Continuous Quality Improvement in HIV Service Delivery

September 2022

Outline

- What is Quality Improvement?
- Background and Rationale for QI in Kenya
- What is CQI?
- Dimensions of Quality
- Quality Improvement principles
- PDSA Improvement cycle model
- Case Study

WHAT IS QUALITY IMPROVEMENT ?

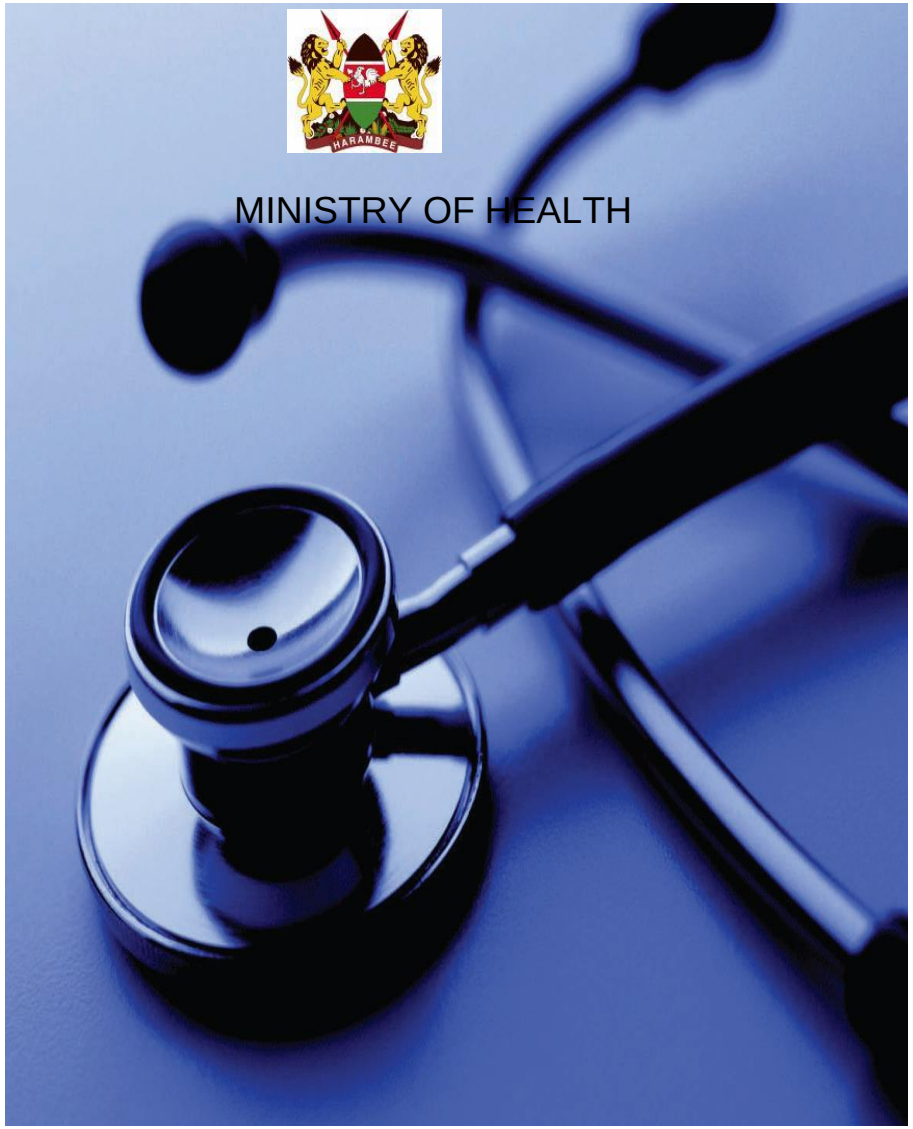
Quality improvement is...

