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MINISTRY OF HEALTH-ETHIOPIA

Primary Health Care Unit Reaching Every District (RED) Guidelines



Photo: Adriana Almiñana, JSI

June 2021



Acknowledgements

The Federal Ministry of Health would like to thank those who have contributed to the development of this guide including JSI Research & Training Institute, Inc. and partners associated with the Monitoring and Evaluation Technical Working Group, and pre-test participants in the Asayita and Hadero woredas in Afar and SNNP regions, respectively.

Suggested Citation

JSI Research & Training Institute, Inc. (2021). Primary Health Care Unit Reaching Every District (RED) Guidelines.

Forward

The Federal Democratic Republic of Ethiopia, Ministry of Health recognizes the crucial role immunization plays in reducing child morbidity and mortality and it affirms its responsibility to ensure that every child is protected from vaccine preventable diseases. Expanded Program on Immunization (EPI), has built on the direction and planning of the Government's Health Sector Transformation Plan (HSTP), the Comprehensive Multi-Year Plan (cMYP 2021-2025), the Reach-Every-District (RED) immunization approach and other initiatives that flag quality and equity at the center of their agenda.

FMOH with its EPI partners has prepared this RED PHCU guide, driven from the RED guide which can be used during operation of routine immunization activity at health center and Health post level. This guide is aimed to strengthen immunization systems by improving planning, managing available resources, service delivery and monitoring, in the context of primary healthcare based on community needs at service delivery points.

This in turn improves equitable and sustainable access to vaccines for every age-eligible individual and reduces incidence of vaccine-preventable diseases (VPDs). This RED PHCU guide emphasizes five important areas for immunization programs: (1) reducing inequity in immunization coverage, (2) integration of health services, (3) delivering vaccines beyond infancy using a life course approach, (4) increasing urbanization, and (5) insecurity and conflict. Adherence to the contents of this guide will streamline efforts by all stakeholders to increase coverage upholding quality and equitable access to immunization by all communities.

The Ministry of Health appreciates the role of partner organizations and individuals in contributing technically and financially in the development and operationalization of the RED PHCU pocket guide.

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Table of Contents

Implementing Reaching Every District/Community (RED/C): A Practical Guide for the Health Center Level	1
INTRODUCTION	2
OVERVIEW OF RED TASKS AT THE HEALTH CENTER.....	3
Detailed Guidance for Implementing RED at the Health Center Level	4
EVERY YEAR	4
Activity 1: Conduct EPI microplanning.....	4
Activity 2: Develop an annual schedule for supportive supervision visits	8
EVERY QUARTER.....	9
Activity 3: Review the microplan for each health center and its HPs and provide feedback for revisions as needed	9
Activity 4. Identify health posts with insufficient resources to implement their microplan	11
Activity 5. Provide orientation and capacity building on routine immunization to newly assigned staff	11
EVERY MONTH.....	12
Activity 6: Analyze immunization data.....	12
Activity 7: Based on the data, provide feedback on data quality and timeliness and the completeness of reports and take corrective action as needed	14
Activity 8: Provide supportive supervision to health posts.....	15
Activity 9: Convene regular meetings of health committees and quality improvement teams	16
Activity 10: Ensure the distribution of vaccines and other supplies to health posts	17
AFTER EACH VACCINATION SESSION	18
Activity 11: After each vaccination session, trace defaulters	18
ONE TIME ONLY OR AS NEEDED.....	19
Activity 12: Provide support to HEWs for static, mobile, and outreach immunization services	19
Activity 13: Distribute immunization data management tools.....	20
Implementing Reaching Every District/Community (RED/C): A Practical Guide for the Health Post Level	21
INTRODUCTION	22
OVERVIEW OF RED TASKS AT HEALTH POSTS.....	23
Detailed Guidance for Implementing RED at the Health Post Level.....	24
EVERY YEAR	24
Activity 1: Prepare a microplan for the health post.....	24
EVERY QUARTER.....	29
Activity 2: Review and update the microplan	29
Activity 3: Mobilize community resources to support mobile and outreach sessions	33
EVERY MONTH.....	34
Activity 4: Submit complete and timely immunization data to the PHCU	34

Activity 5: Monitor static and outreach immunization sessions monthly and mobile services quarterly	34
Activity 6: Monitor immunization coverage and dropout rates and update the immunization monitoring chart	34
Activity 7: Provide your supervisor with the immunization data needed for supportive supervision visits.	36
Activity 8: Participate actively during supportive supervision visits and carry out follow-up actions after each visit.....	37
Activity 9: Collaborate with the community to get updated information for each village	37
Activity 10: Convene monthly meetings of the Quality Improvement Team and provide orientation to new members, as needed.....	38
EVERY VACCINATION SESSION.....	39
Activity 11: Review the session plan and schedule for static, outreach, and/or mobile services	39
Activity 12: Mobilize the community and prepare supplies for the immunization session.....	40
Activity 13: Record complete, accurate data for each immunization session	40
Activity 14: Provide QIT members or social mobilizers with a list of defaulters to bring to the next session ...	41
ONE TIME ONLY OR AS NEEDED.....	42
Activity 15. Invite community members to become members of QITs	42
ANNEXES	43
Annex 1: Health post microplan template	43
Annex 2: Fishbone job aid.....	47
Annex 3: PHCU microplan template	50
Annex 4: PHCU SS planning tool	56
Annex 5: HP SS checklist	57
Annex 6: Health Committee/ QIT Minute book.....	66
Annex 7: Step by step guidance on mobile/outreach and integration services	68
Annex 8: Deliver safe immunization services during COVID-19 (IPC)	71

**Implementing Reaching Every District/Community (RED/C):
A Practical Guide for the Health Center Level**

INTRODUCTION

Ethiopia has implemented the Reaching Every District (RED) approach to strengthen routine immunization (RI) services for over 15 years. In 2018, Ethiopia introduced an adapted version of the RED approach with guidance specific to implementation in Ethiopia. As a complement to the Ethiopian RED Guide, these guidelines provide staff in the primary health care unit (PHCU), which includes both health centers (HC) and health posts (HP), with the essential information to carry out their RED implementation tasks.

As the focus of the RED approach is on strengthening district level service delivery, this guide is intended to provide step-by-step guidance for health workers to implement the five main operational components of RED: 1) planning and management of resources, 2) reaching all eligible populations, 3) engaging communities, 4) supportive supervision, and 5) monitoring and use of data for action. This guide provides detailed information on immunization activities that should be completed at the HC and HP levels on an annual, quarterly, or monthly basis, or after each immunization session, or one time only or as needed.

Who Is This Guide For?

- HC staff (supervisors, Expanded Program on Immunization—EPI—focal persons, vaccinators).
- HP staff (nurses, health extension workers—HEWs).
- The guide may be useful for informational purposes for woreda and Regional Health Bureau (RHB) staff and partners, but it is primarily intended to support PHCU staff.

How Is This Guide Organized?

- Overview of tasks (one page each for HC and HP).
- Detailed description of tasks and tools for the HC level.
- Detailed description of tasks and tools for the HP level.

How Should This Guide Be Used?

This guide should serve as a reference for PHCUs for the management and delivery of immunization services. The guide provides information for supervisors at the health center level and health workers providing immunization services, who are mostly at the health post level. HC and HP staff should review the guide on a regular basis as a reminder of the critical tasks and how frequently they should be carried out.

OVERVIEW OF RED TASKS AT THE HEALTH CENTER

Table 1. Actions for Supervisors, EPI Focal Persons, and Vaccinators

Every Year	Every Quarter	Every Month	Every Vaccination Session
<p>Activity 1: Conduct EPI microplanning.</p> <p>Activity 2: Develop an annual schedule for supportive supervision visits.</p>	<p>Activity 3: Review the microplan for each health center and its HPs and provide feedback for revisions as needed.</p> <p>Activity 4: Identify health posts with insufficient resources to implement their microplan.</p> <p>Activity 5: Provide orientation and capacity building on routine immunization to newly assigned staff.</p>	<p>Activity 6: Analyze immunization data.</p> <p>Activity 7: Based on the data, provide feedback on data quality and timeliness and the completeness of reports and take corrective action as needed.</p> <p>Activity 8: Provide supportive supervision to health posts.</p> <p>Activity 9: Convene regular meetings of health committees and quality improvement teams.</p> <p>Activity 10: Ensure the distribution of vaccines and other supplies to health posts.</p>	<p>Activity 11: After each vaccination session, trace defaulters.</p>
One Time Only or As Needed			
<p>Activity 12: Provide support to HEWs for static, mobile, and outreach immunization services.</p> <p>Activity 13: Distribute immunization data management tools.</p>			

Detailed Guidance for Implementing RED at the Health Center Level

At the health center level, supervisors, nurses, and vaccinators should carry out the tasks described in this guide. The tasks are categorized according to whether they are implemented every year, every quarter, every month, after each vaccination session, or one time only or as needed.

EVERY YEAR

In the three months before the beginning of every fiscal year (i.e., around Miazia), the two main RED activities for PHCU supervisors are:

Activity 1	Conduct EPI microplanning.
Activity 2	Develop an annual schedule for supportive supervision visits.

Activity 1: Conduct EPI microplanning

Carry out the following microplanning tasks:

Miazia	Task 1. Prepare to orient health post staff to microplanning.
Miazia-Ginbot	Task 2. Visit health posts to orient the HEWs/health workers (HWs) and support them and the community to draft their microplan.
Ginbot	Task 3. Review each health post's microplan activities and budget and provide feedback for revisions.
Ginot-Sene	Task 4. Compile the revised microplans and complete the PHCU microplan template.
Sene	Task 5. Submit the PHCU microplans to the woreda and review them together.
Sene-Hamle	Task 6. Send each health post a copy of their woreda-approved microplan.

Task 1. Prepare to orient health post staff to microplanning.

The first step is to prepare to orient health post staff to microplanning, explaining its importance, the benefits of routine use of the microplanning tool, and the overall process of microplanning. For a productive orientation, several activities need to be completed *at least one week prior to the orientation*. This includes having the supervisor explain to HP staff that they need to prepare the following information for microplanning: sub-kebele targets, previous quarter performance (e.g., coverage, dropout rates—DOR), sessions conducted, unimmunized children, hard-to-reach/high-risk villages, vaccines, the status of cold chain equipment (CCE) and other logistics, and locally identified service delivery challenges and potential local solutions.

In addition, health center staff should ask each health post team to reach out to important stakeholders to invite them to participate in the microplanning orientation. This includes community leaders (e.g., kebele, clan, and religious leaders), administrators, and partners who can mobilize the community and

support immunization services in the kebele. The involvement of these stakeholders is critical to the microplanning process as their engagement can:

- Improve planning (e.g., community leaders can inform health staff when and where services should take place).
- Mobilize resources (e.g., the woreda administrator may be able to allocate additional funding for immunization activities).
- Promote ownership of the immunization program across the kebele.
- Provide an opportunity during the orientation to identify which stakeholder will support which activity and the types of resources needed.

Task 2. Visit health posts to orient the HEW/HWs and support them and the community to draft their microplan.

Once planning for the microplanning orientation is complete, PHCU staff plan visits to each health post to provide staff with an orientation to the microplan, its purpose, and how to use it. If the health post has a microplan from the previous year, work with staff to review and update the plan. Encourage HP staff to work with performance review teams, quality improvement teams (QITs), and community members to obtain an actual target (i.e., head count) of women and children, identify and map hard-to-reach areas, and develop local solutions to address service delivery problems. When planning immunization sessions, confirm whether the mobile and outreach sites, dates, and session frequency are still convenient for the community.

Begin the microplanning process by assisting HEWs to draw a catchment area map for their health post. (See the HP section, page 28 for what to include in a HP catchment area map.). Next, support the HEWs to fill out the following forms in the health post microplanning template (see Annex 1):

- **Inventory form**
- **Sub-kebele/village data analysis form**
- **Sub-kebele session planning form**
- **Health facility work plan form**

Task 3: Review each health post's microplan activities and budget and provide feedback for revisions.

After the microplan orientation, each health post should prepare and submit its microplan to the PHCU EPI focal person. The focal person reviews the microplans to ensure that they include strategies to reach all target population, including those in hard-to-reach areas. If a microplan needs improvement, provide feedback to the HEWs and work with them to make the necessary changes (e.g., changes in session dates, frequency, or location, or resources for outreach and mobile activities, such as transportation and per diems). PHCU staff should confirm that the HEWs are clear about their responsibility to carry out the

planned activities (i.e., static, outreach, and mobile immunization sessions) and, if necessary, assign HWs from the PHCU to support health posts to conduct outreach and mobile sessions.

Task 4. Compile the revised microplans and complete the PHCU microplan template.

a. Compile the revised microplans.

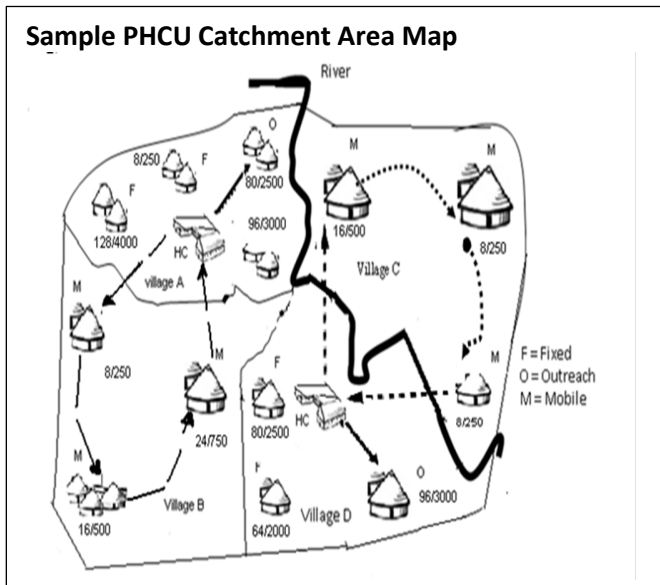
Case Study: Engaging Stakeholders for Resource Mobilization in Gambella, Itang Woreda

Across Ethiopia, implementation of the routine immunization program has its challenges, including limited strategic planning based on context and inadequate funding. The Itang Woreda health office in Gambella developed a detailed immunization microplan and budget to deliver vaccination services to all children in the woreda. Once budget gaps were identified through the microplanning process, Itang’s woreda health office staff advocated for increased immunization funding and engaged the districts civil authorities by presenting the microplan to the Itang woreda administration council. The council approved funding to cover budget gaps for key immunization program activities, including allocating resources for 13 additional outreach sites. Ultimately, they were able to conduct 156 outreach sessions, which included delivering routine immunizations to unreached populations.

