Government of Malawi

A GUIDE FOR REACHING EVERY CHILD

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Ministry of Health
Expanded Programme on Immunization (EPI)
P.O. Box 30377
Lilongwe 3
Tel: (265) 1 725637
E-mail: epi_programme@yahoo.co.uk

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Dr. Charles Mwansambo

CHIEF OF HEALTH SERVICES

ACRONYMS

AFRO	Africa Regional Office, WHO
AVW	African Vaccination Week
BCG	Bacillus Calmette Guérin
CBO	Community Based Organization
CHD	Child Health Days
CHW	Community Health Worker
cMYP	Comprehensive Immunization Multi-Year Plan
CSO	Civil Society Organization
DHMT	District Health Management Team
DPT3	Diphtheria, Pertussis, and Tetanus, third dose
EPI	Expanded Program on Immunization
GAVI	Global Alliance for Vaccines and Immunization
GIS	Geographic Information Systems
GRISP	Global Routine Immunization Strategies and Practices
HepB	Hepatitis B
HF	Health Facility
Hib	*Haemophilus influenzae* type b
HPV	Human Papillomavirus Vaccine
HSS	Health Systems Strengthening
ISS	Immunization Services Support
ITN	Insecticide Treated Net
M&E	Monitoring and Evaluation
MLM	Mid-Level Management
MOH	Ministry of Health
MR	Measles and Rubella
NGO	Non-Governmental Organization
PCV	Pneumococcal Conjugate Vaccine
Penta	Pentavalent Vaccine
PHC	Primary Health Care
PIRI	Periodic Intensification of Routine Immunization
REC	Reaching Every Child
RED	Reaching Every District
RI	Routine Immunization
SIA	Supplementary Immunization Activity
SMS	Short Message Service
TT	Tetanus toxoid for adolescents, adults and other ages
UCI	Universal Childhood Immunization
UNICEF	United Nations Children's Fund
WHA	World Health Assembly
WHO	World Health Organization

1. INTRODUCTION

1.1 **BACKGROUND**

Having strong immunization systems to deliver vaccines to target populations plays a significant role in a country's ability to achieve the health, equity, and economic vision of the 2030 Sustainable Development Goals. Within countries, national Expanded Programs on Immunization (EPI)are responsible for vaccines and vaccination programs delivered to control, eliminate, and eradicate vaccine-preventable diseases (VPDs). For nearly two decades, national EPI programs have depended on strategies including the Reaching Every District (RED) strategy to strengthen their immunization programs and address common obstacles to increasing national immunization coverage.

Developed and introduced in 2002 by WHO, UNICEF, and other partners, the RED strategy has played a key role in successfully strengthening African immunization systems to sustainably and equitably increase immunization coverage to meet national, regional, and global targets. RED aims to fully immunize every infant with all vaccines included in the national immunization schedule of countries. RED builds district capacity to address common obstacles to increasing immunization coverage and encourages districts and health facilities to make micro plans to identify local problems and find corrective solutions, using their own data as a basis for decision-making. RED addresses common obstacles to increasing immunization coverage such as poor-quality district planning, low-quality and unreliable service, and inadequate monitoring and supervision of health workers. The original objective of RED was to reach 80% diphtheria, pertuss is, and tetanus third dose (DPT3) coverage in 80% of the districts in each country by 2005, referred to as the "80/80" goal.

Since 2002, RED has undergone multiple refinements and revisions. In March 2003, the 80/80 goal was revised to align with a 2002 United Nations General Assembly Special Session (UNGASS) recommendation and called on all countries to have routine immunization coverage at 90% nationally by 2010 or sooner, with at least 80% immunization coverage in every district (referred to as the "90/80" goal). Later, recognizing that countries could in fact reach the "90/80" goal while still not reaching immunization equity targets, EPI stakeholders began adapting the RED strategy, aiming to reach not just every district within a country but reaching every child with vaccination services. The aim of the Reaching Every Child (REC) approach is to strengthen immunization systems at sub-national level, by improving planning, managing available resources, improving quality of equitable service delivery and monitoring, in the context of primary health care based on community needs. Implementation of the "more ambitious"[1]REC approach was evaluated in nine African countries by WHO and partners in 2007, and thereafter global REC guidelines were revised in 2008 to promote REC as a platform for improving the delivery of other primary health care services, in line with the 2008 Ouagadougou Declaration on Primary Health Care and Health Systems Strengthening in Africa and WHO's Global Immunization Vision and Strategy Goal number 4.

The REC approach has contributed to increasing DPT3 coverage in Africa from 57% to 80% between 2000 and 2014. Despite this, fewer than half of African countries (16 countries)

[1] Maternal and Child Survival Program, https://www.mcsprogram.org/our-work/immunization-2/routine-immunization/

achieved the Global Vaccine Action Plan national targets of 90% DPT3 coverage by 2015. Mindful of this and the need for strong immunization systems to deliver newer vaccines to those who need them the most, from 2016 to 2017 WHO and partners revised the 2008 global REC guidelines again.

