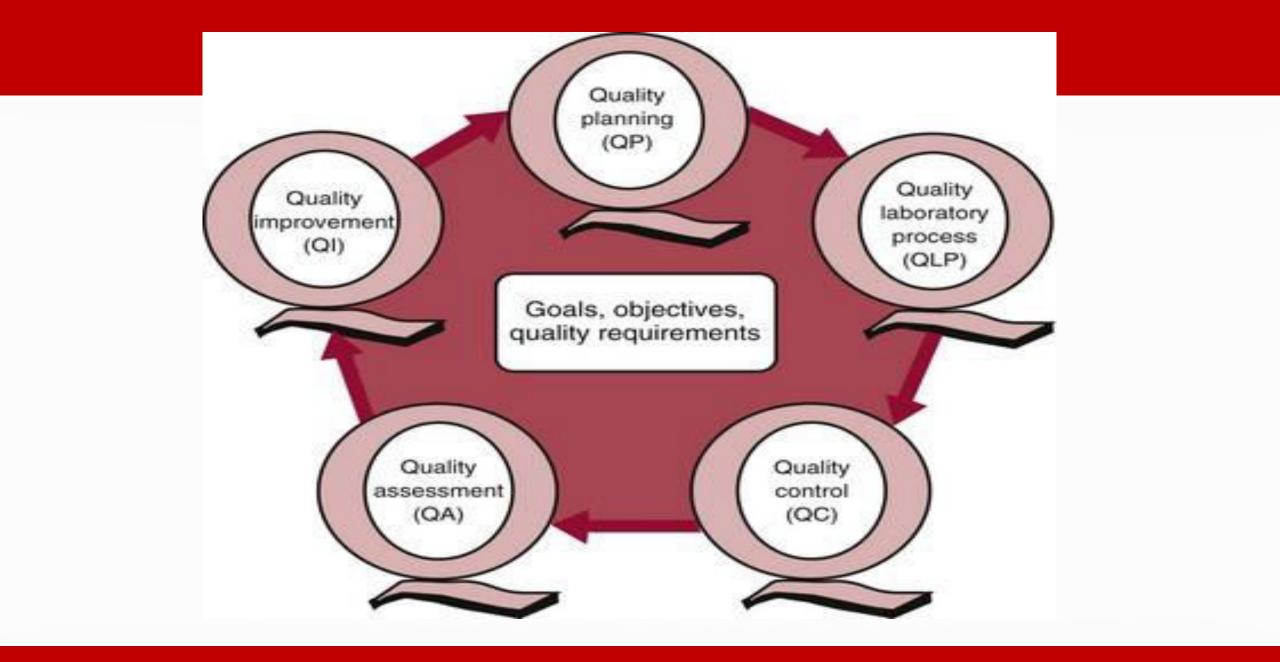


At the end of this activity, participants will be able to:

• Define the essential terms of Quality and TQM System

The Quality Management System





- The traditional framework for managing quality in a healthcare laboratory has emphasized the establishment of quality laboratory processes (QLPs), QC, and quality assessment (QA).
- A QLP includes analytical processes and the general policies, practices, and procedures that define how work is done.
- QC emphasizes statistical control procedures but also includes nonstatistical check procedures, such as linearity checks, reagent and standard checks, and temperature monitors.
- QA, as currently applied, is primarily concerned with broader measures and monitors of laboratory performance, such as (1) turnaround time, (2) specimen identification, (3) patient identification, and (4) test utility.
- Quality "assessment" is the proper name for these activities rather than quality "assurance." Measuring performance does not by itself improve performance and often does not detect problems in time to prevent negative outcomes.
- Quality assurance requires that causes of problems be identified through QI and eliminated through quality planning (QP), or that QC be able to detect problems early enough to prevent their consequences.