After the health posts have incorporated feedback into their microplan, collect the plans and transfer information from the plans to the PHCU microplan template.

b. Develop the PHCU microplan (see Annex 3) by analyzing data and completing four key forms.

- i. PHCU catchment area map:** Begin the PHCU microplan by drafting a catchment area map for the entire PHCU. See below for a sample catchment area map and guidance for creating the map.



A PHCU catchment map should include:

- A list of HPs with a map of their catchment areas by kebele indicating the distances to and from the HC and the location of community facilities.
- Geographical features and landmarks such as rivers, mountains, and valleys.
- Natural seasonal barriers, such as flood zones during the rainy season.
- Roads and tracks.
- A list of communities with each identified as an urban area, town, village, rural settlement, or isolated household.
- The type of service delivery strategies: fixed (F), outreach (OR), or mobile (M).

- ii. **PHCU inventory form:** Fill out the inventory form by gathering data for the target populations from the health post forms. When possible, work with the HP to get accurate target population data estimates using the standard conversion factor. Actual or near accurate estimations of target populations can be obtained through household head counts, community registers from local authorities like kebele, reviewing the registration documents of pregnant women and children under age two, conducting a mini census, and using Supplemental Immunization Activity (SIA) data.
- iii. **PHCU data analysis form:** The PHCU then summarizes the data for each kebele/HP, identifies problems, and prioritizes health posts that need support. To identify problems, consider which HPs have low immunization coverage, high dropout rates, high numbers of unimmunized children, and/or reported vaccine-preventable diseases (VPDs) or outbreaks.

To identify significant problems and understand their causes, use the RED categorization tool and root cause analysis (see Table 2 on page 16) to disaggregate data and assess which HPs are doing well and which need more support.

Find the root cause of the problem

Each PHCU has unique service delivery challenges. PHCU staff should critically review problems using Quality Improvement tools such as the fishbone diagram (see Annex 2). The fishbone diagram will help you to break down bigger problems into smaller pieces to identify the root cause of the problem and develop local solutions.

- iv. **PHCU planning form:** insert in the planning form information about target populations, types of sessions (F, OR, and M), and persons responsible by kebele or HP.
- v. **PHCU resource planning:** determine PHCUs' resource needs based on their service delivery strategy (outreach and mobile), and activities such as supervision, training, and community engagement which require additional resources (e.g., vehicle for supportive supervision and advocacy and social mobilization resources for community engagement).

Task 5: Submit the PHCU microplans to the woreda and review them together.

Submit the completed PHCU microplan to the woreda health office and work with the health office to ensure endorsement and full budgeting for all mobile and outreach immunization activities. This may require the WoHO and woreda administration to collaborate to explore resources and identify cost-sharing opportunities associated with local partners and the community.

Task 6. Send each health post a copy of their woreda-approved microplan.

Once the microplans are approved and accepted by the woreda, send a copy of the approved microplan to the respective health posts and health centers. Clarify that they should begin to implement the plan and monitor their performance, including comparing actual sessions conducted and the number of children immunized to the projected numbers in the microplan.

Activity 2: Develop an annual schedule for supportive supervision visits

The PHCU should develop a supportive supervision plan to provide support to the health posts and follow up on issues identified during the problem analysis phase of microplanning (see Annex 4). Ideally, the PHCU should schedule a follow-up visit one month after a microplan is approved to ensure that the health facility is following the plan. Depending on the number of facilities and resources, it is recommended that the PHCU conduct supportive supervision with all facilities monthly. If resources are limited, use immunization data and information from previous supervision visits to identify and prioritize the health posts most in need of support. Ideally, supervisors will visit all health posts under the PHCU at least once every quarter.

Suggested criteria for selecting priority areas for supportive supervision:

- The highest number of unimmunized children in target populations
- Low coverage rates
- High dropout rates
- Poor performance reports from previous supportive supervision visits
- Hard-to-reach communities or areas
- Reported VPDs
- Poor vaccine management (e.g., stockouts)
- Planned session interruptions
- Problems with reports and data quality

EVERY QUARTER

There are three main RED activities for PHCU supervisors to carry out at the beginning of each quarter (Hamle, Tikmit, Tir, and Miazia).

Activity 3	Review the microplan for each health center and its HPs and provide feedback for revisions as needed.
Activity 4	Identify health posts with insufficient resources to implement their microplan.
Activity 5	Provide orientation and capacity building on routine immunization to newly assigned staff.

Activity 3: Review the microplan for each health center and its HPs and provide feedback for revisions as needed

Task 1: Complete the following tasks before updating the microplan:

- a. Analyze past performance by looking at the following documents to analyze specific indicators:
 - i. **Expanded Programme on Immunization (EPI) monitoring chart:** review immunization coverage, doses administered (Penta1, Penta3, MCV1, and MCV2), dropout rates, and numbers of unimmunized children. Note the following recommendations:
 - In HFs with **low coverage and/or high dropout**, **discuss the problem with the facility and identify solutions such as improving regularity and accessibility** using outreach and mobile services, which requires tasks related to transport, staff, locations and date of outreach and mobile sessions, vaccines and logistics supply, and demand creation activities.
 - In HCs that provide immunization services, check that the numbers from tally sheets and the EPI register match the HC's monitoring chart and reports.
 - Ensure that all pocket areas and missed villages in each kebele are identified and included in the updating of the microplan and that services are planned for these areas.
 - ii. **Health facility work plan:** review whether all planned sessions were conducted in accordance with the plan for each HP. For those that were not, identify what happened (e.g., issues with securing vaccines for outreach, too many planned sessions to implement).

- iii. **Vaccine ledger book:** review the current stock of vaccines to assess past stock levels and stock adequacy.
 - iv. **Surveillance data:** review reported vaccine preventable diseases.
 - v. **QIT meeting minute books:** review the minutes of Quality Improvement Team (QIT) meetings to identify if specific issues need to be addressed in the updated microplan.
- b. When updating microplans, try to coordinate with scheduled activities, such as review meetings, to ensure that you have a forum where HWs are all expected to attend, so you can work with each HW to update their microplan. As possible included PHCU staff and other community members in the process as well.
 - c. Update the microplan: update the microplan forms and catchment maps, and seek solutions to common problems. For example, this might involve replacing inaccurate target population estimates by having community members conduct a head count and ensuring that the numbers continue to be updated through ongoing tracking of pregnant women and newborns and registration of children under two.
 - d. After updating the microplan, provide copies to all facilities and communicate changes in session schedules to the community.

Figure I. Reviewing and Updating the Microplan



Activity 4. Identify health posts with insufficient resources to implement their microplan

During quarterly review meetings (QRMs) and other convening's, focus on the health posts experiencing budget shortages and mobilize resources to address budget gaps for immunization activities (e.g., funding shortages for mobile or outreach sessions). Use opportunities such as review meetings and other interactions with woreda health office and non-health stakeholders to advocate for additional operational funding. If there is a health care financing system in the PHCU, make sure that funds are allocated for mobile and outreach immunization sessions. Talk with community members about mobilizing local resources for outreach and mobile services, such as in-kind support to mobilize the community, guide HEWs/HWS, transport vaccines, and funding logistics.

Activity 5. Provide orientation and capacity building on routine immunization to newly assigned staff

Task 1: Provide orientation for HWs/HEWs assigned to EPI activities and pair new HEWs with more experienced staff members (or ensure that new HEWs have an opportunity for peer-to-peer learning with another health post). Orientation should cover the practical management of immunization sessions, such as a review of the schedule of antigens, the correct and safe administration of vaccines, the accurate use of data recording tools, and guidelines for interpersonal communication.

Task 2: At the end of the orientation, schedule with new staff members when you will return for your first supportive supervision visit with them. Make sure that the HW is aware that s/he can reach out with questions in the interim.

Task 3: Check whether job aids and reference materials are available in the EPI room and staff know how to use them. If they are not present, provide them after the visit.

Task 4: Check whether the microplan is available in the EPI room so that staff can monitor sessions planned, vaccine supply, and the budget for outreach and mobile activities. If the microplan is not available, find out why and provide a copy of the plan after the visit.

EVERY MONTH

There are five main RED activities for PHCU supervisors to carry out at the beginning of every month.

Activity 6	Analyze immunization data.
Activity 7	Based on the data, provide feedback on data quality and timeliness and the completeness of reports and take corrective action as needed.
Activity 8	Provide supportive supervision to health posts.
Activity 9	Convene regular meetings of health committees and quality improvement teams.
Activity 10	Ensure the distribution of vaccines and other supplies to health posts.

Activity 6: Analyze immunization data

To understand how the immunization program is working, it is important to analyze monthly data for each HP and the PHCU, using the RED categorization tool or monitoring chart to review coverage and dropout data, the number of unimmunized children, vaccine stockouts, and interruptions of sessions. Analysis of vaccine stockouts can be done using ledger books, mBrana, and Vaccine Request form (VRF) data, where vaccines and supplies received from the woreda and issued to health facilities are recorded. Analysis of sessions conducted versus planned can be done using the microplan.

Task 1: Calculate immunization coverage using the following steps:

Coverage = The number of children vaccinated with an antigen divided by the target population, then multiplied by 100.

Examples:

Calculating Penta 1 coverage: # of children vaccinated with Penta1 divided by the target population, then multiplied by 100

Calculating Penta 3 coverage: # of children vaccinated with Penta3 divided by the target population, then multiplied by 100

Calculating Measles 1 or 2 coverage: # of children vaccinated with MCV1 or MCV2 divided by the target population, then multiplied by 100

Task 2: Determine and record the number of children unimmunized for Penta1, Penta3 and Measles Containing Vaccine using the following steps:

Number of Unimmunized children

- for Penta1 = target population **MINUS** number of children vaccinated with Penta1
- for Penta3 = target population **MINUS** number of children vaccinated with Penta3
- for Measles 1 = target population **MINUS** number of children vaccinated with MCV1
- for Measles 2 = target population **MINUS** number of children vaccinated with MCV2

Task 3: Determine dropout rates for Penta1- Penta3, Penta1 – MCV1, and MCV1-MCV2:

Penta1-Penta3 Dropout Rate = # of doses of Penta1 minus # of doses of Penta3 for the same period divided by # doses of Penta1 in the same period multiplied by 100.

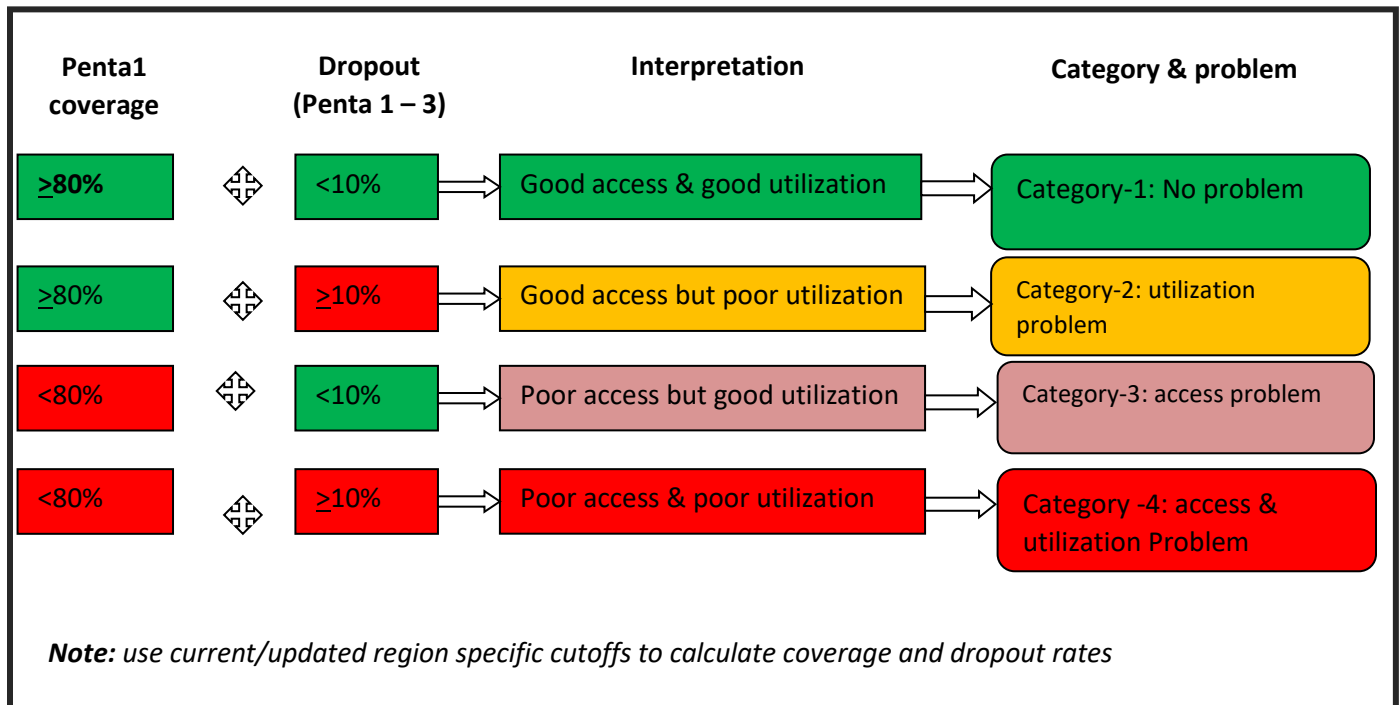
Penta1-MCV1 Dropout Rate = number of doses of Penta1 minus number of doses of MCV1 for the same period divided by number of doses of Penta1 in the same period multiplied by 100.

MCV1-MCV2 Dropout Rate = number of doses of MCV1 minus number of doses of MCV2 for the same period divided by number of doses of MCV1 in the same period multiplied by 100.

Task 4: Examine access to and utilization of services.

It is important to understand whether communities are accessing and utilizing immunization services. Analyze access to and utilization of services by using the RED Categorization tool (see Table 1 below). Use Penta1 for coverage and Penta1 to Penta3 to estimate dropout rates. By cross-tabulating coverage and dropout rates (DOR), access to and utilization of services can be assessed as demonstrated in the algorithm below.

Table 2. RED Categorization Tool



Task 5: Identify solutions.

Use the fishbone diagram (see Annex 2) to identify the root causes of poor access to and utilization of immunization services. Work with the Quality Improvement Team (or a team of stakeholders) to identify solutions and people to implement the solution.

Example:

The QIT identifies that in the past quarter there was a high number of defaulters in Kembata village. The team discusses why this is happening and determines that the problem is that no one was assigned as a social mobilizer for the village, so parents do not know when and where to go for vaccination services. Mr. Tewodros, from the QIT, volunteers to serve as community mobilizer. He will work with the HEW to mobilize the community prior to the next outreach session.

