UCSF Malaria Elimination Initiative (MEI)

Module 3: Solution Generation and Challenge Resolution

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Performance Measurement

Learning Objectives

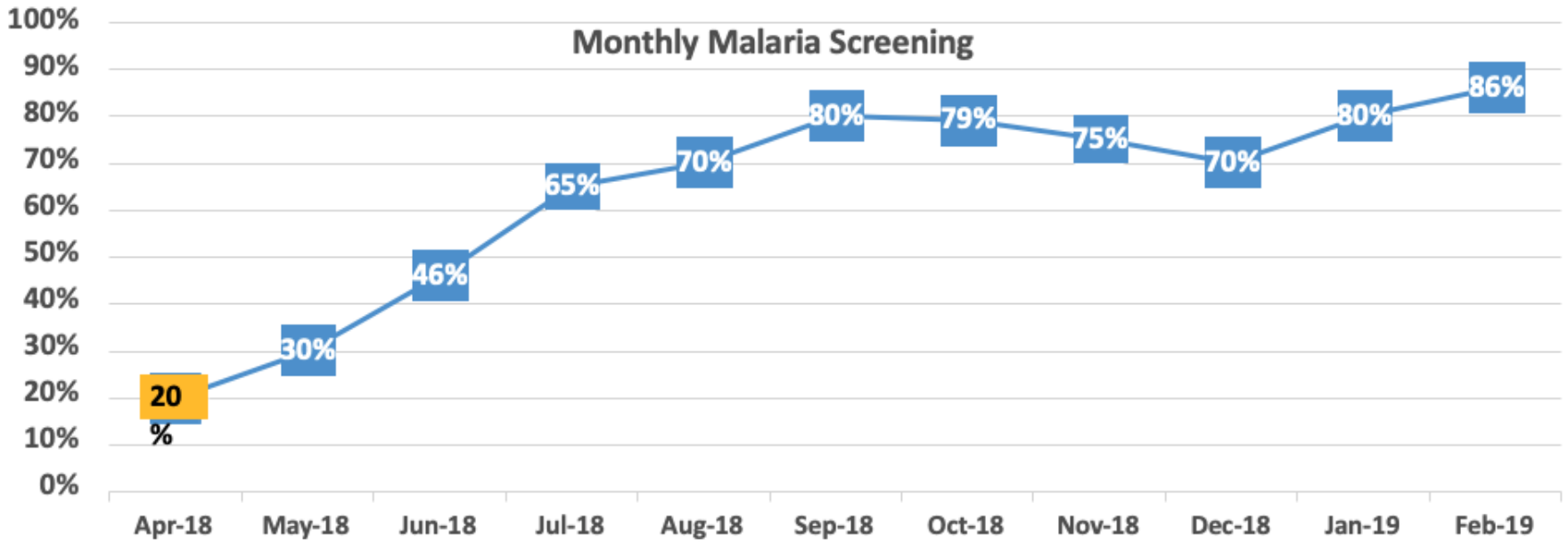
- Understand the importance of performance measurement (PM)
- Understand the types of data
- Understand how to develop performance indicators

What is performance measurement?

- Collecting data, analyzing and reporting information regarding the performance of anything

So why is it important to measure?

- Separates what you think is happening from what is
- Establishes a baseline and shows progress over time



What is data?

- Information such as numbers, words or observations that represents activities done
  - Examples:
    - Number of people who visited a clinic on Friday
    - Comments from the suggestion box
- Data are the voice of the system

Quantitative Data: Counting Things

5 Jelly Beans or

1 Red Jelly Bean

1 Green Jelly Bean 1 Orange Jelly Bean

1 Pink Jelly Bean

1 Purple Jelly Bean

Quantitative Data: Describing Things

- There are red, green, orange, pink and purple Jelly Beans
- Each of the Jelly Beans is oval shaped and about the same size
- They all taste delicious

Which one is an example of quantitative data?