Malawi was one of the first five countries in Southern Africa to implement RED, along with Angola, Madagascar, Zimbabwe, and Zambia.In 2005, Malawi started implementing RED in eight districts (Chitipa, Mzimba, Nkhotakota, Kasungu, Ntchisi, Salima, Lilongwe, Chiradzulu) which were selected based on low diphtheria, pertussis, tetanus/hepatitis B/*Haemophilus influenzae* type b (DPT-HepB+Hib3) coverage and high numbers of unvaccinated children. In 2007/2008, RED was scaled to all districts. By 2015, more than 90% of Malawi's districts had attained 80% coverage of DPT-HepB+Hib 3, but pockets of unvaccinated children remained. As a result, Malawi changed its strategy from RED to REC in 2017, with the goal of equitably reaching all children in the country with vaccination services.

1.2 PURPOSE OF THIS GUIDE AND TARGET AUDIENCE

This revised REC guide is a resource for district and health facility teams to improve the sustainability, equity, coverage, and quality of immunization services in Malawi and takes into consideration best practices and experience gained in REC implementation since 2005. This guide will support planning and implementation of the five REC strategy components and is intended for use by:

- **National-level EPI stakeholders:** to help them advocate for funding to strengthen immunization systems within the health sector.
- **Zonal-level stakeholders:** to help them guide district health teams in planning, budgeting, implementing, and monitoring of REC strategies.
- **District-level stakeholders:** to help them guide health facility teams to plan, implement, and monitor REC strategies and consolidate facility-and community-outreach-level microplans into district microplans.
- **Health-facility level stakeholders:** to plan, implement, and monitor health facility REC strategies.
- **Community-level stakeholders:** to guide community institutions (including traditional and local government and resource persons such as community health workers, village health teams, local leaders, and religious leaders) on how to engage with health facilities in development, implementation, and monitoring of health facility microplans and promote defaulter tracing, determination of target populations, community registration, and leveraging of local resources to support immunization outreach and mobile services.
- **Technical partners:** to guide key partners on the REC approach for promoting coordination of technical and financial resources to reach every child with vaccines in every district.

1.3 WHAT IS NEW IN THIS GUIDE?

This REC guide takes into consideration a review of best practices and emerging issues since 2008. These include various global initiatives that provide new resources and renewed focus on targets for sustainability, address inequities between communities, and offer ways to better integrate programs such as the2030 Sustainable Development Goals, the 2011-2020 Decade of

Vaccines, 2030 Universal Health Coverage agenda, the 2011-2020 Global Vaccine Action Plan,the Global Routine Immunization Strategy and Plan (GRISP), and the Regional Strategic Plan for Immunization 2014-2020.

This REC guide emphasizes five important areas for future immunization programs in Malawi including (1) *reducing* ***inequity*** in immunization coverage, (2) ***integrating*** health services, (3) delivering vaccines ***beyond infancy*** using a life cycle approach, (4) addressing ***insecurity*** and conflict, and (5) increasing ***urban immunization*** as follows:

1. ***Inequities:*** National immunization coverage rates have generally increased over the years. However, according to the Malawi Demographic and Health Survey 2016, there are inequities in coverage rates between different communities, driven by factors such as differences in place of residence and maternal education. Revised REC guidelines include more emphasis on equity analysis at sub-district level and context-specific health facility-and community-level approaches. The guide also has additional focus on microplanning at health facility level.
2. ***Integration:*** Vaccines are generally delivered in primary health care contexts and vaccine schedules provide opportunities for contact between the health system and recipients. Integrating immunization with other health services can reduce missed opportunities, increase system efficiency, and maximize health for beneficiaries. As vaccination rates are usually high relative to other health service coverage rates, primary care providers can be encouraged to deliver multiple interventions to women, children, adolescents, and vulnerable populations at the same time. This guide includes suggestions and items to consider when integrating immunization services with other health services.
3. ***Going beyond infancy and adopting a life cycle approach:*** As more new vaccines are introduced, vaccination schedules increasingly extend beyond the first year of life. Vaccines need to be delivered to pregnant women e.g. tetanus toxoid, to children during the second year of life e.g. measles booster, and to adolescents e.g. human papilloma virus. An expanded life course approach to immunization provides a chance to further integrate immunization with other primary healthcare interventions, such as vitamin A supplementation, nutrition and growth monitoring, family planning, breastfeeding counseling, and de-worming. This guide includes recommendations for ways to adopt a life cycle approach to immunization service delivery.
4. ***Insecurity and natural disasters:*** Conflict and natural disasters displace people. When they occur, routine immunization services cannot be delivered through traditional channels. Instead, other mechanisms which are described in this guide should be deployed with the support of partners or community-based mechanisms.
5. ***Urbanization:*** Traditional immunization delivery strategies and REC approaches are based on reaching vulnerable populations and overcoming social and geographical barriers. There is a need to address social, not just physical, barriers to improve access and utilization in both rural and urban areas however. This guide offers suggestions for special things to consider when targeting urban populations.

1.4 CONTENT AND ORGANIZATION

This guide is organized according to the five interlinked RED/REC components: (1) Planning and Management of Resources; (2) Reaching Target Populations; (3) Linking with Community; (4) Supportive Supervision; and (5) Monitoring and Using Data for Action.

This guide also provides additional references at the end of each section as well as in Annex 1, tools for implementing, monitoring, and supervising implementation of the REC approach. Annexes 2, 3, 4, 5and 6addresses operational issues concerning logistics, communication, and integration.

