



Continuous Quality Improvement in Health

Enhancing Health Outcomes Through
Systematic Improvement

Dr Tineke Water and Lisa Dolan Branton
(FHI360)

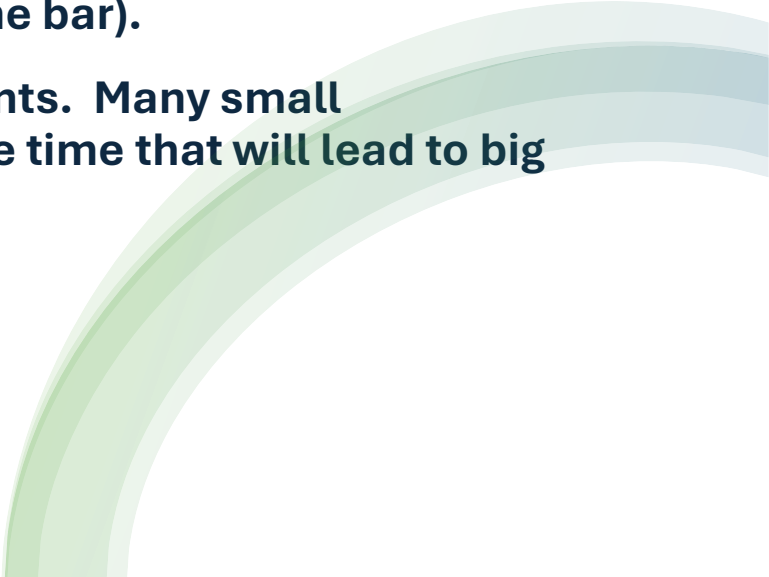
October 2024





Assumptions that underpin Continuous Quality Improvement (CQI)

Quality improvement of health systems is a journey, not a destination.

- We are always (continuously) improving quality.
 - It is a never-ending journey because we can always get better at what we do (raise the bar).
 - It is incremental improvements. Many small improvements happen all the time that will lead to big changes over time.
- 

Introduction to CQI in Health

1

Definition: CQI is a structured approach to improve health initiatives.

2

Goal: Increase effectiveness, reach, and sustainability of health programs/systems.

3

Importance: Adapts to changing community health needs and evidence-based practices.

Key Principles of CQI in Health



Community/stakeholder engagement: Involve stakeholders and the community in the process.



Evidence-Based Practices: Using data and research to guide decision making, program design and implementation (Socratic Triangle).



Iterative Process: Emphasize continuous assessment and adaptation.



Focus on Outcomes: Prioritize measurable health improvements.

Tools and Techniques in CQI

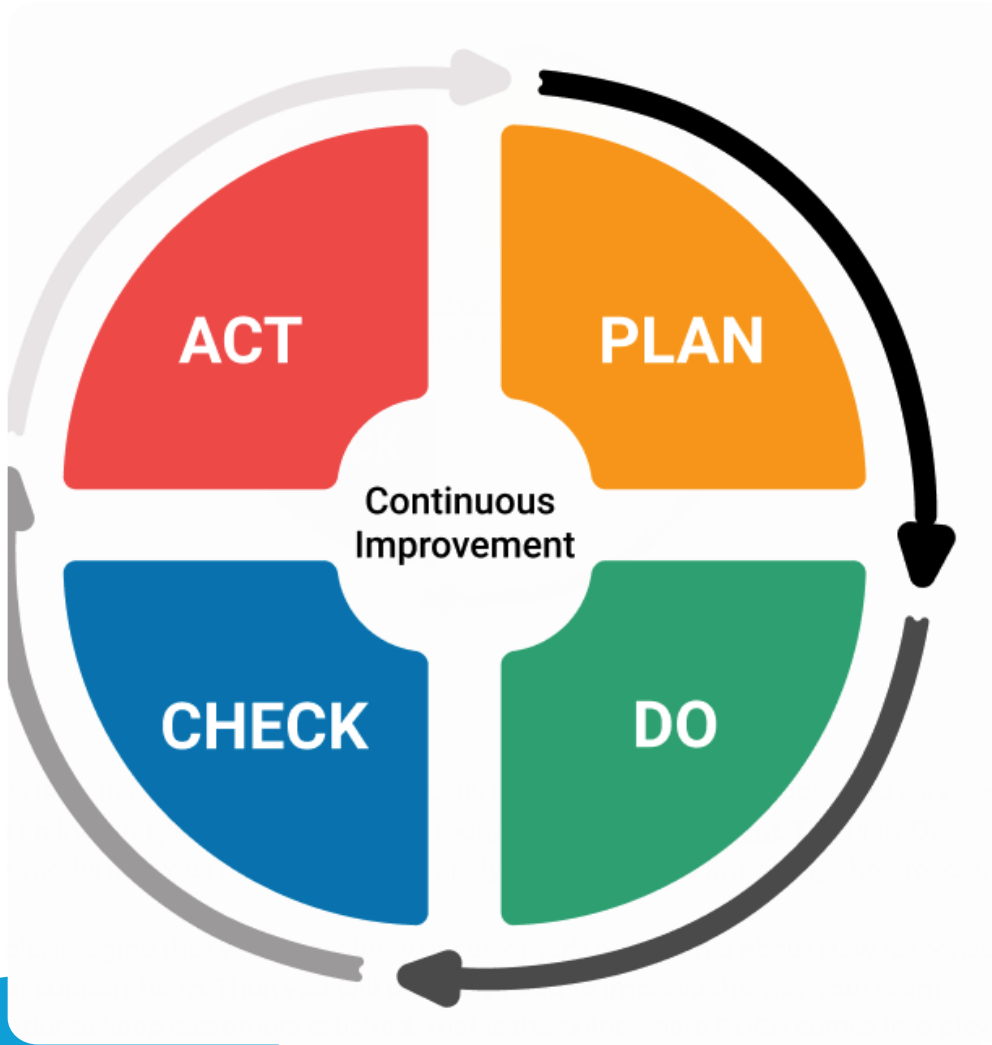
Root Cause Analysis: Why is this happening, who is it happening to, where is it happening, what is the impact?