- Number of people who visit the clinic on Friday
- Comments from the suggestion box

Group Activity: Types of Data

10 minutes discussion, 10 minutes feedback

- Step 1: Form small groups
- Step 2: Select 2 people (Scribe/ Presenter) in your small group
- Step 3: Members of each small group should work together to come up with examples of quantitate and qualitative data
- Step 4: The Scribe is responsible for writing the examples agreed upon
- Step 5: The Presenter is responsible for reporting back to the larger group
- The group with the most examples wins!

Performance Measurement and Quality Improvement

You can’t improve what you can’t measure.

Reasons to Measure in Health Care

- It shows where the challenges are
- It shows whether there is improvement
- Separates what you think is happening from what really is happening
- Shows the starting point
- Helps in identifying problems as they appear
- Allows for comparison across healthcare facilities and regions

Performance Measurement vs. Standards of Care

- Performance measurement = an indication of the healthcare organization's performance
- Standard of care = the expected quality of care that should be given to everyone

What is an indicator?

- Shows the true state or level of something
- There are different types of indicators such as:
  - Time
  - Speed
  - Temperature
  - Weight

What is a quality indicator?

- A quality indicator shows what is happening and if the set of standards are met
- Examples:
  - IRS of all targeted structures 100%
  - Test all suspected malaria cases 100%
  - Treat all confirmed malaria cases 100%

Characteristics of a Good Quality of Care Indicator

- Relevance
  - Does the indicator relate to a condition that occurs frequently or have a great impact on your program?
- Measurability
  - Can the indicator realistically and efficiently be measured?
- Accuracy
  - Is the indicator based on acceptable standards or guidelines?
- Achievable
  - Can the performance rate associated with the indicator realistically be improved?
- Time bound
  - Does it apply to services provided within a defined period?