Quality Planning

Definition of Quality goals:

Quality Control

Constructive measures:

Quality Inspection

Analytical measures:

Quality Improvement

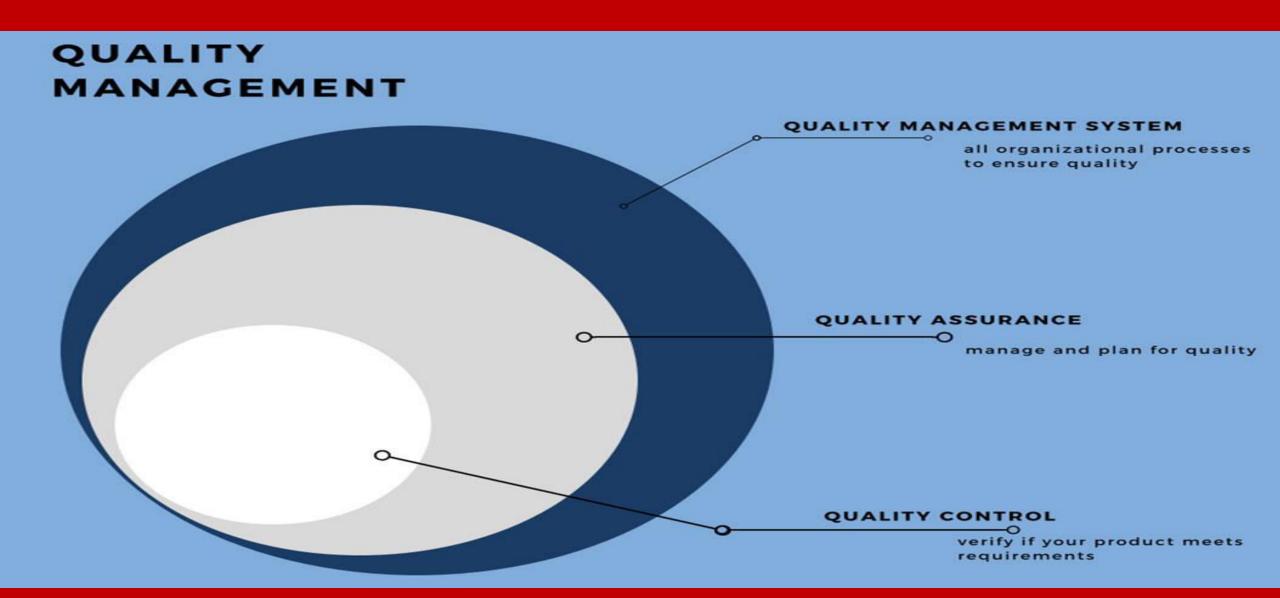
Improvement measures:

That's what we want to achieve!

How we have to work!

Have we achieved the goals? Have we worked correctly?

That's what we can improve!



Definitions

•, media) Quality assurance (QA)

System designed to continuously improve the reliability and efficiency of laboratory services. Includes internal quality control, external quality assessment, and quality improvement.

• Quality control (QC)

Includes all means by which the TB laboratory controls operations (instrument checks, checking new lots of staining solutions, reagents.



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In summary

- Quality management is not new.
- Quality management grew from the good works of innovators who defined quality over a span of 80 years.
- Quality management is as applicable for the medical laboratory as it is for manufacturing and industry.

Key Messages

- A laboratory is a complex system and all aspects must function properly to achieve quality.
- Approaches to implementation will vary with local situation.
- Start with the easiest, implement in stepwise process.
- Ultimately, all quality management system elements must be addressed.



References

- Recommended list of e-books.
- <u>https://apps.who.int/iris/bitstream/handle/10665/44665/9789241548274_eng.pdf;jsessionid=86699B950C</u>
 <u>2CBD7E7EB268F807CEEFDA?sequence=1</u>
- <u>https://books.google.co.in/books?id=FQaOq7Tuc_cC&printsec=frontcover&dq=Laboratory+Quality+Management&hl=en&sa=X&ved=0ahUKEwiSh9u18czjAhXFF3IKHcBgAF4Q6AEILDAB#v=onepage&q=Laboratory%20Quality%20Management&f=false</u>
- <u>https://books.google.co.in/books?id=vGLa5Dy2d24C&printsec=frontcover&dq=Laboratory+Quality+Management&hl=en&sa=X&ved=OahUKEwiSh9u18czjAhXFF3IKHcBgAF4Q6AEIMTAC#v=onepage&q=Laboratory%20 Quality%20Management&f=false</u>