Data for decision-making: What is the incidence or prevalence of the observed outcomes? What other data is needed? Gather community health data.

Flowcharts: Map out individual or community care processes (i.e. patient journey).

End-user perspectives: Gather feedback on the perspectives of different stakeholders (families, community, health professionals, organizations).

The CQI Cycle in Health



- **Plan:** Identify issues and set objectives (e.g., reduce high blood pressure rates). Use indicators to measure success (e.g., participation rates). Map out program activities, outputs, and outcomes.
- **Do:** Implement health promotion strategies (e.g., workplace BP checking).
- **Check (or Study):** Collect and analyze data on program effectiveness (i.e., how many BP checks; the number of positive screens).
- **Act:** Refine and adjust strategies based on evaluation.

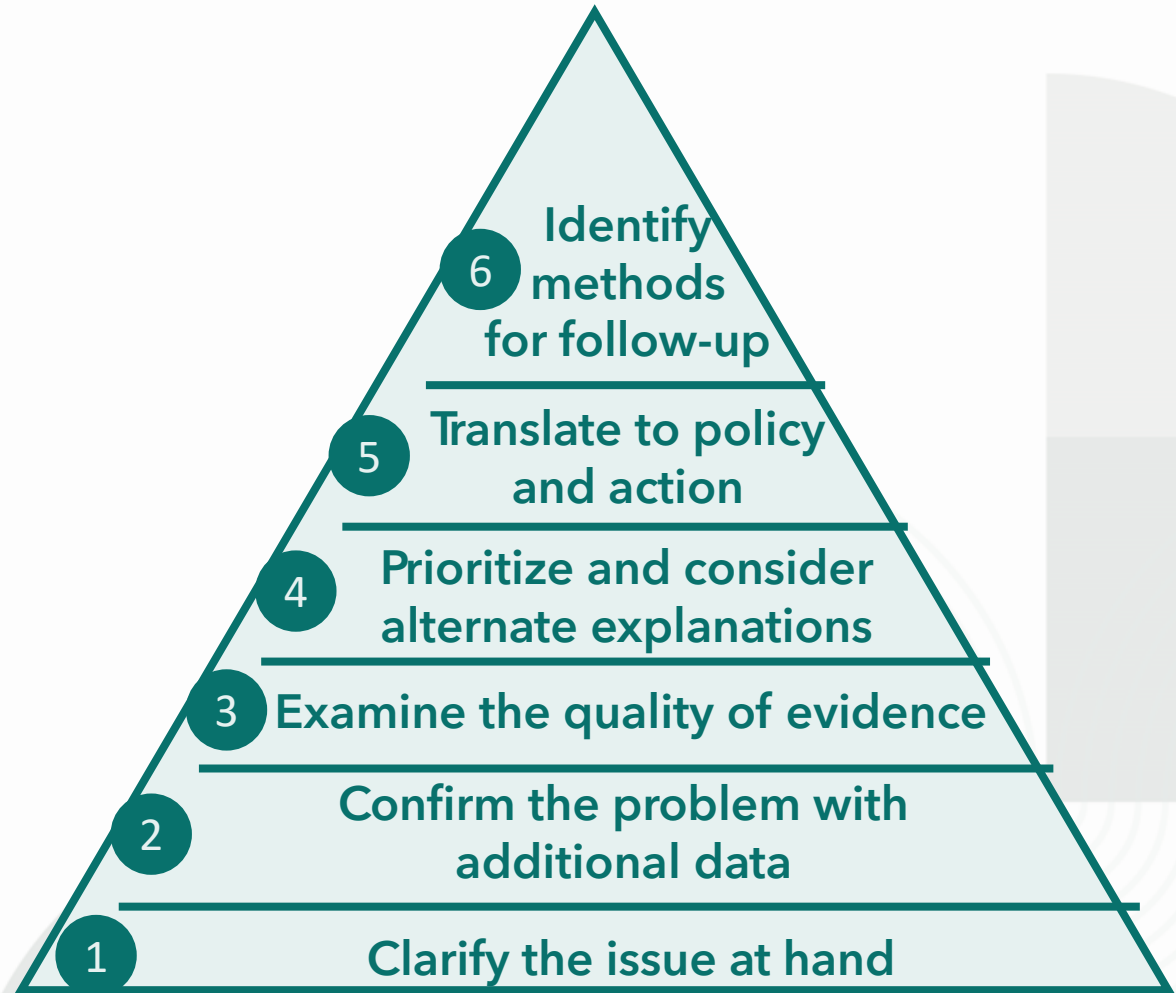
Key Performance Indicators (KPIs) in Health Promotion CQI

Participation Rates: Measure community engagement in programs (i.e. how many BP checks in the workplace).