Activity 7: Based on the data, provide feedback on data quality and timeliness and the completeness of reports and take corrective action as needed

Based on the data, identify key follow-up actions. This may include actions such as arranging supportive supervision visits to lower performing facilities or facilities with inaccurate data, investigating the reasons for session interruptions and stockouts, and promoting timely and adequate vaccine requests.

Key Activities Recommended for QITs:

- a. Identify and prioritize problems.
 - i. Review program data (on coverage, dropouts, vaccine stock, etc.), observe immunization sessions, and discuss findings with health workers and members.
 - ii. Use the fishbone diagram to understand the root cause of problems. You can also use the “5 WHYS” technique, where you continue to ask “why” until you get to the root cause of a problem.
 - iii. Rank and prioritize problems according to their magnitude and possible solutions.
- b. Develop and implement an action plan.
 - i. Develop **an action plan** clearly stating WHAT, WHO and WHEN with timelines.
 - ii. Implement the action plan.
- c. Monitor progress.
 - i. Review the data and ask whether there were improvements and/or challenges during implementation of the plan. Compare the results with baseline data or data from the previous year.
- d. Integrate successful activities into the existing health system.
 - i. Integrate successful activities (e.g. defaulter tracking as a standard process for a health facility) into the health system while continuing to adjust the plan until activities lead to demonstrated improvements.

Activity 8: Provide supportive supervision to health posts

Task 1: Before each visit, review the supervision report from the previous visit, the quality of monthly data reported by the HP, and coverage and dropout rates. As needed, update your supportive supervision checklist for immunization (for example, to follow up on items such as whether a new vaccine has been introduced).

Task 2: One to two weeks before the supportive supervision visit, notify the health post of the visit.

Task 3: During the visit, engage with the health workers in a dialogue about what is working at the health facility and discuss any concerns they have. Provide positive feedback to the health workers for the activities they do well and work with them to solve problems they are having. During supervision, collect information using the supportive supervision (SS) checklist (see Annex 5), discuss your findings with the health workers, provide on-the-job training, and leave written feedback describing follow-up actions.

Figure 2. Supportive Supervision to Health Posts

Before each S.S. visit	1-2 weeks before S.S. visit	During the visit
<ul style="list-style-type: none"> • Review the supervision report from the previous visit. • Review the quality of monthly data reported by the HP and review their coverage and dropout rates. • As needed, update your supportive supervision checklist for immunization. 	<ul style="list-style-type: none"> • Notify the health post of the visit. 	<ul style="list-style-type: none"> • Discuss with the HWs what is working and their concerns. • Provide feedback and brainstorm solutions to problems. • Collect information using the S.S. checklist. • Discuss findings with the HWs. • Provide on-the-job training. • Leave written feedback describing follow-up actions.

Activity 9: Convene regular meetings of health committees and quality improvement teams

At each PHCU, organize a quality improvement team (QIT) by either establishing a new team or re-vitalizing and repurposing an existing team, such as a performance review team, command post, or steering committee. This team will play an instrumental role in discussing and analyzing service delivery challenges and actions to address them. The QIT’s support to the PHCU should focus on improving management processes and procedures to address problems related to, for example, vaccine distribution and planning mobile service delivery. The teams should meet regularly (at least monthly) to review progress and evaluate the performance of the health facility. These meetings will provide newly assigned health workers with an opportunity to understand the role of the QIT. It should be a standard practice to use the health facility’s minute book for proper documentation of QIT activities and meetings (see Annex 6).

PHCUs with a strong QIT should support HPs to organize their own QITs with community members and carry out similar functions at their level. Encourage and support HEWs to mobilize existing structures, such as command posts or steering committees, to serve as QITs, which involves holding regular meetings to review progress and identify challenges. Encourage the HPs to have regular (monthly) QIT meetings and to document them in the minute book for review during supportive supervision.

PHCU supervisors should provide support to health posts to convene QIT meeting with community members. Use the health post section of this guide for guidance to HPs on conducting QIT meetings.

Activity 10: Ensure the distribution of vaccines and other supplies to health posts

PHCU supervisors should coordinate and manage the distribution of vaccines and other supplies to HPs. This involves the following tasks:

Task 1: During microplanning, forecast vaccines and supplies needed for PHCU catchment health posts.

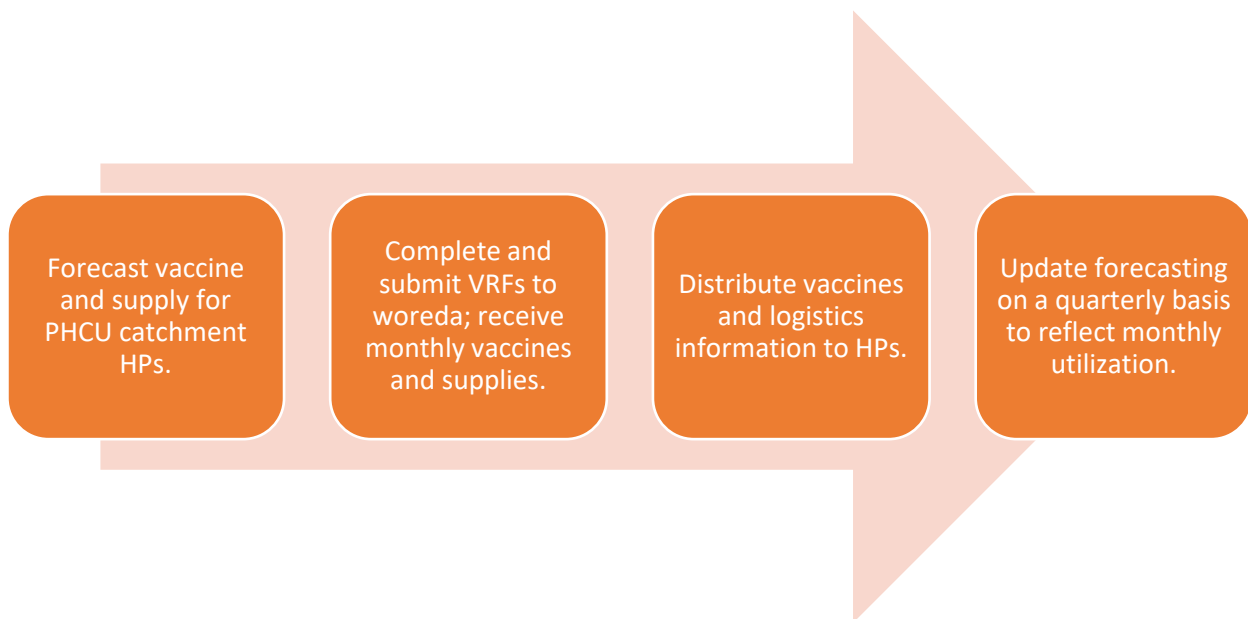
Task 2: Complete and submit VRFs to the woredas and receive monthly vaccines and supplies.

Task 3: Distribute vaccines and supplies to HPs according to the monthly distribution plan and schedule for each health post.

Task 4: On a quarterly basis, update forecasting of vaccines and supplies to reflect monthly utilization.

- a. Monitor distribution of vaccines and supplies using the vaccine ledger book.
 - i. Record each vaccine and related supplies received, issued, and returned to avoid overstock and stockouts.

Figure 3. Distribution of Vaccines and Supplies to Health Posts



AFTER EACH VACCINATION SESSION

As indicated below, there is one main RED activity for vaccinators and nurses to carry out after each session.

Activity 1 I: After each vaccination session, trace defaulters

Task 1: Vaccinators and nurses: Provide the community with a list of defaulters and ask them to bring these children to the next immunization session.

- a. Using the EPI register or a tickler file, identify children who missed their last appointment.
 - i. List the child's name, location, and other information using the defaulter tracing template.
 - ii. Give a copy of the defaulter tracing template (with the list of children) to the kebele or sub-kebele where the children live.
- b. Contact each child's family yourself or with the help of others in the community and tell the parent when and where the next immunization session is.
- c. Bring (or have a community member bring) the children to the next session and vaccinate them.
- d. Update the register and immunization card with the date of the vaccination or an appropriate remark (for example, moved, refused).

Figure 4. Tracking Defaulters after Each Vaccination Session



Task 2: PHCU supervisors: Supervisors should make sure that vaccinators (HWs and HEWs) in all health centers and posts trace defaulters immediately after the vaccination session and ask a community leader or social mobilizer to bring those children to the next session.

ONE TIME ONLY OR AS NEEDED

PHCU supervisors or nurses should carry out these two RED activities one time only or as needed.

Activity 12	Provide support to HEWs for static, mobile, and outreach immunization services.
Activity 13	Distribute immunization data management tools.

Activity 12: Provide support to HEWs for static, mobile, and outreach immunization services

Task 1: Provide support to HEWS for static services.

Support HEWs to provide high quality immunization services at their HF.

- a. For each static session, instruct HEWs to create a schedule in keeping with the number of children in the catchment area. This may mean daily, weekly, or monthly service provision.
- b. Remind HWs to engage regularly with community members to alert them of immunization services, and identify members of the community to serve as community mobilizers.
- c. On a regular basis, plan supportive supervision visits to HFs when static services are scheduled. This allows you, as the supervisor, to support HWs and ensure that HPs are providing services as planned and following safe protocols. Supportive supervision also provides an opportunity to observe recording and reporting during each immunization session. Because your presence during an immunization session can cause service provision to slow down, try to minimize disruption in services.

Task 2: Provide support to HEWs for mobile and outreach services.

The PHCU is responsible for supporting HEWs to plan outreach and mobile services using the EPI microplan.

- a. The PHCU provides technical and logistical support to vaccinators.
- b. Ensure that all mobile and outreach services are conducted according to the microplan.
- c. Assess whether it is feasible to include additional health services when conducting outreach and mobile services.
- d. Use step-by-step guidance for mobile, outreach, and integration services (see Annex 7).

Activity 13: Distribute immunization data management tools

The PHCU monitors the distribution and availability of data management tools. Be sure to communicate with the woreda health office when there is shortage of tools and make sure that tools are available in every health post.

Common immunization data management tools:

- Registration book/family folder
- Home-based record (health passport)
- Tally sheet
- Vaccine ledger book
- Vaccine Request Form/mBrana
- Temperature monitoring chart
- Job aids (e.g., vaccine management, defaulter tracing, fish bone diagram, data quality, counseling, session planning)
- Monthly reporting format
- Monitoring chart

**Implementing Reaching Every District/Community (RED/C):
A Practical Guide for the Health Post Level**

INTRODUCTION

Ethiopia has implemented the Reaching Every District (RED) approach to strengthen routine immunization (RI) services for over 15 years. In 2018, Ethiopia introduced an adapted version of the RED approach with guidance specific to implementation in Ethiopia. As a complement to the Ethiopian RED Guide, these guidelines provide staff in the primary health care unit (PHCU), which includes both health centers (HCs) and health post (HPs), with the essential information to carry out their RED implementation tasks. This specific guide is focused on implementation at the HP level.

As the focus of the RED approach is on strengthening district level service delivery, this guide is intended to provide step-by-step guidance for health workers to implement the five main operational components of RED: 1) planning and management of resources, 2) reaching all eligible populations, 3) engaging communities, 4) supportive supervision, and 5) monitoring and use of data for action. This guide provides detailed information on immunization activities that should be completed at the HP level on an annual, quarterly, or monthly basis, or after every immunization session, one time only, or as needed.

Who Is This Guide For?

- HP staff (nurses, HEWs)
-

How Is This Guide Organized?

- Overview of tasks for HP level
- Detailed description of tasks and tools for the HP level

How Should This Guide Be Used?

This document should serve as a reference guide for PHCUs for the management and delivery of immunization services. The HP guide provides information for health workers providing immunization services, who are mostly at the health post level. HC and HP staff should review the guide on a regular basis as a reminder of critical tasks and how frequently they should be carried out.

OVERVIEW OF RED TASKS AT HEALTH POSTS

Table I. Actions for Health Extension Workers (HEWs) and Clinical Nurses

Every Year	Every Quarter	Every Month	Every Vaccination Session
<p>Activity 1: Prepare a microplan for the health post.</p>	<p>Activity 3: Review and update the microplan.</p> <p>Activity 3: Mobilize community resources to support mobile and outreach sessions.</p>	<p>Activity 4: Submit complete and timely immunization data to the PHCU.</p> <p>Activity 5: Monitor static and outreach immunization sessions monthly and mobile services quarterly.</p> <p>Activity 6: Monitor immunization coverage and dropout rates and update the immunization monitoring chart.</p> <p>Activity 7: Provide your supervisor with the immunization data needed for supportive supervision visits.</p> <p>Activity 8: Participate activity during supportive supervision visits and carry out follow-up actions after each.</p> <p>Activity 9: Collaborate with the community to get updated information for each village.</p> <p>Activity 10: Convene monthly meetings of the Quality Improvement Team (QIT) and provide orientation to new members, as needed.</p>	<p>Activity 11: Review the session plan and schedule for static, outreach, and/or mobile services.</p> <p>Activity 12: Mobilize the community and prepare supplies for the immunization session.</p> <p>Activity 13: Record complete, accurate data for each immunization session.</p> <p>Activity 14: Provide QIT members or social mobilizers with a list of defaulters to bring to the next session.</p>
One Time Only or As Needed			
Activity 15: Invite key community members to become members of QITs.			

DETAILED GUIDANCE FOR IMPLEMENTING GUIDANCE FOR IMPLEMENTING RED AT THE HEALTH POST LEVEL

At the health post level, health extension workers (HEWs) and clinical nurses should carry out the tasks described in this guide. The tasks are organized according to whether they are implemented every year, every quarter, every month, after each vaccination session, one time only, or as needed.

EVERY YEAR

There is one main RED activity for HEWs to carry out at the beginning of every year (i.e., Hamle).

Activity 1: Prepare a microplan for the health post

Health posts should prepare a new microplan every year. The appropriate time for microplan preparation is Miazia or Ginbot.

Carry out the following microplanning tasks:

Miazia	Task 1. Coordinate with the PHCU to obtain the microplan tool and discuss updates to your plan with your PHCU supervisor.
	Task 2. Engage with community members to map the community and plan for service delivery.
	Task 3. Draft the microplan.
Ginbot	Task 4. Submit the draft microplan to PHCU/woreda supervisors for review and feedback.
Sene/Hamle	Task 5. Retain a copy of the revised microplan and share it with the community during QIT meetings.

Task 1. Coordinate with the PHCU to obtain the microplan tool and discuss updates to your plan with your PHCU supervisor.

Health post (HP) staff should discuss with their PHCU supervisor how to prepare a bottom-up microplan for their catchment population and area using the HP microplan template.