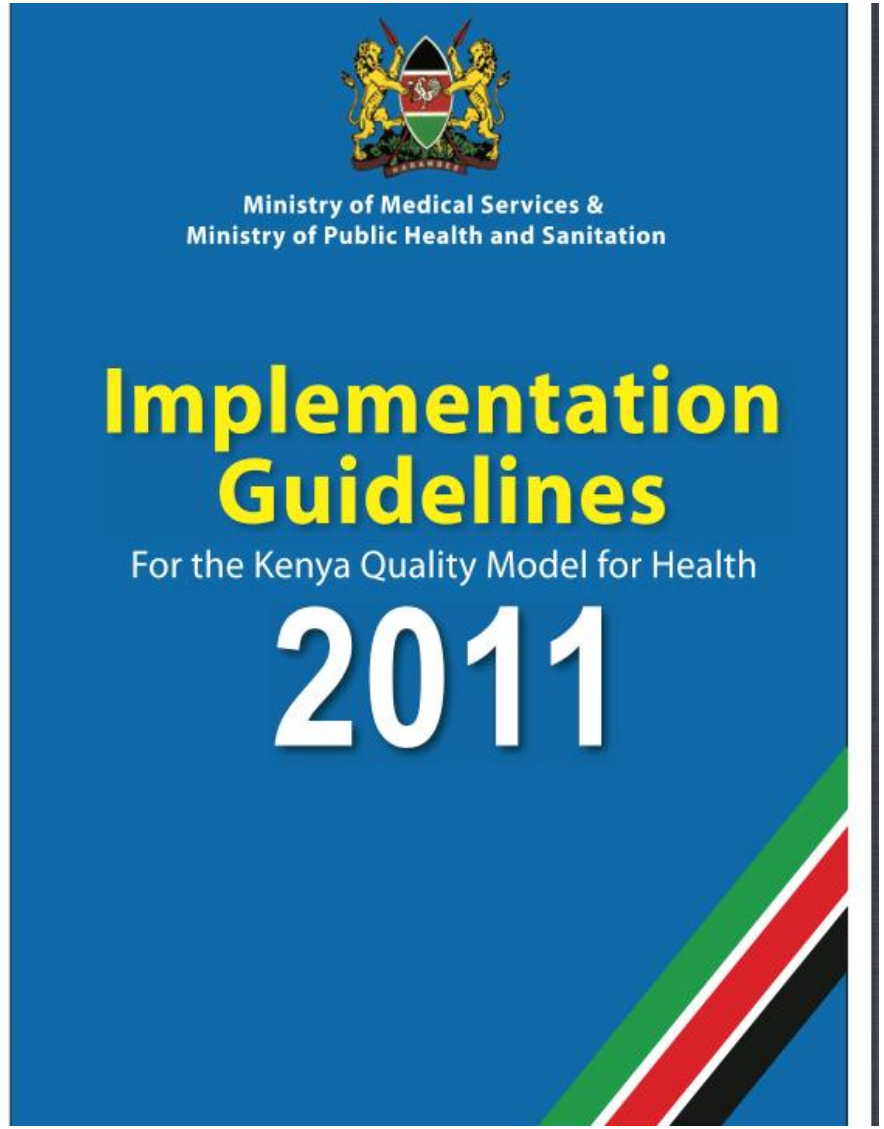
A systematic process of assessing performance of a health system and its services, identify gaps and causes, and introducing measures to improve quality and monitoring the impact

Why use Quality Improvement?

- Recognizes the **value and voice of the client**
- Many urgently needed Health Care interventions are new and complex (**technological advancement**)
- Systematic QI approach supports uniform and quality implementation while ensuring adherence to national health guidelines and client satisfaction (**equity**)
- QI promotes advocacy, ownership and support through the national and devolved systems at all levels (**self confidence**)
- Change starts at the source – by health care workers at point of care

Lack of a well defined QI framework, infrastructure, and limited focus on institutionalization and sustainability through existing systems led to development of the **Kenya Quality Model for Health (KQMH)**





Kenya Quality Model for Health 2009

What is Kenya Quality Model for Health (KQMH) ?