Behavior Change Metrics: Track shifts in health behaviors (e.g., increased physical activity, nutrition, and stress management).

Health Outcomes: Assess changes in population health indicators (e.g., reduced incidence of hypertension).

Socratic lines of inquiry



Clarify issue at hand...(why, where, who, when...)

Rising congenital syphilis in Cambodia is a major public health concern.

Current Rates:

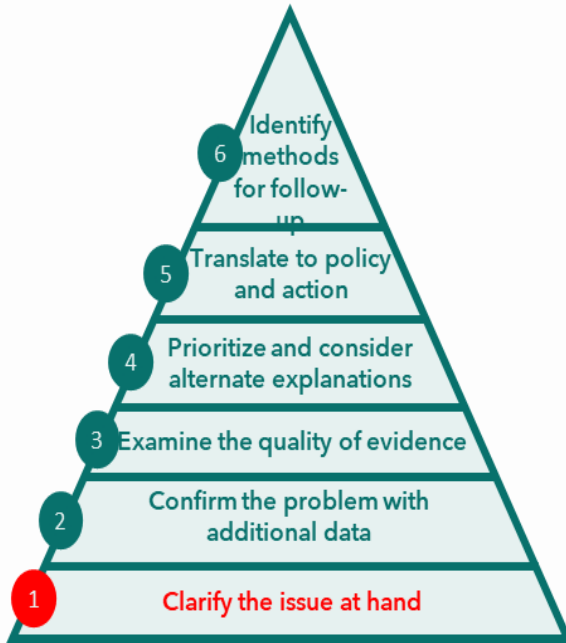
- Unknown but estimates (incidence and testing) suggest 3 – 10x increase since 2019.
- Increase in HIV and other STIs

Integration of mandatory Syphilis screening and treatment in ANC:

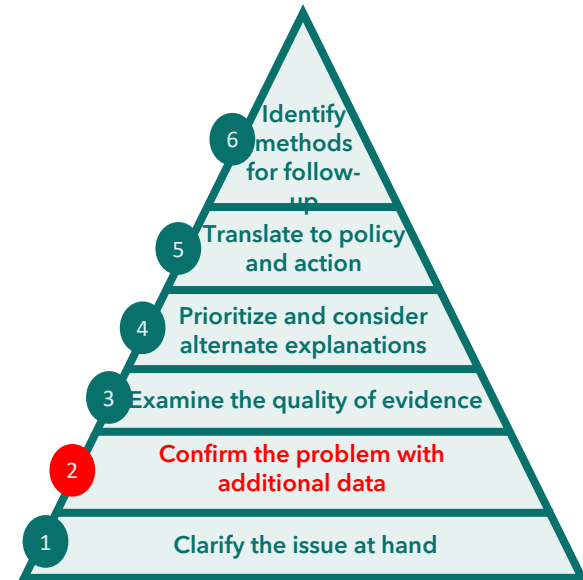
- Increase in women attending ANC (NSSF)
- Less than 75% of women tested
- Only 78% received any syphilis treatment: only 28% were treated with benzathine penicillin.
- Testing is not available in private health facilities.

Barriers to Prevention and Treatment:

- Poor Integration of the 2013 guidelines.
- Overlapping and unclear policies.
- Lack of staff skills/knowledge and inconsistent implementation of criteria/checklists.
- Human resources in health clinics – systemic care barriers.
- Lack of testing resources i.e. testing kits.
- Limited knowledge of patients, loss to follow-up.
- Limited in private settings (unclear how many women deliver privately)



Confirm the Problem with Additional Data



Prevalence Rates among Pregnant Women:

- Wide range in data – but only 75% of women tested.

Congenital Syphilis Cases:

- 69 cases in 2 hospitals.

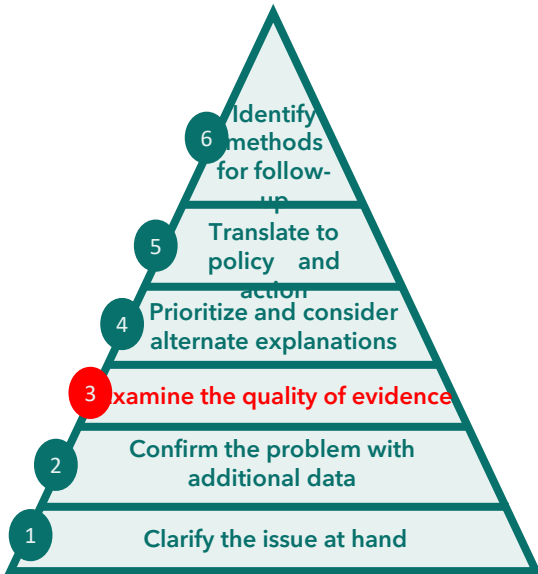
Healthcare Facility Capabilities:

- Lack of clinical guidelines for testing and treatment
- Lack of testing kits
- Lack of knowledge of health professionals and patients
-

Other Relevant Data Points:

