Reaching Every District Using Quality Improvement Methods (RED-QI)

A GUIDE FOR IMMUNIZATION PROGRAM MANAGERS

MAY 2015

ACKNOWLEDGEMENTS

The UI-FHS project would like to extend a special thank you to the health and administrative staff in each of the three learning woredas in which UI-FHS was working; Arbegona woreda in SNNPR, Assaieta woreda in Afar, and Hintalo Wajerate woreda in Tigray for their collaboration and dedication over the past three years. We would also like to thank the Ethiopian Federal Ministry of Health for their support of the UI-FHS project and their commitment to improving the quality, access, and equitability of immunization services to the women and children of Ethiopia. Lastly, we would like to acknowledge the tireless work of Nancy Newton, Jenny Sequeira, and our own UI-FHS staff for their dedication in creating this guide.

Cover photo by Shamara Wheldon

Suggested Citation:
Universal Immunization through Improved Family Health Services (UI-FHS). *Reaching Every District Using Quality Improvement Methods (RED-QI): A Guide for Immunization Program Managers.* Addis Ababa: John Snow Research & Training Institute, Inc. (JSI), 2015.

Contents

ACKNOWLEDGEMENTS 1

ACRONYMS AND ABBREVIATIONS 4

GLOSSARY 5

INTRODUCTION 7
How to Use This Guide 8
OVERVIEW OF RED-QI 8
Strengthening RED Is the Basis for RED-QI 10
QI Process, Methods, and Tools in RED-QI 11
Quality Improvement Teams 11
Step 1. Identify Problems 11
Step 2. Prioritize and Select One Problem 12
Step 3. Set Overall Goal/Objectives 13
Step 4. Analyze Root Causes 13
Step 5. Identify Solutions (Change Ideas) 14
Step 6. Test Selected Change Idea(s) through PDSA Cycles 14
Step 7. Take Action 15

Other QI Methods/Tools Important in Implementing RED-QI 16
Fitting RED and QI Together = RED-QI 19
RED-QI Seeks to Enable Managers, Health Staff, and Communities to Better Plan, Implement, and Assess RED 19
Implementing RED-QI: A Summary of the Process 20

OPERATIONALIZING RED-QI 24
Phase 1. Getting Started with RED-QI 24
A. Advocacy 24
B. Situational Analysis 25
C. Establishment of the RED Categorization Database and Setting Benchmark Categories 26
D. RI Data Quality Assessment 28
E. Set 'Benchmark Status' as Grade I, Grade II, or Grade III 28
F. RED-QI Orientation 32
G. RED-QI/PDSA Training for Woreda and PHCU Staff 33

Phase 2. Establishing RED-QI and Strengthening Systems 33
A. Formation of Quality Improvement Teams (QITs) at Woreda, PHCU, and Community (Health Post) Levels 34
B. QIT Orientation 37
C. Training in RED-QI Microplanning 37
D. Building New Capacities in Supportive Supervision: Training 39
E. Ongoing Supportive Supervision 40
F. Implementation and Management of PDSA Cycles 41
G. Regular Review Meetings at Woreda and PHCU Levels 42
H. Exchange/Experience-sharing Visits 43
I. Ongoing Application of RED-QI to RED Components and Operational Issues 44

Phase 3. Maintaining and Sustaining Improvements in RED-QI 45
A. Minimum Essential Criteria for Institutionalizing RED-QI 45
B. Special Considerations for Grade III HPs 46
C. Experience on Scale and Sustainability from Other Programs 47

CONCLUSION 48

ANNEXES 49
Annex 1. Woreda Situational Analysis Data Collection Form 49
Annex 2. RI Coverage Indicators Collection Form 56
Annex 3. Situational Analysis Reporting Form 57
Annex 4. RED Categorization Database Instructions 58
Annex 5. Data Quality Check Form A: Comparison of Similarities among Selected Data Sources 59
Annex 6: Data Quality Check Form B: Comparison of Similarities among Reports at All Levels 60
Annex 7. Benchmark Category and Benchmark Status of Health Posts and Health Centers/PHCUs in a Woreda 61
Annex 8. Microplanning format for Routine Immunization Activities 63
Annex 9. Guide for RI Microplan Development 69
Annex 10. QIT Meeting Minute Book Template 72
Annex 11. Sample EPI Process Based Supportive Supervision Checklist for Health Posts 74
Annex 12. PDSA Compilation Format for Woreda and PHCU Levels 78
Annex 13: Exchange Visit to RED-QI Woreda Planning Template 79

Acronyms and Abbreviations

DOR	Drop-out Rate
DQA	Data Quality Assessment
FMOH	Federal Ministry of Health
HC	Health Center
HDA	Health Development Army
HEW	Health Extension Worker
HMIS	Health Management Information System
HP	Health Post
ISS	Integrated Supportive Supervision
JSI	John Snow Research & Training Institute, Inc.
LQAS	Lot Quality Assurance Sampling
MOH	Ministry of Health
PBSS	Process-base Supportive Supervision
PDSA	Plan-Do-Study-Act [model or cycle]
PHCU	Primary Health Care Unit
QI	Quality Improvement
QIT	Quality Improvement Team
QRM	Quarterly Review Meeting
RED/C	Reaching Every District/Community
RED-QI	Reaching Every District through Quality Improvement
RHB	Regional Health Bureau
RI	Routine Immunization
UI-FHS	Universal Immunization through improving Family Health Services
WDA	Women's Development Army
WoHO	Woreda Health Office

Glossary

Fishbone Diagram (Cause and Effect Diagram). A graphic tool used in QI that helps generate possible causes of a problem, classify them, and dive deep to the root causes of the problems.

Five (5) Whys. A QI technique to explore the root cause of a particular problem. It asks a series (typically five) of "why" questions, based on the answers to the previous why question.

Flow Diagram (Process Map). A graphic tool used in QI that provides a picture of a process or procedure in order to clearly define a process, standardize procedures, design a new, or modify an existing process, and/or point out aspects of a process that are unclear.

Health Development Army (HDA). A cadre of volunteers at the community level who engage in health promotion; HDA is also known in some regions as the Women's Development Army (WDA).

Lot Quality Assurance Sampling (LQAS). A statistical method, using random sampling, to determine whether a "lot" (sampling unit) meets a certain quality standard.

Pareto Chart. A bar graph used in QI that breaks down a problem into categories to identify the vital few categories that contribute the most to a problem.

Plan-Do-Study-Act (PDSA). A QI problem-solving cycle used for carrying out changes or making improvements. P= plan the change; D = do the change; S = study the change; A = act to maintain the change or to continue to improve.

Quality Improvement (QI). A cyclical process of measuring a performance gap; understanding the causes of the gap; testing, planning, and implementing interventions to close the gap; studying the effects of the interventions; and planning additional corrective actions in response.

Quality Improvement Team (QIT). The multi-disciplinary group of individuals that meets regularly to identify and analyze areas in need of improvement, propose solutions, and test change ideas.

RED Categorization Tool. An Excel-based tool to collect and analyze core EPI performance indicators (Penta1, Penta3, and measles) data. It allows assessment of performance by health facility and the woreda as a whole.

Reaching Every District through Quality Improvement (RED-QI). An approach to strengthening the routine immunization (RI) system through the application of practical quality improvement (QI) models and tools, with the aim of making the five pillars of RED fully operational in a woreda.

Run Chart. A bar or line graph used in QI that shows variation in data over time, used to understand the impact of changes on a measurement/indicator.

Women's Development Army (WDA) and 1-to-5 networks. A cadre of volunteer women at the community level who promote the wellbeing of households. Each WDA member assists 25-30 households (or five "1-to-5 networks". The 1-5 network is a community structure at the household level).

Woreda. The equivalent to a district. Ethiopia is divided into nine regional states and two city administrations. These regional states and city administrations are further divided into 103 zones, 816 woredas (districts), and approximately 15,000 kebeles (lowest government structure).

INTRODUCTION

Ensuring all eligible women and children receive reliable and quality vaccination—universal immunization—is a critical development goal. In 2002, the World Health Organization and partners introduced the Reaching Every District (RED) approach[1], as a strategy to improve stagnating immunization coverage and effectiveness, with a targeted focus on poorer-performing districts and health facilities. Ethiopia began to use the RED approach in 2003 to improve performance of its Expanded Program on Immunization (EPI). RED implementation led to improved coverage of some vaccines, but a 2007 evaluation found gaps in all areas of RED.[2] In response, the Federal Ministry of Health (FMOH) launched new initiatives to strengthen routine immunization (RI), including Enhanced Routine Immunization Activities in 2008 and the two-year Routine Immunization Improvement Plan in 2013. Nevertheless, 2013 data suggest that progress has been uneven. Coverage remains inequitable across the country, and too many children are never reached by routine immunization. How to make RED fully operational in every woreda (district)—particularly in remote, rural areas—remains a challenge.

In order to explore what it takes to reach and sustain high immunization coverage in Ethiopia, in 2011 JSI Research & Training Institute, Inc. (JSI) partnered with the FMOH on a two-and-a-half-year learning initiative entitled "Universal Immunization through Improving Family Health Services (UI-FHS)." The goal of UI-FHS was to develop and share evidence with the FMOH and other stakeholders on how universal immunization, integrated with family health approaches, could be achieved effectively, affordably, and sustainably.

Reaching Every District using Quality Improvement methods (RED-QI) arose from these learning experiences in three "learning woredas." RED-QI aims to strengthen the RI system through the application of practical quality improvement (QI) models and tools—it aims to make the five pillars of RED fully operational in a woreda. An important feature of RED-QI is its potential to address large, high-priority problems (such as persistently high drop-out rates) by breaking them into their component parts and introducing small, rapid, doable changes that can quickly be tested and evaluated for adoption, adaption, or abandonment at the local level. UI-FHS continues to use RED-QI as it expands into additional woredas and regions through 2015.

This guide reflects lessons learned to date in implementing RED-QI and provides guidance on how to carry it out. The guide supplements, but does not replace, the current national RED strategy. As the FMOH makes decisions on transitioning from RED to Reaching Every Community (REC), the guide will be updated to fit policy changes. This is a "living document" and will be revised as new lessons are learned during its use. Comments, feedback, and suggestions for improvement are welcomed and should be addressed to: Zenaw Adam, UI-FHS Technical Director, at zenaw_adam@jsi.com.

1. World Health Organization Regional Office for Africa. *Implementing the Reaching Every District Approach: A Guide for District Health Management Teams*. Revised August 2008. World Health Organization, 2008.

2. World Health Organization Regional Office for Africa. "Ethiopia Country Report." *In In-Depth Evaluation of the Reaching Every District Approach in the African Region:* World Health Organization, 2007.

HOW TO USE THIS GUIDE

Program managers at the Woreda Health Office (WoHO) and Primary Health Care Unit (PHCU) levels are the intended users of the guide. The guide does not directly target health workers at health facilities. Staff of partner organizations and others with an interest in improving and strengthening RI systems may also find it useful.

The guide aims to convey the essential knowledge and tools needed to carry out RED-QI as a systematic, yet flexible approach, with limited or no outside support. The next section provides an overview of RED-QI and its features and elements, including a summary of activities, responsibilities, and where to learn more in the guide. Subsequent sections break out the implementation process into phases and the activities or tasks associated with each phase. Each task gives a definition of what it is, explains the purpose, outlines the main activities, and describes expected outputs. The annexes contain the main tools used to implement RED-QI.

A complementary Training Package (available from UI-FHS or the Regional Health Bureau) contains facilitation notes and Powerpoint presentations to use when conducting training associated with RED-QI implementation.

OVERVIEW OF RED-QI

RED-QI provides a powerful dual focus on "performance" and "process" improvements.

STRENGTHENING RED IS THE BASIS FOR RED-QI

RED-QI aims to make RED fully operational by its focus on putting all five components solidly in place and on taking actions to overcome weaknesses that impede optimal operations.

The five RED components are:[3]

- **Effective planning and management of resources:** ensuring better management of human, financial, and material resources at every governing level.
- **Reaching all target populations:** reaching out to previously underserved, unreached communities, in giving support and access to services.
- **Linking services with communities:** partnering with communities to promote and deliver services through regular meetings between communities and health staff.
- **Supportive supervision:** providing local staff with on-site training, feedback, and follow-up by supervisors.
- **Monitoring for action:** using tools and providing feedback for continuous self-assessment at all levels.

3. World Health Organization Regional Office for Africa. *Implementing the Reaching Every District Approach: A Guide for District Health Management Teams*. Revised August 2008. World Health Organization, 2008.

RED-QI also aims to improve those **RED "best practices"** which are already in place and helps to ensure that practices which are not yet functional are carried out. Some of these best practices are[4]:

- Microplanning, based on woreda core annual plan
- Quarterly review meetings (QRMs)
- Focusing planning on low coverage and hard to reach areas (categorized by access/utilization)
- Targeting pockets of unimmunized children and mothers for improved equity
- Decentralizing problem-solving to the PHCU and health post (HP) levels
- Actively involving communities in planning and implementation of activities
- Process based supportive supervision (PBSS, which is also known as subject-matter or program based supportive supervision)
- Defaulter and newborn tracking
- Regular analysis and sharing of data with partners; visible display of monitoring charts in facilities and WoHOs
- Disaggregation of woreda health management information system (HMIS) data according to whether vaccinations are given at fixed, outreach, or mobile immunization sites.

RED-QI also uses practical problem-solving tools that can help to address RED **operational issues** such as:

- Cold chain and supply management (forecasting, monitoring and distribution of supplies, maintenance, policy guidance, safe handling of vaccines).
- Strategic communication interventions that are data-driven, community-oriented, results-based, and encourage communities to take control of their own health and development.

Implementing routine RED activities and putting best practices into place at each level are responsibilities of all WoHOs and PHCUs, whether or not they undertake RED-QI.[5]

4. World Health Organization Regional Office for Africa. *Implementing the Reaching Every District Approach: A Guide for District Health Management Teams*. Revised August 2008. World Health Organization, 2008.

5. Consult the national RED guide Enhancing Routine Immunization Services in Ethiopia: Reaching Every District (RED) Approach. Field Guide and Essential Tools for Implementation 2008 for more guidance on RED.