- **Conceptual framework** for an Integrated Approach to improved quality of health care.
- Provides a framework for **holistically and systematically addressing** a range of organizational quality issues with the main aim of delivering a positive health impact.
- The KQMH embraces the 5S, CQI (Continuous Quality Improvement) and Total Quality Management (TQM) improvement model

What is Continuous Quality Improvement?

- CQI is an approach that seeks to achieve small, incremental changes in the processes of service provision in order to improve efficiency and quality in health care.
- It focuses on improving health service systems and processes
- Health systems can apply the Improvement cycle Model in health services provision to improve the quality of health care.

Rationale for CQI in HIV Service provision

- HIV QI Framework has been anchored onto KQMH.
- Integration of CQI in HIV services applies Quality improvement models such as the PDSA model as described in the KHQIF.

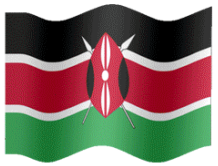
REPUBLIC OF KENYA
MINISTRY OF HEALTH

Kenya HIV
Quality Improvement
Framework
(KHQIF)

2014

Dimensions of Quality

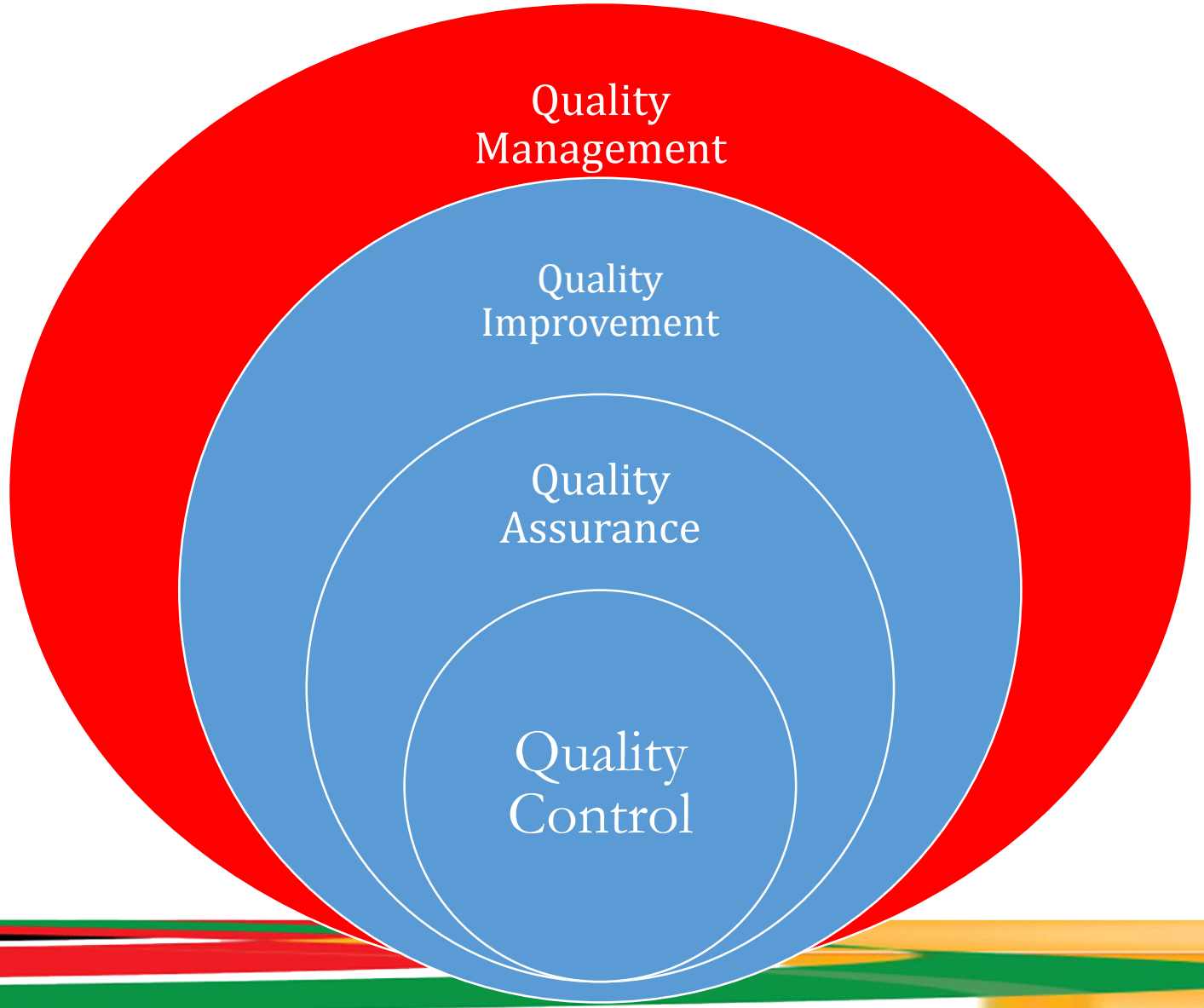
- A health care system should address all dimensions of quality
- KHQIF is aligned with the six quality of care domains prescribed by the World Health Organization