- No regional data on congenital Syphilis rates
- No data on neonatal outcomes
- No data on testing or outcomes from private facilities
- Increase in other STIs
- Data not available on demographic characteristics of women most affected by syphilis

Examine the Quality of the Evidence



Types of Evidence:

- Scientific studies (global data)
- National HMIS/CDHS observational data
- Healthcare facility reports

Data Reliability:

- Data from national hospitals and HMIS/CDHS
- Syphilis screening in ANC services provides continuous data

Data Comprehensiveness:

- Broad trends in HMIS/CDHS reports (2017, 2019–2020)
- Insights from Calmette Hospital

Gaps and Inconsistencies:

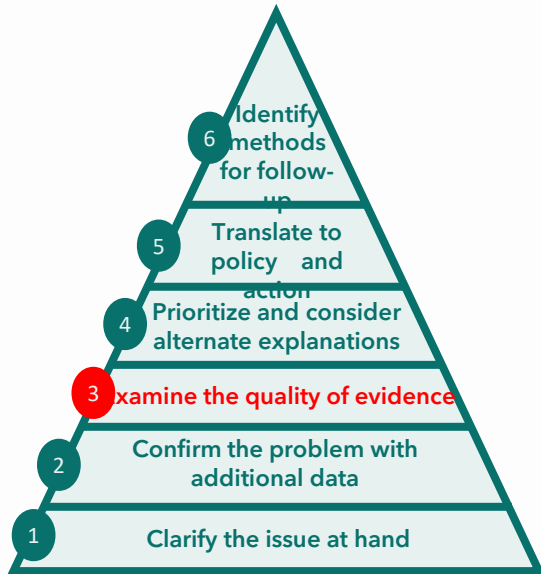
- Inconsistent tracking and treatment of exposed mothers/infants
- Limited data from private fac.
- Potentially higher actual cases than reported

Limitations:

- No private healthcare data
- Limited test availability
- Insufficient monitoring and evaluation
- Limited data on effective measures to address root causes and transmission

Despite limitations, the available data provides valuable insights and can guide initial actions.

Prioritize and Consider Alternative Explanations



Alternative Explanations for Trends:

- Underreporting from inconsistent data collection
- Improved detection increased ANC visits, better screening and diagnostics
- Shifts in sexual and healthcare-seeking behaviors
- Bigger picture – increase in STIs
- Migration and displacement effects

Priority Areas for Exploration and Intervention:

Root causes:

- Increased rates of syphilis in the community

Barriers:

- Limited tests, inadequate interventions, cultural, and socioeconomic barriers

Healthcare Utilization:

- Proportion of women using private healthcare

Geographical Inequities:

- Urban vs. rural healthcare provision disparities

Translate to Policy and Action (plan and do)



Policy Changes Needed:

- Align existing policies–global +local
- Monitor policy implementation

Key Partnerships:

- Government, other relevant MDAs
- Donors and Funding Agencies
- NGOs, Private Sector
- Healthcare Providers

Suitable Actions:

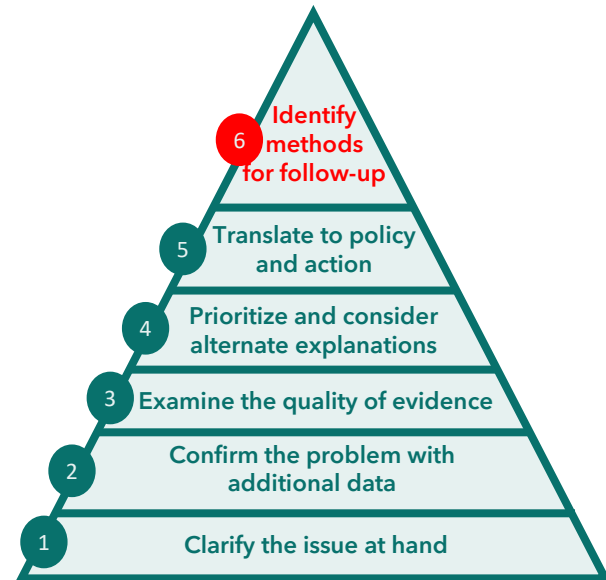
Training and support for providers

- ✓ Develop clinical protocols
- ✓ Enhance ANC counseling and dual testing skills
- ✓ Distribute IEC materials to high-incidence areas
- ✓ Improve referral systems for low-incidence locations

Enhance public awareness of maternal syphilis and other STIs and the risks.

Improve data collection and monitoring systems.

Identify Methods for Follow-Up (check/study & act)



Measuring and Reporting Progress:

- Regular audits of screening and treatment protocols
- Surveys and feedback to assess patient & provider experiences
- Track and analyze trends in prevalence
- Set EMTCT program targets

Indicators for Assessing Effectiveness:

- ANC coverage $\geq 95\%$
- Syphilis testing coverage $\geq 95\%$
- Adequate treatment $\geq 95\%$
- EMTCT Impact: ≤ 50 cases of congenital syphilis per 100,000 live births

Ensuring Continuous Improvement:

- Collect, analyze, and track data regularly to identify gaps and inform adjustments
- Involve all major stakeholders in feedback sessions
- Adapt policies based on real-time data and feedback
- Provide continuous training for healthcare providers to maintain effective implementation