There are two icons that highlight specific information in the guide:

This icon points out tools that can help complete a process.

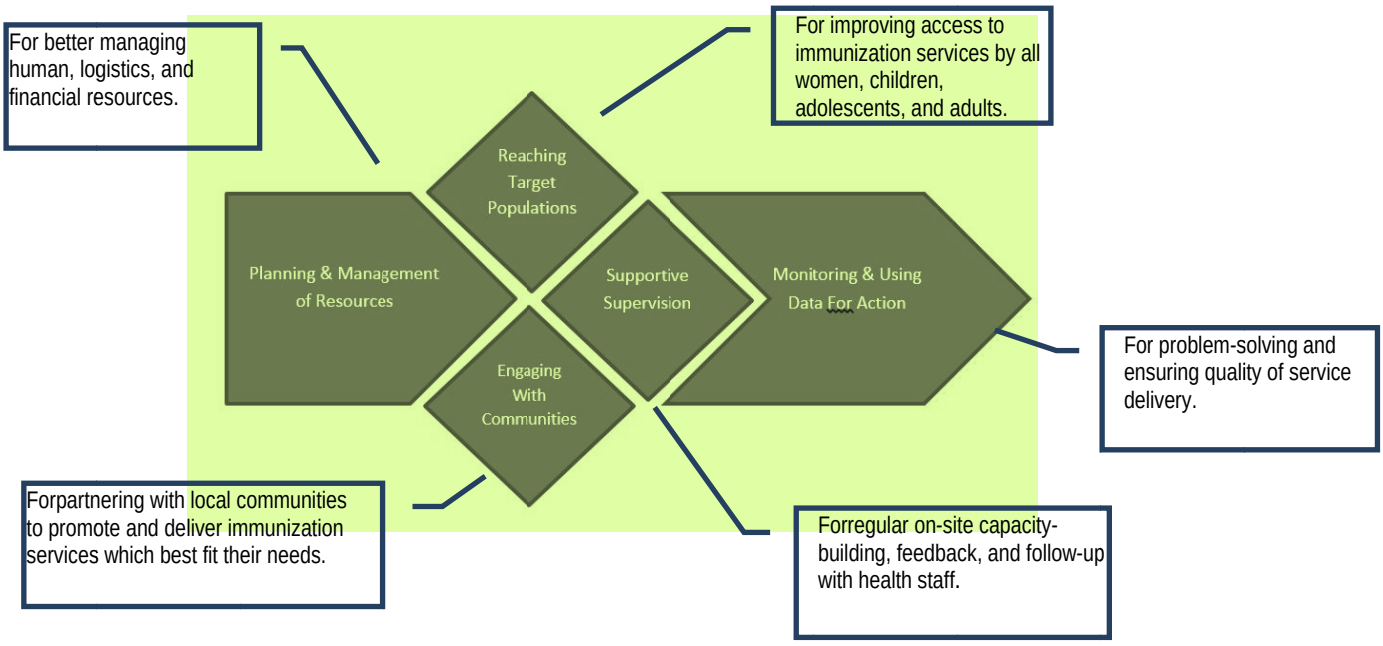
This icon points out tips that can help with implementing the REC approach.

2. THE REACHING EVERY CHILD APPROACH

The REC approach consists of five components implemented at district and health facility levels: (1) planning and managing resources; (2) reaching target populations; (3) linking with community; (4) supportive supervision; and (5) monitoring and using data for action. REC prepares districts to support health facilities by actively promoting microplanning; using information to monitor progress and detect and solve problems; and to ensure the quality of service delivery. REC also promotes linking health facilities with communities to improve access, acceptability, appropriateness, and utilization of health services.

Although this guide describes each REC component in a separate section, it is important to implement the REC approach as an interconnected process, as the content and concepts of each component overlap and link with each other. Implementation of the process may or may not be linear and components may be implemented at different times.

THE FIVE COMPONENTS OF REC



3. PLANNING AND MANAGEMENT OF RESOURCES

Planning & Management of Resources

Steps	RECMicroplanning Tool (see Annex 2)
1. Preparations	
2. Situation analysis	1a, 1b, 2a
3. Set objective & annual targets	3a
4. Identify problems & plan activities	2a, 2b, 5b, 6, 7
5. Estimate resource needs	4a, 4b, 7a
6. Select indicators for monitoring	
7. Use microplan as a management tool	
8. Monitor progress	

*Comprehensive planning by districts and health facilities **identifies** and **prioritizes** essential activities and resources required for improved performance. Participatory planning strengthens partnerships with district and community stakeholders, which mobilizes resources for a more cost effective, sustainable program.* Planning and Management of Resources also involves the other four components of REC: reaching target populations, engaging with community, supportive supervision, and monitoring for action.

3.1 KEY ISSUES

- ***Participatory planning at all levels:*** Participatory planning with community partners promotes ownership. Key program staff and other units in the ministry, such as finance, should involve communities from the beginning of the planning process. Ownership contributes local information which promotes advocacy for securing budgets, which is a critical step at all levels. Careful planning and focused management of resources by national, district and health facility staff are essential for delivering effective, high quality immunization and other health services. Like management, planning must be active and continuous – not only an annual preparation of documents and spreadsheets for a higher administrative level.