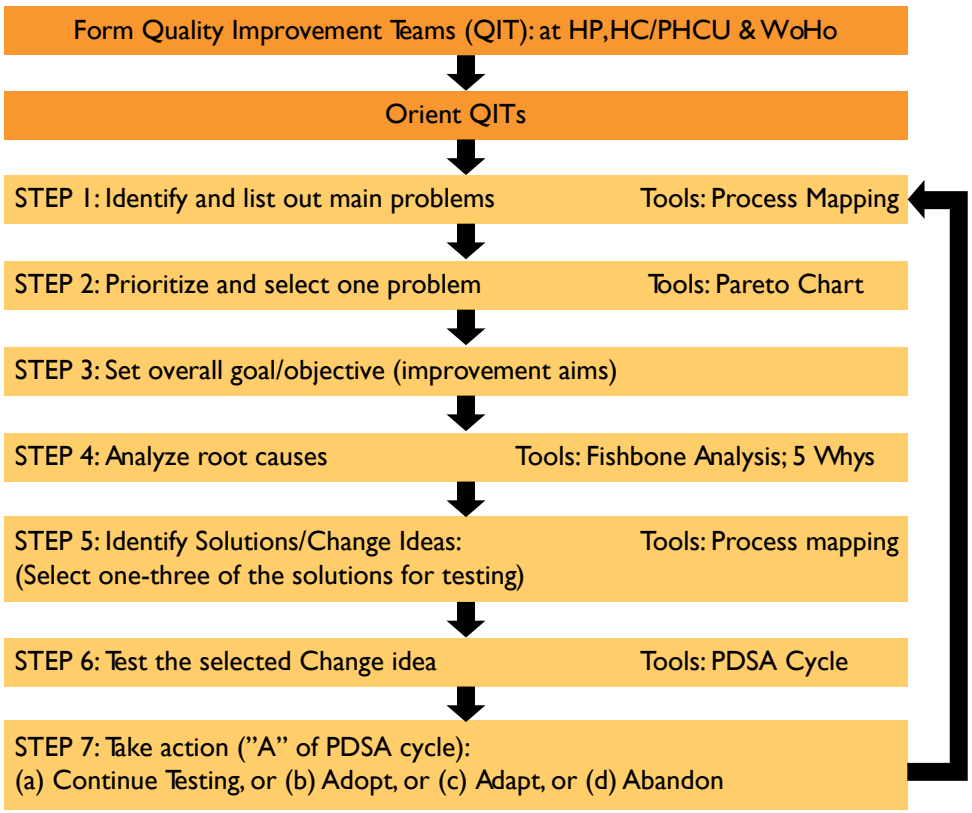
QI PROCESS, METHODS, AND TOOLS IN RED-QI

A definition of quality improvement (QI) is:

> *"A cyclical process of measuring a performance gap; understanding the causes of the gap; testing, planning, and implementing interventions to close the gap; studying the effects of the interventions; and planning additional corrective actions in response."*[6]

The basic process, methods, and tools used by RED-QI are common to QI efforts in health care and other sectors throughout the world. However, they have been adapted for the specific context of RI and primary health care in Ethiopia. Figure 1 summarizes the overall QI process. Descriptions of the methods and tools used in each phase of the process follow in the text below.

FIGURE 1: Quality Improvement Process



6. Tawfik, Y., M. Segall, E. Necochea, and T. Jacobs. *Finding Common Ground: Harmonizing the Application of Different Quality Improvement Models in Maternal, Newborn, and Child Health Programs*. Bethesda, MD: USAID Health Care Improvement Project, University Research Co., LLC (URC), 2010.

QUALITY IMPROVEMENT TEAMS

At its core, QI is a team process. A quality improvement team (QIT) draws on the knowledge, skills, experience, and perspectives of different individuals within the team to make lasting improvements. QITs meet regularly to identify and analyze areas in need of improvement, propose solutions, and test the change ideas.

In RED-QI, QITs are formed from existing structures (such as command post, steering committee, or health committee), where possible. There are QIT teams at three levels: at the WoHO and PHCU levels, teams focus on improving management processes and procedures, while at the community/HP level, teams focus on improving service delivery. Before QITs initiate improvement efforts, they receive orientation to understand their roles and responsibilities and gain familiarity with the methods and tools involved in the QI process. (See QIT Orientation.)

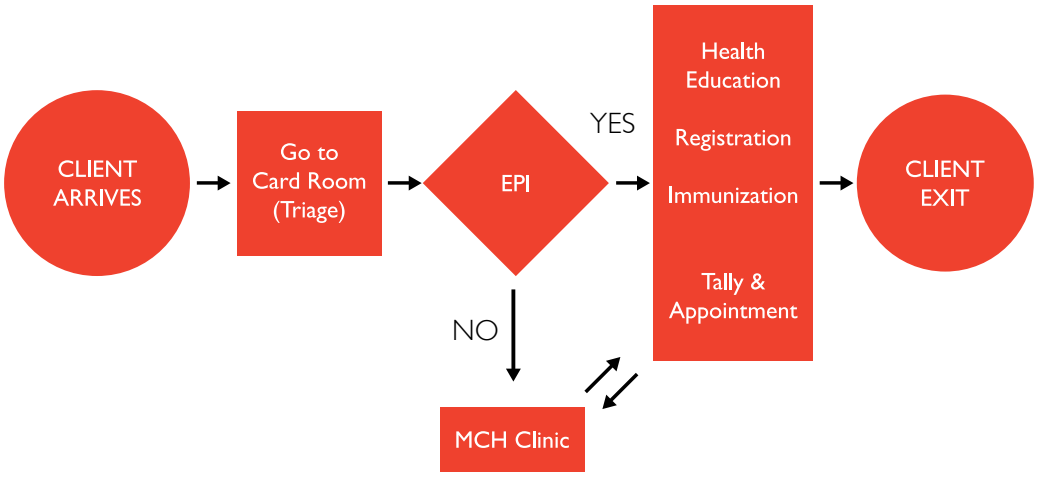
STEP 1. IDENTIFY PROBLEMS

A review of the previous year's EPI data reveals gaps and weaknesses (problems) in the major components of RED and its operational issues reveals the main problems in RI.

A flow diagram or process map (as shown in Figure 2 below) provides a picture of a process or procedure. It serves to clearly define a process, standardize procedures, design a new or modify an existing process and/or point out aspects of a process that are unclear. Process maps help to identify problems and generate solutions by answering questions such as:

- Is the process standardized, or are the people doing the work in different ways?
- Are steps repeated or out of sequence?
- Are there steps that are unnecessary?
- Are there steps where errors occur frequently?

FIGURE 2: Process Map of Ideal Client Flow for Routine Immunization at a Health Center



STEP 2. PRIORITIZE AND SELECT ONE PROBLEM

Answering the fundamental questions below is the next phase, in order to identify what improvements are needed, what target to set, and which indicator(s) to use to measure changes.

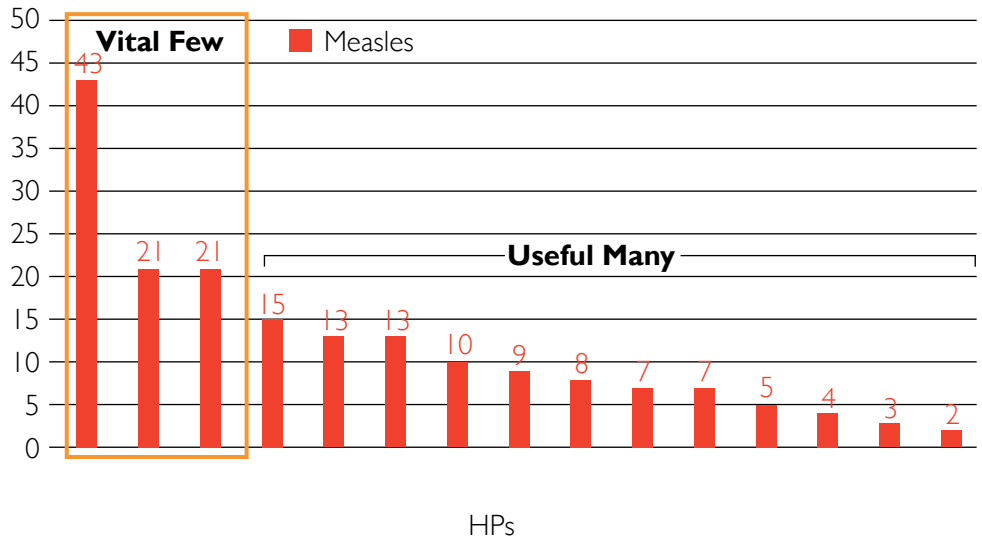
- What are we trying to accomplish? What is our aim? Among our aims, which one is a priority?
- How will we know that a change is an improvement? What measurements will we use to determine if an improvement has occurred?

An assessment of the magnitude and severity of the problem helps to select priority problems to address.

QI diagnostic tools aid in the critical analysis of a problem and the division of a larger problem into smaller parts. These tools include the Pareto Chart and the Fishbone Diagram (Cause and Effect Diagram).

A Pareto Chart (as shown below in Figure 3) is a bar graph that breaks down a problem into categories to identify the vital few categories that contribute the most to a problem. This Pareto Chart shows that three of 15 HPs in a woreda are the biggest contributors to children who are unimmunized for measles, indicating that measles immunization coverage is uneven across the woreda and suggesting that the three HP could benefit most from quality improvements.

FIGURE 3. Unimmunized for Measles Coverage in Health Posts: Pareto Chart



STEP 3. SET OVERALL GOAL/OBJECTIVES

An improvement aim—a measurable objective to achieve an improvement in a specific system within a specific time frame—is the output of this stage. Improvement aims should be linked to one of the five RED components.

STEP 4. ANALYZE ROOT CAUSES

The Fishbone or Cause and Effect Diagram (shown in Figure 4 below) helps a team generate possible causes of a problem, classify them, and dive deep to the root causes of the problems. This fishbone diagram analyzes the causes of the problem "low full immunization," with four main categories of potential causes and the specific causes of each main category.

The 5 Whys (as shown in Figure 5 below) is another QI technique to explore the root causes of a particular problem. It starts by asking why a problem exists. The team uses the answer as the basis for a subsequent "why," and continues to dig deeper until the cause is identified. The number "5" in the name is used because typically five "why questions" are need to resolve the problem.

FIGURE 4. Fishbone Diagram: Analysis of Low Full Immunization Coverage in a PHCU

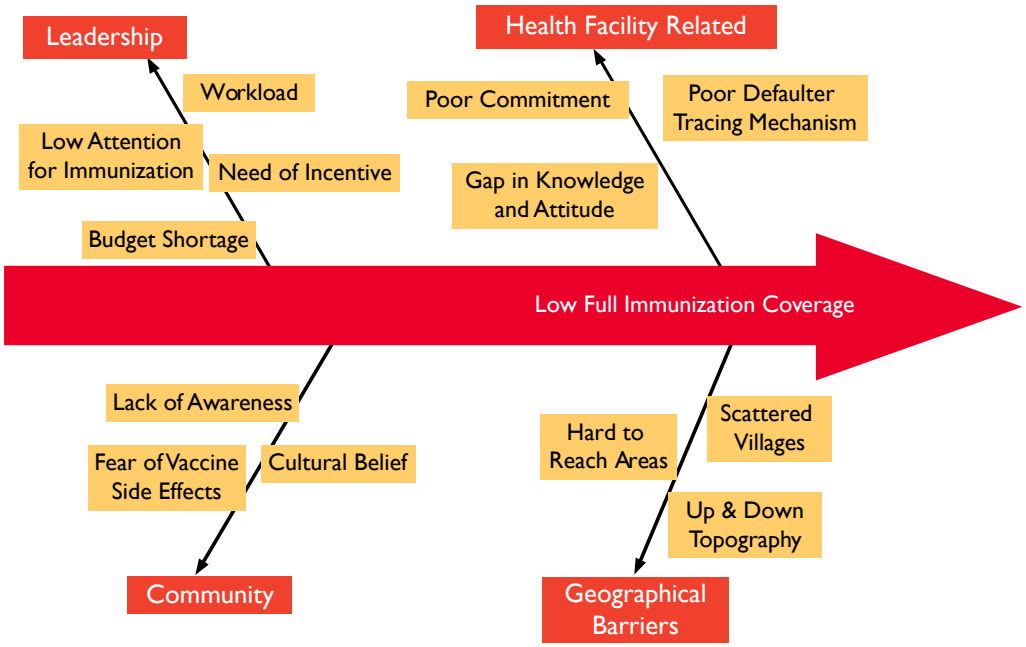


FIGURE 5. 5 Whys Analysis of Incomplete Immunization

Problem: Children are not fully immunized	
1	**Why are children not fully immunized?** Their families have negative beliefs about immunization.
2	**Why do families have negative beliefs about immunization?** They are afraid of side effects.
3	**Why are families afraid of side effects?** They do not have correct information about typical side effects and how to manage them if they occur.
4	**Why have families not been adequately informed?** HEWs do not take the time to tell families about side effects.
5	**Why do HEWs not tell families about side effects?** HEW training, supervision, and behavior change communication materials and skills do not reinforce the importance of telling families about side effects.

STEP 5. IDENTIFY SOLUTIONS (CHANGE IDEAS)

A change idea is a small-scale, locally specific intervention, which if applied, can contribute to achieving the improvement aim. Change ideas are potentially better ways to do things that address the root causes of the problem. Change ideas can be generated by:

- Reviewing the findings of the diagnostic tools.
- Learning what has worked in other places: seeking positive experiences that can be repeated.
- Consulting experts, studies, literature review, and guidelines.
- Creative thinking and invention of new ideas.

After assessing the various change ideas proposed, the team chooses one-three ideas to test through Plan-Do-Act-Study (PDSA) cycles.

STEP 6. TEST SELECTED CHANGE IDEA(S) THROUGH PDSA CYCLES

The PDSA is a problem-solving cycle used for carrying out changes or making improvements. Change ideas are tested within a short period and measured to determine if improvements occurred. PDSA cycles may also lead to the identification of additional problems, which can then be tested through more PDSA cycles. Or, they may suggest that new solutions to existing problems should be tested. The use of the PDSA is cyclical: WoHO, PHCU, and HP QITs conduct repeated rapid PDSA cycles.

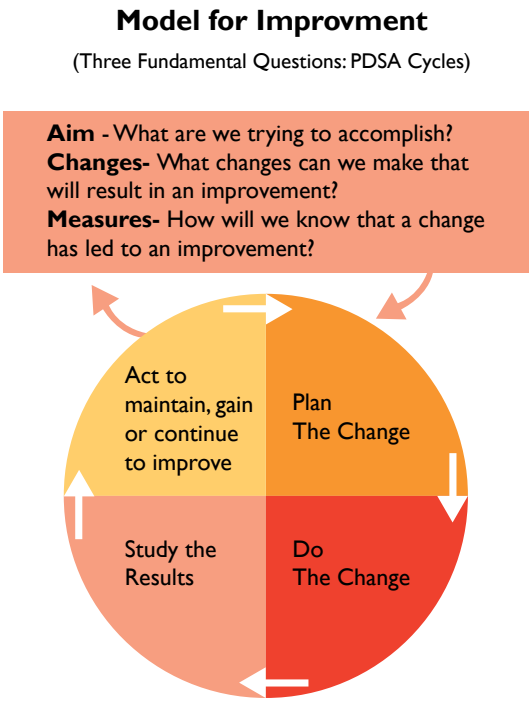
The steps in the PDSA cycle are:

P- Make a plan of action that includes:
- Objectives
- Predictions about what will happen when the test is carried out
- Who will do what task, when he or she will do it, and how and where
- Responsibilities and plan for data collection.

D- Do (carry out) the plan:
- Implement the "change idea"
- Document changes, problems, and unexpected observations
- Check data quality and begin data analysis.

S- Study the results of implementing the plan:
- Complete data analysis
- Review run charts or line graphs (see Run Charts below)
- Consider qualitative data and other information
- Compare data to predictions
- Summarize lessons learned.

FIGURE 6. PDSA Problem-solving Model



STEP 7. TAKE ACTION

A- Act on the findings—decide:
- Did the change lead to an improvement?
- Was the improvement significant?
- Did the change produce any unintended effects? Did any other factors affect the outcomes?
- What changes will we test in the next PDSA cycle?

Table 1 below provides more detail on actions a QIT may take in the "A" step of a PDSA cycle.