HP staff should prepare the following information for microplan development:

- a. Sub-kebele targets (ideally through a head count of the community).
- b. Previous quarter performance (e.g., coverage, dropout rate, sessions conducted, unimmunized children, hard-to reach villages).
- c. Immunization challenges and local solutions identified to improve service delivery strategies (static, outreach, and mobile).

Task 2. Engage with community members to map the community and plan for service delivery.

When developing the microplan, community engagement is critical. Prior to the microplanning session, invite key community members such as kebele, clan, and religious leaders to participate in the session. The involvement of these stakeholders can:

- a. Improve planning (e.g., community leaders can inform HP staff when and where services should take place).
- b. Mobilize resources (e.g., woreda administrators may be able to allocate additional funding for immunization activities).
- c. Promote ownership of the immunization program across the kebele. During microplanning, identify which stakeholder will support which activity and the type of resources needed.

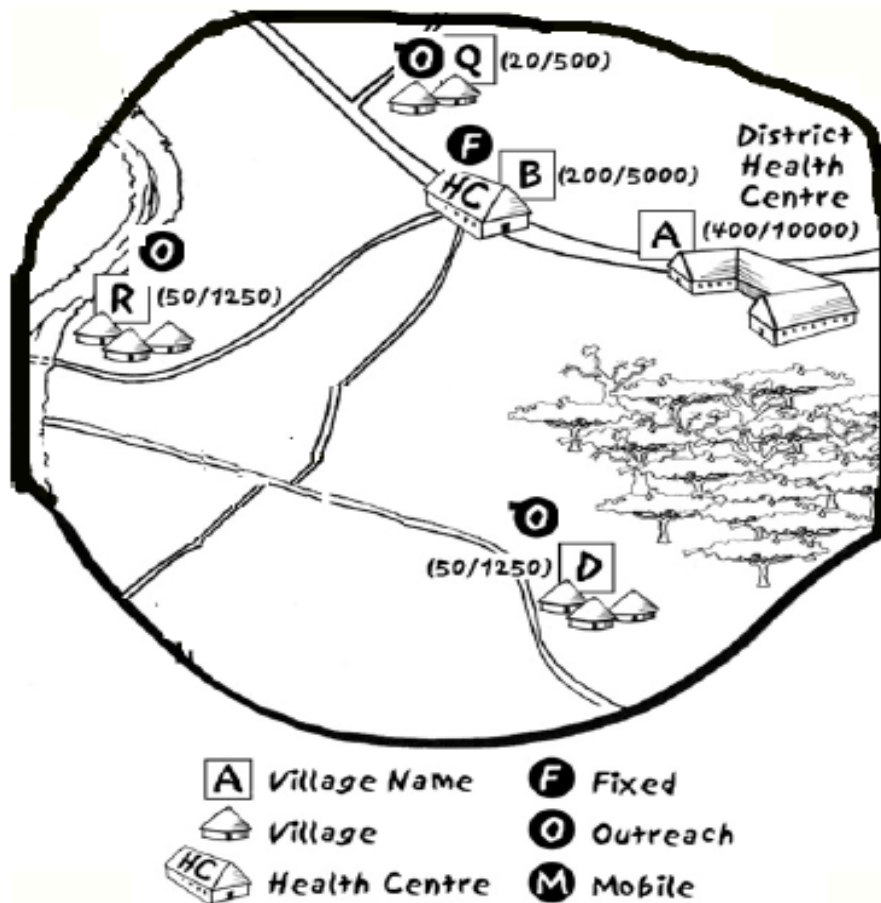
Task 3. Draft the microplan.

a. As you prepare to develop the microplan:

- i. Determine how you will identify or estimate target populations using local means, such as head counts, data from pregnant women and newborn registrations, and child health days (CHD), and calculate supply needs for the coming year.
- ii. Use data about the target populations to develop a map illustrating the HP's catchment areas and populations and the strategies for reaching them (i.e., static, outreach, or mobile). (See b. below for more information about catchment area maps).
- iii. Design an immunization service delivery strategy that reaches all target populations with **all** routine immunizations as per the national schedule.
- iv. Define realistic local actions for improving and sustaining quality immunization coverage (e.g., open new outreach sites, conduct monthly meetings with the community).

- b. Draft an HP catchment area map.** Develop or update a catchment area/Expanded Program on Immunization (EPI) map by sketching the geography, boundaries, and important features of the catchment area.

Sample HP Catchment Area Map



An HP catchment area map should include:

- Villages and communities and their immunization service delivery sites and strategies (i.e., fixed, outreach, or mobile).
- Important landmarks such as schools, government buildings, water points, churches and mosques, rivers, mountains, roads, transit and meeting points of pastoral communities, bus transport, and migration routes.
- “High risk” or “hard-to-reach” communities.
- Major climate and geographical barriers to service, such as seasonal flooding and impassable roads.
- Distances and travel time between the communities and service delivery sites.
- If possible, community seasonal travel routes.

- c. **With community involvement, complete the microplan.** Work with community members and the QIT to estimate accurate eligible populations by sub-kebele. Determine the dates and locations of upcoming vaccination services. Then use the kebele/health post microplan form and steps described below to prepare the microplan (see Annex 1 for the HP microplan template).
- i. **Sub-kebele inventory form:** insert the target population using the head count¹ from each sub-kebele, distance between the sub-kebele or immunization site to the health facility, cold chain availability and functionality, means of transportation, and skills/training of HEWs and health workers. Engage community members in estimating the target population through a head count.
 - ii. **Sub-kebele data analysis:** Analyze immunization coverage and drop-out data by sub-kebele and identify a RED category (Category 1-4) for each sub-kebele. Then categorize the kebele or health post based on sub-kebele categorizations. Using data from the previous planning cycle (the fiscal year or quarter), review the following for each sub-kebele:
 - Immunization coverage by antigen.
 - Dropout rates for Penta1-Penta 3; Penta1-measles-1; MCV1-MCV2.
 - Number of sessions planned versus conducted.
 - Factors affecting performance (good or poor) and challenges.
 - Possible solutions to obstacles identified.
 - Strengths, Weaknesses, Opportunities, and Threats (SWOT) analysis to identify reasons for successes and challenges.
 - iii. **Sub-kebele session planning form:** Consult with the community to identify each sub-kebele and its target population. Determine the location of immunization sites (static, outreach, and mobile) that are near target populations, distance between the sites and the health post, the frequency and dates of sessions, and the community contact person and designated HEW/health worker.
 - Identify with the community the date and location of each session.
 - List each sub-kebele and its target population.

¹ The term “head count” refers to target population estimates obtained by measures other than calculations using a conversion factor. More accurate target population estimates may be obtained through a community census (“head counts”), or a combination of other data sources, such as pregnant women and newborn registrations, under two years registration, and immunization campaign data. Estimation methods may vary by area, as local areas use their own approaches and contexts to estimate target populations.

- Indicate the type of strategy to be used (fixed, outreach, or mobile) and the frequency of sessions. Plan for **at least four immunization sessions** for remote sites every year.
- iv. **Health facility annual work plan form:** List the service delivery sites (static, outreach, and mobile) and the date for every site each month. This form is also used to monitor sessions planned versus conducted. Health post staff update/fill in the date of sessions conducted every month.

Tasks 4. Submit the draft microplan to PHCU/woreda supervisors for review and feedback.

Make sure to submit your draft microplan to the PHCU or woreda for review. They will review your plan to ensure feasibility and whether the planned activities have the resources and logistics needed for implementation, such as transportation and adequate human resources for outreach and mobile sessions. After the PHCU/woreda reviews the microplan, they will ask you to incorporate their feedback into the plan. Then you will update the microplan and submit the final copy to the PHCU/woreda.

Task 5. Retain a copy of the revised microplan and share it with the community during QIT meetings.

HPs should keep the final copy of their microplan and use it for monthly monitoring of service delivery—planned and conducted sessions for static, outreach, and mobile services. HP staff should also share the final microplan with community members during a QIT meeting to ensure that the community is aware of the plan and to gain their support for social mobilization and implementation monitoring.

EVERY QUARTER

There are two main RED activities for HEWs to carry out at the beginning of each quarter [July, October, January, and April].

Activity 2	Review and update the microplan.
Activity 3	Mobilize community resources to support mobile and outreach sessions, such as providing logistical support and guides.

Activity 2: Review and update the microplan

Health posts should review and update their microplan at least every quarter. With help from community members and the QIT, update the catchment area map if there were changes in location of any villages, landmarks, or previously unreached areas, or any new migrant or displaced settlement sites. In addition, review the previous quarter's performance with community members or the QIT by carrying out the following tasks.

Task 1. Reflect on the delivery strategy for the HP (static, outreach and mobile services). Analyze how well the strategy is working (e.g. ability to carry out each session, how many children vaccinated each session, distances required to travel and frequency of sessions, and any challenges in reaching target populations).

Task 2. Compare sessions conducted with those planned and identify the reasons for interruptions (if any).

Task 3. Calculate coverage and the number of vaccinated and unvaccinated children.

Task 4. Review problems critically using Quality Improvement tools, such as a fishbone diagram (more information to follow), and divide big problems into smaller pieces to understand the root cause of the problem and develop local solutions.

Figure 1. Review and Update the Microplan



Use a Fishbone Diagram to Identify Root Causes and Effective Solutions

What it is: A fishbone diagram is a way to map out a problem's root causes. This enables teams to address the root cause rather than focusing on symptoms.

Why do it: To identify the sources (root causes) of a problem, which helps teams to develop lasting solutions.

Who should do it: A small, focused team (e.g., HEWs, nurses, EPI focal persons, and others who experience or are affected by the problem). Other possible team members:

- QIT members, including community leaders and members.
- Managers who have insight into the problem, a role in solving the problem, or facilitation skills to help move the process along.

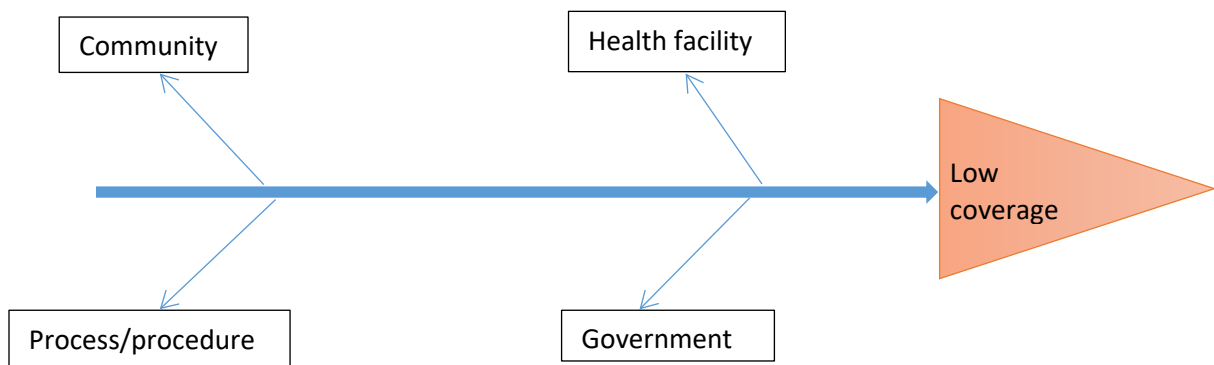
How to do it:

1. Draft a clear **problem statement** that all team members agree to.

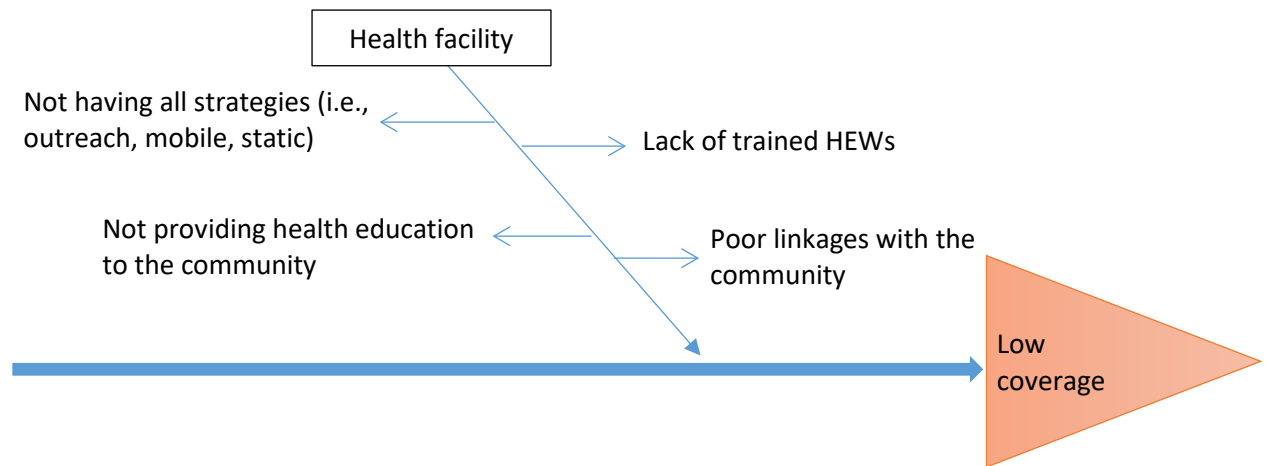
Write the problem statement in the head of the "fish." Draw a line with an arrow toward the head—this is the fish's "backbone." In the example shown here, the problem is **low coverage**.