- ***Integrated planning:*** REC microplanning is an integral part of overall district and health facility planning. An integrated planning process helps coordinate approaches to maximize resources and exposes potential problems that might arise from integrated service delivery. This allows development of appropriate strategies for resolving operational and financial problems before they become major barriers. Integrated planning maximizes use of staff time and resources, rather than duplicating staff effort and operational expenditures.

- ***Start with community and health facility levels:*** Ideally, the planning process begins at the health facility level and should be inclusive of community-level planning to provide practical and more reliable information for the district plan and budget. Planning, budgeting, and resource management should not be done in isolation, but rather as a collaborative exercise through participation of all stakeholders at each level of the health system.

3.2 MICROPLANNING

Benefits of microplanning: Microplanning is more than compiling information and forwarding it to the next higher administrative level for obtaining funds. Rather, a microplan defines how to reach clients, how many people should be targeted for services in the area,and how frequent quality services are provided. An effective microplan is developed by all stakeholders at each level and:

i) Creates a map showing well-defined catchment areas identifying where target populations live. This could include geographic information systems (GIS) information both at community and facility level. If GIS mapping is not feasible, then manual/sketch mapping using flip charts and developed through community participation will provide guidance for resource planning;
ii) Identifies target populations eligible for immunization in the following year;
iii) Prioritizes plans to reach all target populations with immunization services on a continuous basis, according to the national schedule;
iv) Includes realistic local actions based on available operations, economic, and social context for improving and sustaining coverage;
v) Reduces inequities in service provision;
vi) Improves quality of services.

Process considerations: The RECmicroplanning process uses a periodic review and updating process that includes participation of communities and a problem-solving approach that analyzes past achievements, current barriers, and available human, material, and financial resources.

Steps for RECMicroplanning at Health Facility and District

There are eight major steps for microplanning. In each step both the health facility and the district have a role to play.

STEP 1: PREPARATIONS

The health facility

a. Orientation of the health facility team: the health facility team should be oriented on the importance, benefits, and process of microplanning processes.
b. Health Facility (HF) leadership calls for an inclusive microplanning meeting, including community members and stakeholders from other sector, with facilitators from the District Health Management Team (DHMT).

The district

a. District planning is different from health facility planning and should be completed after the health facility plans have been developed.
b. The district team should conduct a review meeting involving health facilities and other stakeholders as part of the REC microplanning. During the review meeting, health facilities' previous three years' performance should be reviewed and discussed.

STEP 2: SITUATION ANALYSIS

The health facility

a. Operational map – the *process* for drafting an operational map should include:
   - Coordination by district level, to ensure no areas or populations are left out.
   - Where possible, technology with GIS and digital maps can be used which will cover geographic identification of vaccination sites (fixed and outreach sites).
   - Health workers serving in the catchment area develop the operational map.
   - Visiting high-risk populations to better understand underlying barriers to service access and use.

To develop an operational map, use Tool 1b.

b. An operational map should:
   - Define the catchment area being served.
   - Include villages and communities covered under fixed sites, outreach sites, or child health days.
   - Include important landmarks including schools, government buildings, water gathering points, religious institutions, hard-to-reach areas, rivers, mountains, roads, and transit points such as nomad meeting points, busy transport and migration routes, etc.
   - Identify areas with low coverage, including 'high risk communities' both geographically and socially.
   - Show major climate and geographical barriers to service delivery, such as seasonal flooding and impassable roads, etc.
   - Urban areas could use existing street maps, Google Earth maps, or polio or measles campaign maps. These can help map out areas of dense populations, migration populations, slum areas, social structures, and NGOs or private sector entities who deliver services.

Use REC Tool 2a to conduct an equity assessment.

c. Population data and denominators: estimating the actual target population or number of children who live in a catchment area is a crucial step for microplanning. If

possible, include population data for both fixed and outreach sites. Official estimates are often provided annually from higher levels and extrapolated based on averaged growth rate. Note that these figures may be tied to budget resource allocation and may not be accurate, especially in areas with high rates of migration/immigration. It is therefore important to conduct head counts annually ***at local levels*** and triangulate information at district and health facility level to get the most accurate operational population estimate. Items to consider:

- Total number of children in the target age group in the catchment area (as opposed to the number of children that would achieve a particular coverage target).
- Using local community head counts at beginning of the year.
- Community registers may be available from local authorities, polio and measles supplementary immunization activity(SIA) data, or other programs.
- Use previous census data and local population growth rates.
- Assessing and planning for variable nomadic or other migrant populations needs better understanding of routes and where and when populations move.
- Village health registers, immunization register, or other facility sources could also be used as a birth register. These registers could therefore be used to estimate infant populations, as well as helping to followup infants on the defaulter tracking list. *Immunization in Practice, Module 6* highlights this.