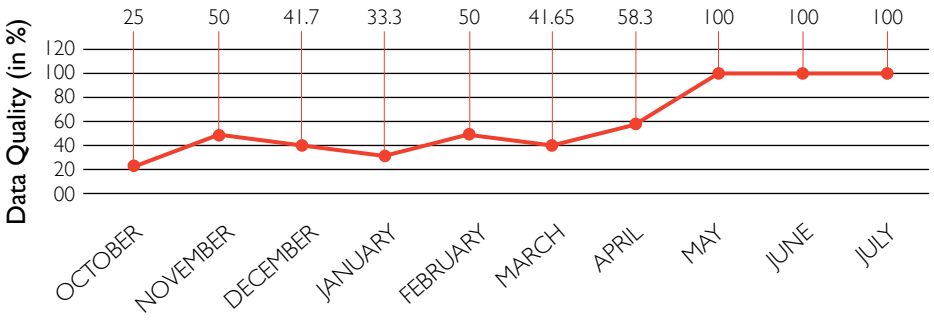
Table 1. Actions and Next Steps in "A" of the PDSA Cycle

Action	Description	Next Plan
Continue Testing	Further testing on proposed change ideas	Continue the cycle on the same change idea starting from P-part of the PDSA Cycle
Adopt	Team ready to engage management to make the new change permanent in the system	Select other problems to solve and plan the adopted experience to share with others to improve their RI system
Adapt	Modify proposed change idea	Modify the change idea process to test it again or add additional change idea to support the original change idea
Abandon	Drop and develop alternative change idea to test	Start from proposing solutions/change ideas to address the problem

OTHER QI METHODS/TOOLS IMPORTANT IN IMPLEMENTING RED-QI

Run charts (as shown in Figure 7) are another QI tool used in RED-QI. They are bar or line graphs that show variation in data over time. QITs use them during the "Study" step of a PDSA cycle to understand the impact of changes on a measurement. This run chart shows the changes in EPI data quality (percentage of EPI tools correctly recorded) at a HP over a 10-month period.

FIGURE 7. Run Chart Showing Changes in EPI Data Quality Indicator



Peer learning and exchange, and coaching are two other methods applied throughout RED-QI.

Peer learning is gaining knowledge and skills through active helping and supporting among people who have similar responsibilities and objectives. It involves helping each other to learn and, in doing so, learning themselves. In RED-QI, peer learning takes place through regular review meetings, QIT meetings, exchange visits, and other activities.

Coaching is a technique to build capacity for improvement. Coaching calls for mentoring, open exchange of information, and a collaborative approach between the coach and health workers and/or QIT members, in order to improve performance and meet objectives. In RED-QI, supervisors trained in coaching serve as coaches.

BOX 1. HOW A QIT USED QI TO TEST A SOLUTION TO "DEFAULTER PROBLEM"

Priority Problem: Data analysis (from HMIS) shows high (12%) Penta1 to measles drop-out rate (DOR)

Improvement Aim: Decrease drop-out rate to from 12% to 3% by March 2014 in kebeles A and B by improving defaulter tracing

Root Causes of the Problem (from Fishbone Tool):

- Open vial policy (1 vial for 6 children), and the vial is opened only on Monday and Thursday
- Child transferred to other kebeles
- Lack of follow up (not notifying family in advance)
- No tracking mechanism available
- Poor communication between HC and HP

Change Idea (Local Solution):

- List defaulters and give the list to the HEWs to find them in their respective kebeles

Plan (P of PDSA):

- Prediction – DOR will decline by 2% monthly.
- What to do – prepare a list of names of defaulted children, find defaulted children, and give them vaccine.
- Who to do – HEWs, EPI focal person and QIT members.
- How to do – The EPI focal person prepares the list and gives it to the HEWs. HEWs find defaulters, give them the vaccine, and send the information to the HC staff and EPI focal person. QIT does follow up.
- When to do – First cycle of testing during the month of October.
- Where to do – in kebele A and B.
- Data collection – Number of children on the list who were traced, number of children vaccinated. HEWs and EPI focal person will collect the data and review it at November meeting.

Do (D of PDSA):

- HEWs received lists of defaulted children monthly. HEWs found children. QIT reviewed experience after at one month.

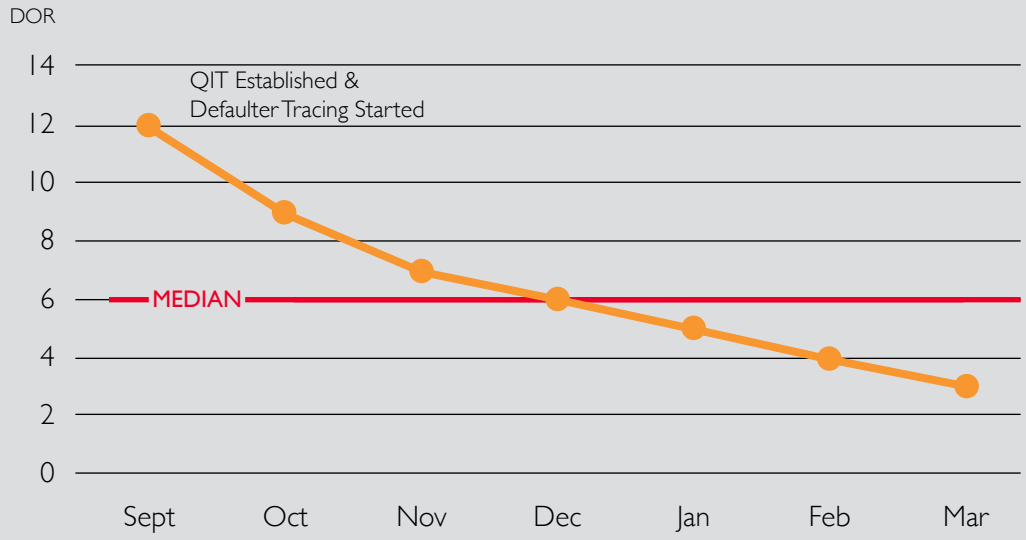
Study (S of PDSA):

- The team found that the DOR decreased to 9% after a month, but the improvement aim of a decrease to 3% was not achieved.
- HEWs reported it was challenging to find the children in the villages. However, finding defaulters created satisfaction.

Act (A of PDSA):

- Since the results showed promise, the team decided to undertake another PDSA cycle to continue testing the change idea.
- The plan remained the same.
- Testing continued for six months, with a monthly review of results.
- When the aim of 3% DOR was reached, the change idea was judged effective.
- Based on these results, the PHCU **adopted** the change idea of listing defaulters for HEWs to find as a routine activity.

RUN CHART - DDR from Oct. 2013 - Mar. 2014 In Kebeles A & B



FITTING RED AND QI TOGETHER = RED-QI

RED-QI SEEKS TO ENABLE MANAGERS, HEALTH STAFF, AND COMMUNITIES TO BETTER PLAN, IMPLEMENT, AND ASSESS RED

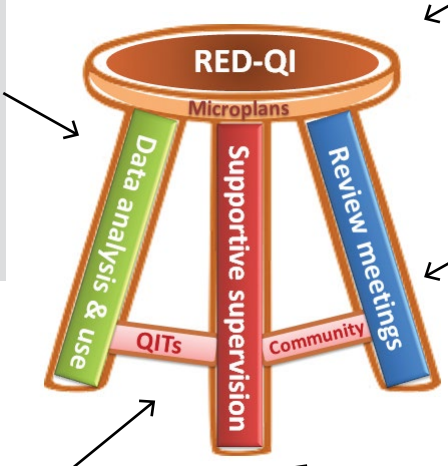
Through the practical methods and tools of RED-QI, health staff and communities work collectively to strengthen RED in their specific context. They focus on **"how to"** rather than "what" to improve. RED-QI builds on the **"assets" (strengths and potentials)** of health resources and communities. **Teams** bring multiple perspectives to problems, break them down into their component parts, and "dig deeper" to find their root causes. This allows the generation of solutions **(small, "doable," and context-specific change ideas)**, which can quickly be tested and evaluated. **The active use of data** throughout RED-QI reinforces the evidence base for decision making, and regular sharing of data and local solutions promotes a **learning environment** that has shown evidence of working.

The three-legged stool or ***berchuma*** (see Figure 8 below) provides a conceptual representation of the essential RED-QI processes, combining the RED components with QI.

FIGURE 8. The *Berchuma:* Conceptual Representation of RED-QI

Ongoing analysis and use of EPI coverage and dropout data at all levels to assess process and performance in RI.

Assets-based thinking to recognize better performing health facilities, which share how they are solving problems.



Integration of RI microplanning into woreda core planning, with focus on regular follow-up.

Incorporation of QI into microplan.

Peer learning through QRMs, monthly PHCU review meetings, and frequent QIT meetings to review performance and exchange good practices.

Feedback to the community.

QITs with community members as decision-making partners in health.

PBSS with feedback, coaching, tailored on-job training, and follow-up.

Support to QITs and PDSA implementation.

IMPLEMENTING RED-QI: A SUMMARY OF THE PROCESS

Table 2 below summarizes the activities in RED-QI, who (the category of health staff) is responsible for the different activities, the estimated duration, and where to find more information about the activities in this guide.

Table 2. Summary of the RED-QI Process

RED-QI Activity	Who is Responsible	Estimated Duration	Where to Find Details and Tools in the Guide
Phase 1. Getting Started with RED-QI [1 to 2 months]			
Advocate for RED-QI to the woreda council/ administration and PHCUs	WoHO	2 hours meeting [Ongoing to encourage broader uptake of RED-QI]	• Overview of RED-QI • Section 1A. Advocacy
Conduct Situational Analysis	WoHO	3 to 5 days	• Section 1B. Situational Analysis • Annex 1. Woreda Situational Analysis Data Collection Form • Annex 2. RI Coverage Indicators Collection Form • Annex 3. Situational Analysis Reporting Form
Establish RED Categorization Database and set RED benchmark category for each health facility	WoHO HMIS and EPI Focal Persons, PHCUs (HCs with computers)	Part of Situational Analysis	• Section 1C. Establishment of the RED Categorization Database and Setting Benchmark Categories • Annex 4. RED Categorization Database Instructions
Assess RI data quality	WoHO	Part of Situational Analysis	• Section 1D. RI Data Quality Assessment • Annex 5. Data Quality Check Form A: Comparison of Similarities among Selected Data Sources • Annex 6. Data Quality Check Form B: Comparison of Similarities among Reports at All Levels

RED-QI Activity	Who is Responsible	Estimated Duration	Where to Find Details and Tools in the Guide
Set RED benchmark status for woreda, PHCUs, and each health facility	WoHO	Part of Situational Analysis	• Section 1E. Set 'Benchmark Status' as Grade I, Grade II, or Grade III • Annex 7. Benchmark Category and Benchmark Status of Health Posts and Health Centers/PHCUs in a Woreda
Conduct RED-QI orientation for woreda administrative leaders and main woreda health staff	WoHO	1 day	• Section 1F. RED-QI Orientation • RED-QI Orientation Meeting Facilitation Notes [in Training Package]
Conduct RED-QI/ PDSA training for key health care players	WoHO	2 days	• Section 1G. RED-QI/PDSA Training for Woreda and PHCU Staff • Annex 10. QIT Meeting Minute Book Template • RED-QI/PDSA training facilitation notes [in Training Package]
Phase 2. Establishing RED-QI and Strengthening Systems [6 to 12 months]			
Begin formation of QITs at woreda, PHCU, and community/HP levels	WoHO (for woreda QIT) PHCU (for PHCU QIT and for HP QITs)	1 month [Ongoing until QITs formed and ready for orientation]	• Section 2A. Formation of QITs to identify and test change ideas • Overview of RED-QI
Orient QITs	WoHO PHCU (for HP level QITs)	1/2 day	• Section 2B. QIT Orientation • Annex 10. QIT Meeting Minute Book Template • QIT orientation facilitation notes [in Training Package]

RED-QI Activity	Who is Responsible	Estimated Duration	Where to Find Details and Tools in the Guide
Train PHCU teams in microplanning	WoHO	2.5 days	• Section 2C. Training in RED-QI Microplanning • Annex 8. Microplanning format for Routine Immunization Activities • Annex 7. Benchmark Category and Benchmark Status of Health Posts and Health Centers/PHCUs in a Woreda • Annex 9. Guide for RI Microplan Development • Microplanning Training Facilitation Notes [in Training Package]
Conduct training in supportive supervision	WoHO	3 days	• Section 2D. Building New Capacities in Supportive Supervision: Training • Annex 11. Sample EPI Process Based Supportive Supervision Checklist for Health Posts • Supportive Supervision Training Facilitation Notes [in Training Package]
Conduct supportive supervision, including support for QITs	WoHO to PHCU PHCU to HP	Ongoing Frequency = Monthly from PHCU to HPs	• Section 2E. Ongoing Supportive Supervision
Implement and manage PDSA cycles through QITs	QITs at WoHO, PHCU, and HP levels	Ongoing Frequency = Woreda QITS monthly; PHCU QITs weekly, bi-weekly, or monthly; Community/HP QITs bi-weekly	• Section 2F. Implementation and Management of PDSA Cycles • Annex 10. QIT Meeting Minute Book Template • Annex 12. PDSA Compilation Format for Woreda and PHCU Levels

RED-QI Activity	Who is Responsible	Estimated Duration	Where to Find Details and Tools in the Guide
Hold regular review meetings at woreda (QRM) and PHCU levels	WoHO for QRM PHCU	Ongoing Frequency = QRMs every 3 months PHCU meetings monthly	• Section 2G. Regular Review Meetings at Woreda and PHCU Levels
Hold exchange (or experience-sharing) visits	WoHO (for other woredas) PHCU (for PHCU to PHCU visits)	1 – 2 days Frequency = periodic	• Section 2H. Exchange or Experience-sharing Visits • Annex 13: Exchange visit to RED-QI Woreda Planning Template
Continue RED-QI implementation	WoHO PHCU HPs	Ongoing	• Section 2I. Ongoing Application of RED-QI to RED Components and Operational Issues
Phase 3. Maintaining and Sustaining Improvements in RED-QI			
Expand the number of HPs implementing RED-QI	PHCU	Ongoing	• Section 3A. Minimum Essential Criteria for Institutionalizing RED-QI
Plan for supporting Grade III HPs	PHCU WoHO	Ongoing	• Section 3B. Special Considerations for Grade III HPs

OPERATIONALIZING RED-QI

PHASE 1. GETTING STARTED WITH RED-QI

Phase 1 includes activities to initiate the implementation of RED-QI in a woreda:

A. Advocacy by the WoHO to encourage the woreda council and administration as well as PHCU staff to agree to implement RED-QI.
B. A brief situational analysis to understand the woreda health and immunization context, using several data collection and analytical tools.
C. Establishment of the RED Categorization Database.
D. RI Data Quality Assessment.
E. Setting RI 'Benchmark Status' as Grade I, Grade II, or Grade III for health facilities and the woreda as a whole.
F. Orientation to RED-QI for woreda and PHCU staff.
G. RED-QI/PDSA training for woreda and PHCU staff.

Phase 1 typically occurs over a period of 1 to 2 months.

A. ADVOCACY

Definition:

Advocacy is a set of targeted actions focused on gaining and maintaining the support of important stakeholders for implementing RED-QI. Important stakeholders include: the woreda council and administration, and PHCU (HC and HP) staff.

Purpose:

- To familiarize the stakeholders in a woreda with the objectives, rationale, concepts, and processes in RED-QI and to determine if the woreda wants to carry out RED-QI.