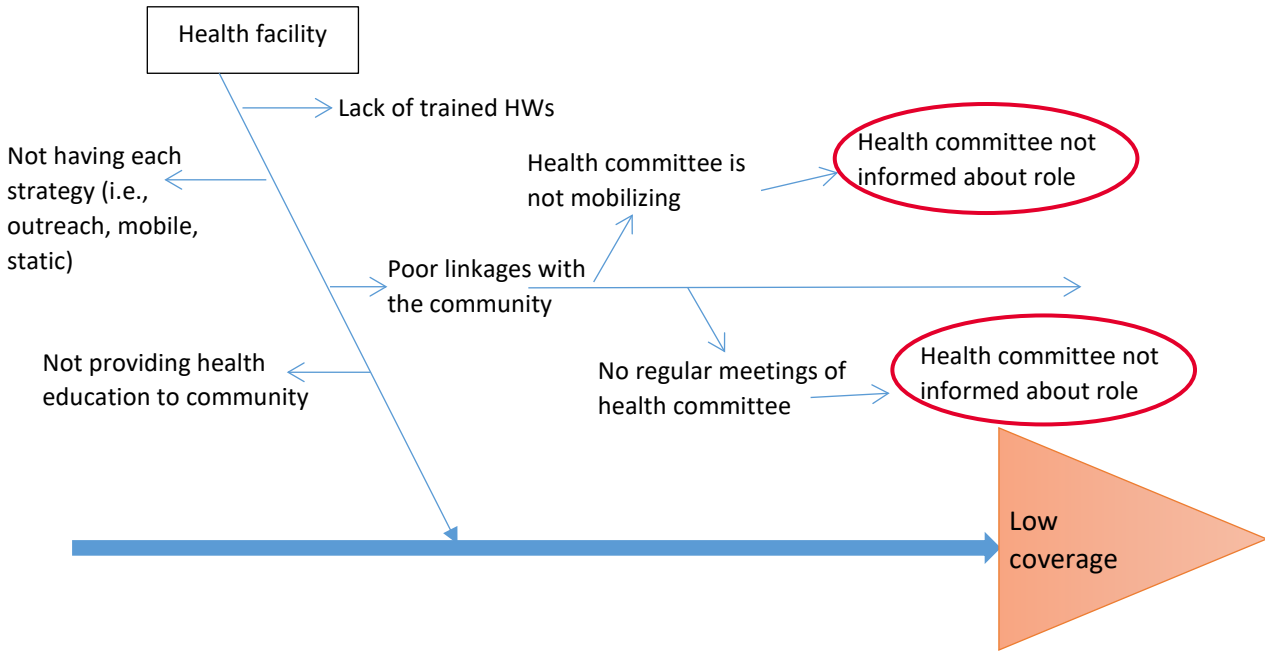
2. Brainstorm **major categories** of issues that might be part of the problem. Connect them to the backbone as "ribs." Common categories include the health system, geography, materials, policies, the environment, culture/tradition, methods, and information.



- For each category, brainstorm **contributing factors** (i.e., possible causes of the problem). (Or choose one category where you know the group can act.) Attach each contributing factor to the appropriate rib (category). Some contributing factors may fit into multiple categories.



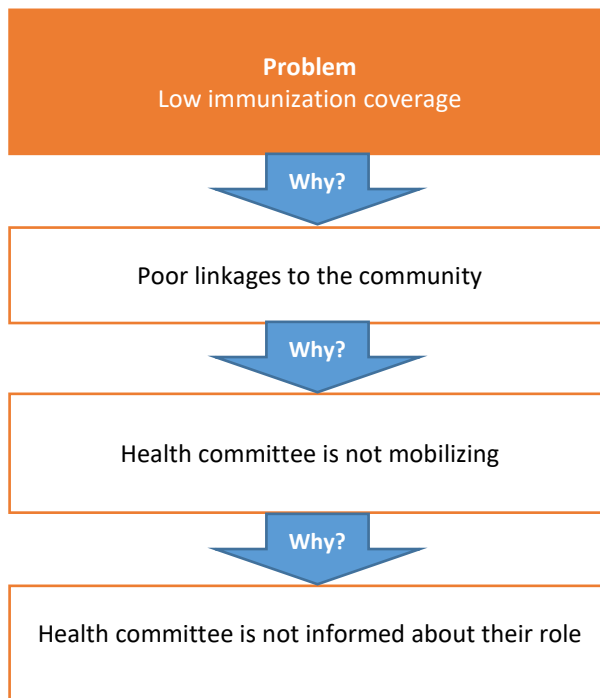
- Push to identify **deeper causes**. You may end up with several branches on each successively smaller rib. Continue to go deeper for a clear understanding. Ask **“why” two to five times**, as in the example below.
- Identify **main reasons/root causes** by looking for causes that appear more than once. Addressing the root cause can affect many contributing factors and have far-reaching effects.
 - In the example below, “Health committee not informed about their role” seems to be a good root cause to address.
 - Factors to consider regarding which main reason/root cause to address include:
 - The likely impact of addressing that root cause (the greater the likely impact, the more important it is to address).
 - How difficult it will be to address the root cause.
 - The resources available to address the root cause.
 - Whether there is a logical order in which to address the root causes.
 - Finding an appropriate root cause to address may involve trial and error, as there may be multiple root causes to address.
 - If the team decides to address a given root cause and the problem continues to occur, you have probably not identified the actual root cause.
 - Take another look at the root causes and keep asking “Why?”



6. Develop and implement **local solutions** or try a different solution based on the identified root cause.

- Select local solutions that are within your control and could make the situation better.
- Test local solutions or try something else using the Plan-Do-Study-Act (PDSA) cycle.

Ask why to understand the root cause of a problem:



Discuss with your supervisor opportunities for integrated service delivery.

As you plan for mobile and outreach service delivery, discuss with your supervisor what other activities it may be feasible to integrate with immunization services (for example, aligning “ready to use” food distribution with immunization sessions). Focus on activities that are likely to be manageable during immunization outreach/mobile sessions. If your HP is planning to implement mobile service delivery based on your microplan, review Annex 7 for more information on how to set up and implement mobile services.

Using the information you have gathered about delivery strategies, coverage, and problems associated with (and local solutions for) service delivery, fill out an HP microplan form (see Annex 1) and submit it to the PHCU/woreda, pointing out any resource gaps during implementation.

Activity 3: Mobilize community resources to support mobile and outreach sessions, such as providing logistical support and guides

Work with the community to mobilize support for the following tasks:

Task 1. Register children under two and pregnant women.

Task 2. Identify children who did not receive any vaccinations (i.e., “left out”) and defaulters.

Task 3. Support the transport of vaccines and logistics to outreach/mobile sites.

Task 4. Provide outreach or mobile teams with a community member to guide the teams to immunization sites and to link with the community.

EVERY MONTH

There are seven main RED activities for HEWs to carry out every month.

Activity 4	Submit complete and timely immunization data to the PHCU.
Activity 5	Monitor static and outreach immunization sessions monthly and mobile services quarterly.
Activity 6	Monitor immunization coverage and dropout rates and update the immunization monitoring chart.
Activity 7	Provide your supervisor with the immunization data needed for supportive supervision visits.
Activity 8	Participate actively during supportive supervision visits and carry out follow-up actions after each visit.
Activity 9	Collaborate with the community to get updated information on the number of pregnant women and newborns, the tracing of defaulters, and population movement patterns for each village.
Activity 10	Convene monthly meetings of the Quality Improvement Team and provide orientation to new members, as needed.

Activity 4: Submit complete and timely immunization data to the PHCU

Compile data from immunization sessions (static, outreach, and mobile) from tally sheets or the registration book. Prepare and submit your monthly report on time each month to your supervisor. Every month, submit timely vaccine requests (using the Vaccine Request Form or mBraná) to the PHCU to avoid vaccine stockouts and session interruptions. Compile and submit the refrigerator temperature recording form and daily temperature records (if there is a refrigerator in the HP).

Activity 5: Monitor static and outreach immunization sessions monthly and mobile services quarterly

Based on the microplan, HP staff are required to monitor static and outreach immunization sessions every month and mobile sessions every quarter using the health facility EPI work plan form and submit completed forms to the PHCU. If there were any session interruptions during the reporting period, discuss the possible reasons and potential solutions with the community and the PHCU.

Activity 6: Monitor immunization coverage and dropout rates and update the immunization monitoring chart

For each village/gotte, use routine immunization data to analyze and summarize coverage and dropout rates, the number of unimmunized children, vaccine stockouts, and session interruptions. This will enable you to see overall immunization performance and whether any areas need support.

In calculating coverage and dropout rates, “doses administered” and “number of vaccinated children” are used interchangeably as the numerator.

Task 1: Calculate coverage for Penta1, Penta3, Measles 1, and Measles 2 for each village.

Coverage = The number of vaccinated children with an antigen divided by the target population and multiplied by 100.

Examples:

Calculating Penta 1 coverage: the number of children vaccinated with Penta1 divided by the target population and multiplied by 100.

Calculating Penta 3 coverage: the number of children vaccinated with Penta3 divided by the target population and multiplied by 100.

Calculating Measles 1 and 2 coverage: the number of children vaccinated with MCV1 (or MCV2) divided by the target population and multiplied by 100.

Task 2: Calculate the number of unimmunized children in each village.

Number of **unimmunized children**:

- for Penta1= the target population **minus the** number of children vaccinated with Penta1.
- for Penta3= the target population **minus the** number of children vaccinated with Penta3.
- for Measles1= the target population **minus the** number of children vaccinated with MCV1.
- for Measles 2= the target population **minus the** number of children vaccinated with MCV2.

Task 3: Calculate dropout rates for Penta 1 - Penta 3, Penta 1 - MCV1 and MCV1 - MCV2 for each village.

Dropout rate for Penta 1 - Penta 3: the number of children vaccinated with Penta 1 minus the number of children vaccinated with Penta 3 divided by the number of children vaccinated with Penta 1 multiplied by 100.

Dropout rate for Penta 1 - MCV1: the number of children vaccinated with Penta 1 minus the number of children vaccinated with MCV1 divided by the number of children vaccinated with Penta 1 multiplied by 100.

Dropout rate for MCV1 - MCV2: the number of children vaccinated with MCV1 minus the number of children vaccinated with MCV2 divided by the number of children vaccinated with MCV1 multiplied by 100.

Task 4: For low coverage and high dropout rates, identify the reasons and take corrective actions.

To address low coverage or high dropout rates (DOR), you need to understand the root cause of the problem. With community members and/or the QIT, carry out a root cause analysis using the fishbone diagram described earlier. Once you have identified the root causes with community members and/or the QIT, discuss possible solutions for each root cause and develop a plan to implement each selected solution.

When you see low coverage and/or high DORs, it is also a good idea to review the HP's microplan and strategies for service delivery.

To identify the reasons for low coverage and high dropouts, ask yourself the following questions:

- i. Have we designed sessions to reach all target populations (i.e., through outreach and mobile sessions)?
- ii. Are we implementing the planned services? (i.e., were all planned outreach and mobile services conducted)? If not, why not? Were there problems related to transport, staff shortages, or other issues?
- iii. Were session dates and locations aligned with the routes of population movement, and were the dates and locations communicated?
- iv. Is there a system for alerting community leaders to mobilize the community prior to an outreach or mobile session? Are there obstacles related to community awareness or engagement? Ask the QIT and/or community members what they think.
- v. Are all recording and reporting tools in place? Are there issues related to data collection, analysis, or utilization? Check the correspondence between data in the tally sheet and the EPI registration book.
- vi. Are all villages (gottes) covered and identified in the catchment area map? Talk with kebele or clan leaders to confirm that all communities are included in the map.
- vii. Were there any shortages of vaccines or supplies?

Then design appropriate actions for the prioritized root causes of low coverage or high dropout rates and implement the actions.

Activity 7: Provide your supervisor with the immunization data needed for supportive supervision visits

Health post staff should share key data on immunization performance with their supervisors so that it can be discussed during supportive supervision visits. During visits, share the following data and resources with your supervisor:

- a. Monthly reports, tally sheets, the EPI register, and the EPI monitoring chart.
- b. Sessions planned and sessions conducted.
- c. Information on vaccines and dry supplies, the ledger book, temperature records, and mBrana/VRFs.
- d. The QIT minute book with notes on problems and/or problem-solving efforts.

Activity 8: Participate actively during supportive supervision visits and carry out follow-up actions after each visit

Supportive supervision is a learning and capacity-building opportunity for health workers, who should be attentive and actively engaged to benefit from the visit. The visit provides health workers with an opportunity for one-to-one discussion, knowledge transfer, skill building, experience sharing, and updates on tools, procedures, and standards. Make sure to discuss what is going well in the HP; use this as an opportunity to share your promising practices with your supervisor so s/he can identify ways to share best practices (i.e. during review meetings, through peer learning networks such as on what's app). The supervisor can help to identify gaps and factors involved in low performance and provide guidance on seeking local solutions and agreeing to follow-up actions.

Activity 9: Collaborate with the community to get updated information on the number of pregnant women and newborns, the tracing of defaulters, and population movement patterns for each village

Task 1: Discuss the following issues with community members:

- a. The importance of registering and regularly updating target population estimates (i.e., pregnant women, newborns, children under two) and sharing this information with the HEW/nurse.
- b. The need to track population movement patterns and routes in pastoralist communities and provide this information to the HP for use in session planning and implementation.
- c. Identifying a contact person in the community who will communicate regularly with HP staff.

Task 2: Make sure that your HP does the following:

- a. Provides registration forms to the contact person in each community for registering and updating target population estimates and collects completed forms every month.
- b. Provides each community contact person with a list of defaulters and encourages tracking them and bringing them to the next immunization session.
- c. Makes sure that each contact person understands when and where the next vaccination session will take place and passes this information along to the community.

Activity 10: Convene monthly meetings of the Quality Improvement Team and provide orientation to new members, as needed

Conduct monthly meetings with community members or the QIT to monitor immunization performance. The QIT identifies problems by reviewing data on issues such as coverage, dropouts, outreach and mobile sessions, and vaccine stock.

- a. Ensure that QIT members are actively engaged when the team uses tools such as the fishbone diagram or multiple “whys” to identify, prioritize, and solve problems.
- b. Develop action plans to address problems detailing what, who, and when. These plans should include monitoring progress using good data practices and documentation.
 - i. Review the data and identify successes and challenges.
 - ii. Compare the results with previous or baseline data to see whether improvements can be integrated into the existing practice or the plan needs to be modified.
 - iii. Document all processes using the QIT minute book.

The Multiple Whys tool is another QI technique used to explore the root causes of a problem by asking why a problem exists in the first place. The answer to the first *why* forms the basis for subsequent *whys* and leads to digging deeper to identify the cause.

Consider the following example: The problem that has been identified is that children are defaulting on their follow-up immunization doses. Some of the *whys* and responses might be:

- *Why* are children not returning for their subsequent immunization doses?
Answer: Parents do not know when to return for follow-up doses.
- *Why* do parents not know when to return?
Answer: The health workers do not provide parents with the information and do not issue immunization cards.
- *Why* are the health workers not providing this information?
Answer: They do not have the information or they forget to provide it.
- *Why* do the health workers not have the information or forget to provide it?
Answer: They need supportive supervision to strengthen their skills.

EVERY VACCINATION SESSION

There are four main RED activities for HEWs to carry out for every vaccination session.

Before every vaccination session	Activity 11. Review the session plan and schedule for static, outreach and/or mobile services.
	Activity 12. Mobilize the community and prepare supplies for the immunization session.
During every session	Activity 13. Record complete, accurate data for each immunization session.
After every vaccination session	Activity 14. Provide QIT members or social mobilizers with a list of defaulters to bring to the next session.

Activity 11: Review the session plan and schedule for static, outreach, and/or mobile services

Task 1. For static services:

- a. Confirm that the dates and times of the immunization services are as planned and do not conflict with holidays or public events.
- b. Make sure that the community is aware of schedule changes, including rescheduled sessions.