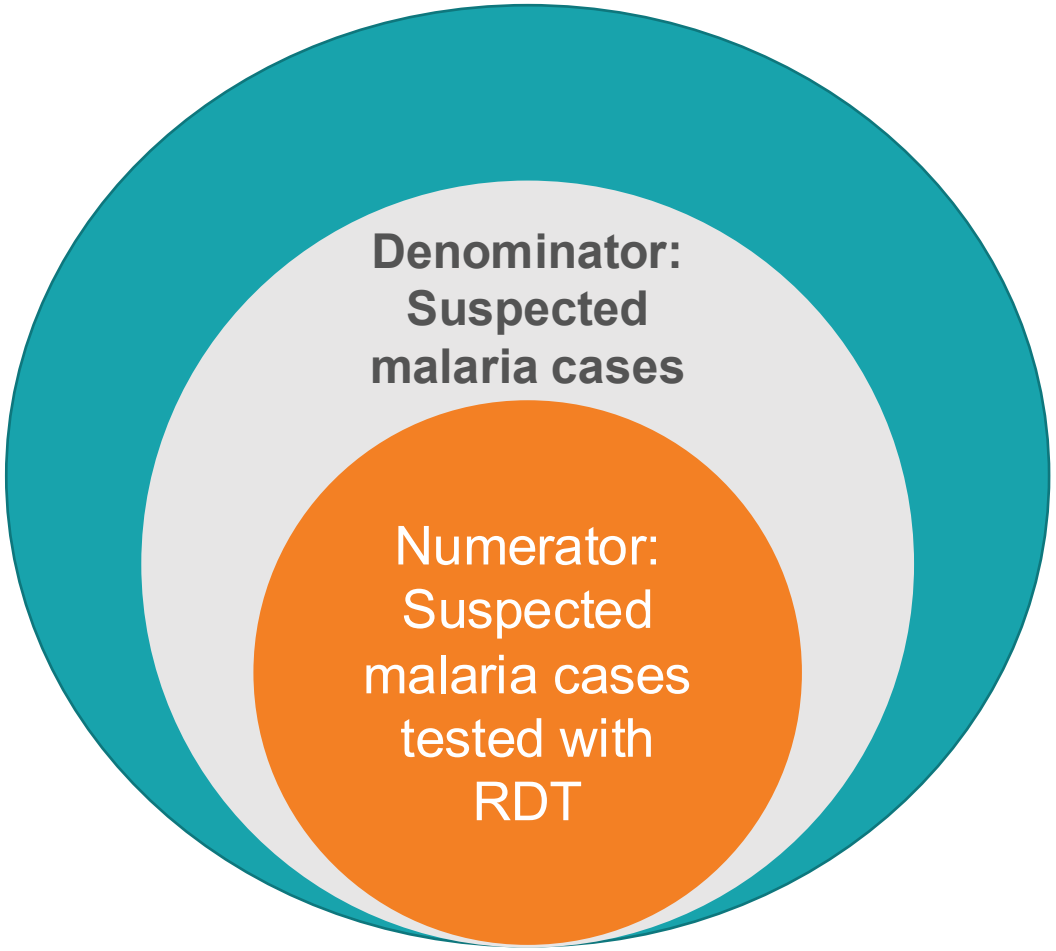
Development of an Indicator

- Specify the reasonable requirement for care
- Define the measurement population
  - Gender
  - Age
- Define the time-frame
  - 1 week
  - 3 months
- Define the indicator as a question
  - What is the Hepatitis B vaccination coverage of health care workers in the facility or region?