Main Activities:

WoHO staff (who may be accompanied by Regional and/or Zonal staff):

- Review this guide.
- Brief leaders in the woreda and the PHCUs about RED-QI, including the objectives, rationale, concepts, process, and estimated timelines (approximately two-hour meeting).
- Emphasize RED-QI as an evidence-based, methodical process to strengthen RI.
- Discuss EPI directions and plans at the national level and epidemics observed recently in different parts of the country.
- Identify challenges in building sustainable and equitable routine immunization systems (rather than focusing on increasing coverage).
- Present important processes in RED-QI: application of QI tools and methods to identify the causes of problems and test "doable" small-scale changes to solve them; sharing of promising practices with peers on a regular basis; performance-based supportive supervision.
- Share learning from woredas that have already successfully implemented RED-QI, highlighting achievements and best practices.
- Remind decision-makers that a woreda can apply RED-QI to solve problems in other areas of maternal, newborn, and child health, not only in immunization.

- If there is agreement to pursue RED-QI, establish dates for subsequent activities: situational analysis and orientation.

Outputs:

- Agreement by stakeholders to pursue (or not) implementation of RED-QI
- Plans for next activities: situational analysis and orientation (if there is agreement to move forward).

Advocacy also occurs throughout RED-QI implementation. WoHo staff share lessons learned with Zonal, Regional, and Federal staff to demonstrate practical ways in which RI can be strengthened and encourage the incorporation of improvements into national policy and program.

B. SITUATIONAL ANALYSIS

Definition:

The Situational Analysis is a formative assessment conducted before a woreda initiates implementation of the RED-QI approach. It assesses the status of routine immunization service provision at the HP, HC, and WoHO levels. The Situational Analysis takes place shortly after the decision to pursue RED-QI.

Purposes:

- To collect benchmark information about the RI service delivery system of a woreda.
- To categorize health posts, HCs/PHCUs and woredas using at least 2 years of their previous RI implementation data.
- To determine major strengths, influential factors, and gaps/challenges in implementing RI services in all levels.

Main Activities:

- Hold a meeting to discuss what to do, where to go, and how to do it.
- Prepare the data collection tools:
  - Woreda Situational Analysis Data Collection form (Annex 1. Woreda Situational Analysis Data Collection Form).
  - RI Coverage Indicators Data Collection form (Annex 2. RI Coverage Indicators Collection Form).
- Collect data:
  - Conduct in-depth Interviews of key informants or hold focus group discussions among staff at the WoHO level using the Woreda Situational Analysis Data Collection Form.
  - Extract secondary data from the woreda health management information system (HMIS): the previous two years of RI data from all health posts, focusing on the three major indicators (Penta1, Penta3, and measles).
- Analyze data:
  - Use the RED Categorization Tool (See Establishment of the RED Categorization Database below.)

- Develop a RI profile and write up the Situational Analysis Report write-up using Annex 3. Situational Analysis Reporting Form.
- Conduct a Strengths, Weaknesses, Opportunities, and Threats (SWOT) analysis as part of the Situation Analysis Report.

Outputs:

- A woreda RI benchmark profile which the WoHO will use as a point of reference to assess achievements throughout the implementation of RED-QI.
- Criteria to measure the status of the HPs, HCs/PHCUs, and WoHOs as "Grade I, Grade II, or Grade III" for their own monitoring and evaluation purposes.

C. ESTABLISHMENT OF THE RED CATEGORIZATION DATABASE AND SETTING BENCHMARK CATEGORIES

Definition:

RED Categorization is an Excel-based tool to collect and analyze core EPI performance indicators (Penta1, Penta3 and Measles) data (Annex 4. RED Categorization Database Instructions provides instructions, but request the tool from UI-FHS or RHB). Managers and EPI focal persons at the WoHO and PHCU levels use the analyses to evaluate EPI performance by health facility and the woreda as a whole to see the variation in performance among HPs and PHCUs or the whole woreda. The RED Categorization tool automatically categorizes a health facility or a WoHO as RED Category 1 to 4 as shown in Table 3.

Table 3: RED Categorization and Problem Identification Criteria

RED Category Types	Accessibility	Utilization	Level of the Problem
Category 1	Good	Good	No Problem
Category 2	Good	Poor	Poor Utilization
Category 3	Poor	Good	Poor Accessibility
Category 4	Poor	Poor	Poor Accessibility and Utilization

Regions can establish appropriate cut-off points for each RED Category according to local context. Some regions use Penta1 coverage > 90% = good accessibility; Penta1 to Penta3 drop-out rate (DOR) < 10% = good utilization, but others use different cut-off points. The RED Categorization tool/database can be customized for use accordingly.

Other important features of the RED Categorization tool include:

- Use of routine data collected through the health management information system (HMIS) system of each health facility—no special data collection needed.
- Automatic calculation and graphic display of coverage, drop-out rate, and number of unimmunized children.

Purposes:

- To set a 'benchmark category' (Category 1 – 4) for each health facility and the WoHO for monitoring RED-QI implementation.
- To use the categories as one criteria for status measurement.
- To establish RED Categorization databases for WoHOs and PHCUs with computers.

Benchmark category is a standard for each health facility and the WoHO to compare changes in category at any point during implementation.

Main Activities:

- Collect at least two previous years' RI service delivery data for the specific EPI indicators (Penta1, Penta3 and measles) from the HMIS data base.
- Enter the data into the RED categorization database Annex 4. RED Categorization Database Instructions.
- Analyze the data and set a 'benchmark category' for each health post.
- Establish the RED categorization database, including the current month's data, at WoHO (HMIS unit and EPI unit) and also at PHCUs that have computers.

Outputs:

- Established RED Categorization Database for monitoring purposes.
- Benchmark category set for each health post and health centers/PHCUs of the woreda for measuring changes over time.

RED Categorization is used throughout implementation of RED-QI. As health facilities put improvements into place over time, they use the tool to determine if problems have been resolved and their category has changed. Other uses include: prioritization of health facilities for supportive supervision; and identification of problems to address through PDSAs.

D. RI DATA QUALITY ASSESSMENT

Definition:

The data quality assessment is similar to Lot Quality Assurance Sampling (LQAS) data quality checks and tools that are part of the current HMIS system. The assessment checks the consistency and accuracy of: a) RI monitoring tools found at HP and HC levels; and integrity of: b) reports at all levels (HPs > HCs/PHCUs > WoHOs) for the three selected RI coverage indicators (Penta1, Penta3, and measles).

Purposes:

- To determine consistency, accuracy, and integrity of RI service delivery data.
- To use the findings as one of the criteria for setting the 'benchmark status' of a woreda.

Main Activities:

- Prepare the LQAS tools (Annex 5. Data Quality Check Form A: Comparison of Similarities among Selected Data Sources and Annex 6: Data Quality Check Form B: Comparison of Similarities among Reports at All Levels).
- Conduct the data quality check during the Situational Analysis.
- Analyze the data for accuracy, consistency, and integrity.
- Provide feedback: on-site and written.
- Record findings on Annex 7. Benchmark Category and Benchmark Status of Health Posts and Health Centers/PHCUs in a Woreda.

Output:

- Knowledge of RI data quality and areas for improvement.

Data quality assessments take place throughout RED-QI implementation. Supervisors work with health staff to conduct them during supervisory visits.

E. SET 'BENCHMARK STATUS' AS GRADE I, GRADE II, OR GRADE III

Definition:

For purposes of monitoring RI activities, RED-QI classifies the **status** of each HP, HC/PHCU, and the WoHO, using the criteria below (Table 4 for HPs and HCs, and Table 5 for WoHOs), as Grade I, Grade II, or Grade III. The classification does not measure the status of the health facilities and WoHOs for achievements in health service programs other than RI.

To determine the status of the HPs and HC/PHCUs, two criteria are used: the 'benchmark category' (the RED Category) and the percent of unimmunized children for Penta3. Both are found in the RED categorization database. Table 4 below summarizes how to apply the criteria to classify the status of HPs and HCs (PHCUs).

RED-QI uses 'Benchmark Status' in addition to RED Category because it is possible for a health facility and/or a WoHO to have a good benchmark category (Category 1 or Category 2) while also having poor data quality, high DORs, high number of unimmunized children, and/or other measures of a poor RI system. Thus, setting a Benchmark Status of Grade I, Grade II, or Grade III, using agreed upon RI service delivery criteria is important for management purposes. This is particularly the case with WoHOs, where additional major and minor criteria are used to set a benchmark status, in addition to benchmark category, as shown below.

Table 4. Criteria for Classifying the Status of HPs and HCs/PHCUs

RED Benchmark Category of Health Facilities	Percent of Unimmunized Children for Penta3 ((Target-Penta 3)/Target)*100	Status Classification
Category 1	<5%	Grade I
Category 1	5%-10%	Grade II
Category 2	<10%	
Category 3	≤5%	
Category 3	>5%	Grade III
Category 1 and 2	>10%	
Category 4		

Classification of the WoHO as a whole uses many factors, including minor criteria drawn from the findings of the Situational Analysis. The major criteria for status measurement are the cumulative benchmark categories and status measures of each HP. Table 5 below summarizes how to apply the criteria to classify the overall WoHO status.

Table 5. Selected Criteria Used for the Classification of WoHO Status

SELECTED CRITERIA	The criteria below represent what is expected in order to classify a WoHO as Grade I		
MAJOR CRITERIA		Fulfilled	
		Yes	No
Benchmark Category	At least 75% of health posts with benchmark Category I + WoHO benchmark Category I itself		
Status of HFs	At least 50% of the health posts classified as Grade I.		
MINOR CRITERIA		Fulfilled	
		Yes	No
QRM	At least 50% achievement in conducting QRM over a year + EPI discussed as agenda + documented in report/minutes		
ISS	At least 50% ISS per year + checklist used + documented in report/minutes		
PBSS	Regularly scheduled (monthly) PBSS + checklist used + EPI focused + documented as report/minutes		
Budget	Does EPI program have its own budget allocated by woreda council?		
Cold Chain	At least 75% of health posts have actively functioning refrigerators		
1-to-5 Networking	Does the woreda have functional WDA? + Does the WDA have active defaulter tracing mechanisms?		
Committee	Do the WoHOs and PHCUs have actively functioning steering committees or command posts?		

Experts' Opinion	Do experts suggest that WoHO to be classified as Grade I?		
WOREDA STATUS		Fulfilled	
Grade I	2 Major Criteria + [At least 4 Minor criteria]	Yes	No
Grade II	1 Major Criteria + [At least 3 Minor Criteria]	Yes	No
Grade III	0 Major Criteria + [At least 2 Minor Criteria]	Yes	No

Purposes:

- To measure changes in RI status from one specific time/step to another.
- To identify best practices in RI from 'Grade I' WoHOs or sub-units areas to share with other areas.

Main Activities:

- Collect the 'benchmark categories' of each health post and health center/PHCU from the established RED categorization data base.
- Calculate the percent of unimmunized children for Penta3 of each HP.
- Assess the status of each HP and HC/PHCU as Grade I, Grade II, or Grade III.
- Mark each minor criteria for the WoHO as fulfilled or not, referring to the findings of the situational analysis.
- Determine the status of the WoHO.
- Summarize the final benchmark category and status on Annex 7. Benchmark Category and Benchmark Status of Health Posts and Health Centers/PHCUs in a Woreda.
- Share the summary with the respective PHCUs and HPs for so they can use it for monitoring their own activities.

Outputs:

- Knowledge among the WoHO, PHCUs, and HPs of their baseline RI status before initiating RED-QI.

As health facilities make improvements in RI throughout RED-QI implementation, the Status Classification table, together with the RED Categorization Database, will identify changes in RI status.

F. RED-QI ORIENTATION

Definition:

The RED-QI orientation and the RED-QI/PDSA training will be conducted at the same time. The first day is the RED-QI orientation and the second and third day will be allocated for the RED-QI/PSDA training. The orientation is organized and facilitated by the WoHO (accompanied by Regional, Zonal or partner staff as appropriate) to introduce important stakeholders in the woreda to RED-QI. Participants include: woreda administrative leaders who are involved in making health-related planning and financing decisions, and the main woreda health staff (PHCU in-charges, EPI focal points, HMIS personnel, Health Extension Worker [HEW] supervisors and some HEWs). The workshop usually follows shortly after the situation analysis is complete.

Purposes:

- To develop common understandings of RED-QI concepts and practices among woreda stakeholders.
- To prepare plans for the next set of activities.

Main Activities:

- Become familiar with RED-QI Orientation Meeting Facilitation Notes in the Training Package.
- Prepare an agenda.
- Invite participants: all key health personnel (WoHO head and experts, PHCU heads, PHCU EPI focal persons, PHCU supervisors and possibly, some HEWs) and woreda administrative leaders.
- Emphasize the following aspects of RED-QI during orientation:
  - National RED strategy – rationale and all of its components.
  - EPI performance of the woreda.
  - Findings from the Situational Analysis, including data quality and use.
  - Discuss on the challenges and possible solutions
  - RED-QI approach – overview about RED-QI methods, tools and ways to solve the problems.
  - Sharing evidences of RED-QI from the learning woredas.
  - The importance of leveraging existing structures to build Quality Improvement Teams (QITs) at the community/HP level.
  - Plan to carry out the RED-QI activities.
- Encourage woreda leadership to begin thinking about how to sustain RED-QI and the improvements produced.

Outputs:

- Familiarity with RED-QI by woreda leadership, staff of PHCUs, select HP staff, and woreda/community leaders
- Agreement between WoHO and PHCUs on details and dates of next activities, including establishment of QITs.

G. RED-QI/PDSA TRAINING FOR WOREDA AND PHCU STAFF

Definition: The RED-QI/PDSA training will immediately follow the orientation and will be held on day two and three. It will be organized by the WoHO (accompanied by Regional, Zonal or partner staff as appropriate). The participants are composed of PHCU in-charge, HP/HEW supervisor(s), and EPI focal persons and some HEWs. The main purpose of the technical training is to enable the participants on how to use the tools during planning, supervision and review meetings to identify problems and find local solutions to improve routine immunization.

Purpose:

- To familiarize the national RED strategy, and problem solving mechanisms through RED-QI concepts to improve routine immunization in the local context
- To develop supervisors' skills to use QI tools for problem analyses and follow up.
- To select thematic areas for improvement (improvement aims) and to develop change ideas to test using Plan-Do-Study-Act (PDSA) cycles.
- To enhance knowledge and skills in the use of data for decision-making, while building a sense of teamwork and collaboration.

Main Activities:

- Become familiar with Introduction to RED-QI, PDSA, Training Workshop for Woredas: Facilitation Notes in the Training Package.
- Consult with Regional or Zonal offices to learn more about previous experiences with PDSA cycles that produced successful change ideas in other woredas and/or to invite one or two people from the woreda to share their experiences at the workshop.
- Prepare an agenda for the training.
- Emphasize the following during the training:
    - RED components, EPI problem categorization.
    - Definitions of quality and quality improvement.
    - RED-QI approach, processes and tools.
    - Using QI tools for problem analysis and follow-up, with a focus on PDSA cycles.
    - Identifying and testing "change ideas" (possible improvements).
    - Linking PDSA aims with the RED Categorization tool analysis.
    - Training, supporting, and maintaining QITs at three levels, especially through supportive supervision and coaching.
    - Ample opportunities to practice using tools.
- Plan to do the whole process of RED-QI problem solving mechanisms through PDSA both at management and service delivery point and review regularly. The participants also plan to form the QIT and provide orientation about RED-QI for them.