For assistance with determining population denominators, use the WHO denominator estimation guide.

d. Analysis of performance and identification of barriers to high risk populations (Tool 2a): an inclusive, participatory review by health and community leaders of program performance over the previous three years gives an opportunity to review performance and celebrate goals achieved and can highlight areas requiring support. A review can also highlight vulnerable 'high risk' communities from the operational map, identify their barriers to accessing immunization services, and help teams develop plans to address these barriers.

e. Analysis of local immunization and disease surveillance data includes:
   - ✓ Vaccination coverage rates (all antigens and season fluctuations) and dropout rates (Penta1-Penta3, DTP1-MR1, MR1-MR2).
   - ✓ Numbers of unvaccinated target population by health facility/community.
   - ✓ Service delivery strategies and results: frequency of fixed, outreach, mobile, and other immunization services and results when compared to targets.
   - ✓ Management indicators: frequency of supportive supervision visits and monitoring/review meetings, presence of updated monitoring charts in health facilities, number of vaccination sessions conducted against the plan, and barriers to implementation against plans.
   - ✓ Vaccine supply: frequency of vaccine stock-outs, overstocks, vaccine wastage rates, and underlying causes of problems.
   - ✓ Cold chain and logistics: health facilities without adequate cold chain, temperature monitoring, transport material, etc., and underlying causes of problems.

- ✓ Surveillance data: cases of vaccine-preventable diseases, deaths, locations of epidemics.
- ✓ Community involvement: frequency of review meetings with the community, presence of defaulter tracking, types of health education materials and activities, quality of health worker communications with communities and families.

The district

a. District-level data should be analyzed to identify priority areas. There should also be prioritization of HFs using immunization data, see Table 4.4 in "Immunization in Practice".
b. Review health facility denominators and overlap between facilities.
c. For district-level coverage calculation, use official district population statistics from the National Statistical Office.
   - It is important to regularly review these figures and ensure that differences between official and programmatic denominator estimates are considered.
   - Alternative: at district level, aggregate both the numerator and the denominator of the health facilities, in contrast with the official denominator.
   - Alternative: base operational program decisions only on numerators.

d. Make a map, showing all health facilities and outreach sites, if possible using GIS for catchment area mapping.
   - The district map should show the same elements as HF maps: the entire catchment area of the district; each HF and its catchment area; roads, towns, villages and other features and landmarks; etc.
     - Use the data from microplanning Tool 2a to show priority areas and populations.
   - Show areas with high number of un/under-vaccinated children and identify underlying causes of the problem.
   - Ensure that no area is left out or appears in more than one health facility catchment area. In case of overlap, HFs should agree on who provides services to what area.

STEP 3: SET OBJECTIVE AND ANNUAL TARGETS

The health facility

The program goal, for communications purposes, should be to reach all target populations with each antigen within the population catchment areas.

Performance should be measured against the total eligible population, not against an artificial reduced target number. Describe progress in terms of the number of persons reached (numerator) rather than in terms of coverage rate.

The district

Set incrementally increasing annual targets determined for individual districts, based on the previous year's achievement, with the aim of ultimately achieving the national goal as described in the national comprehensive multi-year plan (cMYP). Annual targets notwithstanding, each district should also ultimately be aiming to immunize all target populations.

STEP 4: IDENTIFY PROBLEMS AND DEVELOP A PLAN

The health facility

REC Tool 2a helps to identify problem areas by using numbers of unimmunized target populations and dropouts to show areas with low coverage.

REC Tool 2b identifies problems revealed by situational analyses.

a. **Annex 3** provides a useful guide for analyzing underlying causes of high immunization dropout rates. Maintaining progress in implementing REC strategies requires active monitoring to review progress and updating of microplans based on new information.
b. Identify special activities for reaching hard-to-reach and other problem areas and update HF microplans to include all high-risk communities.
c. Meet community leaders to discuss barriers to immunization in their areas. If community leaders are resistant to immunization, discuss their concerns and find solutions together (see Linking with Communities section).

The district

a. Consolidate all health facility microplans.
b. Prioritize HFs and sessions that need support based on those with the highest number of unimmunized and under-immunized children and serving hard-to-reach populations.
c. Add supervisory visits according to priority.
d. Conduct review meetings to monitor progressand review microplans based on quarterly performance.
e. Mark the day on which vaccines, safe-injection equipment, and other supplies will be delivered each month to each health facility.
f. Make a district activity plan **(see Tool 7, Annex 2):**
    - List all activities the district is planning to do in the next quarter.
    - List by health facility all problem-solving activities for hard-to-reach areas and problem areas for which district support is needed, showing dates and persons responsible.
    - List all district-wide activities, SIAs, meetings, trainings, etc., showing dates and persons responsible.

STEP 5: ESTIMATE RESOURCES NEEDED AND PREPARE A REALISTIC BUDGET

The health facility

a. Effective microplanning requires an accurate estimate of resources needed and a detailed budget. While estimating resource needs, consider these questions:
   - Were sufficient funds received last year and what was spent?
   - Is more or less funding expected next year?
   - Who will carry out the proposed immunization activities?
   - What resources are needed to carry out the proposed activities?
   - What resources are available for these activities and from whom?
   - Are there any opportunities for sharing costs among other health services?

b. To prepare a budget, consider the six building blocks in the table below.