USAID
FROM THE AMERICAN PEOPLE

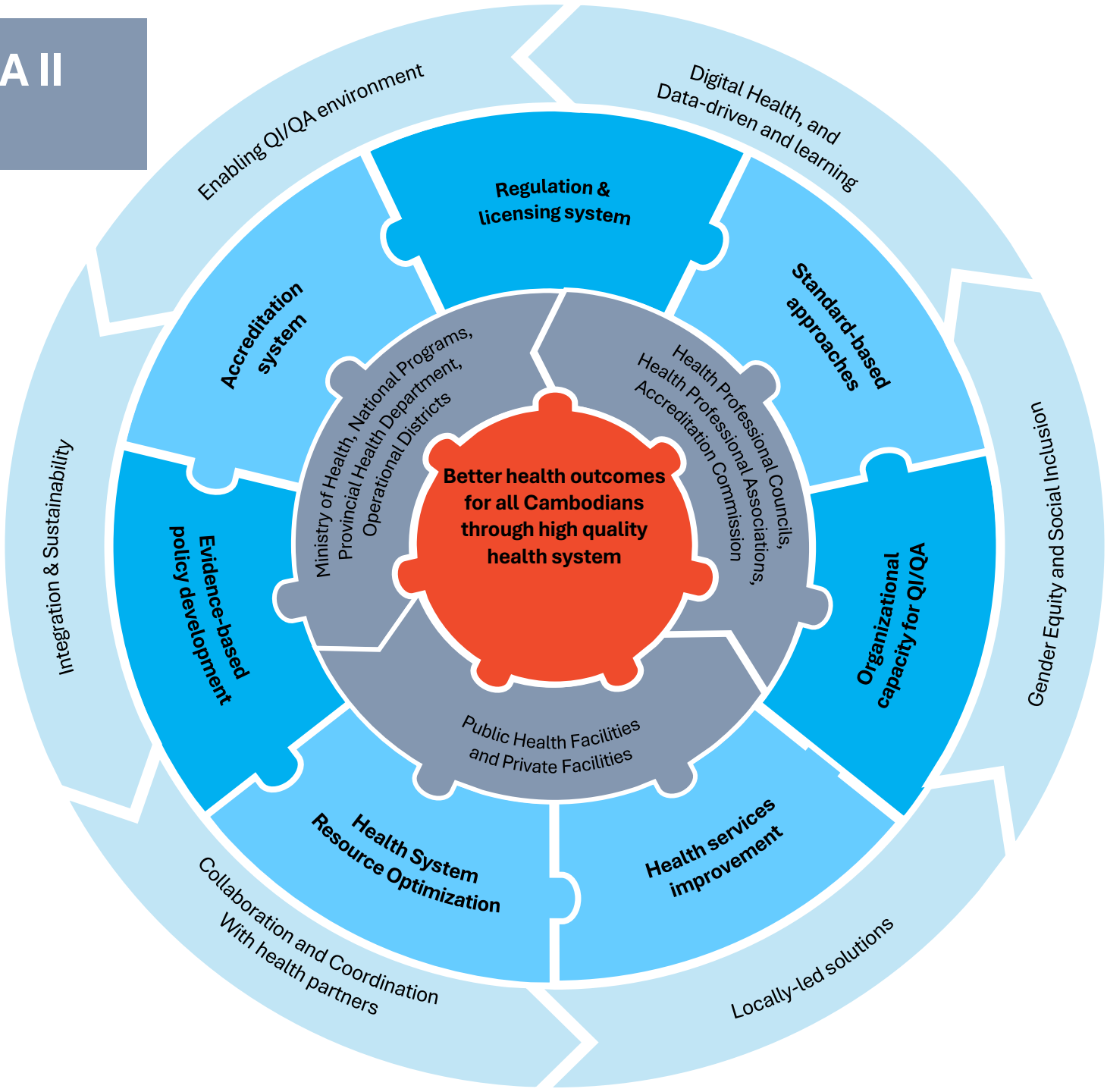


Lisa Dolan – Branton
FHI360

CQI Project

Improving Hand
Washing at Kang
Meas Referral
Hospital

What we do under EQHA II



Model for Improvement (MFI)

- An Improvement Project



Model for Improvement

What are we trying to accomplish?

How will we know a change is an improvement?

What change can we make that will result in improvement?



The model has two parts:

The first part involves resolving three fundamental questions:

- Set an aim
- Establish measures
- Generate the changes you will test


The second part is the PDSA cycle to test changes in real work settings.

Hospital Profile

- **Name : Kang Meas Referral Hospital**
- **Level : CPA 1**
- **OD : Kang Meas**
- **Province: Kampong Cham**