Outputs:

- Capacity to provide subsequent cascade training at the HP levels in QI and conducting PDSAs.
- Capacity to support QITs at the community level.

PHASE 2. ESTABLISHING RED-QI AND STRENGTHENING SYSTEMS

Phase 2 focuses on putting all of the components and processes of RED-QI into place and making them functional, with technical support from the WoHO. The duration of Step 2 depends greatly on the woreda health system context (Grade I, Grade II, or Grade III). Grade III woredas, especially those lacking basic infrastructure, are likely to require more time and technical support (including refresher trainings and additional exchange visits) than Grade I or Grade II woredas. In a "typical" woreda, Step 2 usually takes 6 to 12 months.

Activities in Phase 2 include:

A. **Formation of QITs** to identify and test change ideas
B. **Orienting QITs**
C. **Training in RED-QI microplanning** for WoHO and PHCU staff
D. **Training in supportive supervision** for supervisors from WoHO and PHCUs
E. Conducting **ongoing supportive supervision**
F. Implementing and managing the **PDSA cycles** of QITs
G. Holding regular **review meetings** (QRMs and PHCU-level meetings) to assess progress and exchange ideas
H. Exchange or **experience-sharing visits**
I. **Continuing use of RED-QI** to improve RED

Each activity in Phase 2 is necessary, but not always a "separate step," as some activities overlap in sequence (e.g., formation of QIT begins with orientation in Phase 1). Timing of other activities (e.g., exchange visit) can vary according to the needs and availability of participants.

A. FORMATION OF QUALITY IMPROVEMENT TEAMS (QITS) AT WOREDA, PHCU, AND COMMUNITY (HEALTH POST) LEVELS

Definition:

Throughout Ethiopia, community groups (with varying names and functions depending on the region) such as command post, steering committee, or health committee exist. Instead of establishing a new structure, these existing structures can be the QITs. Sometimes, the addition of a few influential persons can improve the team interaction and generate more innovative change ideas. The ideal number of members on a QIT is 8 to 12 people.

The roles and responsibilities of QITs differ at the HP, HC/PHCU, and WoHO levels vary, as outlined in Table 6.

Table 6. Roles and Responsibilities of QITs by Level

Community (HP) Level

- Ensure implementation of RED-QI activities at the community level.
- Regularly meet and discuss RI issues, identify problems, and prioritize them.
- Analyze the root cause of the prioritized problems and find local solutions.
- Communicate QIT discussions and proposed actions with their respective sub-kebele/gote Health Development Army (HDA).
- Continuously test changes to solve problems to deliver vaccination to every mother and child.
- Review the action plan and conduct ongoing measurement for improvement.

HC/PHCU Level

- Support the HP-level QIT to implement RED-QI activities:
  - Support training of HP-level QIT and HDA.
  - Provide support in reviewing performance of RI and in developing, planning and implementing change ideas at the HP level (PDSA cycles).
  - Ensure proper documentation of evidence of changes: 1) changes being tested and whether adapted, adopted, or abandoned; and 2) new ideas to be tested to advance progress.
  - Support HPs in collecting, aggregating, analyzing, and plotting data
  - Ensure quality of data: completeness and accuracy
- Regularly meet and discuss RI issues, identify problems, and prioritize them for both service provision and management issues.
- Analyze the root cause of the prioritized problems and find local solutions for both service provision and management issues.
- Ensure all eligible children and mothers are identified and registered at PHCU level.
- Continuously test changes ideas to solve problems in **both service provision and management** in order to deliver vaccination to every mother and child.
- Review the action plan and conduct ongoing measurement for improvement.
- Facilitate peer learning among HPs.

WoHO Level

- Support the PHCU QIT to implement RED-QI activities:
  - Provide support in reviewing performance, developing, planning and implementing ideas to PHCU level.
  - Ensure proper documentation of evidence of changes: 1) changes being tested and whether adapted, adopted or abandoned; and 2) new ideas to be tested to advance progress.
  - Support health facilities in collecting, aggregating, analyzing, and plotting of data.
- Aggregate, plot, and analyze data at woreda level.
- Ensure quality of data: completeness and accuracy.

- Regularly meet and discuss RI issues, identify problems, and prioritize them in relation to management issues.
- Analyze the root cause of the prioritized problems and find local solutions to management issues.
- Continuously test change ideas **in management** process and procedures in order to deliver vaccination to every mother and child.
- Review the action plan and conduct ongoing measurement for improvement.
- Facilitate peer learning among the PHCUs, especially during Quarterly Review Meetings (QRMs).

The process of community/HP-level QIT formation begins during the RED-QI orientation in Phase 1, when PHCU staff begins to identify existing structures that could serve as QITs. It continues through the QIT orientation.

Purposes:

- To put into place groups (teams) that use QI tools and methods to identify, prioritize, and analyze problems and then find local solutions through team interaction.
- To establish teams which generate change ideas and test the "workability" (feasibility and practicality) of the ideas in the particular situation.

Main Activities:

- During the RED-QI Orientation, assess the local situation regarding existing structures which may serve as QITs.
- Review members' capacity and time available to work on RI.
- Explore additional influential persons, who can support and strengthen the existing structure.
- Agree to the potential members.
- Plan how to form and organize the QIT at each level.
- During the QIT formation process, begin working with HEWs to draft HP-level microplans, which contribute to overall woreda microplan. (Become familiar with Annex 8. Microplanning format for Routine Immunization Activities).
- Invite the members of existing structures to a QIT orientation (see below) to discuss RED-QI, QIT roles and responsibilities, and the possible addition of additional members.

Outputs:

- QITs formed at all levels (HPs, HCs/PHCUs and WoHOs), following orientation (see below).
- QITs ready to start QI activities (PDSA cycles) at their levels, following orientation.

B. QIT ORIENTATION

Definition:

The PHCU and WoHO staff who participated in the RED-QI Orientation and RED-QI/PDSA training workshop provides QITs at each level with a half-day introduction to RED-QI and QIT work.

Purpose:

- To introduce the concepts of RED-QI and working together as a team to explore how to improve RI.

Main Activities:

- Plan date, site, participants, and agenda.
- During orientation, present the purpose of RI, highlight national and local goals of RI, address the local situation regarding RI in that particular area, and give a general overview of the QI process.
- Discuss how to work together as a team.
- Prepare a plan for the upcoming activity period.
- Introduce and explain Annex 10. QIT Meeting Minute Book Template.
- Assess the QITs' understanding of and the commitment to RED-QI.
- Plan for follow-up support to identify problems and find local solutions.

Outputs:

- QITs with an understanding of RI, QI, and how to work together.
- QITs with capacity to understand their own local problems.
- Draft HP-level microplans to contribute to woreda microplan.

C. TRAINING IN RED-QI MICROPLANNING

Definition:

The two-and-a-half-days training organized and facilitated by the WoHO (who may be accompanied by Regional, Zonal or partner staff as appropriate) builds capacities in microplanning in the context of RED. During the training it is also important to review the process of RED-QI from a practical point of view. The facilitator can allocate a half-day to look at the experiences of RED-QI activities (such as QIT formation and orientation, problem analyses and starting to test different ideas through PDSA) in the past following the RED-QI orientation and RED-QI/PDSA training, and the rest of the two days will be arranged for the microplan development. The training participants are composed of: PHCU in-charge, HP/HEW supervisor(s), EPI focal persons, and some HEWs.

Ideally, the training takes place around the time of the woreda core annual planning. Alternatively, the WoHO can link the training with microplan review/updates during a regular Quarterly Review Meeting (QRM).

Purposes:

- To strengthen the RED-QI and PDSA implementation process.
- To develop draft PHCU and overall woreda microplans for RI.

Main Activities:

- Become familiar with Introduction to RED-QI and Microplanning Training Workshop for Woredas: Facilitation Notes in the Training Package.
- Consult with Regional or Zonal offices to learn more about previous experiences with RED-QI Microplanning.
- Prepare an agenda for the training.
- Before the workshop, notify participants to bring draft HP-level microplans and EPI data from their facility/catchment area.
- Ask participants to indicate which aspects of RED-QI they would most like to see "in action," so that preparations for a future exchange visit (see Exchange/Experience-sharing Visits) can be initiated.
- Emphasize the following during the training:
  - Reviewing the RED-QI process, tools and experiences.
  - Provide a short presentation on RED-QI to strengthen the capacity of the participants to carry out RED-QI effectively.
  - Concepts of RED-QI microplan; how to do a RED-QI microplan.
  - Processes to develop RED-QI microplan.
  - Key activities under each RED component.
  - Preparing a microplan for RI, in line with core woreda annual plan, using their own EPI data, Annex 8. Microplanning format for Routine Immunization Activities, and Annex 9. Guide for RI Microplan Development.
  - Ample opportunities to practice using tools.
- Dedicate time to a discussion on sustainability:
  - What does sustainable RED-QI mean in the specific context?
  - What actions can stakeholders take now and in the future to promote sustainability?
- After the workshop ends, compile the PHCU microplan documents into a single WoHO microplan.
- Plan to review and update the woreda microplan at quarterly review meetings (QRMs) and PHCU microplans at the monthly meetings with HPs.

Outputs:

- Pull together the lessons so far and share them.
- Draft RI microplans for each PHCU.
- Compilation of PHCU microplan documents into a draft woreda RI microplan.
- Capacity to RED-QI microplan for the next time.

D. BUILDING NEW CAPACITIES IN SUPPORTIVE SUPERVISION: TRAINING

Definition:

RED-QI Supportive Supervision increases WoHO and PHCU supervisors' capacities in supportive supervision for RI, through the development use of process-based supportive supervision checklists. The checklists are based on essential EPI processes and incorporate documentation of RED-QI implementation, including QIT PDSAs. The training consists of two, three-day workshops: the first for supervisors at the PHCU level, and the second for supervisors at the WoHO level. Participants at the PHCU-level workshop could include: PHCU heads, PHCU EPI focal persons, PHCU supervisors, and a few health post representatives. Participants at the WoHO-level workshop could include: WoHO experts, PHCU heads, PHCU EPI focal persons, and PHCU supervisors.

Purposes:

- To build the capacity and ownership of supervisors and supervisees in the woreda to conduct and receive effective EPI-related supportive supervision.
- To agree on next steps (in line with the woreda's EPI microplan) with health staff for further strengthening RI.

Main Activities:

- Become familiar with Facilitation Notes for RED-QI Supportive Supervision Training – PHCU Level and Facilitation Notes for RED-QI Supportive Supervision Training – WoHO Level, both in the Training Package.
- Review Annex 11. Sample EPI Process Based Supportive Supervision Checklist for Health Posts.
- Prepare agendas for the two workshops.
- Emphasize the following during the training:
    - The importance of involving HPs and PHCUs in defining standards and checklist questions, deciding a supervision schedule, and identifying the nature and frequency of feedback to give and receive.
    - Defining lists of essential RI activities for each RED component at each level and for RED-QI activities (e.g., PDSA cycles and coaching QITs and HDAs).
    - Converting essential activity lists into Process-based Supportive Supervision (PBSS) checklists with operational definitions.
    - Practice using the PBSS checklists.
    - Coaching and mentoring skills.
- After the training, conduct a field experience with supervisors in their work places to test the checklists, reviewing the experience together and discussing checklist questions that need to be refined.
- Make a plan for PBSS visits: integrate PHCU PBSS checklist use into quarterly Integrated Supportive Supervision (ISS) from WoHO to PHCU level; integrate HP PBSS checklist use into monthly supportive supervision visits from PHCU to HP.

Outputs:

WoHO Level Training	PHCU Level Training
List of essential RED-QI activities at the WoHO level, specific to the woreda context	List of essential RED-QI activities at the HP level, specific to the woreda context
Guidance on how to do effective supportive supervision in that particular context developed.	List of essential RED-QI activities at the PHCU specific to the woreda context
PBSS checklist with yes/no operational definitions for use at PHCU level	PBSS checklist with yes/no operational definitions for use at HP level
Both Trainings	
• Skills in providing supportive supervision • Skills in developing process-based supportive supervision checklists • Plan for frequency of PBSS visits	

E. ONGOING SUPPORTIVE SUPERVISION

Definition:

During PBSS, trained supervisors assess performance of RI, give positive and negative feedback, and work cooperatively with the staff and QITs to improve weaker performance areas.

Purposes:

- To increase staff and QIT competencies in RI and learning approaches to improving RI.

Main Activities:

- Identify high performing and lesser performing HPs, using analyses from the RED Categorization tool on a regular basis. Adjust the frequency of supervision visits so that weaker HPs receive more attention.
- Include in the microplan a plan for supportive supervision, developed in consultation with the respective HPs.
- During the visit, jointly:
  - Review the findings from the previous supervisory visit and the action plan.
  - Conduct a data quality assessment.
  - Use the PBSS checklists to identify, prioritize, and analyze problems.
  - Discuss achievements.
  - Visit the QIT and review the QIT minute book.
- Provide coaching in PDSA implementation as needed.
- Observe immunization services, if possible.

- Record the findings and provide written and oral feedback on-site.
- Refer problems to appropriate QIT for solutions, as needed.

Outputs:
- Documentation of status of RED components.
- Documentation of improvement efforts (QIT meetings and PDSA cycles).
- Guidance on actions to improve implementation of RED components.

F. IMPLEMENTATION AND MANAGEMENT OF PDSA CYCLES

Definition:
QIT teams at all levels test a change idea by planning it, trying it, observing the results, and acting on what is learned. PDSA cycles can lead to new 'best practices,' to the identification of additional problems, and to discovering possible innovative solutions to be further tested.

PDSA cycles focus on a single collective woreda improvement aim, established during the microplanning process (or the microplan quarterly review process). However, each QIT works on finding a solution to a smaller piece of the "bigger problem," based on context-specific priorities. Thus, multiple sites simultaneously test changes, using common indicators and peer learning about how to improve a particular problem. The focus of PDSA cycle problem solving is both in service delivery and management issues. HP and HC can work on the service delivery issues, and WoHO and PHCU can work on management issues.

Purposes:
- To break down overwhelming larger problems into smaller pieces that can be addressed by existing resources.
- To identify context-specific problems, and generate and test solutions to the problems.

Main Activities:
- Set meeting dates for each QIT.
- Prepare Annex 10. QIT Meeting Minute Book Template, to be used at each meeting.
- Based on the woreda improvement aim (and its outcome measurement), use QI tools and methods to analyze the larger problem and prioritize which smaller part to address:
    - Observation, brain storming, data analyses, individual or group interviews, and/or process mapping to identify what is working well and what could be improved.
    - Pareto chart, consensus, or majority to establish a priority.
    - Fishbone method to determine the root causes of the problem.
- Set QIT improvement aim.
- Look for alternative solutions/change ideas (that draw upon existing "assets and strengths") through brain storming, dialogue, others' experiences, and/or process mapping the ideal process (re-designing).
- Select one-three change ideas through consensus or majority vote method.
- Test the change idea using the PDSA model

  - P – set measurement (process measurement), predict outcomes, plan, how, who, when, and data collection
  - D – implement the plan, collect data and document problems, unexpected effects, general observations, and new insights
  - S – compare the findings with the prediction, use run charts to identify trends in changes, and examine what happened and how the change idea was implemented
  - A – make a decision based on the results: adopt, adapt, or abandon the change idea
- Document the PDSA steps using Annex 10. QIT Meeting Minute Book Template
- During PBSS (see Ongoing Supportive Supervision), provide coaching, mentoring, and other guidance to support QITs at the community level.
- During PBSS, use Annex 12. PDSA Compilation Format for Woreda and PHCU Levels to document and compile the progress of PDSA cycles of the QITs.
- Continue the QI process through additional PDSAs according to the decision to "adopt, adapt, or abandon" and the woreda RI microplan.
- Hold monthly meetings with all QITs in a PHCU catchment area to review PDSA cycles and share experiences.