Table 1: Building blocks framework

Health System Building Block	**EPI-related Component**	**Associated Costs**
Leadership and Governance	Community leaders	• Costs associated with engaging with community leaders for immunization microplanning and vaccination implementation activities.
Health Workforce	Human resource responsible for carrying out immunization services	• Training costs. • Remuneration costs. • Costs associated with supportive supervision.
Medical Products and Technologies	Cold-chain equipment, vaccines, and safe injection materials	• Transportation costs (fuel, per diem) for distributing vaccines. • Procurement of vaccines, disposable syringes, waste management supplies. • Procurement and maintenance of cold chain equipment.
Service Delivery	Immunization service delivery	• Transportation costs for outreach immunization services. • Running costs to support facility-level static immunization activities.
Information	Monitoring and evaluation (M&E)	• Costs associated with data collection tools (such as child registers, child immunization passports, home-based records forms, default tracking forms and tools, reporting forms, and coverage monitoring charts), data collection, and data management.

Be sure to also include in-kind contributions from the community and partners.

c. The budget plan should fit with available resources. If funding and resources are not sufficient to fully implement the plan, mobilize for additional support from government, donors, communities, NGOs, and the private sector. Prioritize interventions to fit within the available budget such that the most critical activities(such as immunizing high-risk communities), will be implemented and equity with quality is addressed. A well-prepared budget will help justify funding requests and increase the chances of obtaining needed funding.
d. Ensure that the microplan budget is included in the overall health facility plan as well as in the district plan.

The district

a. The district budget has two parts:
   - Costs associated with conducting all sessions prepared at health facility level and
   - Running costs, supervision, maintenance costs, training, social mobilization and communication, program management, etc. costs.
b. The district should prepare its budget based on the requirements of the health facility microplans and other district-level requirements.
c. District EPI microplan budgets should feed into the whole district health plan.
d. Points to consider:
   - A realistic budget is needed reflecting human resources, commodities, and financial resources needed for any integration of services.
   - Review last year's budget and determine if the money and other resources requested were sufficient and received on time. If there were problems in the flow of funds to the district level or within the district, consider how the situation can be improved.
   - Consider new activities requiring extra money.
   - Account for any local mobilization of resources e.g., local partners might provide outreach transport or gas for a refrigerator.
   - Look for efficient ways of implementing certain tasks to save resources e.g. combining distribution of vaccines with HF visits or training.
   - Explore pooling of resources from different areas to take advantage of integration e.g. transport shared with different programs or a minimum package for outreach and/or mobile services which include vitamin A supplementation, distribution of insecticide treated nets (ITNs), etc. without compromising service quality.
   - Determine how activities can be jointly conducted to avoid duplication when they involve the same person and same time frame.
   - Advocate for extra money at provincial or national level.
   - Include district inputs and other facility inputs for mobile team sessions.
   - Include costs for expenditure monitoring.

STEP 6: SELECT KEY INDICATORS FOR MONITORING

The health facility

a. Effective monitoring requires the regular collection of reliable data and its analysis to verify that planned activities are being implemented and that desired results are being achieved. First, determine your key indicators, such as coverage and dropout rates, for monitoring your microplan and immunization service performance. Active monitoring requires review, feedback, and taking action on documented progress with the DHMT, health workers, stakeholders, and community members.

b. **Review and update** your microplan at least **every quarter.** See section 7 for more detail.

The district

a. Review progress by using consolidated HF monthly reports, quarterly reviews, and supportive supervisory visits.
b. Include inputs from the monitoring group such as data quality reviews, etc.

STEP 7: USE MICROPLAN AS A MANAGEMENT TOOL FOR PERFORMANCE IMPROVEMENT

The health facility

The health facility RECmicroplan is a very effective management and advocacy tool for obtaining support from local government, donors, NGOs, community-based organizations (CBOs), and the community. Through regular performance review and routine updating, take necessary corrective actions and make adjustments at the local level in time to stop problems from impeding progress.

The district

a. Review progress, take action, and solve identified problems.
b. All of the monitoring and review activities listed above can lead to short- or long-term corrective action.

STEP 8: MONITOR PROGRESS MONTHLY

The health facility

a. Monitor process indicators and all antigens coverage and dropout rates monthly.
b. Involve all health workers involved in the immunization program and the community representatives in monitoring.
c. Review progress by using monthly reports, monitoring charts, quarterly reviews, and supportive supervisory visit reports at monthly DHMT meetings.
d. Monitor progress within high-risk communities.

See "Monitoring for Action" section for more details.

The district

a. Districts should conduct regular review meetings and review the district microplan during the review meeting for immediate corrective actions at local level.
b. The district microplan should be updated every six months.

3.3 ROLES OF THE MANAGEMENT TEAM IN MICROPLANNING

National Level

- Ensure that REC is an integral component of the Health Sector Strategic Plan 2, Health Promotion Strategic Plan, Community Health Strategic Plan, the comprehensive Multi

Year Plan for immunization and other Ministry of Health (MoH) planning, and that reaching un-immunized and most vulnerable populations is a priority.

- Adapt and update the REC guide and tools according to district and health facility situational analyses.
- Conduct equity analysis to describe the communities that are affected by inequities.
- Allocate budget and disburse government and donor funding and resources to regions and districts in a timely manner.
- Train regional and district managers on the REC approach and relevant EPI technical areas.
- Monitor and assist district microplanning processes and implementation.
- Prioritize support to districts with the most under-immunized populations and communities affected by inequities.
- Review progress based on process, performance, and surveillance data routinely and adjust microplans.