Task 2. For mobile and outreach sessions:

- a. **One week prior to the session**, review the session plan and begin organizing outreach or mobile services according to the microplan.
- b. Contact the community focal person (social mobilizer) and confirm the session date, time, place, and the number of children and women expected. Make sure that health workers have access to the mobile numbers of (or other means of contacting) key community leaders in the catchment areas.
- c. Request that a community member serve as a guide to support the vaccination team during outreach and mobile sessions.
- d. Find out where cold chain, vaccines, and supplies will be made available for the session.
 - i. Records and reporting: EPI tally sheet(s); EPI register; information, education, and communication (IEC) materials/job aids; passport card; and defaulter tracing tool.
 - ii. Materials: vaccines, auto-disable (AD) syringes, safety box, and mixing syringe.

Activity 12: Mobilize the community and prepare supplies for the immunization session

Task 1. One to two days prior to the immunization session:

- a. Ask community groups (e.g., community/religious leaders, social mobilizers, health development armies—HDAs) to mobilize families to bring children to the session.

Task 2. Finalize planning for cold chain/logistics.

- a. Ensure that there is a vaccine carrier with a foam pad.
- b. Prepare conditioned/chilled ice packs the night before the session.
- c. Have a back-up plan in case a vaccine team has to be in the field longer than expected.
- d. Check the vaccine vial monitors (VVMs) and expiration date before the antigens are put in the vaccine carrier for outreach/mobile sessions.

Task 3. Make sure that all EPI tools are available (e.g., registration book, tally sheet, passport card). Carry the EPI register to mobile and outreach sessions.

Activity 13: Record complete, accurate data for each immunization session

Task 1. During every session: good quality data collection should begin at the immunization session.

- a. During the registration of mothers and children, check whether they are new or returning.
- b. After each administration of vaccines, complete the records in the vaccination registers, vaccination cards or health passports, and tally sheets.
- c. Make sure that mothers and caretakers receive the essential immunization messages below.

Essential immunization messages

1. *The diseases that are prevented by the vaccines the child received today.*
2. *The possible side effects that could occur and how to manage them.*
3. *The number of visits the child needs to be fully immunized or protected.*
4. *The importance of not missing the next scheduled session, even if the child is sick.*
5. *The date, time, and place of the child's next immunization.*
6. *Remind the mother to keep the vaccination card and bring it with her to future visits.*

Task 2. After each vaccination session:

- a. Cross check the number of total doses given in the register with the tally sheets to make sure the numbers match.
- b. If there is a mismatch, recount the number of doses of the antigen(s) given from the register and reconcile it with the tally sheet.

Activity 14: Provide QIT members or social mobilizers with a list of defaulters to bring to the next session

- a. Prepare a list of defaulters from the registration book or family folder.
- b. Provide a copy of the defaulters list to QIT members.
- c. Ask QIT members to contact the families on the list and tell the parents when and where the next session will be.
- d. Ask QIT members to encourage parents to bring the child to the next session.
- e. Make sure that the data on defaulters is included in the monthly report submitted to the PHCU/woreda.

ONE TIME ONLY OR AS NEEDED

Activity 15. Invite community members to become members of QITs

Task 1. Reactivate or establish QITs: Health workers at health posts should reactivate existing QITs and establish new ones to support immunization services. Reactivating existing QITs can vary, but it typically includes identifying command posts, a steering committee, a health or social mobilization committee, and a few influential persons to serve as additional members. QITs may vary in size, but 8-12 members is generally recommended.

Task 2. Provide orientation to new QIT members: describe their role and responsibilities, QI methods, and tools. The roles and responsibilities of QIT members include:

- a. Collaborate with health workers to ensure implementation of RED.
- b. Hold regular meetings to discuss routine immunization (RI) issues, analyze the root causes of problems, prioritize the causes, and develop solutions.
- c. Share proposed actions with their sub-kebele/gotte for action (e.g., registration of pregnant women and newborns, defaulter tracing, and social mobilization for outreach and mobile sessions).

ANNEXES

Annex I: Health post microplan template

Kebele Inventory																												Form K1										
Region:					Zone:			Wored				Kebele:				Date of Compilation:																						
Sub-Kebele Name		Total Population	Target Population							Sub-Kebele contact person	Distance from Kebele		Type		# Health Facility			# Functional EPI Sites				Transportation Access? (yes=1, No=0)		# Functional Cold chain Equipment			# staff trained				Name of hard to reach area							
			Live birth	Surviving infant	12-23 months	12-59 months	HPV target	Preg. Women	Non-Preg. Women									Fixed	OR	Mobile	Total	Car	Motor Bike	Animal /walk	Refrig	Cold box	V. Carrier	IIP	IRT	Cold Chain		Vaccine Management	Injection Safety	Other				
Total																																						

NB:
Use annaul conversion factor for each target population (Live birth, surviving infant, etc)
e.g. Live birth= Totap pop * annual conversion factor of the region

Name of coordinator: _____

Signature: _____

Sub-Kebele Session planning																
Date filled in:		Region:			Woreda:				Health Facility:			Form K2				
Name of the site (fixed, outreach mobile) for service	Target Population per year							Distance or time to vaccination post (km or	# injections per year	Other key MNCH activities for integration (e.g. Vit, de-worming,	Session type F, OR & M	Sessions			Responsible Person	
	Live birth	SI	12-23 months	12-59 months	HPV target	PW	NPW					#per year	#per month	Day of Session	HEW/HW	sub-Kebele Mobile#
A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q

*How to calculate # of injection per Year: Static: 40 injections per vaccination/day and for outreach/mobile session: 30 injections per vaccination/day

* If other services are integrated such as VAS, consider for static session: 35 injections per vaccination/day and for outreach/mobile session: 25 injections per vaccination/day

#injections/year= # children* # total injection (a child should take 10 injections to fully immunized and 2 Td injections for PW= 12 injections). Hence # injections/year = # children *12

injection/month= #injection per /12

sessions/year for static= # injection per year/40

sessions/year for OR/M= # injection per year/30

sessions/month for static= # sessions/year for static/12

sessions/month OR= # sessions/year for OR/12

sessions/quarter for M= # sessions/year for OR or M/4

		Sub Kebele Data Analysis Summary form																			Data of _____		Form K3										
Region:		Zone:					Woreda:					Kebele																					
Sub Kebele Name														Analyse problem																			
	Total Pop	Surviving Infant	Doses of vaccine administered							Immunization Coverage (%)					Unimmunized (No.)			Drop-out rates	Identify & categorize Problems			Are there significant # VPDs?	Are there significant # of high irsk pop?	Are there significant # of unimmunized ?	Priority/rank (1,,2,3,4)								
			12-23 Months	HPV target	Penta1	Penta3	MCV1	MCV2	HPV	Td2+	Penta1	Penta3	MCV1	MCV2	HPV	Td2+	Penta3		MCV1	MCV2	HPV					Td2+	P1-P3	MCV1-MCV2	Access	Utilization	Category; 1,2,3,4		
a	b	c	d	e	f	g	h	i	j	k	l	m	n	o	p	q	r	s	t	u	v	w	x	y	z	ab	ac	ad	ae	af	ag	ah	
Total																																	

Category
1 = No problem,; drop-out rates low(<5%) or (<10%), coverage (access) high (DPT1 > 90% or >80%) based on regional context
2 = Utilization Problem; drop-out rates high, coverage (access) high.
3 = Access Problem; drop-out rates low, coverage (access) low.
4 = Both Access and Utilization Problem; drop-out rates high, coverage (access) low.

Priority
Category 4=Priority 1
Category 3=Priority 2
Category 2=Priority 3
Category 1=Priority 4

Annual RI workplan													
Region/Zone:	Woreda:		Health Facility:							Form K4			
Name of service delivery site	Session plan (F, OR, M)	Hamle	Nehase	Meskerem	Tikmit	Hidar	Tahisas	Tir	Yekatit	Megabit	Miazia	Gginbot	Sene
	Static	Date scheduled											
		Date held											
	Outreach 1	Date scheduled											
		Date held											
	Outreach 2	Date scheduled											
		Date held											
	Outreach 3	Date scheduled											
		Date held											
	Mobie 1	Date scheduled											
		Date held											
	Mobile 2	Date scheduled											
		Date held											
	Mobile 3	Date scheduled											
		Date held											
Grand Total		Total planned in the month											
		Total held in the month											

Annex 2: Fishbone job aid

Use a Fishbone Diagram to Find Root Causes and Effective Solutions

What it is: A fishbone diagram is a way to visually diagram a problem's root causes. This allows teams to address the root cause rather than focusing on symptoms.

Why do it: “. To identify the sources of a problem – the root causes – this helps teams develop lasting solutions.

- **Who should do it:** A small, focused team. For example: HEWs, Nurses, EPI focal persons, and others experiencing or affected by the problem.
- QIT members, including community leaders/members.
- Managers who might have insight into the problem, a role in solving the problem, or facilitation skills to help move the process along.

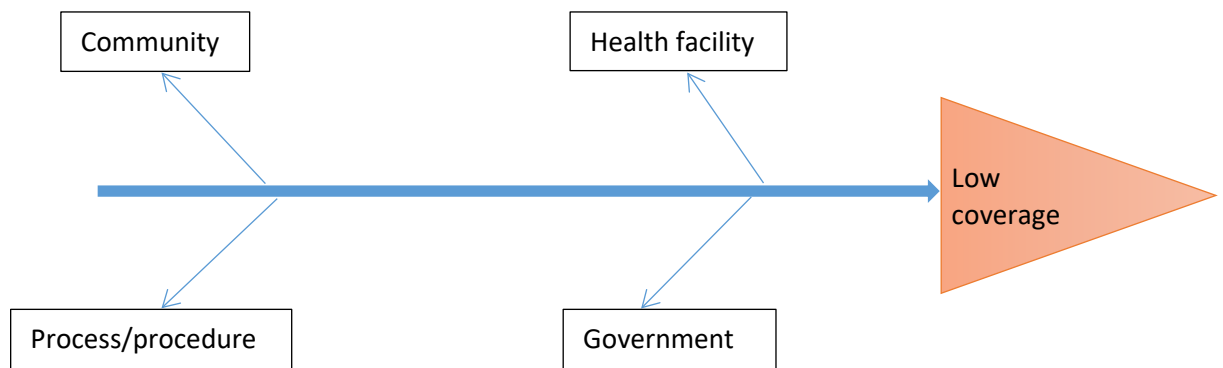
How to do it:

1. Draft a clear **problem statement**, on which all team members agree.

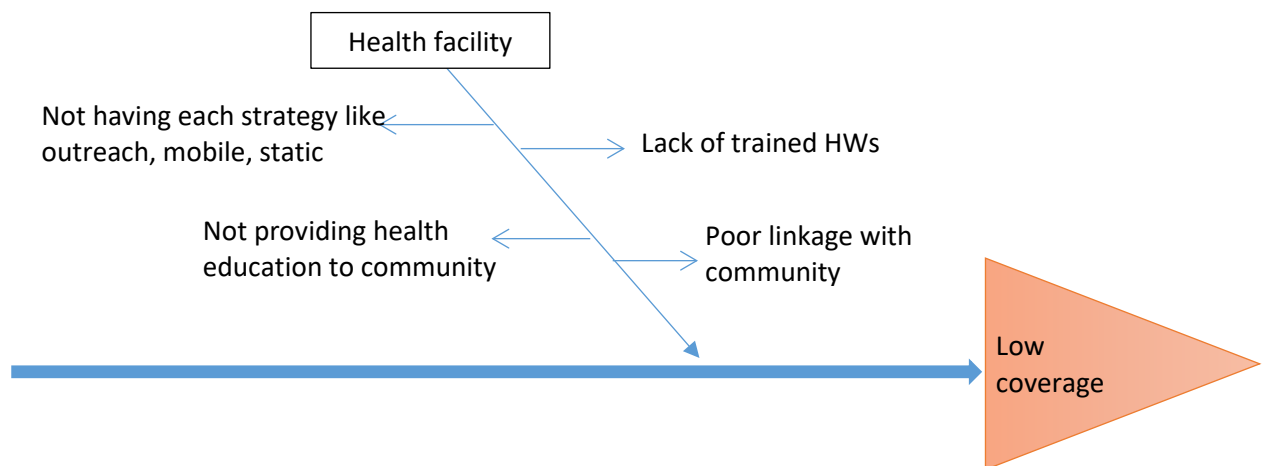
Write the problem statement in the head of the "fish." Draw a line with an arrow toward the head—this is the fish's "backbone." In the example shown here, the problem is **low coverage**.



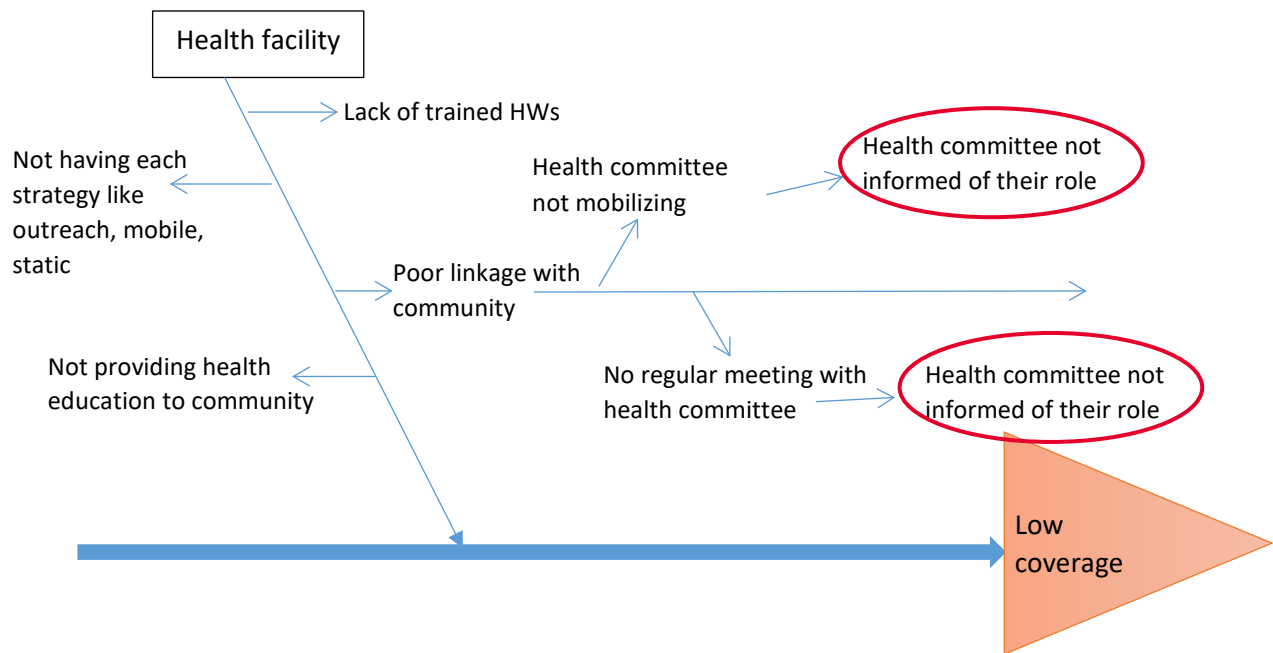
2. Brainstorm **major categories** that might be part of the problem. Connect them to the backbone, in "ribs." Other common categories include health system, geography, materials, policy, environment, culture/tradition, methods, and information.