Quality Dimensions (Adapted from WHO)

Safety	The avoidance or reduction to acceptable limits of actual or potential harm from health care management or the environment in which health care is delivered
Accessibility	Obtaining health care that is timely, geographically reasonable, and provided in a setting where skills and resources are appropriate to medical need
Effectiveness	Care, intervention or action achieves desired outcome
Efficiency	Achieving desired results with the most cost-effective use of resources
Acceptability/patient-centeredness	Service provides respect and is client orientated; respect for dignity, confidentiality, participation in choices, promptness, quality of amenities, access to social support networks and choice of provider
Equity	Delivering health care which does not vary in quality because of personal characteristics such as gender, race, ethnicity, geographical location, or socioeconomic status

Quality: Concepts View Point



Definitions: QC, QA, QI, and QM

- **QC:** Identify problems based on established benchmarks
  - *a product-based reactive, or corrective approach of checking and ensuring that items conform to specific standards*

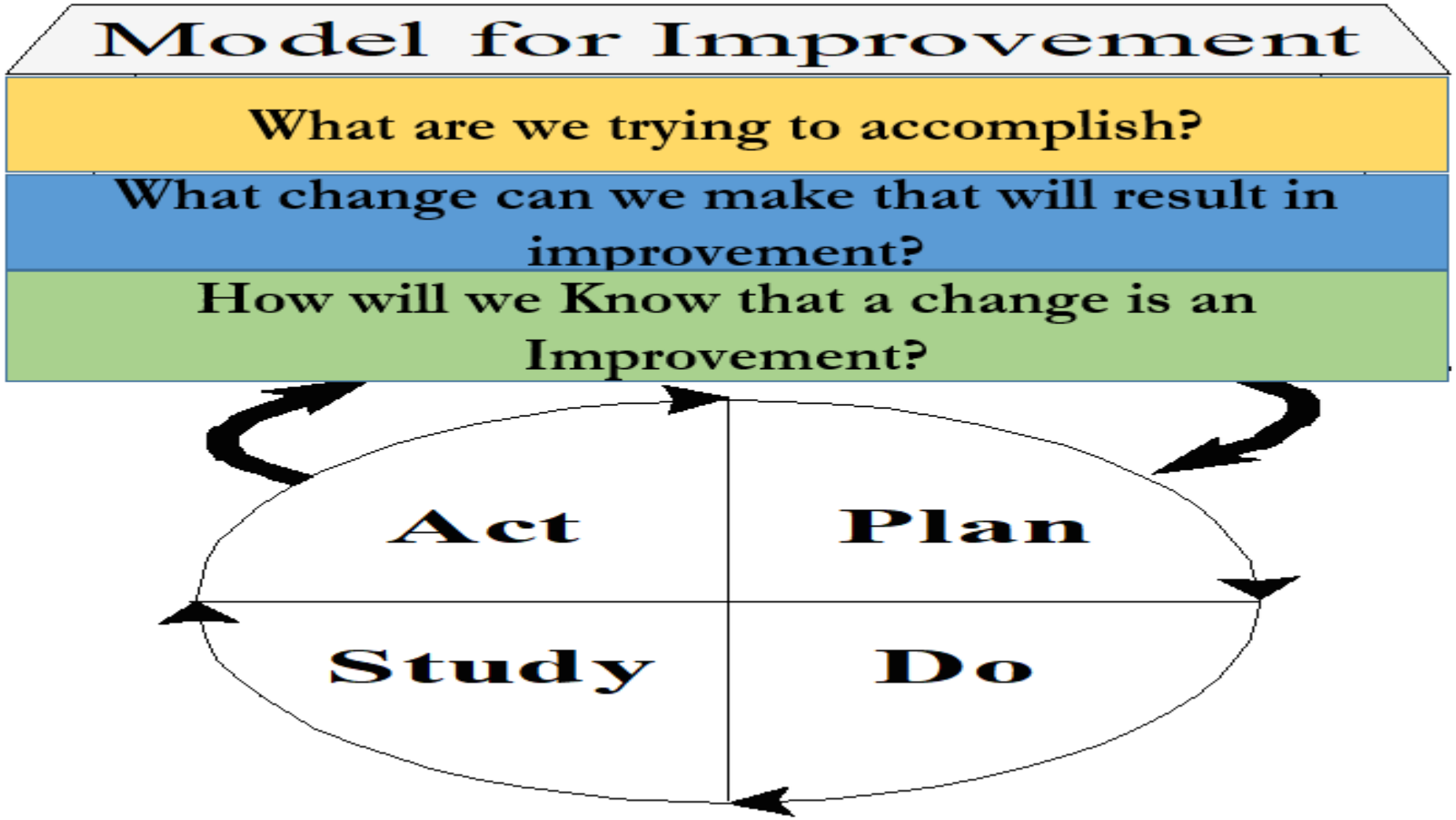
- **QA**: Prevent problems based on established benchmarks
  - *a process oriented to guaranteeing that the quality of a product or a service meets some predetermined standard*