Zonal Level

- Train district managers on REC.
- Monitor, supervise, and assist district microplanning processes and implementation.
- Allocate and disburse resources in a timely manner.
- Prioritize support to districts with the most under-immunized children.
- Routinely review progress on process, performance, and disease surveillance and adjust microplans as required.

District Level

- Conduct situational analysis and review previous year`s performance.
- Review and improve health facility population (denominator) estimates.
- Engage political and community leaders, community health workers and groups, and partners in the microplanning process.
- Train health workers on REC strategy.
- Supervise and assist health facility microplanning sessions.
- Allocate and disburse funding and resources to health facilities.
- Prioritize health facility catchment areas and high-risk communities with the most under-immunized children. Explore potential use of technology to help with this.
- Routinely review progress on process, performance, and disease surveillance regularly and adjust district plan and microplans as required.

Health Facility Level

- Conduct a local situational analysis for the microplan for improving reliability of information, such as target population (denominator) estimates. Compare the number of children in your register with the estimated official target population and with local population registers or census.
- Consult the community in developing vaccination delivery strategies addressing the system approach of health system strengthening, particularly in communities that have a large number of unimmunized children. These special communities will need additional effort according to your equity assessment. If there are health facilities which have done this well before, have them share their approach with others.
- Develop a list of community focal points to coordinate vaccination sessions for mobilizing all eligible children and women.

- Engage community leaders and groups in microplanning and developing strategies to reduce left-outs and dropouts, in particular with groups that are socially hard to reach.
- Coordinate health facility and community resources for more cost effective and sustainable services.
- Establish regular meetings with community focal points.

Community Level

- Help the health facility improve the accuracy of the target population (denominator), through actions such as registering newborns and finding unregistered families in the community.
- Work with the health facility to plan optimal scheduling for vaccination sessions.
- Mobilize eligible population before vaccination sessions to improve compliance for continuation of the vaccination (full effective coverage of vaccination).
- Community health workers and leaders participate in REC microplanning including mapping of vaccination sites (fixed and outreach sites) in respective catchment areas.
- Work with health facility in prioritizing high-risk and underserved communities for left-outs and dropouts.

3.4 MANAGING RESOURCES

Increased expectations from the health system and the need to deliver more interventions can increase resource needs. This comes at a time when financial support may be decreasing and resources are not sufficient for implementing all planned activities. Consequently, not all activities may be implemented that were planned in the microplan, and ways of achieving more with less will need to be sought in an effort for more efficient management.

Efficient resource management requires prioritizing activities and coordinating them with other health programs, such as integrated supportive supervision. Managers must carefully and clearly allocate staff to activities. Managers also need to think creatively to find in-kind and collaborative resources from other PHC programs, NGOs, the private sector, and the community. Key issues to consider when allocating human, material, and financial resources are as follows.

HUMAN RESOURCES

- Capacity-building through pre-service, in-service, and on-the-job training during supportive supervision. Mentoring and supervision often have more impact on behavior change than more formal trainings.
- Staff are motivated by different things including supportive supervision; recognition of good performance through frequent feedback and sharing practical experiences with peers; appropriate staff placement according to skills and experience; and financial and non-financial incentives such as health worker of the month recognition, opportunities to gain new skills, and opportunities to move into more responsible positions.
- Innovative ways of motivating health workers include use of technology for recognition and exchanging success stories and better use of review meetings.

FINANCIAL RESOURCES

- Review available financial resources by source and identify funding gaps.

- Determine how to utilize coordination mechanisms at district level to raise additional funds.
- Coordinate resources from different health care activities, such as vitamin A supplementation and ITN distribution, to share transport for outreach and mobile immunization services.
- Identify shared training and communication opportunities.
- Determine how activities can be jointly conducted to economize staff time and make services more convenient for caretakers.

MATERIAL RESOURCES

- Infrastructure, logistics, and equipment gaps.

3.5 REFERENCES

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- State of Inequality: Childhood Immunization, World Health Organization.

4.REACHING TARGET POPULATIONS

Steps	RED/REC Tool
1. Design strategies based on community needs	
2. Extend immunization to all age groups	1a, 1b
3. Assess opportunities for integration	
4. Prepare and conduct sessions	7b
5. Monitor reaching the target	

"Reaching target populations" focuses on improving equitable access and utilization of immunization and other health services in a cost-effective manner through a combination of service delivery strategies which fit the needs of the community.

4.1 KEY ISSUES

Achieving and sustaining high levels of equitable coverage requires service delivery strategies which are appropriate to the needs of the people and which make additional efforts to immunize communities affected by inequities. In addition to geographical considerations, reaching target populations includes bridging socioeconomic and other inequities. To develop the most effective strategy or combination of strategies, the health team must identify and locate all immunization-eligible children and adults. Then the health team determines which groups are at high risk for not completing their required immunizations, and thereby at high risk for vaccine-preventable diseases. Effective service delivery strategies are based on clearly defined reasons for low vaccination coverage, including logistical, cultural, or financial barriers, and inadequate performance of immunization services.

"High-risk population" means: the hard to reach, the underserved, the urban poor, migrants, refugees, ethnic or religious groups, or people affected by insecurity, displaced by natural disasters, and others.