Outputs:

- Feasible local solutions to larger problems in RI, or decision to seek and test alternative solutions.
- Documented best practices on the RED-QI process and change ideas.

G. REGULAR REVIEW MEETINGS AT WOREDA AND PHCU LEVELS

Definition:

WoHOs organize regularly scheduled quarterly review meetings (QRMs). In RED-QI, the WoHO specifically dedicates one-half to a full day at the QRM (depending on the total number of days for the QRM) to sharing experiences with RED-QI to enable learning about improving RI. Similarly, at the PHCU level, time to discuss RI in detail is scheduled for monthly review meetings.

Ideally, each HEW should have an opportunity to participate in the QRM (may be in rotation). If there are sufficient resources, all HEWs can have a chance to participate to enhance learning and experience sharing.

Purposes:

- To establish a "learning culture" whereby peers learn from others' data-driven experiences.
- To identify and share potential best practices.

Main Activities:

- Assign a committee or individual to organize the meeting and prepare for presentations and discussions.
- Use the RED Categorization database tool to show changes in RI indicators and HP and PHCU performance category.

- Present and discuss testing of change ideas and analysis of results through the PDSAs. (Explain "how" a change idea was implemented, not only "what" the idea is).
- Present and discuss findings from PBSS and ISS.
- Select other change ideas to test.
- Select change ideas to share with higher health system levels.
- Review and update RI microplan (QRM at woreda only).
- Prepare minutes of the QRM or monthly review meeting with action points and follow up through supportive supervision.
- Start the next review meeting with a review of the status of the action points of the previous meeting.

Outputs:

All Review Meetings

- Understanding of changes in RI performance.
- Learning about new practices and possibilities.
- Knowledge and documentation of potential best practices.

Woreda QRM

- Updated RI microplan.

H. EXCHANGE/EXPERIENCE-SHARING VISITS

Definition:

A one or two-day visit by staff from woredas starting RED-QI to a "learning woreda" allows first-hand learning about RED-QI implementation and outcomes. PHCU-to-PHCU exchange visits within a woreda also take place so that health workers within the same woreda can share ideas and best practices.

Participants from the "visiting woreda" are a mix of WoHO, PHCU, and HP staff, but can also include woreda administrative leaders. A maximum of 15 visitors participate. From the "visiting PHCU," PHCU-level visit participants include: WoHO, PHCU, and HP staff. At the "hosting" woreda, participants include: WoHO staff, including EPI focal persons, to organize and lead the visit; staff of PHCUs and HPs that receive the visitors.

The timing of an exchange visit is somewhat flexible, depending on the "hosting" woreda's schedule, the logistics of making the visit, and other factors. A woreda-to-woreda visit typically occurs about three months into Phase 2 so that visiting participants have some experience in RED-QI. Grade III woredas may benefit from a second exchange visit later in the implementation process. PHCU-to-PHCU exchange visits also typically occur in the early months of implementation. As PHCUs begin to expand RED-QI to additional HPs (from the first one or two), additional exchange visits are beneficial.

An alternative to an exchange visit is to include time for RED-QI experience exchange at the bi-annual "all woreda" review meetings so all can learn from the experiences of woredas implementing RED-QI.

Purposes:

- To foster peer learning by introducing "new-to-RED-QI" woredas to practical applications of RED-QI processes.
- To strengthen ongoing RED-QI implementation in "experienced" woredas.

Main Activities:

- Become familiar with Annex 13: Exchange visit to RED-QI Woreda Planning Template.
- Prepare an agenda for the visit and notify participating PHCUs and HPs.
- Emphasize the following during the visit:
  - Visitors should ask questions and express their interests.
  - Health system improvements resulting from implementation of RED-QI.
  - Conducting supportive supervision (both PBSS for EPI and ISS).
  - Use of RED Categorization tool.
  - Problems identified by QITs at the three levels and how they are addressed.
  - Management of review meetings and how they are used to share experiences.
  - How to sustain key activities.

Outputs:

- Action plans for improvement, based on lessons learned, prepared by each "visiting" level (WoHO, PHCU, and HP).
- A summary of lessons learned, what was most useful, and what was less useful. Health staff participating in the visit use the summary and action plan to brief their colleagues upon return to their woreda.

I. ONGOING APPLICATION OF RED-QI TO RED COMPONENTS AND OPERATIONAL ISSUES

Definition:

As identified priority problems are solved, new priorities arise. WoHOs and PHCUs identify these during QRMs and other review meetings, incorporate them into updated RI microplans, and undertake RED-QI activities to solve them.

Purpose:

- To ensure operationalization of all RED components.

Main Activities:

- Perform ongoing data management.
  - Monthly data collection.
  - Documentation of RED-QI activities, including PBSS, review meetings, PDSA cycles.
  - Data quality checks using LQAS.
  - Use of RED categorization tool for data analysis and follow up actions.
  - Monthly reporting and dissemination.
- Manage the cold chain.
  - Assess cold chain equipment and transport system at each level and all service delivery points.

  - Monitor stocks of vaccines, injection materials, and other supplies at all levels.
  - Ensure emergency/contingency plans are in place at each level.
  - Use existing forms to record data.
- Track defaulters and reach children in hard-to-reach areas.
  - Use RED Categorization tool to identify HPs with high DORs and rates of unimmunized children.
  - Engage communities, HEWs, and QITs to assist with tracking and reaching the unimmunized.
- Design and use communication interventions to promote positive immunization behaviors by families, communities, and health workers.
  - Consult with mothers and community members to understand concerns about immunization and other determinants of immunization behaviors.
  - Develop messages and media which address the determinants.
  - Engage community and religious leaders, including HDAs, WDAs, and 1-in-5 networks as immunization behavior change advocates, channels, and monitors.
- Conduct integrated supportive supervision (ISS) as planned, incorporating elements of PBSS.
  - Include ISS from Regional or Zonal level to woreda.

Outputs:

- Improved implementation of RED components

PHASE 3. MAINTAINING AND SUSTAINING IMPROVEMENTS IN RED-QI

A critical part of the RED-QI process is planning for sustainable improvements that strengthen the routine immunization system. WoHOs and PHCUs should begin discussing and developing a strategy for sustaining the activities of RED-QI during the first RI micro-planning, and incorporating actions into subsequent microplanning. In order to continually strengthen RI, the WoHO must budget for these activities.

A. MINIMUM ESSENTIAL CRITERIA FOR INSTITUTIONALIZING RED-QI

Experience suggests that the minimum essential criteria for institutionalizing RED-QI within the HP to PHCU to WoHO health system are the completion of all activities in Step 2, including:

- At least four QRMs with dedicated time for discussing RED-QI, monthly PHCU review meetings that discuss RED-QI, and more frequent QIT meetings.
  - QRMs and monthly meetings include time set aside for presentation and discussion of promising change ideas from PDSA cycles and a review of all health facility performance based on the RED Categorization tool.
- The three RED-QI trainings: RED-QI Orientation/PDSA training, Microplanning training, and Supportive Supervision training.
- At least four PBSS visits focused on RI only to PHCUs and HPs.
  - Findings from PBSS indicate that at least 80% of essential practices are carried out.
- One ISS visit focused on RI only to woreda by Regional/Zonal offices.

- Annual woreda based RI microplanning where RED-QI inputs are planned and budgeted for.
- Active use of EPI data for programming and planning.

Indications that a RI System Has Been Strengthened:

WoHOs and PHCUs should consider the indications below when determining if a RI system is stronger:

- Better scheduling of outreach.
- Fewer stock-outs of vaccines.
- More frequent static services, if needed.
- Better identification of target population.
- More reliable local financing.
- Better community understanding of need to complete the vaccination schedule.

B. SPECIAL CONSIDERATIONS FOR GRADE III HPS

If a WoHO chose to begin RED-QI with better functioning HPs, it should take into consideration the following lessons from the learning woredas when moving into HPs that do not perform as well (for example, in pastoralist or equivalent areas). Tailoring RED-QI to the specific context is essential.

Grade III systems often require additional inputs such as:

- More time to implement Phase 2 of RED-QI.
- Assignment of an EPI focal person if none exists.
- Activation of PHCU structure in line with national policy.
- Stronger advocacy with woreda administration for PHC budget allocation.
- Focus on ensuring first that fixed services are happening on a monthly basis and are well attended. Then, move into strengthening outreach and mobile services in line with community preferences.
- Strengthening cold chain and logistics, which may be a priority problem to be addressed through QITs and PDSAs.
- Building a stronger QRM foundation to encourage systematic and meaningful peer learning opportunities.
- More attention to formation of QITs in contexts where community structures may be very different or not as "structured".
- Extra capacity building inputs such as:
    - Additional exchange visits to learn more about how to operationalize various pieces of RED-QI.
    - Extended (two week) Immunization in Practice training for health workers.

C. EXPERIENCE ON SCALE AND SUSTAINABILITY FROM OTHER PROGRAMS

Five years' experience in moving from small-scale projects to scale-up and toward sustainability in supply chain management in Ethiopia, Malawi, and Rwanda provides some lessons that may be useful for RED-QI. [7]

- Consistent stakeholder consultation and intervention redesign and refinement, based on data and evidence from monitoring and evaluation activities, build the foundation for scale and sustainability.
- Gaining political commitment from senior Ministry of Health officials is critical to advancing scale and sustainability. Ongoing data sharing and collaborative problem-solving contribute to achieving the commitment.
- Attention to improving management components helps to establish an organizational culture of learning and QI, which can boost the likelihood of sustainability.
- A continuous improvement process, continued political commitment, and reliable financing are all necessary investments for the process to produce sustained benefits.

7. *From Pilot to Practice. Lessons on Scale, Institutionalization and Sustainability from the (In-Progress) Journey of the SC4CCM Project.* **JSI, September 2014.**

CONCLUSION

Over the past three-and-a-half years, UI-FHS has had an opportunity to study the effectiveness of RED-QI in three learning woredas, a small sample for Ethiopia. In the next five years, UI-FHS will continue to learn about the adaptability and sustainability of the RED-QI approach on a much larger scale and plans to update the guide with improved guidance for pastoralist and emerging regions.

The RED-QI focus is more on building a long-lasting system and less on seeking a "quick fix" to increase coverage. Adding QI to RED seeks to offer an iterative improvement approach for building an immunization system robust enough to sustain high coverage RI. As RED moves to Reaching Every Community, it offers a participatory, systems-thinking approach, put into action through health staff-community teams working to solve problems.
In contrast to conventional thinking, where high dropout rates are often seen as a problem, in RED-QI, dropout rates are seen as a symptom, needing deeper local context analysis of root contributors to this quality issue.

ANNEXES

ANNEX 1. WOREDA SITUATIONAL ANALYSIS DATA COLLECTION FORM

Woreda Situational Analysis Form

Section-I: Introductory Information	
Names of people conducting interview:	
Name(s) & positions of those being interviewed:	
Woreda:	
Zone:	
Region:	

Section-II: Information from WoHO HMIS			
II A: Demographic information			
Number of Kebeles in Woreda:	Total:	Urban:	Rural:
Recent completed year Population:	Total:	Urban:	Rural:
Recent completed year total under one year population:	Community Census:		
	Government Estimate:		

II B: Total number of facilities	
Hospitals	
Health Centres	

Health Posts					
II C: Staffing					
Facility Type	Total Number	EPI focal person (YES/NO)	PHCU/ Health Extension Supervisor (YES/NO)	HMIS focal person (YES/ NO)	Remark
WoHO					
HCs					
-					
-					
-					
HEWs					
Section-III: Information from WoHO EPI unit					
III A: Total number of public facilities providing EPI services in recent completed year					
Hospitals:		Health Centers:		Health Posts:	
Number of Fixed sites		Number of Out-reach sites		Num-ber of Mobile sites	
III B: Total number of refrigerators by level					
Facility Types		Functional		Non-functional	
Health Posts					
Health Centers					

WoHO				
III C: Planning for Routine Immunization (RI)				
Is there a separate microplan for routine EPI at Woreda level?	Yes	No		
IF YES: Who was involved in development of the microplan? (tick all who participated from the below)				
HEWs	HWs from HCs	Woreda EPI or FP	Woreda adminis-trator	Other (Specify:
Is the Microplan prepared in more detail than the Woreda based plan?	Yes	No		
IF YES: What additional activities/areas were planned? (tick all that apply)				
Resource Plan-ning & manage-ment	Reach-ing the target popula-tions	Linking services with com-munities	Support-ive super-vision	Monitoring for action
III D: Mapping of EPI catchment				
Were past year vaccination session plans prepared to cover all Kebeles/Gotts (including the hard to reach area) in the Woreda?			Yes	No
Does the Woreda map out its catchment area? (take picture of WoHO map if available)			Yes	No
Do health facilities map out their catchment area?	Yes, all facilities	Yes, some facilities	No	
III E: Capacity building and management plan				
What did last year's capacity building and management plan include? (check yes for all those included):			By whom	2007 EFY plan
Immunization in Practice (IIP) training	Yes	No		

Integrated Refresher (IRT) Training	Yes	No		
Mid-Level Managers (MLM) training	Yes	No		
Cold chain and vaccine management	Yes	No		
Other, specify	Yes	No		
III F: Implementation of EPI activities				
Is monitoring of the EPI microplan implementation done for 2006?			Yes	No
IF YES, were all planned immunization sessions carried out?			Yes	No
IF YES, Immunization sessions implemented		Number	Percent	Remark
Fixed sites:				
Outreach sites:				
Mobile sites:				
IF NO, why were planned immunization sessions not conducted?				
III G: Supportive Supervision				
ISS: How many Integrated Supportive Supervision (ISS) were conducted from WoHO to PHCU?			In 2005	
			In 2006	
IF ISS was planned but not conducted, what were the main reasons for cancellation?				
PBSS: Did you conduct PBSS from WoHO to PHCUs? (If yes, check document)			Yes	No

Checklist: Did you use checklists when you conduct PBSS? (if yes, take picture of a used one)		Yes	No
If some visits were not conducted, what were main reasons for cancelation?			
Feedback: How is feedback given during supportive supervision? (check all that apply)			
Written Feedback	On-site feedback	During review meeting	Other:
III H: Review Meetings			
Were any review meetings conducted in the last two years? (ask for a copy of last meeting's minutes, if available)		Yes	No
IF YES, how many review meetings were conducted?		in 2005	
		in 2006	
What were the key RI topics that were discussed at the last review meeting?			
III I:Vaccine Wastage			
Was vaccine stock monitored regularly through monthly reports? (If yes, see documented evidence)		Yes	No
Was vaccine wastage monitored? (If yes, see documented evidence)		Yes	No
IF YES: was any feedback given to facilities on level of wastage?		Yes	No
IF Feedback given: Is vaccine wastage used as an indicator of performance and for ranking of facilities?		Yes	No
Was injection safety monitored? (may need to see health facilities)		Yes	No
IF YES: how?			