- **QI:** Raising the quality of a product or service beyond current standard
  - *a process of incrementally improving quality of a product or service beyond current standard*
- **QM:** Coordinating activities and infrastructure within an organization
  - *-- a management model designed to support the activities that address quality and institutionalize change*

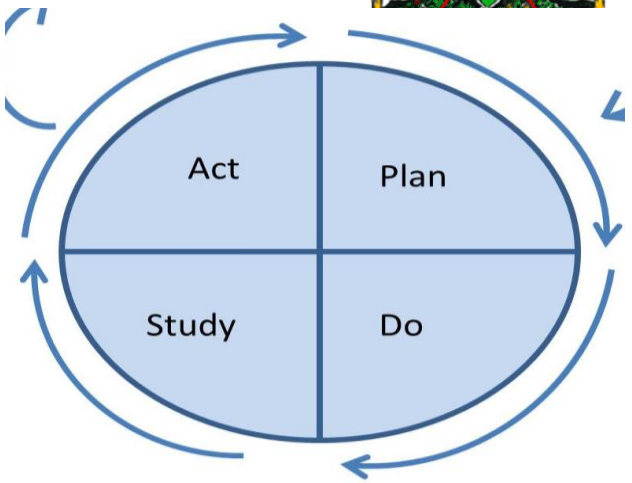
Principles of Quality Improvement

- Leadership
- Customer orientation
- Involvement of people and stakeholders
- Systems approach to management
- Process orientation
- Continuous quality improvement
- Evidence-based decision making

PDSA Improvement Cycle



What is Plan, Do, Study, Act (PDSA) cycle?



The PDSA cycle is a repetitive four stage problem solving model used for improving a process or carrying out changes

- ✓Identifying problems and analysing
- ✓Implementing identified changes,
- ✓Measuring the effects of changes
- ✓Decide whether to abandon, modify or implement the change.