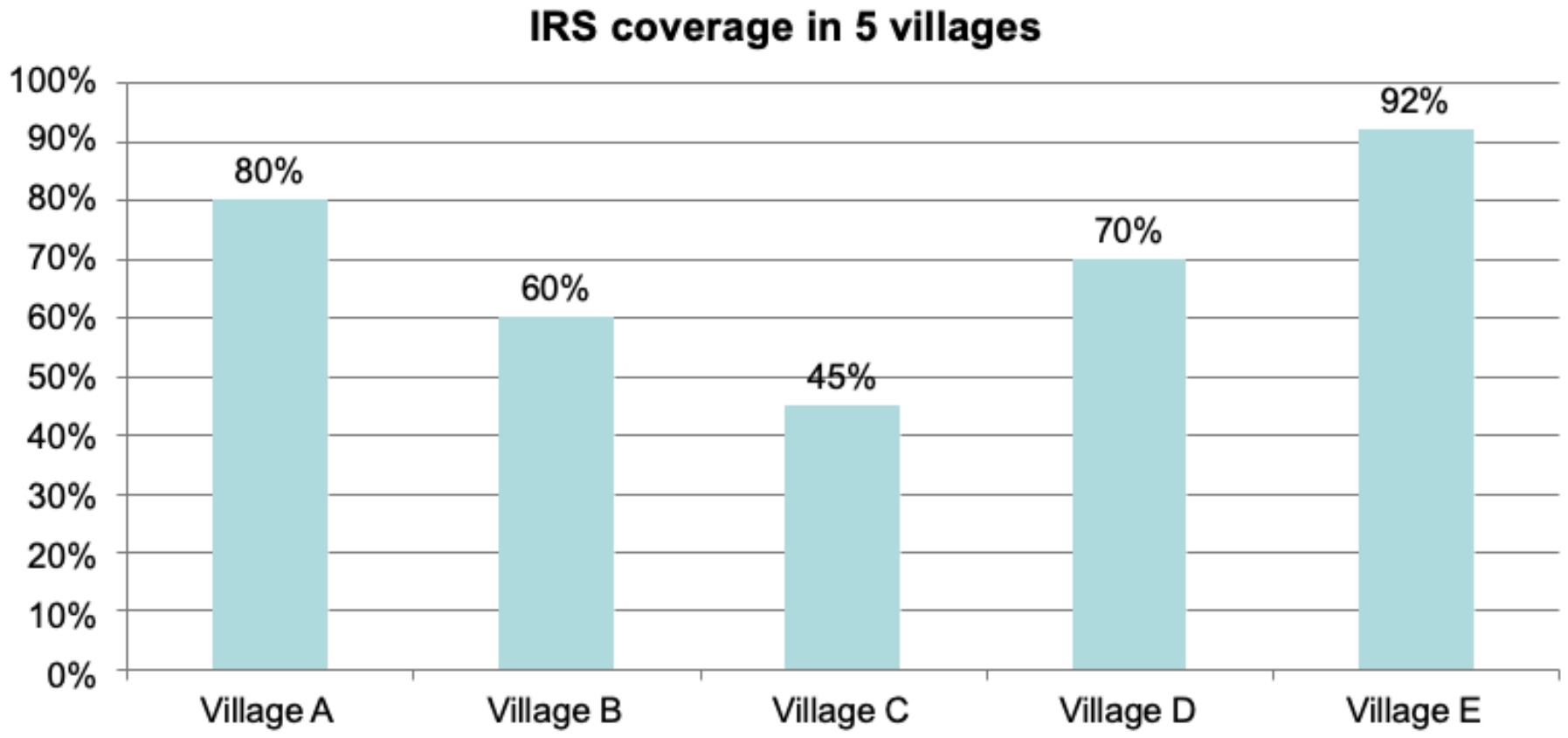
Examples of Indicator Development

- Specify the reasonable requirements for care (e.g. All suspected malaria cases presented at the facility must be tested with RDT)
- Set the denominator
  - Specify which cases should be getting care
    - Suspected malaria cases presented at the facility
- Set the numerator
  - Which suspected malaria cases got the care/ tested?
    - The number of suspected malaria cases tested with RDT

Summary: Indicator Development



How Indicators Can Be Displayed



Key Points

- Performance measurement is important in order to improve quality of healthcare services
- There are two types of data: qualitative and quantitative
- Indicators measure the true state or level of something
- Quality indicators measure specific aspects of healthcare