IF NO: Why?				
III J: Monitoring Temperature				
Was refrigerator temperature monitored? (may need to see health facilities)			Yes	No
IF YES, Is it current?		If No, Why?		
III K: Steering Committee activities				
Steering Committee: Is there a steering or other committee that plans and monitors routine EPI activities? (If yes, see documented evidence)			Yes	No
IF YES: How often does the steering committee/other committee meet? (check which one applies)				
Weekly	Every 2 weeks	Monthly	Quarterly	Other (specify):
If YES: who regularly attends the meetings?				
Do you have any suggestion on how to improve it further?				
III L: Focal Persons activities				
EPI focal person: Is there a designated focal person for EPI at woreda level?			Yes	No
IF YES: Was the EPI Focal Person trained on EPI?			Yes	No
IF NO: who is in charge of EPI?				
Cold Chain focal person: Is there a designated focal person for Cold Chain in the woreda?			Yes	No
IF YES, the Cold Chain focal person trained on EPI and Cold Chain?			Yes	No

Surveillance focal person: Is there a designated focal person for Surveillance at woreda level?			Yes	No
IF YES: Is the Surveillance Focal Person trained on Surveillance?			Yes	No
III M: Budget and Logistics				
Budget: How does the WoHO get financial support from the woreda council?				
Specific to EPI	Family Health program		Not program specific	
Is financing a concern for EPI in your woreda?			Yes	No
IF YES: What are the areas that need more funding, for which funding is limited? (check all that apply)				
Transportation of vaccines	Kero-sene for refrig-erators	General fridge mainte-nance	Per diem (SS, outreach)	Other (specify):
Are there any reports/minutes of discussion on RI held on between the community leaders or other influential people with the WoHO/HF staffs during 2006 EFY?			Yes	No
IF YES, how frequent are these meetings at WoHO and HF level?				

ANNEX 2. RI COVERAGE INDICATORS COLLECTION FORM

RI Coverage Indicators Collection Form

Section-I: Identification				
Reporting Date			Reported for the month of:	
Region				
Zone			Reported by:	
Woreda				
Section-II: EPI Coverage Indictors				
Name of Health Facilities	Monthly Target	Number of 'Penta1' vaccinated children	Number of 'Penta3' vaccinated children	Number of 'Measles' vaccinated children

ANNEX 3. SITUATIONAL ANALYSIS REPORTING FORM

Situational Analysis Reporting Format

Region:

Zone:

Woreda:

I. Demographic and Health Profile

II. Planning, Leadership, Management, and Human Resources

III. Routine Immunization Activities

IV. Supportive Supervision, Review Meetings and Community Activities

V. RED Categorization

IV. SWOT Analysis

Strength: Recent practices worked well and show promise to strengthen immunization

Weakness: Main challenges/gaps affecting immunization program

Opportunities: Opportunities for improving immunization program

Threats: Any expected bottlenecks

ANNEX 4. RED CATEGORIZATION DATABASE INSTRUCTIONS

There are seven main sheet tabs in the database: Monthly data, Cumulative data, Quarter data, Analysis by Month, Analysis by Quarter, Progress by Quarter, and Graph sheets. All the sheet tabs are protected to prevent structural modifications and unintentional change to the formulas. However, the first two sheets "Instruction" and "Monthly data" sheet tabs allow data entry. Users of the database should update the instruction sheet once a year (Fiscal Year [FY], categorization criteria and general information). The Monthly data sheet tab also has unlocked cells that allow the users to enter monthly data. Hence, monthly data for each HP can only be entered on the Monthly data sheet tab. The rest of the sheets will automatically update based on the data entered in Monthly data sheet.

1. The "Monthly data" sheet tab captures the monthly data of each health facility. The database automatically adds up the value: Penta1, Penta3, measles, and annual target at the top of the sheet. All the analyses and graphs on the subsequent sheets are based on the data entered in this sheet.
2. The "Cumulative data" sheet tab automatically calculates the cumulative values by adding previous month(s) total to the current month data.
3. The "Quarter data" sheet helps to compare data by quarter so that each month's data will be added. This sheet has the summative value of the months' data entered in the last column and the graph for coverage and drop out is based on this column.
4. The "Analysis by Month" sheet displays coverage for Penta1, Penta3, and measles; number of unimmunized children for Penta3 and measles; Penta1 to Penta3, and Penta1 to measles drop-out rates (DOR); and Accessibility and Utilization status. Finally, the problem is categorized from 1 to 4.
   Accessibility: Good when Penta1 coverage is equal or above 90%, otherwise poor and;
   Utilization: Good when DOR of Penta1 to Penta3 is below 10% and non-negative, otherwise poor

   Category 1 = high coverage (>=90%), low drop out (<10% and non-negative)
   Category 2 = high coverage (>=90%), high drop-out (>=10%)
   Category 3 = low coverage (<90%), low drop-out (<10% and non-negative)
   Category 4 = low coverage (<90%), high drop-out (>=10%)
5. "Analysis by Quarter" and "Progress by Quarter" sheets summarize the data by quarter
6. The "Graph" sheet displays some basic graphs. The user of this database can add other graphs as needed.
7. There is an auto filer activated on sheet tabs and which helps to select part of the variables.

Note: When a filter applies to the data, the graph shows the filtered items only.

ANNEX 5. DATA QUALITY CHECK FORM A: COMPARISON OF SIMILARITIES AMONG SELECTED DATA SOURCES

Data Quality Check Tool A: Comparison of Similarities among Selected Data Sources

REGION:

ZONE:

WOREDA:

HEALTH FACILITY:

DATE:

S. no	SELECTED INDICATORS	SELECTED DATA SOURCES			VERIFICATION FACTOR (VF)			
		(A) EPI Register or Tickler file	(B) Monitoring chart	(C) Report	VF(a) = [(A)/(C)] * 100%	Margin of Error	VF (b) = [(B)/ (C)] * 100%	Margin of Error
1	Penta1							
2	Penta3							
3	Measles							

Note: Verification factor/ consistency ratio = [number recounted from data source/ reported data] * 100%
Margin of error = absolute value of (100-verification factor)
If the margin of error is 0-10%, ADEQUATE
If the margin of error is 11-20%, ACCEPTABLE
If the margin error is >20%, POOR

ANNEX 6: DATA QUALITY CHECK FORM B: COMPARISON OF SIMILARITIES AMONG REPORTS AT ALL LEVELS

Data Quality Check Form B: Comparison of similarities among reports at all levels

QUARTER	M 1 : M 2 : M 3 :	REGION									ZONE			
WOREDA		PHCU									HEALTH POST			
S. No	INDICATORS	Reports at all levels (Put the absolute numbers (not percentages) under each boxes)									All sources similar?			Remark
		HP			**PHCU**			**WoHO**			YES / NO / NA			
		M1	M2	M3	M1	M2	M3	M1	M2	M3	M1	M2	M3	
1	Penta1													
2	Penta3													
3	Measles													
										Number of 'YES' responses				
										ACCURACY RATE (%)				

DECISIONS: If the responses of 'YES' for all indicators for one month or the percent of similarities among the indicators for the month is 100%, we can consider the Data Quality is Good/Strong. If one of the indicators becomes 'NO' for the month, we can assume that the Data Quality is Poor.

TIPS: ACCURACY RATIO (AR)

It is the concordance/matching between the actual data on the data reported by health facility (HP) to the next level (PHCU) and Woreda Health Offices (WoHO). It is measured through checking the consistency of the monthly reports along the levels. When we found it similar, we put 'Yes' across the observed indicator but if there is no similarity from one level to the other, we put 'No'. Finally, the accuracy ratio will be calculated by taking all the numbers of observations as a denominator and all 'Yes' responses as numerator.
Accuracy Ratio = all 'yes' responses/sum of maximum scores that could be obtained
A "no" scores 0, a "yes" scores 1 and an "NA" is not recorded in the denominator. The overall AR is the proportion generated as the sum of all numerators and all denominators.

ANNEX 7. BENCHMARK CATEGORY AND BENCHMARK STATUS OF HEALTH POSTS AND HEALTH CENTERS/PHCUS IN A WOREDA

Criteria for RED Categorization				**Region**		**Zone**		**Woreda**			
Penta1 Coverage	Penta1 to Penta3 DOR										
> 90% (or as established by region)	< 10%										
Name of the Health Facility	Immunization coverage (%)			Unimmunized (Number)		Drop-Out Rates (%)		Identified problem		Benchmark Category	Benchmark Status
	Penta1	**Penta3**	**Measles**	**Penta3**	**Measles**	**Penta1-3**	**Penta1-Measles**	Access	Utilization		
HC/PHCU											
….. HP											
….. HP											
….. HP											
….. HP											
….. HP											
HC/PHCU											
….. HP											
….. HP											
….. HP											
….. HP											

HC/PHCU											
….. HP											
….. HP											
….. HP											
….. HP											
….. HP											
Woreda Total											

PHCU and WoHO Microplanning Format for Routine Immunization Activities

Region: Zone: Woreda: Health facility:

Year of the microplan (EFY)

Introduction and mapping vaccination service areas (outreach, static, or mobile)

Table 1 – Analyses of PHCU/WoHO Data Summary

PHCU/ Health post	Compile population, immunization Coverage data in the previous 12 months (YEAR_____)							Analyze problem								Prioritize area
	Surviving Infants <1 year	Doses of vaccine administered			Immunization Coverage (%)			Un/under-immunized (No.)			Drop-out rates (%)		Identify Problem		Categorize Problem	
		Penta1	Penta3	Measles	Penta1	Penta3	Measles	Penta1	Penta3	Measles	Penta1-Penta3	Penta1-Measles	Access	Utilization	Category 1,2,3,4	Priority 1,2,3,4
PHCU/ WoHO Total																

Category (Regions can establish appropriate cut-off points for each RED Category according local context.)	Priority
1 = No problem; drop-out rates low (<10%), coverage (access) high (Penta1 >80%) (good access and utilization) 2 = Problem; drop-out rates high (poor utilization), coverage high (good access). 3 = Problem; drop-out rates low (good utilization), coverage low (poor access). 4 = Problem; drop-out rates high (poor utilization), coverage low (poor access).	

Table 2 – PHCU/WoHO EPI Microplanning Problems, Causes, and Solutions Analysis Form

Categories	Problems	Root Causes of problems	Solutions with existing resources	Solutions with extra resources
Staffing/ Training				
Logistics				
Service Delivery				
Quantity				
Quality				
Management/ Planning				
Data Collection/ Reporting				
Monitoring and Evaluation				
IEC				

Setting objective and strategies

- Set objectives and targets
- Sketch strategies to achieve the target

Table 3 – PHCU/WoHO target population and vaccination session planning form

PHCU/ Health post	Total Target Population				Planned																# sessions in type		
	Tot. Pop.	Surviving Infants	Preg. Wom	Non-PW	BCG	%	Penta1	%	Penta3	%	Rota1	%	Rota2	%	Measles/ Vit.A	%	PWTT2+	%	NPW TT2+	%	Fixed	OR	Mob

Table 4 – Performance Improvement Plan (Activity plan) to achieve your objectives and targets (grouped under the five components of RED)

SN	Activity	Unit	Quan-tity	Implementation Period in month (EFY2006)												Responsible Body
				Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	
A	**Planning and management**															
1																
2																
3																
B	**Reaching the target popu-lation**															
1																
2																
C	**Supportive supervision**															
1																
2																
D	**Community involvement**															
1																
2																
E	**Monitoring for action**															
1																
2																

Table 5 – PHCU/WoHO vaccine and supply planning, and operational cost planning form

Health post/ PHCU	OR Sessions per year	Vaccine needed in doses						Vit.A tin	Supply				Operational costs								
		BCG	Mea-sles	Pen/ Pcv	OPV	Rota	TT		AD syringe for		Mixing syringe	Safety box	Allowance for OR	Supervision	Review Meeting	Training	Transport	Kerosene & other costs	IEC ***	Total	Source
									BCG	Other											
Total																					

Note.
1. Vaccine requirement = Target pop'n*annual target coverage*wastage factor*number of doses/antigen
* Wastage Rate/Wastage factor (50%/2 for BCG, 30%/1.43 for Measles & 10%/1.11 for others vaccines & Supplies)
2. AD syringes requirement = Target pop'n.*target coverage for the year(%)*number of doses*wastage factor (1.11)
3. Mixing syringes requirement = number of (BCG & Measles) vials*Wastage factor (1.11)
4. Safety boxes requirement = (AD syringes+mixing syringes)/100

***Social Mobilization/IEC activities should be planned in detail on separate page

Table 6 – Monitoring Planned Activities

Activity and key indicators	Unit	Quan-tity	Implementation Period in month (EFY2006)												Who is responsible?	Remark
			Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun		

ANNEX 9. GUIDE FOR RI MICROPLAN DEVELOPMENT

(Guide for PHCU and WoHO Microplans)

(Note: Please use the term health facility instead of PHCU where there is no PHCU structure)

This guide is for PHCU and WoHO staff to work on preparing a RI microplan. It provides guidance on how to use the RI microplan template effectively throughout the microplan development process.

The WoHO and/or PHCU will analyze their problems using RED Categorization and QI tools to design an appropriate strategy that will have a positive impact on RI. The WoHO microplan should include all PHCUs with in the woreda, and a PHCU microplan should include all HPs with in the PHCU cluster.

1. Introduction and mapping vaccination service areas

- In this section, provide a short summary description of the PHCU/woreda; mainly focusing on socio-cultural and economic determinants of health. It is also important to map out the vaccination areas across the catchment; the map may indicate key places such as HCs, HPs, schools and other important landmarks.
- Population profile should be presented in this section including pregnant women, women of reproductive age, total births, surviving infants (<1 year) and under five children.
- The PHCU and WoHO team also assess the past experiences on what has improved routine immunization system strengthening, including the components and main activities in each RED/REC component that will help to design an effective intervention for the upcoming year. The past experience analyses should focus on local situation interventions that could work well in that particular context.

2. Analyses of PHCU/WoHO data summary (table 1)

- This section focuses on data analyses using the previous year performance. The immunization coverage and dropout rate as well as number of unimmunized children should be examined to identify the problems. Then, prioritize the problems to act on the magnitude and severity of the problems that could have great impact on the service improvement. The RED categorization tool has to be used to identify the access and utilization problems that will help to understand the bigger problems. Then, at this point the QI tools such as Pareto, fishbone and process mapping may be vital to analyze the problem critically and to break down the bigger problems into smaller pieces.
- **Immunization coverage** can be calculated as: doses of vaccine administered divided by surviving infants (< 1 year) and multiply by 100.
- **Number of un/under-immunized children** can be calculated as: subtract doses of vaccine administered from surviving infants (< 1 year).
- **Drop-out rate** can be calculated as follows:
  Penta1 to Penta3 dropout rate = (Penta1 – Penta3) ÷ Penta1 x 100%, where:
  - Penta1 is the number receiving the first pentavalent vaccine dose
  - Penta3 is the number receiving the third dose.

- **Drop-out rate Penta1 to measles** can be calculated as:
  Penta1 to measles dropout rate = (Penta1 – measles) ÷ Penta1 x 100% where:
  - Penta1 is the number receiving the first pentavalent vaccine dose
  - Measles is the number receiving the first measles vaccine dose
- **Identify Problem** – access problem is directly indicated by Penta1 coverage and utilization problem is directly indicated by Penta1 to Penta3 DOR. It is possible to say poor or good for both access and utilization problem depending on the achievement.
- **Priority** – when you prioritize the problem, it is good to look at the number of un-immunized children in addition to the category.

