Internal quality assurance scheme

**Importance**: ensuring the reliability and consistency of results.

**Definition:** An Internal Quality Assurance (IQA) scheme is a laboratory quality management process to check the reliabiltiy and consistency of results

**Methodology**: IQA is typically measured by the routine reprocessing of a sample. Clinical specimens are anonymously re-introduced through the diagnostic laboratory process.

**Objectives**

\* To ensure that laboratory processes operate at an acceptable level.

\* To monitor the performance and consistency of staff and test procedures.

\* To facilitate investigation of discrepancies and prompt changes in practice to improve consistency.

**Benefits**

* **Ensure the laboratory is providing a reproducible service**
* **Learning for staff**

**Importance:** Participation in IQA programs is considered essential for diagnostic laboratories.

## External quality assurance scheme

* aka proficiency testing
* **Importance**: ensuring consistency and reliability in diagnostic testing.
* **Definition**:
  + objectively assesses a laboratory's competence by comparing its testing results to an external source.
  + an external body provides specimens with known, but undisclosed, contents for analysis.
* **Objectives**:
  + To ensure inter-laboratory comparability and standardization of diagnostic testing.
  + To serve as an educational tool for laboratories and staff.
  + To monitor the effectiveness of a laboratory's quality assurance measures.
  + To identify and help remedy problems, leading to continuous quality improvement.
* **Benefits**:
  + Provides objective evidence of testing pathway efficacy.
  + Highlights systematic problems in equipment or operations.
  + Can prompt re-evaluation of laboratory methodologies, such as adopting new technologies
  + Supports staff training and improves identification skills
* **Implementation**:
  + samples must be treated identically to routine samples.