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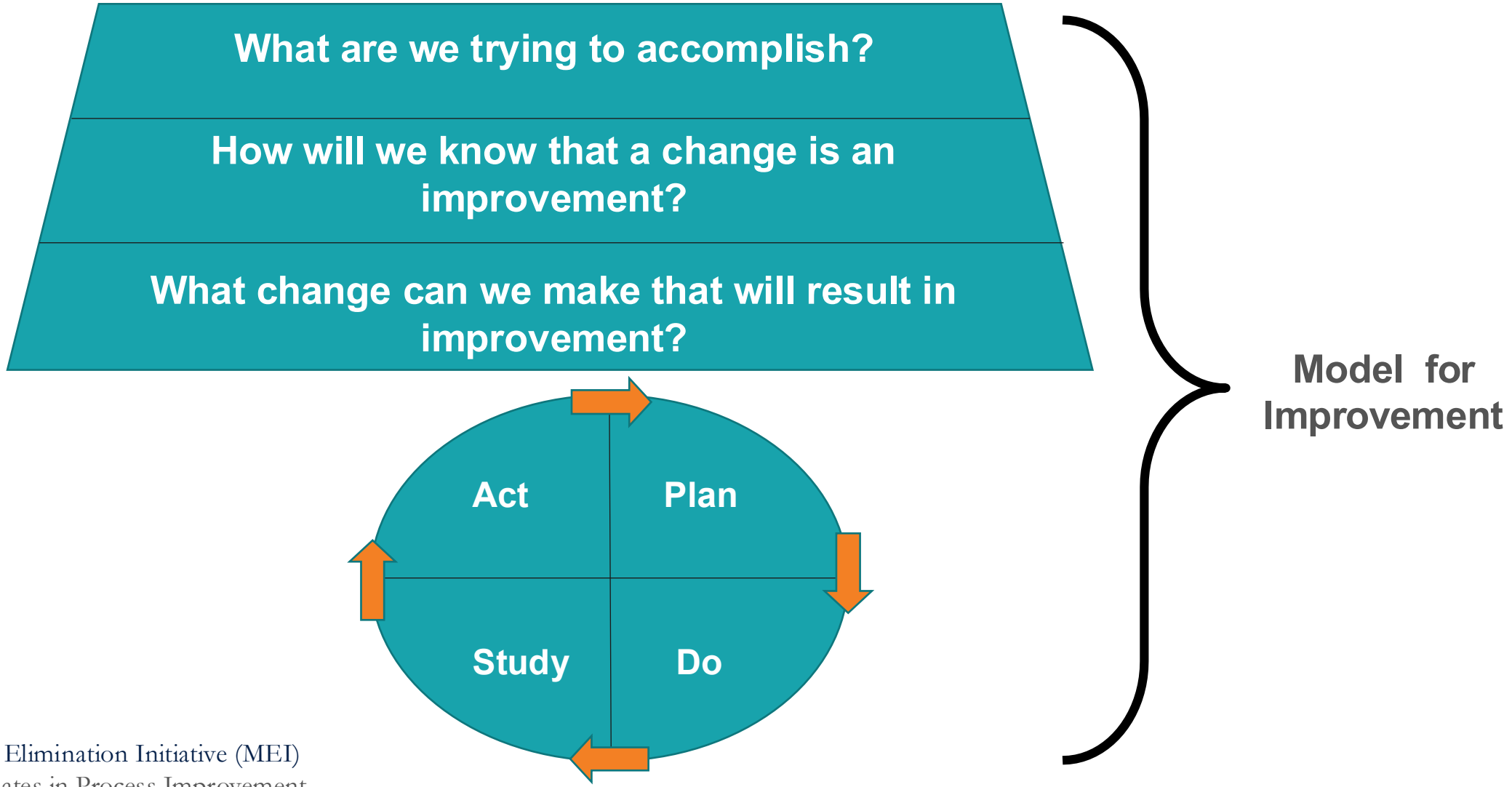
Model for Improvement