3. PHCU/WoHO EPI microplan problem, causes and solutions analysis form (table 2)

- Once the team identifies and prioritizes the major problems, they should analyze the root causes of the prioritized problems using fishbone analysis. The problems should be identified based on the problem category and the analysis should identify the root causes of the prioritized problems and that will lead to find local solutions. You may not need to list problems in each problem category but the team should focus on some problem category that can have high impact in that particular situation. Identify the problems that could be solved with local resources and that may need extra resources that will help the team to design an effective intervention.
- **Staffing/Training** – list out problems in related to human resource and skill gaps such as shortage of human resource, Skill gaps (lack of trainings), staff turnover (lack of staff retention), etc.
- **Logistics** – list out problems in relation to vaccine and supply distribution, cold chain management and transportation, etc.
- **Service Delivery** – problems in organizing and providing the vaccination sessions.
- **Quantity** – this refers to the analyzed data summary or expressed in coverage and number of un/under-immunized children (level of category).
- **Quality** – refers to the service delivery quality that indicates client satisfaction, waiting time, quality vaccine delivery for the right client, key message for women, etc.
- **Management/Planning** – problems in forecasting, managing inventories, dispatching, human resource management, etc.
- **Data Collection/Reporting** – list out problems in recording, report compilation and summarization, and formats.
- **Monitoring and Evaluation** – problems in relation to analyzing and use of data for action, and follow up.
- **IEC/BCC** – problems in social mobilization, program communication, distribution and use of IEC/BCC materials (job aids), etc.

4. Setting objectives and strategies

- Set overall aim, objectives and targets in the line with woreda based planning and national immunization targets.
- The objective should be SMART (specific, measurable, achievable, realistic and time bounded); the objectives should address few number of problems; it could be 3-5 priority areas you identified above.

- Example: reduce the number of unimmunized children from X# to Y# by June 2015 (Sene 2007 EFY) among the five PHCUs.

- Similarly, set targets for the key performance areas, not only for prioritized areas but also for those areas that need sustainability.
- To design effective strategies to address the set target you should review the previous experience on what has improved the RI and sketch strategies to achieve the set target. Clearly mention/describe the approaches you will use to achieve the objectives and targets. For practical reasons, context specific and affordable strategies/ approaches should be considered.

5. PHCU/WoHO target population and vaccination session planning form and activity plan (table 3)

- Set the target population for each health post under the PHCU, and plan the type of the vaccination session that are carried out throughout the year. The total sum will give the PHCU target population and planned activities. Similarly, all health posts (PHCUs) will give the total for the woreda.
- Activity Plans: This is the most important part of the microplan and needs critical thinking in selecting activities for your objectives as well group them under the five components of RED. This will help you to focus as well as see whether the RED components are well addressed and interlinked too. In order to do this effectively you need to understand and internalize the Ethiopia national RED guideline as well as know which activities fall under which components of RED.

6. PHCU/WoHO vaccine and supply planning, and operational cost planning form (table 4)

- This section is important to forecast vaccine and supply to prevent shorting in the coming budget year.
- Use your regional figures in calculating wastage and other rates while calculating your logistics requirement for the year even if there is some guidance under the table.
- Plan the operational costs based on key activities that are laid down in the above. The costs may include but not limited to trainings, supportive supervision, different meetings, cold chain system and equipment, supply, etc.

7. Monitoring planned activities (table 5)

- This section is important to monitor the planned activities whether carried out efficiently and effectively that can help the management team to ensure who is managing what and how. Accordingly, clearly describe how this microplan will be managed. What will be the role of each people involved such as the supervisors, WoHO head, HWs, HEWs, volunteers, other partner, etc.?
- Additionally, describe your key performance indicators to be used, as well as the mechanisms in place to monitor and evaluate progress of your activities.
- Please leave the free space of "implementation Period in month (EFY)" column and fill in when you implement the microplan activity. The importance of these columns is to track the progress of the activity implementation.

ANNEX 10. QIT MEETING MINUTE BOOK TEMPLATE

QIT Meeting Minute Book

Date:

Section-I: GENERAL QI COMPONENT	
List MAIN PROBLEMS related to EPI	PRIORITIZE the Problems
	1
	2
	3
Selected ONE PROBLEM for Improvement	
OVERALL GOAL [aim you wish to achieve]	
How will you know if there is improvement? [Define OUTCOME INDICATORS]:	1 2
ROOT CAUSES of the selected problem	1
	2
	3
PROPOSED SOLUTION/IDEA to address the Problem	

Section-II: PDSA Cycle			
P-Plan [Plan activities with responsible persons and the timeframe to test the proposed solution/Ideas]			
List the TASKS or ACTIVITIES	RESPONSIBLE person	TIMEFRAME [When to be done]	PLACE [Where to be done]
PREDICTION: [Predict what will happen when the test is carried out]			

PROCESS MEASUREMENT: [How will you measure the activities? Set some process indicators]	1 2 3
DATA COLLECTION Plan	

D-Do [Write what happened and what you observed when you do the planned activities]		
1		
2		
3		
S-Study [Describe the measured results and compare with the planned predictions]		
RESULTS	**COMPARE [Result with Prediction]**	**Why did this result happen?**
A-Act [Take an action according to the findings of the study]		
ACTION	DESCRIPTION	NEXT PLAN
CONTINUE TESTING	Further testing on proposed change ideas	Continue the cycle on the same change idea starting from P-part of the PDSA Cycle
ADOPT	Team ready to engage management to make the new change permanent in the system	Select other problems to solve and Plan the adopted experience to share for others to improve their RI system
ADAPT	Modify proposed change idea	Modify the process to test the change idea or add additional change idea to support the original change idea
ABANDON	Drop and develop alternative change idea to test	Start from proposing solution/ idea to address the problem
DECISION FOR THIS SPECIFIC CYCLE		

ANNEX 11. SAMPLE EPI PROCESS BASED SUPPORTIVE SUPERVISION CHECKLIST FOR HEALTH POSTS

General Information

a. Name of health HP:_____
b. Date of visit:_____
c. Number of households _____Number of WDA _____ Number of 1 to 5 network _____
d. Catchment area population by HP:_____

S.no	Activities	Yes/no/NA	Comments
Planning and management of resources			
1	Is there registered under one and pregnant women population by name and number in each gote? Yes: if there is a posted list of under one children and PW by name or if there are registered lists No: if it is only in numbers or not registering all gotes (mender)		
2	Are there identified areas that are able to be reached through routine vaccination sessions (static and outreach) or mobile sessions? Yes: if there are identified areas described using maps or names and the type of the service given No: if the above is not fulfilled		
S.no	**Activities**	**Yes/no/NA**	**Comments**
3	Do they have a plan and was it participatory during planning process? Yes: during planning process if HEWs, volunteers, TBAs, kebele leaders and other influential people are participated No: if the participants from the above list are less than three		

4	Did they identify major problems and prioritize them? Yes: if they used either fishbone, Pareto chart, or process map to identify and prioritize problems No: if they did not use any of the above		
Cold chain and logistics			
5	Do they include necessary vaccines and cold chain materials in type and quantity in the plan? Yes: if the necessary materials are included in the plan including the type and quantity in time period No: if the above is not fulfilled		
S.no	**Activities**	**Yes/no/NA**	**Comments**
6	Did they use safety box for wastes and dispose appropriately? Yes: if they used safety box and burn in the dig and there is not any waste around No: if one of the above is not fulfilled		
Link the service with the community			
7	Are they informing their vaccination schedule (static and outreach) to the community? Yes: if there is posted vaccination session schedule in the wall No: if there is no posted schedule		
8	Did the health post undertake the vaccination sessions according to the schedule? Yes: look the registration book and compare with the planned schedule; yes if they did according to the schedule and the vaccinated children and women are recorded No: if one of the vaccination session is interrupted		

9	Did the health care providers, HEWs, and QIT meet in the last month? Yes: if the meeting is conducted in that particular month, and more than half of the participants are attending the meeting and have minutes. No: if the meeting is not conducted or no minutes		
S.no	**Activities**	**Yes/no/NA**	**Comments**
10	Are they using tickler box to identify defaulters and those children who have appointment? Yes: if there is defaulter and appointment cards in the tickler box No: if there is no defaulter or appointment cards in the tickler box		
11	Did they do house-to-house visits in the last month? Yes: if there is any document that shows house-to-house visit No: if there is not any document		
12	Is there a new change idea that is on testing? Yes: look at the minutes; if there is recorded new change idea or a change idea in progress No: if there is no recorded change idea either new or in testing		
Observation			
S.no	**Activities**	**Yes/no/NA**	**Comments**

13	Are they bundling all necessary vaccine antigens and supply during static or outreach sessions? Yes: by observing at the vaccination session; if they have bundled all vaccine antigens and supply (vaccine, syringe including for dilute, safety box, immunization card, and sponge pad) No: if one of the antigen/supply is not fulfilled		
14	Did the vaccinator apply the five R's? Yes: by observing the vaccinator during vaccination session and if s/he exercised the five R's of right client, right route, right time, right vaccine, and right dose No: if s/he missed one of the above		
Monitoring data and use for action and surveillance			
15	Is there consistent data among tally sheet, EPI registration book, monitoring chart, and monthly report in the last month? Yes: if the four tools are similar No: if there is discrepancy among the four tools		
S.no	**Activities**	**Yes/no/NA**	**Comments**
16	Is the performance Vs plan achievement satisfactory? Yes: if Penta1 and Penta3 coverage is greater than 80% and Penta1-Penta3 DOR is less than 10%. No: if one of the above is not fulfilled		
17	Did they send completed and timely report to the woreda? Yes: if the report was sent within 20 – 25th of the month, and the report format have all fields completed No: if one of the above is not fulfilled		

18	Did they do weekly surveillance? Yes: if there are posted case definitions on the wall and they sent weekly report No: if otherwise		
		Total yes	
		Yes in % from the eligible questions	

Name:

Responsibility:

Signature and date:

Supervisor _____

Supervisee _____

Findings and action plan

Major problems identified	Prioritized problems to improve	Action period	Responsible body

ANNEX 12. PDSA COMPILATION FORMAT FOR WOREDA AND PHCU LEVELS

Region:_____

Woreda: _____

S. No.	Health facility name	Aim/pri-oritized problems	Root causes	Change idea	Measure-ment	Plan	Do	Study	Act
1									
2									
3									
4									
5									
6									

ANNEX 13: EXCHANGE VISIT TO RED-QI WOREDA PLANNING TEMPLATE

Introduction

A key element of the RED-QI approach is the exchange of ideas (best practices) between health workers within the same woreda, as well as with neighboring woredas. "Experience sharing visits" encourage the exchange of ideas at both the health facility and management level. After initial orientation and training on RED-QI, staff from a "new for RED-QI implementation" woreda will travel to a "RED-QI implementing" woreda that has already implemented/practiced RED-QI to show RED-QI implementation. The latter woreda will share experiences on working with PDSA cycles, utilization of the RED categorization tool, and will provide suggestions to improve RI. In the same vein, the "new" woreda will share their experiences to date so that the visit is a "two-way" learning process. Before the visit, each WoHO and PHCU will be asked which thematic areas/activities they are most interested in learning about and this feedback will be incorporated into the exchange visit agenda

(to be prepared after this specific interest has been identified). During the exchange visit, the "new" woreda will design a plan for how they will incorporate the lessons learned from the visit into their work. This plan will be monitored at three and six months after the visit.

Objective of the Exchange visit

- Introduce the "new" woreda to practical applications of RED-QI processes.
- Create an environment for cross-learning across woredas at both the management and health facility level.
- Encourage open communication between woredas.
- Strengthen the on-going RED-QI implementation of "old" woredas.

Who should attend the "experience exchange visit"

Cross visit participants should be a mix of WoHO, PHCU, and HP staffs, but can also include woreda administrative leaders or partners. Participants should be selected based on how that woreda envisions building a critical mass of RED-QI expertise and how spread/scale out is envisioned to happen internally within that woreda until all HPs are covered. A total of fifteen persons participate in this exchange visit.

Activities for an exchange visit

1. Before planning the visit, make sure that RED-QI activities are sustained in the woreda and the staff is ready to share their experience.
2. Communicate with the health facility staff to be visited, including the WoHO staff/EPI focal persons will lead the process.
3. Brief the visitors on how RED-QI improved the health system of the woreda (by WoHO head and EPI focal person).
4. Facilitate the visit and experience sharing.
5. Share these activities during the visit:
    a. How they conduct supportive supervision, both Process Based Supportive Supervision (PBSS) for EPI and Integrated Supportive Supervision (ISS), including preparation and follow up.
    b. How EPI data analysis is conducted routinely and RED categorization tool is used to analyze the identified health facility level performance problem.
    c. How problems are addressed.
    d. How they have managed QRMs and use them to share best experiences including PDSAs in RI (Completed PDSAs in RI for both service delivery and management should be available).
    e. How the community structure-QIT is working with HEWs in RI on issues such as defaulter tracing and registering pregnant mothers and new born babies; frequency of QIT meetings and how QITs track improvement linking the service delivered at HP with the community.
6. Summarize the lessons learnt during the visit and identify the most useful and less useful experiences gained to take home.
7. Develop an action plan to implement in their specific woredas.

Expected outcomes from visitors

- Participants will have gained experience on the specific areas that they said they wanted to learn about ahead of the visit and achieve techniques and methods of implementing RED-QI with the available resources.
- Development of action plans based on the practical experience they have acquired and lessons learnt to implement RED-QI in their respective woredas for the coming three months.
- Brief to other HWs and community leaders the experience they had after returning back to their woreda.

Suggested steps to do the exchange visit

1. The WoHO selects and notifies participants for the cross visit.
2. The participants reach the host woreda and the visit starts on the next day morning.

3. **Day 1: Experience Share Visit:**

- Two hours brief will be provided with some suggestions from the host woreda how RED-QI is implemented and the best practices to be observed during site visit of the HPs and HCs. Different stakeholders working closely with WoHO can be part of the briefing, discussion, site visit, and following up of implementation of the experiences obtained from this cross visit.
- Visitors should be encouraged to ask questions and express their interests.
- After the briefing, visitors will divide into manageable groups of two or three participants and visit selected HPs or HCs.
- During site visit, host WoHO staffs should be within each group and facilitate experience sharing with UI-FHS staffs.
- In the afternoon the visitors continue visiting the health facilities.

4. **Day 2: Experience Share Visit:**

- In the morning, visitors go to WoHO and see what the woreda office is doing in the management aspects related to RED-QI.
- Have a discussion, with questions and answers.
- In the afternoon visitors reflect what they were observing in the past one-and-a-half days both at the health facilities and WoHO.
- Discuss the strengths and weaknesses of the host woreda.
- The host will take time to comment on the reflection comments and questions.
- After discussion the visitors sit together and develop action plans based on lessons learnt and experiences shared for the next three months to each level (HP, HC, and WoHO).

5. ZHD and RHB are expected to follow the implementation of action plans developed by the woreda after this exchange visit, and UI-FHS facilitates both the implementation and the follow up.

Action Planning Table

Level: HP/HC/WoHO

Sr.#	Activity	Strategy for implementation	Respon-sible body	Implementation period
1				
2				
3				
4				
5				
6				

UI-FHS
Universal Immunization
through Improving Family
Health Services