Problem Identification



**Kang Meas Referral Hospital
has experienced poor hand
washing with compliance at
only 40% in December 2023.**

QI Project on Hand Hygiene

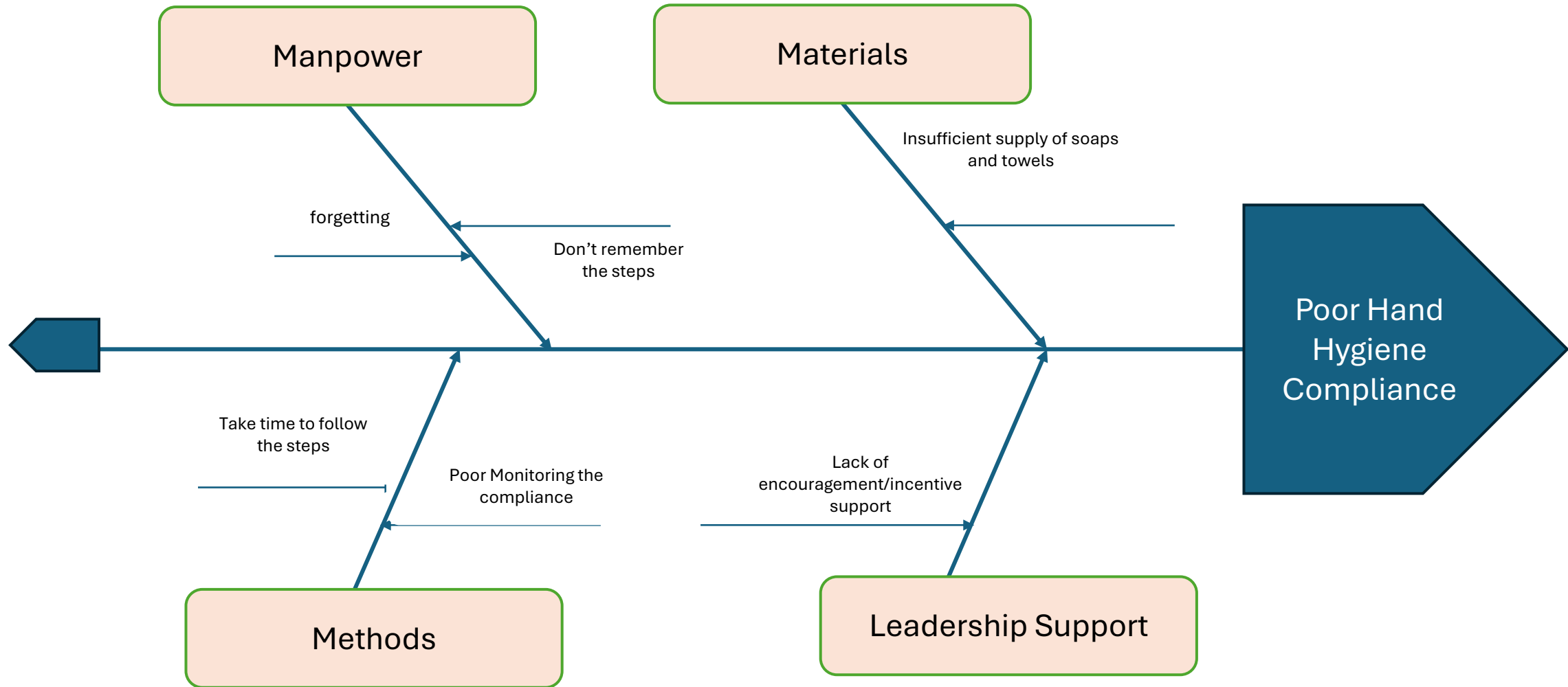
Improvement Aim:

- **We will improve hand washing compliance among hospital staff from 40% to 80% by December 2024.**

Measure:

- **Percentage of hospital staff practicing hand washing following the five moments of hand hygiene.**

Identify the changes –using the fishbone diagram



Change Ideas:

1

Place clear and visible signage at all handwashing stations reminding healthcare providers to wash their hands

2

Regularly monitor handwashing compliance and provide feedback to healthcare providers on their performance.

3

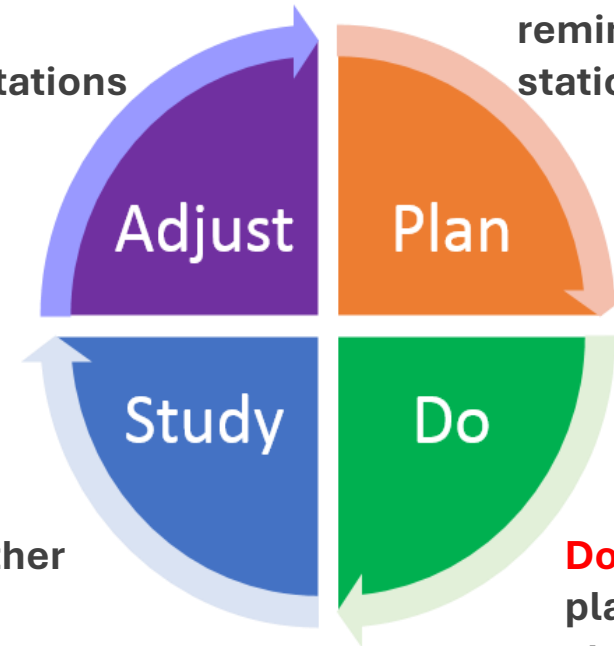
Establish a routine to monitor the stock of soaps and paper towels

The PDSA Cycle: Testing the Change?