PLAN

a) Problem identification

b) Goal setting

c) Root cause analysis/Problem analysis

d) Activity planning and resource allocation

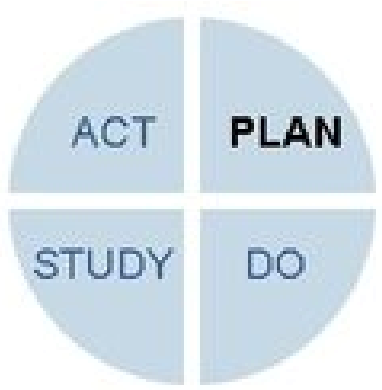
e) Performance measurement plan

PLAN: a) Problem Identification

- Ways to identify problems

  - ✓Review performance measurement (routine data, QI file reviews
  - ✓Client satisfaction surveys
  - ✓Organizational assessments

- Develop a problem statement



Plan: b) Goal Setting

A goal is a clear statement of the intended improvement and how it is to be measured

Your goal should:

- **Answer the question, "What do you want to accomplish?"**
- Be **measurable**
- **Be short** so that everyone can remember it
- Does ***NOT*** include ***HOW*** you will achieve goal
- Should have a **beginning** and **end date**

PLAN: c) Root Cause Analysis

Gain deeper understanding of the opportunity for improvement before considering changes

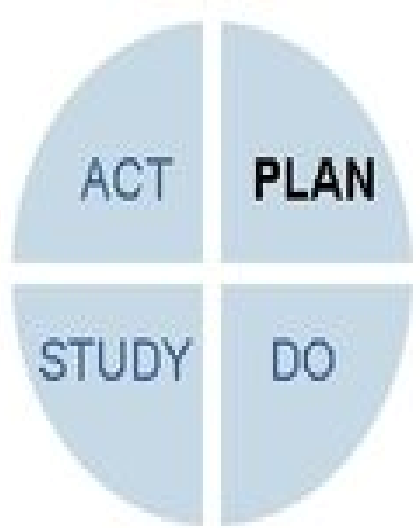
- **Analysis should include**
  - Use of existing data or collecting additional data
  - Drawing flow charts or process analysis diagrams, 5-whys, fishbone diagrams

PLAN: d) Activity planning/ Change package development

- When enough data has been collected to develop hypotheses about what changes or interventions might improve the **existing** problem

- Use information gathered from previous steps (identify and analyze) to explore and decide which changes would result in QI

- Remember to allocate resources/ responsibilities as needed

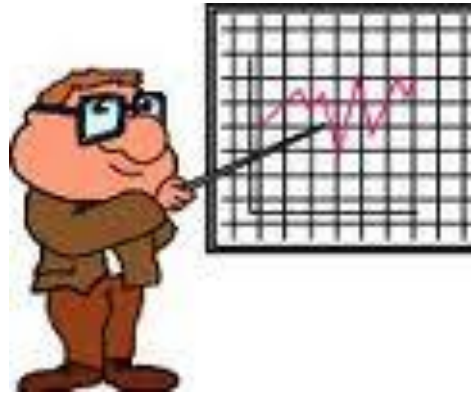


PLAN: e) Performance measurement

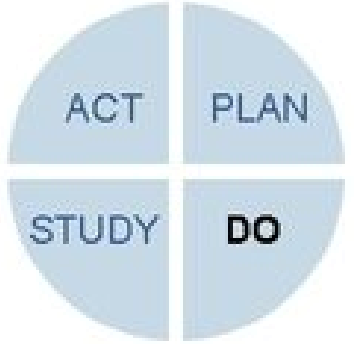
NB: Not every change leads to an improvement

- Proposed solutions need to be tested before institutionalization to see if they lead to expected improvement

- Therefore, a performance measurement plan needs to be put in place…
  - ✓ How will we know that the change led to improvement?
  - ✓ How should we measure the effect of the change?
  - ✓ How will we collect the required data and document?



DO: Implement the change



- Implement the change package

- Collect data regularly according to the performance measurement plan.

STUDY

Learn from the data collected during the 'Do' stage.

- Did the results match the theory/predictions?
- Is there an improvement? If yes, by how much?
- Are there trends?
- Are there any unintended side effects?
- Is the process more difficult using new methods?
- Is the change scalable?