3. Brainstorm **contributing factors** -- possible causes of the problem in each category (or choose a category where you can act). Attach each to the appropriate rib. Some contributing factor may fit into multiple categories.



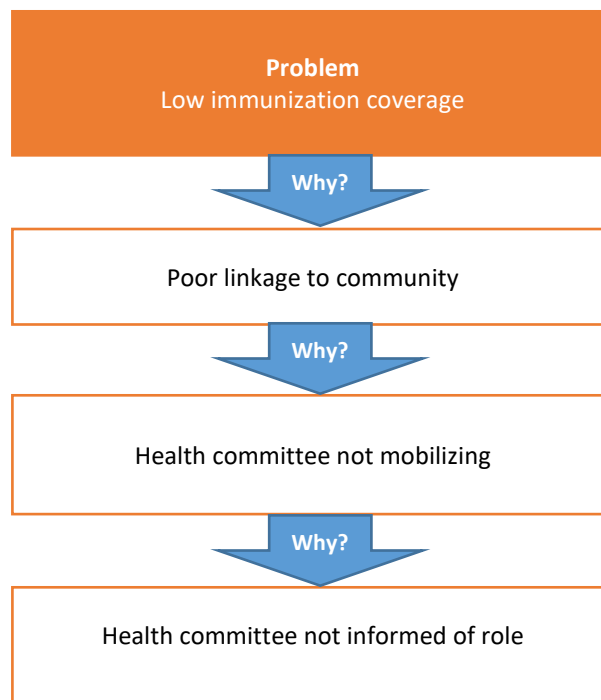
4. Push toward **deeper causes**. You might end up with several branches off of each successively smaller rib. Continue to go deeper for a clear understanding. **Ask “why” 2-5 five times**, as in the example below.
5. Identify the **main reasons/root causes** by looking for causes that appear more than once. Addressing the root cause can affect many contributing factors and have far-reaching effects.
- In the example shown, “Not informed about their role” seems to be a good root cause to address.
 - Other options for deciding which main reason/root cause to address include:
 - The likely impact of addressing that root cause.
 - The greater the likely impact, the more important it is to address.
 - How difficult it will be to address the root cause.
 - The resources available to address the root cause.
 - Whether there is a logical order in which to address the root causes.
 - The process of finding the right root cause to address might involve trial and error.
 - If the team decides to address an identified root cause and the problem continues to occur, it probably is not the actual root cause.
 - Take another look at the root causes and keep asking “Why?”



6. Develop and implement possible local solutions or change ideas based on the identified root cause.

- Select the local solutions within your control to make the situation better.
- Test the local solutions or change ideas using PDSA cycle.

Ask why to understand the root cause of a problem:



Annex 3: PHCU microplan template

PHCU/HC Inventory summary Form																		Form Cluster 1																					
Region: _____		Zone						Woreda: _____			Cluster PHCU/HC: _____				Date: _____																								
Kebele Name	Total Population	Target Population							Sub-Kebele contact person	Distance from Kebele	Type		# Health Facility					# Functional EPI Sites			Transportation Access? (yes=1, No=0)			# Functional Cold chain Equipment					# staff trained	Name of hard to reach area									
		Live birth	Surviving infant	12-23 months	12-59 months	HPV target	Preg. Women	Non-Preg. Women			Rural	Urban	Hos	HC	HP	Total	Fixed	OR	Mobile	Total	Car	Motor Bike	Animal /walk	Refrig	Cold box	V. Carrier	MLM	IIP			IRT	Cold Chain	Vaccine Managem ent	Injection Safety					
Total																																							

NB:
Use annual conversion factor for each target population (Live birth, surviving infant, etc)
e.g. Live birth= Totap pop * annual conversion factor of the region

Name of coordinator: _____ Signature: _____

PHCU/HC EPI Micro-Planning: Root Cause Analysis					Form Cluster 2	
Region: _____		Zone: _____		Woreda: _____	HC: _____	Date of compilation: _____
Major Problems:						
System components/ link to social barriersManagement	Problems identified	Root Causes of problems (Fishbone analysis)	SOLUTIONS with available resources	SOLUTIONS with extra resources	Possible time line	Responsible person
Reaching target population (sessions, reaching the unreached) 2nd yr of life, girls (HPV), women (Td), etc						
Supportive Supervision						
Engaging communities						
Monitoring & use of data for action						
Planning and management of resources						
Cold chain & vaccine management						
Are Key interventions integrated with immunization & planned carefully to optimize the services?						
Surveillance						

		PHCU/HC Micro-Planning budget and other resource Form																					Form Cluster 5						
Region:	Zone:					Woreda:				Cluster PHCU/HC:				Date:															
Kebele/HP	Num of Sessions per year				Vaccine needed in dose								AD syringe for		Mixing syringe	Safety box	Operational costs											Source of budget	
	Static	OR	Mobile	Total	BCG	Penta	PCV	Rota	OPV	IPV	Measles	HPV	Td	Vit.A tin	BCG	Others	Allowance for OR	Allowance for Mobile	Supervis ion	Review Meeting	Training	Transport OR	Transport Mob	Kerosene & other costs	Socmob /IEC ***	Total			
Total																													

NB. 1. Vaccine requirement = Target popn.*annual target coverage*wastage factor*number of doses/antigen
 * Wastage factor: BCG=2.0, Measles=1.33, OPV, TT, & PCV=1.11, Penta & Rota= 1.05, IPV=1.25, AD & mixing syringes= 1.11, Safety box=None
 2. AD syringes requirement = Target popn.*target coverage for the year(%)*number of doses*wastage factor(1.11)
 3. Mixing syringes requiremnt = number of (BCG & Measles) vials*Wastage factor(1.11)
 4. Safly boxes requirement = (AD syringes+mixing syringes)/100
 ** Specify the reasons at the back of the format
 *** Social Mobilization/IEC activities should be planned in detail on separate Page
 Name of the Woreda Coordinator: _____ Signature: _____

Summary of priority Activity plan and budget (Health facility)																					
Name of Region: _____				Zone _____		Woreda: _____				Health Facility: _____				Form Cluster 6							
Date filled in: _____				Name of health worker: _____				Phone number : _____				Fiscal Year: _____									
S.No	Activities	Unit	Quantity	Responsible person	Priority level (I, II, III)	Implementation Timeline												Unit cost	Total cost	Source of Budget	Implementati on status
						Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun				
1	Planning and Management of Resources																				
1.1																					
1.2																					
1.3																					
2	Reaching the target population (Service delivery)																				
2.1																					
2.2																					
2.3																					
3	Vaccine and cold chain mangement																				
3.1																					
3.2																					
3.3																					
4	Advocacy and communication (Linking service with the community)																				
4.1																					
4.2																					
4.3																					
5	Human resource Development																				
5.1																					
5.2																					
5.3																					
6	Monitoring and use of data for action																				
6.1																					
6.2																					
6.3																					
7	Other Activities																				
7.1																					
7.2																					

Annex 4: PHCU SS planning tool

PHCU Support Supervision planning tool																	
Woreda: _____										Date: _____							
No	HF name	Month												Responsible	Resources		Remark
		Hamle	Nehase	Meskerem	Tikmit	Hidar	Tahisas	Tir	Yekatit	Megabit	Miazia	Ginbot	Sene		Description/Type	Amount needed	
1	HF1					X	X										
2	HF2																
3	HF3																
4	HF4																
5	HF5																
6	HF6					X	X										
7	HF7																
8	HF8																
9	HF9																
10	HF10																
11	HF11					X	X										
12	HF12																
	# HFs planned per month/quarter																
	# HFs supervised per month/quarter																
	Percentage (Conducted/Planned*100)																

Annex 5: HP SS checklist

Routine Immunization Supportive Supervision and Self- Assessment Checklist- Health Post			
Woreda Name		Under which PHCUs	
Date of Visit		Name of HPs	
Total Population		Number of Kebeles	
Name of a Supervisor who completed this form		Number of sub-kebeles/kushet/tabia/Gotte	
		Any other (specify)	

#	Question	Yes, No or N/A	Comments
Section 1A: Catchment Area and Management			
1	<p>Does the HP have a catchment area map showing sub-kebele boundaries, total population by sub-kebele, main roads/rivers, Mosques/Churches, schools and current static, outreach and mobile sites?</p> <p>YES: If there is a map showing sub-kebele boundaries, total population by sub-kebele, main roads/rivers, Mosques/Churches, schools and current static, outreach and mobile sites</p> <p>NO: If there is no map posted or it does not include items indicated.</p>		
2	<p>Is the current year's target population of pregnant women and surviving infants in the catchment area posted on the wall?</p> <p>YES: If the current year's target population is posted on the wall in a visible place</p> <p>NO: If the target population for the current year is not posted on the wall in a visible place</p>		
3	<p>Is there a current Session Plan of static, outreach and mobile vaccination sessions available -for the kebele (by sub-kebele, name of location of service, and schedule)?</p> <p>YES: if there is an up-to-date session plan for all RI activities in the kebele (by sub-kebele) that shows location of service and schedule</p> <p>NO: If there is no RI session plan (static, outreach, mobile) by sub-kebele, location, and schedule.</p>		

4	<p>Was the Session Plan for the previous month implemented?</p> <p><i>Note 1: If the answer to Question 3 was “NO,” mark this question as NA (not applicable) and move to the next section (Section 1b)</i></p> <p><i>Note 2: if the answer to Question 3 was “YES,” review documents (registration book, tally sheets, and reports) and compare immunization session dates with the planned sessions on the Session Plan.</i></p> <p>YES: if all static, outreach and/or mobile sessions were conducted last month as scheduled on the session plan</p> <p>NO: if not all static, outreach and/or mobile sessions were conducted last month as scheduled or if there is no current session plan posted.</p>		
Section 1B: Microplanning			
5	<p>Does the Health Post (HP) have a copy of the RI Microplan (MP) from the PHCU/Woreda for the current year?</p> <p>YES: If the current RI Microplan (MP) document is available</p> <p>NO: If the MP for the current year is not available</p>		
6	<p>Does the HP plan its sessions (static, outreach, mobile) based on the MP?</p> <p><i>Note: compare the Microplan with the Session Plan (#3 above)</i></p> <p>YES: If the number of sessions indicated on the Session Plan are the same or more than the number of sessions planned in the Microplan</p> <p>NO: If the sessions shown on the Session Plan are less than the sessions planned in the Microplan</p>		
Section 1C: Community Involvement			
7	<p>Is the QIT or any other committee involved in any of the following?</p> <ol style="list-style-type: none"> 1) Newborn registration 2) Community announcements for immunization sessions 3) Community education on immunization 4) Provides logistic support to the HF <p><i>Note: there must be documentation to support “yes” answers (e.g. minutes from meetings, newborn registration list)</i></p> <p>YES: if at least 1 of the above are provided by the QIT/other committee and it is documented</p> <p>NO: if there is no documented involvement by the community</p>		

8	<p>Is there a mechanism in place to track left-outs and/or defaulters? <i>Note: use of 1-to-5 network, Women Development Army, other community structure, tickler file etc. Verify with documentation e.g. defaulter lists, newborn list, minutes of meetings discussing defaulters/left-outs)</i> YES: If health workers have any documented approach for tracking NO: If there is no system for tracking left-outs or defaulters</p>																						
Section 1D: Data quality, management, and use																							
9	<p>Are all antigens given recorded in the RI register with a date AND when a child is checked as fully immunized has the child or family folder received all antigens/doses as indicated by dates? <i>Note: check the RI register to see that all entries are by dates and whether the register has dates across all antigens/doses for a fully-immunized child</i> YES: If all doses are registered with dates and all antigens/doses are given and recorded with dates for a fully immunized child NO: If dates are not always used or not all antigens/doses are recorded for a child indicated as fully immunized</p>																						
10	<p>Record the number of doses administered for the previous month for the following tools and antigens. If data for a certain tool is incomplete or if a tool is not available, write N/A in the box.</p> <table border="1" data-bbox="260 769 1541 1068"> <thead> <tr> <th data-bbox="260 769 753 870"></th> <th data-bbox="753 769 945 870">Tally sheets (All from prev month)</th> <th data-bbox="945 769 1136 870">EPI Register/ tickler file</th> <th data-bbox="1136 769 1327 870">Monitoring Chart</th> <th data-bbox="1327 769 1541 870">HP Monthly report</th> </tr> </thead> <tbody> <tr> <td data-bbox="260 870 753 935">Penta1</td> <td data-bbox="753 870 945 935"></td> <td data-bbox="945 870 1136 935"></td> <td data-bbox="1136 870 1327 935"></td> <td data-bbox="1327 870 1541 935"></td> </tr> <tr> <td data-bbox="260 935 753 1000">Penta3</td> <td data-bbox="753 935 945 1000"></td> <td data-bbox="945 935 1136 1000"></td> <td data-bbox="1136 935 1327 1000"></td> <td data-bbox="1327 935 1541 1000"></td> </tr> <tr> <td data-bbox="260 1000 753 1065">Measles 1 (MCV1)</td> <td data-bbox="753 1000 945 1065"></td> <td data-bbox="945 1000 1136 1065"></td> <td data-bbox="1136 1000 1327 1065"></td> <td data-bbox="1327 1000 1541 1065"></td> </tr> </tbody> </table>				Tally sheets (All from prev month)	EPI Register/ tickler file	Monitoring Chart	HP Monthly report	Penta1					Penta3					Measles 1 (MCV1)				
	Tally sheets (All from prev month)	EPI Register/ tickler file	Monitoring Chart	HP Monthly report																			
Penta1																							
Penta3																							
Measles 1 (MCV1)																							