1. Place clear and visible signage at all handwashing stations reminding healthcare providers to wash their hands

Act: Continue to maintain the availability of reminders at all stations

Plan: To display handwashing reminders (posters) at all stations



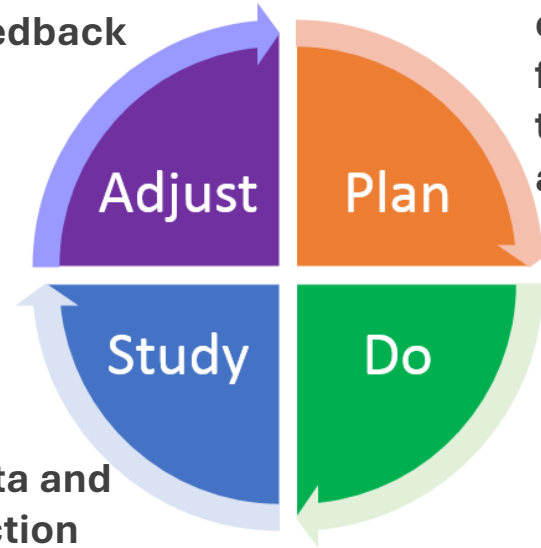
Study: Check whether the reminders are posted at all stations

Do: Team members print and place the reminders at all stations in June 2024

The PDSA Cycle: Testing the Change?

2. Regularly monitor handwashing compliance and provide feedback to healthcare providers on their performance.

Act: Continue Regular monitoring and feedback



Plan: Develop a checklist and assign a focal person to monitor the handwashing twice a week

Do: Use a checklist to monitor compliance with handwashing steps and moments

Study: Analyze data and compare to prediction

The PDSA Cycle: Testing the Change?

3. Establish a routine to monitor the stock of soaps and paper towels

Act: Monitoring and refilling soap and paper towel dispensers can increase handwashing compliance.

Study: Analyze the data to see the % of availability of soaps and paper towels



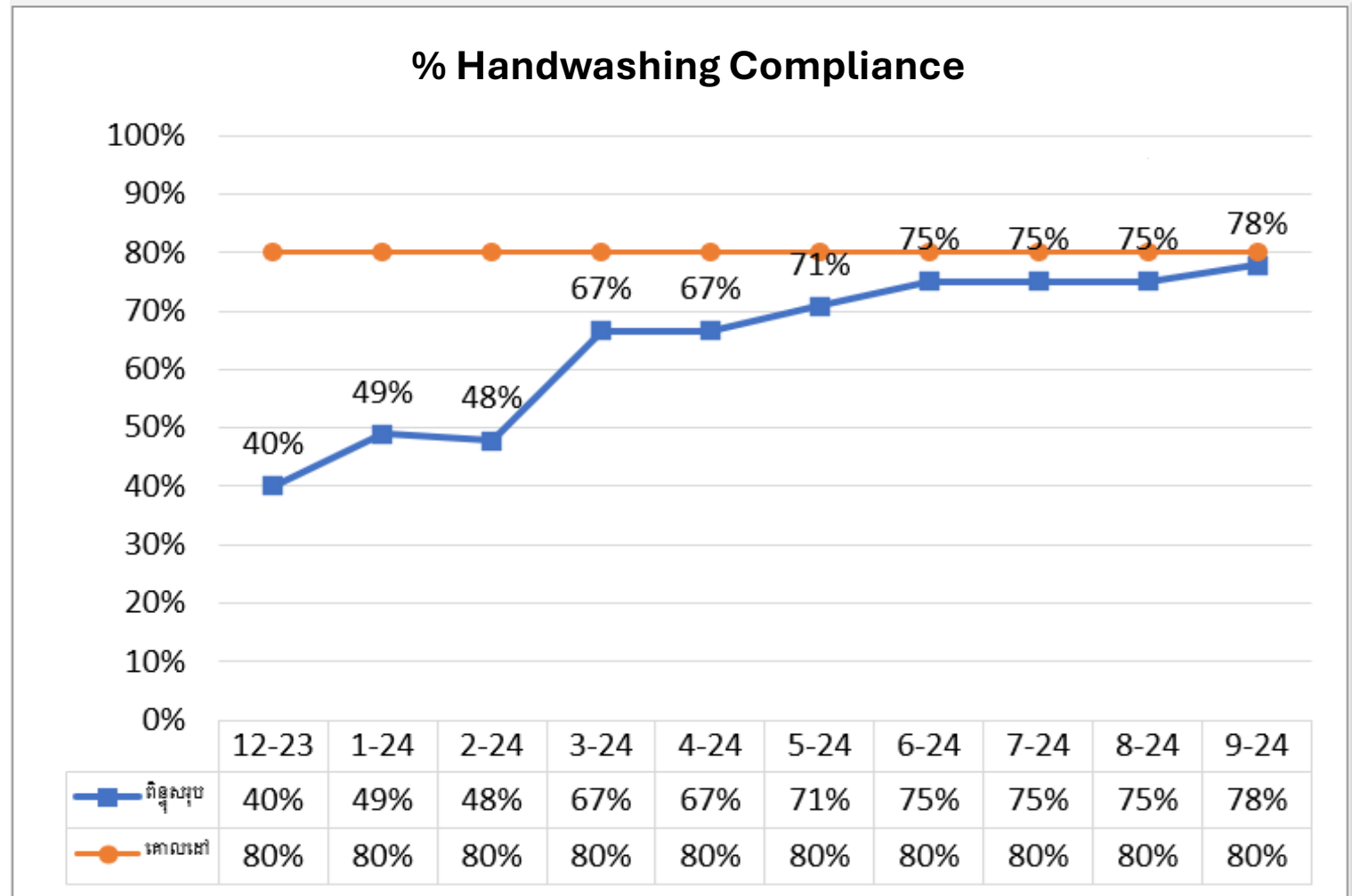
Plan: Using the checklist to monitor routinely the availability of soaps and paper towels at washing stations

Do: Implement a daily monitoring routine to ensure the availability of soap and paper towels at handwashing stations before the start of each workday

Result – Run Chart

By implementing these changes, handwashing compliance increased from 40% to 78% by Sept 2024.