Note: Studying should go on continuously throughout the improvement cycle.

ACT

Your responses derived from the Study stage define the tasks for the Act stage.

- The change was successful and should be adopted – follow the steps outlined under the maintenance phase institutionalize and sustain the change

OR

- The process has not improved – you should review the change to determine reasons for poor performance, refine the process, and plan another test cycle

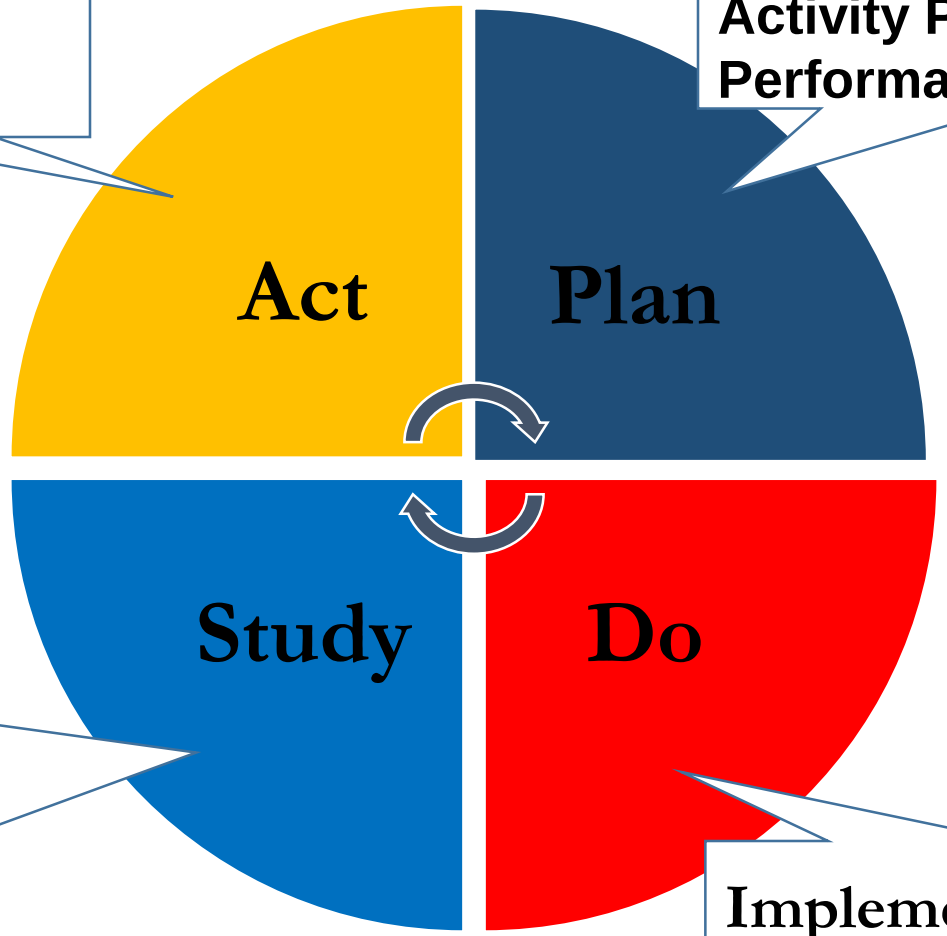
Examples of QI Tools

QI Tools	Problem Identification	Problem Prioritization	Problem Analysis	Activity Planning and Implementation	Measuring Change Impact and Monitoring progress
Bar graphs, Pie Charts	x				
Brainstorming	x				
Multi-voting	x				
Decision Matrix		x			
5 - Whys			x		
Flow chart/Process maps	X		x		
Cause and Effect diagram (Fishbone)			x		
Tree diagram and Matrix				x	
Action plan Template				x	
Time plot, run chart					x

What did we learn?

What can we predict?