Model for Improvement



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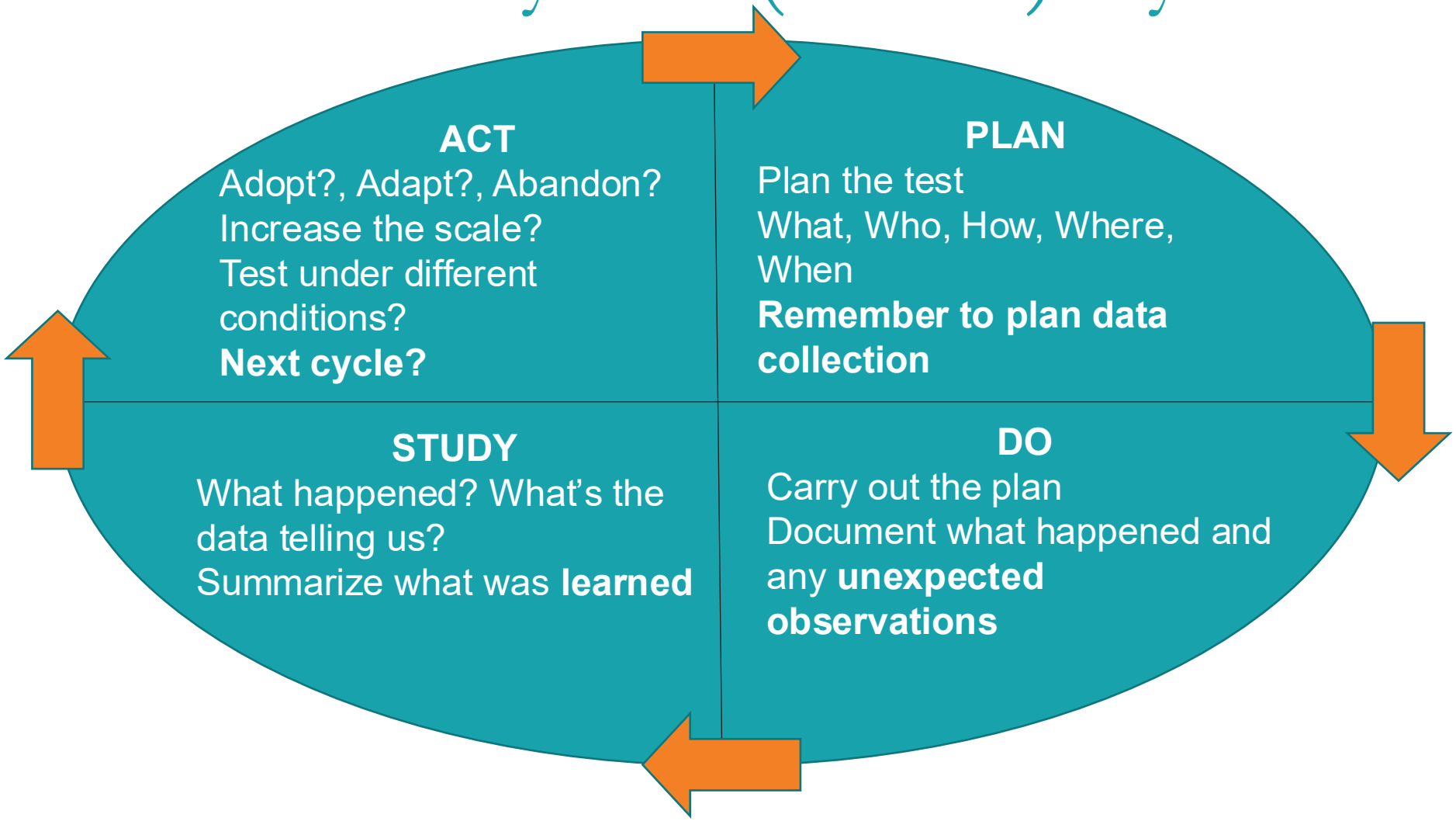
Source: Associates in Process Improvement