The team will continue to implement these changes and ideas



USAID
FROM THE AMERICAN PEOPLE





Thank you!

FHI 360 Office in Cambodia

GIA Tower, Floor 12th (Room G1201 & G1202) & 26th (Room G2602 & G2603), Street Sopheap Mongkol Corner of Koh Pich, Sangkat Tonle Bassac, Khan Chamkarmon, Phnom Penh, Cambodia, P.O. Box: 2586

W: www.fhi360.org | Facebook: @EQHACambodia

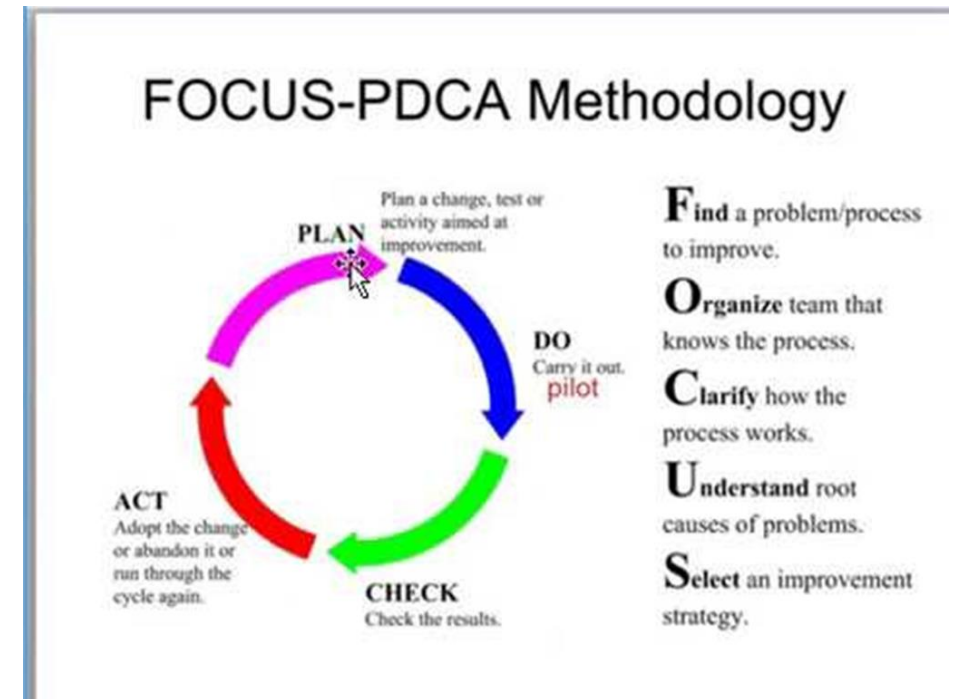


USAID
FROM THE AMERICAN PEOPLE



Individual/group activity guidelines– **FOCUS** and **PDCA**

- 1. **Find** a problem
- 2. **Organize** a team (core members and stakeholders)
- 3. **Clarify** the roles and process
- 4. **Understand** - brainstorm the root causes
- 5. **Select** an improvement strategy
- 6. **Plan** - state identified issues, set objectives, decide on indicators to measure success, and map out program activities, outputs, and outcomes
- 7. **Do** - implement change idea
- 8. **Check** -collect and analyze data on program effectiveness
- 9. **Act** - Refine and adjust strategies based on evaluation



Learning activity / worksheets

1

Use the Cause-and-Effect Worksheet to map the root causes (to understand why, what, who, and where).

Includes data-driven decision-making – Socratic Triangle.

2

Use the PDSA Worksheet to complete a map of the CQI initiative for your chosen issue.

3

Identify one advocacy initiative from your CQI for social media to highlight your CQI initiative –

Packaging - using data to advocate for health improvements.

4

Photo storyboard of key milestones (for example your team, brainstorming root causes, coming up with the plan, implementing this, challenges along the way, etc.).

Reflection on transformative leadership.

Key dates and activities

- 11th of October CI Deep Dive.
- 19th of October First in-person meeting with Tineke 9 - 11 am or 1 - 3 pm at Eleven One Kitchen. Use Cause and Effect worksheet to understand the issue and consider a CQI initiative. Start PDSA Worksheet and photo storyboard reflection on the team journey.
- 25th of October (TBC) Transformative Leadership wrap-up session.
- 23rd of November Media Training for Advocacy Initiative at IDE 8 - 1 pm (with lunch).
- 23rd of November Second in-person meeting 1.30 -4 pm at Eleven One Kitchen on the progress and presentation of the CI project. Near completion of PDSA and photo story board.
- 14th of December Final in-person workshop - pulling it all together and presentations to stakeholders - possibilities for 2025.

Conclusion



Summary: CQI is essential for advancing health promotion efforts.



Call to Action: Encourage organizations to adopt CQI practices for sustainable health improvements.