Problem Identification
Goal Setting
Root Cause Analysis
Activity Planning
Performance Measurement

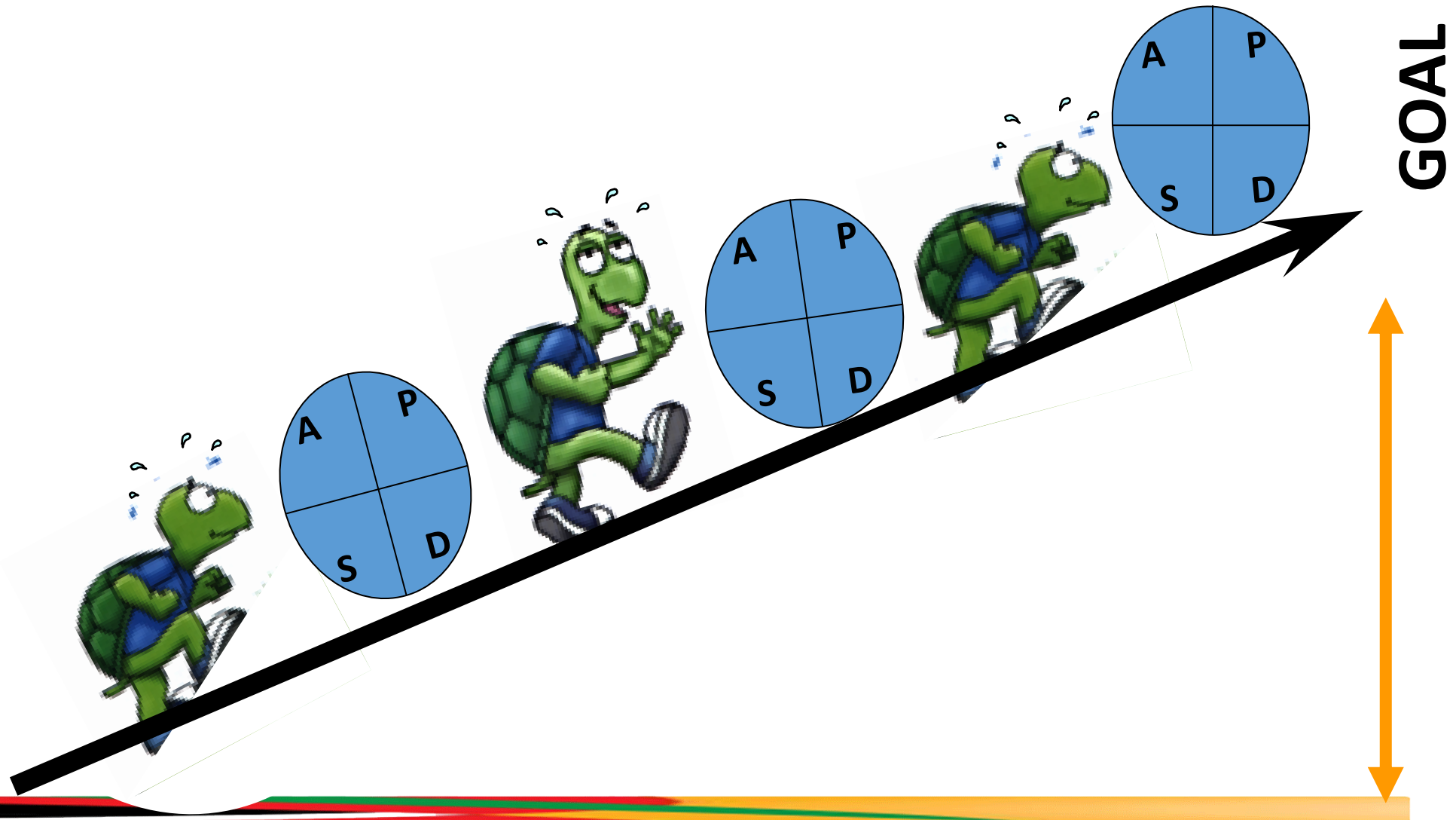


Observe the effects of the change:
Use data, data, and data

Implement the change
Collect data

(CQI)

INCREMENTAL BUT CONTINUOUS PROGRESS



Case study in CQI Application

Case study in CQI Application- Refer to the Participants' workbook.