The Plan-Do-Study-Act (PDSA) Cycle

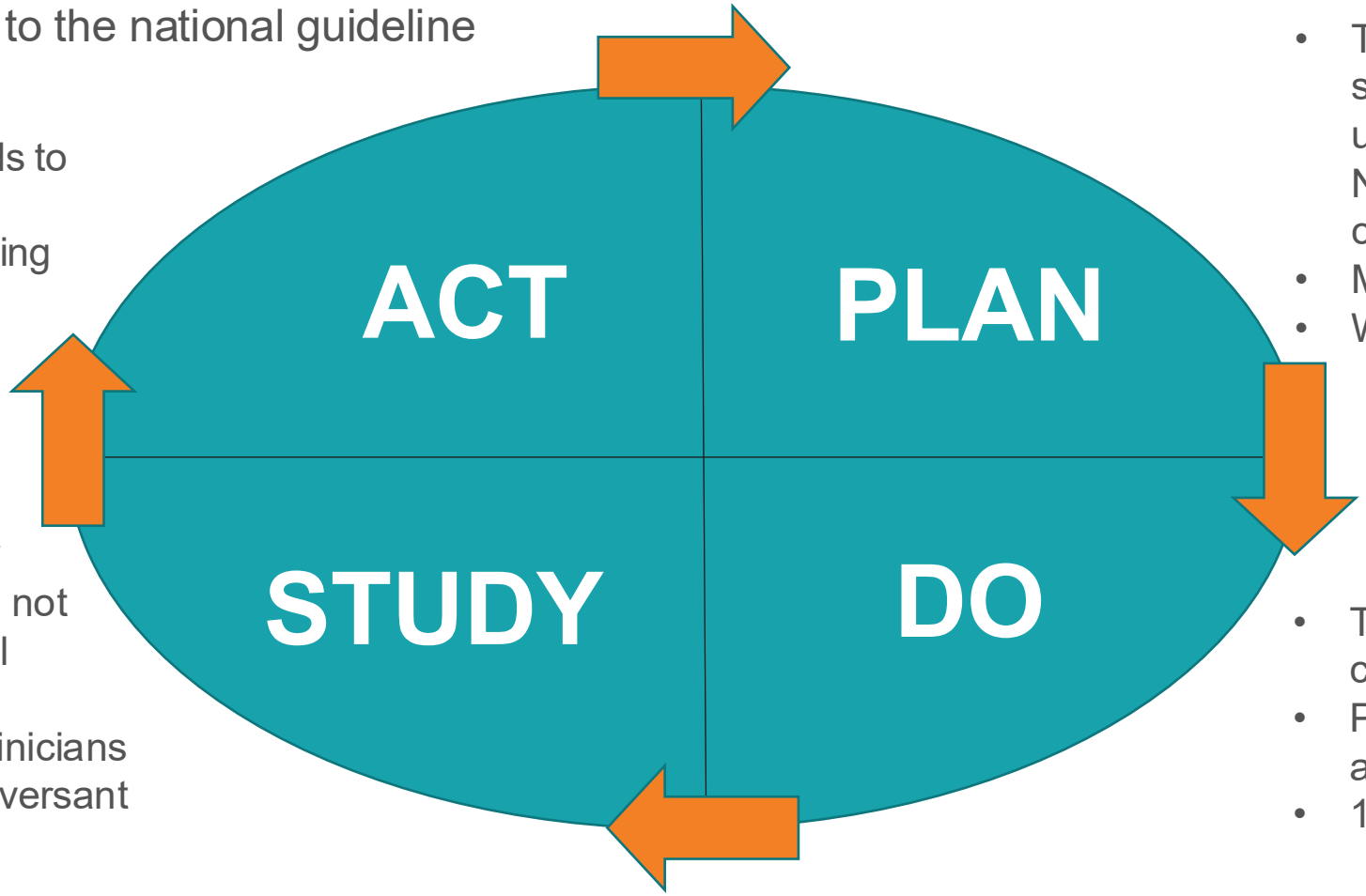


Source: Associates in Process Improvement

Example of a PDSA Cycle 1

Problem: Data shows that 70% patients with confirmed malaria received appropriate anti-malaria treatment according to the national guideline

- The change idea needs to be adopted
- Provide refresher training to 4 clinicians
- Provide treatment algorithm



- TT Members to provide in-service training to 16/20 untrained clinicians (Drs, Nurses) in the facility on case management
- Mondays and Wednesdays
- Week: TBD