11	<p>Is there a cumulative coverage & dropout (EPI) monitoring chart, correct and up-to-date to the previous month? <i>Note: check the correctness of the chart up to the previous month and compare data on the chart with data in the EPI register and monthly report</i> YES: If the monitoring chart is available and cumulative coverage and DOR are correctly calculated and plotted on the monitoring chart up to the previous month and if the data matches the data in the register and monthly report NO: If the monitoring chart is not updated, or if calculations/plotting are incorrect, or if the data does not match the register and report NA: If there is no EPI monitoring chart at all</p>		
12	<p>Can the Health worker adequately explain the meaning & use of the monitoring chart? <i>Note: Ask this question only if the EPI monitoring chart is available</i> NA: if EPI monitoring chart is not available YES: if health worker can adequately explain the meaning & use of the monitoring chart NO: if health worker cannot adequately explain the meaning & use of the monitoring chart <i>If no, explain to the health worker how to interpret the information displayed on the chart. Discuss issues of access and utilization.</i></p>		

<p align="center">Section 2: Vaccine Management (complete this section if the Health Post has a refrigerator) [if there is no fridge or fridge is non-functional, mark N/A for #13-20 and move to next section]</p>			
13	<p>Has the HP had a continuous supply of vaccines during the last 3 months? YES: in the last 3 months the HP did not have any stock out of any vaccine NO: in the last 3 months the HP had stockouts of one or more vaccines</p>		
14	<p>Can you please show the document where the information on vaccine stock out is recorded? YES: if vaccine stock out information from previous 3 months is documented NO: if there is no documentation to record when a stock out occurs</p>		

15	If there was a stockout in the past 3 months, please fill in details in table below. If there was no stockout, write N/A.		
	Vaccine(s) that experienced stockout in past 3 months		
	How many days stocked out		
	Reason for stock out		
16	<p>Is the refrigerator temperature monitoring sheet filled in twice daily, including weekends and action taken during alarm time? YES: If the recorded data in the temperature monitoring sheet is filled twice daily for the current month (up to date) and action taken during alarm time documented properly. NO: If the temperature monitoring sheet is not filled out correctly</p>		
17	<p>Are all antigens correctly arranged in the appropriate compartment of the refrigerator? YES: If each antigen and vials are stored in their proper place. NO: If there are antigens/vials improperly placed in the refrigerator</p>		
18	<p>Do all vaccine vials have readable labels, are not expired, and all are in VVM stage 1 or 2? YES: if all vials have readable labels, are not expired and are in VVM stage 1 or 2. NO: if any vial has an unreadable label, is expired or is in VVM stage 3 or 4.</p>		
19	<p>Does the health worker discard opened vials of BCG, Measles and PCV immediately after a session (or within six hours of opening/reconstitution)? YES: the health worker discards opened vials of BCG, Measles, and PCV (confirm there are no open vials of BCG, measles, or PCV in the refrigerator) NO: if there are opened BCG, Measles or PCV vials in the refrigerator</p>		
20	<p>Does the health worker label the date of opening for all open vials of OPV, TT, and IPV vaccines that are stored in the refrigerator? YES: there are dates labelled for <u>all</u> open vials of OPV, TT, and IPV stored in the refrigerator NO: if any open vial of either OPV, TT, or IPV is missing a date labelling when it was opened NO OPEN VIALS: there are no opened vials of OPV, TT, or IPV currently in the refrigerator</p>		
Section 3: RED-QI quality improvement activities			

21	<p>Does the HP have a Quality Improvement Team (QIT) that uses QI tools to solve problems in health programs? <i>Note: probe to ask what tools they use (e.g. may be fishbone, PDSA cycles, etc). If yes, check members name from minute book or other sources</i> YES: if the HP has a group that uses QI tools to solve health problems, and members names are documented NO: if there is no group that uses QI tools to solve problems in health programs. If no, then mark N/A for 22-24</p>		
22	<p>Did the QIT conduct planned meetings in the last month with immunization as an agenda item? YES: If there are minutes of the QIT meeting for <u>last month</u> and if immunization was one of the agenda items. NO: If there is no documentation of the meetings in the last month, the meeting was not held, OR if the content of the meetings does not include immunization. N/A: there is no group that uses QI tools to solve problems in health programs</p>		Write the date of meeting conducted
23	<p>Does the QIT use data for improving RI service provision? YES: if there is any RI data recorded in the minute book for last month's QIT meeting. NO: If there is no RI data recorded in the minute book for last month's meeting or there was no QIT meeting last month. N/A: there is no group that uses QI tools to solve problems in health programs</p>		
24	<p>Does the team follow RED-QI/PDSA process and document it in the minute book? YES: If the minute book has recorded minutes for the previous month that relate to conducting the PDSA process NO: if there is no recorded minutes from the previous month that relate to conducting the PDSA process N/A: there is no group that uses QI tools to solve problems in health programs</p>		
<p>Section 4: Vaccination Session (complete this section if vaccination session is in progress) [if not, mark N/A for #25-28 and move to section 5]</p>			
25	<p>Is the vaccine carrier and vaccine correctly managed in the place where the session is conducted? YES: if a foam pad is in use, there is chilled/ conditioned icepacks, there is no exposure of the vaccine carrier to direct sunlight, vaccine has readable labels, vaccine is not expired and all VVM are in Stage 1 or 2. NO: If any one of the above points is not fulfilled</p>		

26	<p>Does the health worker (HW) give the 5 key messages to the caregiver? <i>Observe the service provider giving these 5 key messages to caregiver:</i></p> <ol style="list-style-type: none"> 1. <i>What disease do the vaccines prevent (which her child received today).</i> 2. <i>Number of visits the client still needs in order to be fully immunized or protected.</i> 3. <i>What side effects may occur and how they can be treated.</i> 4. <i>Date, time and place of next immunization (writes the date of next visit on the card).</i> 5. <i>Remind a mother to keep the card and bring it with her.</i> <p>YES: if the service provider gives all 5 key messages to the caregiver NO: if even one of the five messages is not given</p>		
27	<p>Were the “5 R’s” implemented at the immunization session? <i>(right client, right antigen, right time, right route, and right dose)</i></p> <p>YES: if the Health Worker (HW) followed the “five rights” when giving the vaccine. No: if the HW missed (started to miss) even one of the five rights. <i>*Supervisor should intervene appropriately before any potential harm occurs</i></p>		
28	<p>Are used syringes/needles placed immediately after the injection into the safety box without recapping?</p> <p>YES: if the HW does not recap and uses the safety box immediately. NO: if the HW recaps the syringe/needle or does not place the syringe/needle immediately in the safety box after vaccination</p>		
Section 5: immunization wastage management			
29	<p>Are all used syringes and needles completely burned and in the incinerator or down in a pit?</p> <p>YES: if all used syringes/needles are burned <u>and</u> inside the incinerator or down in a burn pit NO: if any used syringes/needles are not burned and/or not in the incinerator or pit</p>		

Summary:

Copy the totals from each of the above sections and calculate overall percentage:

TOTALS	# of Questions	# of Applicable Questions	# of YES Answers	Percent (%) YES # of yes answers/ # of applicable questions
Section 1A. Catchment Area & Management (#1-4)	4			
Section 1B. Microplanning (#5-6)	2			
Section 1C. Community Involvement (#7-8)	2			
Section 1D. Data quality, management, and use (#9,11-12)	3			
Section 2. Vaccine Management (#13-20)	7			
Section 3. RED-QI Quality Improvement (#21-24)	4			
Section 4. Vaccination Session (#25-28)	4			
Section 5. immunization waste management (#29)	1			
GRAND TOTAL – all sections (do not include #10 in scoring)	27			

Data quality/consistency review: Describe what actions you took based on your review of the data in question #10.

3 Main Successes: highlight examples of specific areas/practices done well by the Woreda, and the reason why

<p>1.</p> <p>2.</p> <p>3.</p>

Action Table: Issues to be addressed

Sn	Issue	Action to be taken	Responsible Person	By when

Name and title of supervisor: _____ Sign/date: _____

Name and title of supervisor: _____ Sign/date: _____

Name and title of supervisee: _____ Sign/date: _____

Name and title of supervisee: _____ Sign/date: _____

Annex 6: Health Committee/ QIT Minute book

Date: _____

1. List of Members

1. _____
2. _____
3. _____
4. _____
5. _____

2. List of Prioritized problems

1. _____
2. _____
3. _____
4. _____
5. _____

3. Select one problem _____

4. Objective [aim you wish to achieve/target you wish to achieve]

5. Main reasons why do the selected problem occur

-
-
-

6. Proposed Activities/solution to address those main reasons

-
-

7. Action Plan

S.no	Activities	Responsible person	Date	Place
1.				
2.				
3.				

Data to be collected _____

Next meeting date: _____

8. Implement the **Action Plan** - Write what happened and write what you observed when you do the planned activities _____

9. **Review** what happened after action plan implemented (Compare collected data with aim/objective to determine whether the measures were met, any challenge or lesson learned/success)

10. Next plan (Decision)

Annex 7: Step by step guidance on mobile/outreach and integration services

Organizing mobile and outreach services is key strategy to reach and vaccinate children in hard to reach communities. Woreda health offices and PHCUs should initiate the planning and execute effective mobile sessions. The following steps are expected to help the process.

At least one week before the session:

Step 1. Review the EPI micro plan and put activities orderly in place to organize the mobile services.

- a. Identify the required personnel and supplies specifying sources and health facilities where vaccinators and team members are to be drawn.
- b. Organize or compose the mobile team and clearly define the individual roles and shared responsibilities during of providing services

Suggested Mobile Team composition

A mobile team typically is composed of three members:

- A vaccinator and team leader.
- A recorder (documentation).
- A social mobilizer and guide.

The social mobilizer should know the area/population well to guide the team movement.

NOTE:

- It is critical for the Woreda/PHCU to ensure mobile team members are skilled and experienced for the task particularly in safe handling of vaccines, cold chain, injection waste disposal and careful and using tools for accurate recording.
- Addressing staff shortages and bridging gaps in skill of vaccinators can use different approaches including pairing less skilled health workers with experienced ones to allows learning through working together.
- Gaining experience and skills on activities such as safe injections and proper data recording can be achieved through a program at health facilities where peers practice together for a certain period of time until the ability to vaccinate independently.

Step 2. Finalize the plan of operations and details of sessions.

- a. Decide on the area to cover and number of sites to be reached with duration of the team's stay in each.
- b. Ensure the mobile team have secured the logistics requirements such as sleeping arrangements and meals.
- c. Confirm the travel date, time and place for sessions and communicate with community leaders and the community.
- d. Ensure supplies would match requirements to cover the expected number of children, girls (for HPV) and pregnant women (TT). No shortages of vaccines and dry supplies, EPI registers, tally sheets and child health cards (health passports) should be allowed.

Step 3. Start social mobilization activities a day earlier and on the day of the session.

- a. Engage the social mobilizer to contact local community or clan leaders to inform them on the planned activities.
- b. Ensure the community and the target populations are informed to bring children to the sessions.
- c. Having contact phone numbers of community leaders and/or any other community members is recommended.

Step 4. Check and crosscheck the availability and functionality of logistics and cold chain.

- a. Ensure cold boxes are functioning properly and ice packs are frozen and check if vaccine carriers have foam pads.
- b. Check VVMs are valid before vaccines are put into vaccine carrier for transport and change ice packs as recommended.
- c. Have a base point for storage of cold boxes & ice packs.
- d. Have a "back up plan" incase a vaccine team has to be in the field longer than planned including the need for additional finances.

Explore the feasibility of integrating other services with immunization:

Hard to reach communities where immunization services are unavailable, are likely to experience shortages or total lack of other essential services. It is strategically important to assess the overall situation and feasibility of integrating other service components with immunization during planning and implementing outreach and mobile services. Referring to the points in the following table may provide some guidance to plan to integrating selected impactful service components.

Key factors of consideration: Intervention related	Key factors of consideration: Health system context
<ul style="list-style-type: none"> • Similarity of the target population. • Alignment of timing and frequency of schedules. • Accommodation of additional logistical requirements; is within the capacity and available resources. • The intervention and benefits are well understood and accepted by clients, communities and health workers with expected synergy between the integrated services. • Health worker can provide both interventions at the same time. (i.e. HWs do not need additional skills to complete both activities, nor is an additional HW needed to perform the services). 	<ul style="list-style-type: none"> • Political will to promote integration and coordination. • The intervention is responsive to health needs of the community. • Financial support available if required for the extra integration effort. • The primary health care structure supports the delivery of both interventions. • Well defined responsibility for supporting and monitoring each intervention. • Combining the intervention does not disrupt or create an unrealistic burden for service delivery

Annex 8: Deliver safe immunization services during COVID-19 (IPC)

Update planning for immunization

In the event that COVID-19 pandemic prevail and the response effort is ongoing, it is important to review and update your microplan and adjust planning and conducting immunization sessions. It is particularly important to take a closer look in to the following:

1. Continue to maintain the target population by reviewing and updating list of children/mothers who need vaccination.
2. Update your session plans to compensate for missed delivery services.
3. If it is required, plan to increase frequency of sessions and decrease number of clients at each immunizations session.

Safety and protection of health workers and the community

1. Select a well ventilated area where you can ensure one-way flow and physical distance.
2. Avoid crowding and maintain a safe distance, at least a meter, in waiting areas and limit one adult per child for infant immunizations.
3. When possible make hand sanitizer or a hand washing facility available at the entrance of the health facility.
4. Perform screening of persons presenting respiratory symptoms before admission to the vaccination posts.

When conducting immunization sessions, the HW must:

1. Ensure the vaccinator wears a face mask, gloves on and use hand sanitizer as appropriate.
2. Plan outreach sessions not to exceed 15 people at a time. Scheduling additional sessions or time-slots may be needed.
3. Ensure HWs and beneficiaries/caregivers are strictly following the social distancing rules.
4. Ensure caregivers with flu like symptoms, fever or cough, or shortness of breath are referred to the health facility for investigation.
5. Ensure no child is returned unvaccinated for fear of vaccine wastage. Follow the guidance on open vial policy.

What should I communicate to communities about COVID-19 and routine immunization?

Communicate with families on the importance of immunization services to prevent serious childhood diseases. Explain to parents and caregivers precautionary measures are being taken to make the immunization session site safe for both health workers and clients. As possible, after each vaccination session provide information to the community on the following:

- Use a multi-layered cloth mask when going outside the house.
- Wash hands with soap properly before having meals, after coming back home from outside, after meeting with someone or accidentally touching your mouth, nose and eyes.
- Do not touch your mouth, eyes and nose unnecessarily.
- Do not spit in public places.
- Unless essential, discourage visitors in the house.
- Consume a balanced and healthy diet, rich in immunity boosting foods, especially if you are pregnant.
- Regularly exercise for physical and mental immunity, especially if you are pregnant.
- Do not panic if you notice flu like symptoms. Contact the health authorities and seek their guidance.
- Follow proper social distancing guidelines, with a minimum of one meter distance from each other.