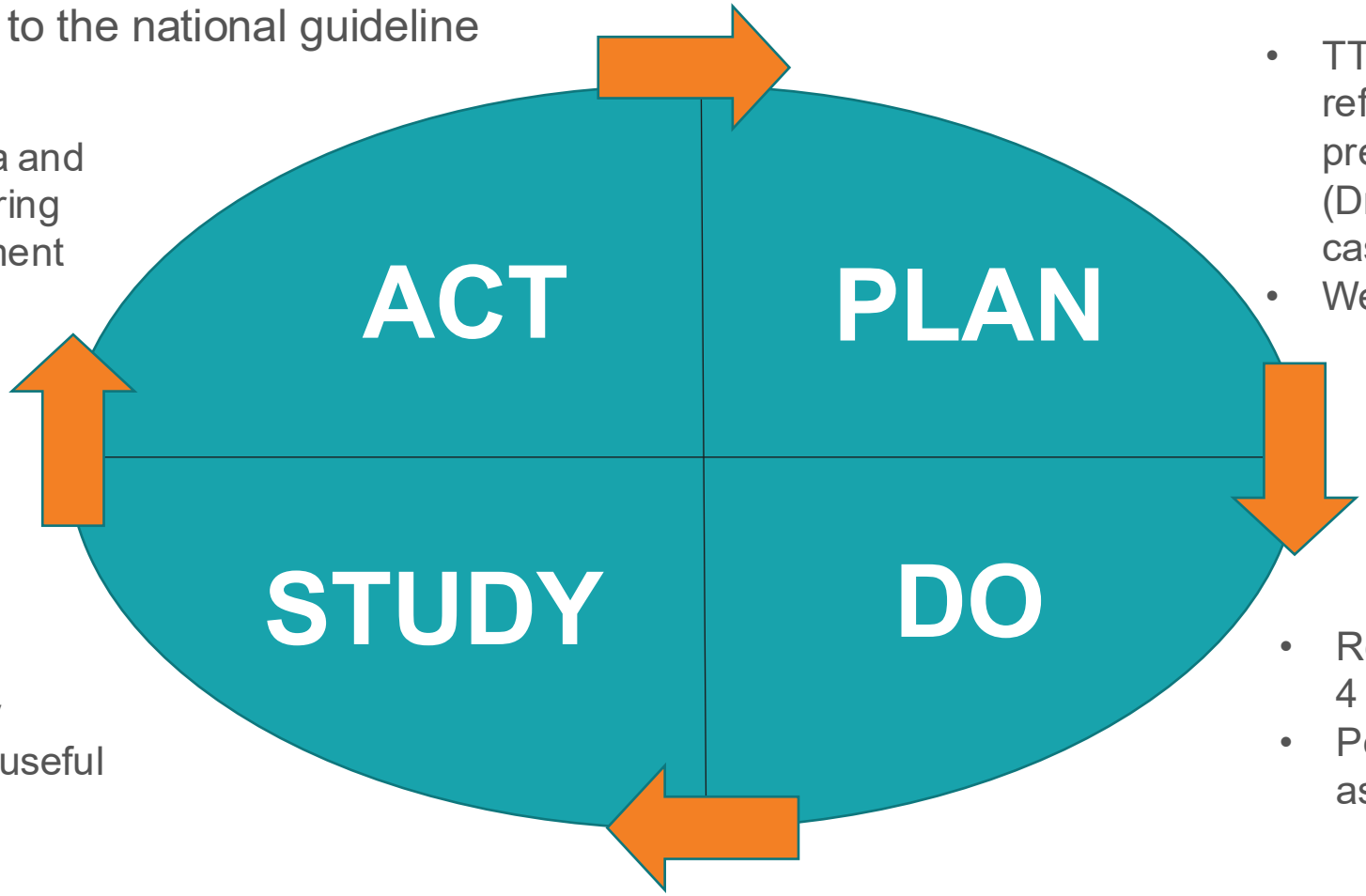
- 81% of malaria cases were treated correctly
- Treatment algorithm is not correctly followed in all cases
- 4 previously trained clinicians are not 100% conversant with Rx algorithm

- TT train a minimum of 4 clinicians weekly
- Perform pre-and post assessment
- 16 clinicians trained by date

Example of a PDSA Cycle 2

Problem: Data shows that 81% of patients with confirmed malaria received appropriate anti-malaria treatment according to the national guideline

- Adopt the change idea and continue close monitoring and regular measurement



- TT Members to provide refresher training to 4/20 previously trained clinicians (Drs, Nurses) in the facility on case management
- Week: TBD

- 92% of malaria cases were treated correctly
- Algorithm prove to be useful and appreciated

- Refresher training provided to 4 clinicians
- Perform pre-and post assessment

Why Test?

- Increases our confidence that the idea is leading to an improvement
- Enables us to observe a change under different conditions
- Allows successful adaptation of an idea
- Evaluates costs and unexpected consequences
- Minimizes resistance to implementation