Reaching target populations is not just a task for the health facility, but for all levels in the Ministry of Health as well as for the community. Roles of each level include:

The national level develops national policies and guidelines that support implementation of REC microplanning for all programs. Well planned, integrated services use scarce resources

more effectively. The process of reaching target populations begins at the national level with integrated and coordinated policies, resource mobilization, projects, and budgeting which support integrated management and delivery of services.

Zones enforce implementation of national policies and ensure adequate resources for district microplans. They support development and implementation of action-oriented district communication and advocacy plans which fit the needs of communities.

Districts ensure adequate resources for health facility microplans and ensure that accurate target populations (denominators) are included, maps are consolidated, and that all communities are clearly defined and reached appropriately. Action-oriented district communication and advocacy plans which fit the needs of communities are vital for effectively finding and reaching the unimmunized and the under-immunized.

Health facility REC focuses on three basic routine immunization delivery strategies: static, outreach, and mobile. Static services refer to services offered in the health facility. Outreach services mean services delivered in the community by health workers who go to the community and return to the health facility in the course of the working day. Mobile services refer to sessions that are conducted by teams that travel to places distant from any health facility. They usually stay out at least one night. The team may be workers from nearest health center or they may consist of district or national staff. Unlike outreach sessions, which are scheduled periodically, mobile sessions are scheduled when needed. Teams often go to homes, fields, workplaces and schools, wherever the target population exists.

4.2 HOW TO REACH TARGET POPULATIONS

The target population for immunization has greatly expanded given the adoption of a life cycle approach and now includes populations beyond infancy. The immune response to new vaccines, the need for booster doses, and disease patterns of emerging diseases all require vaccine delivery schedules that go beyond infancy. To maximize health benefits and return on investments, health systems need to deliver vaccines to pregnant mothers, school children, adolescents, and vulnerable adults. This requires a change in thinking beyond traditional vaccine schedules and, in the context of a primary healthcare approach, be more aligned to a life cycle or continuum of life approach to delivery. Looking at health needs of populations by age can highlight opportunities for integration of immunization services into other PHC services. For example, HPV outreach can provide opportunities for other health interventions targeted at adolescents such as Td vaccination, menstrual hygiene education, sexual and reproductive health education, and HIV prevention services.

There are five major steps to reaching target populations:

1: Review the Microplan and Design Strategies

Develop the most effective strategy or combination of strategies for **Reaching Target Populations.** Use the information in your health facility microplans and perform the following tasks:

- **Review** your microplan and the frequency of immunization sessions in the past 3-6 months, in particular in those areas that are previously underserved, to sustain and raise coverage using an equity lens.

- **Identify** groups that need special attention and secure the resources needed to reach them, e.g., coordinate with agriculture sector, Department of Disaster and Management Affairs (DODMA) to reach refugees and displaced communities, political authorities or NGOs, CBOs, FBOs to reach insecure areas, UNHCR, etc.
- **Monitor** efficiency of your immunization sessions (i.e., ensure all targets are being reached, and if not, work with communities to reorient strategies).
- **Regularly meet** leaders of communities that oppose immunization to discuss issues and find appropriate solutions.

Additional opportunities to boost coverage can be planned through Periodic Intensification of Routine Immunization (PIRI) also known as local immunization days, Child Health Days (CHDs), African Vaccination Week (AVW), and campaigns. These are planned efforts to reach populations that are not reached systematically using the REC approach. It is important to plan these additional activities in advance and focus on areas where systematic approaches do not reach the target populations, e.g., in humanitarian crisis.

PIRIs are organized in areas where coverage is low. CHDs are integrated events for delivery of immunization messages, vitamin A, deworming, and other high-impact interventions typically to children under five and pregnant women for broader maternal, newborn, and child health, but the age range is tailored to the target population of the interventions that are delivered. AVW is a week to advocate for and deliver immunization. It also promotes delivery of other high-impact lifesaving interventions.

2: Immunization Beyond Infancy

According to national immunization policies:

- Catch-up children who did not complete their series in the first year of life, after their first birthday.
- Include children in their second year of life for second dose of measles/rubella-containing vaccines, as well as immunization and preventive care sessions for children under five.
    - Find out why children beyond 1 year are not being immunized (this may include issues related to health worker or caregiver's knowledge). These reasons may differ from infant immunization barriers.
- Organize sessions for school-aged children, adolescents, and adults.
    - Adolescents: consider immunization in schools and strategies to reach out-of-school adolescents. Adapt strategies to their ways of living, workplace programs, and informal workplace settings
- Consider special community mobilization strategies for adults, by group.

3: Assess Opportunities for Integration

- Review what interventions can be integrated. Session plans should contain strategies to reach populations with integrated services.
- Use contact points at the heath facility for curative and preventive care and at community level to identify clients' immunization status and for referral of missed opportunities.

- Deliver other interventions with immunization:
    - Add on interventions and referrals according to staff capacity.
    - Be sure to bring commodities for other interventions during outreach sessions.
    - Ensure systematic referral of clients in static sites to other relevant programs.
    - Offer all immunizations with other interventions.

4: Prepare and Conduct Sessions

- Assign community focal points to mobilize target population for static, outreach, and mobilesessions. Where possible, community health workers should list all children and pregnant women in their community with immunization status to follow up
- Mobilize the population for immunization and other interventions, through community leader or community health worker. Consider sending short message service (SMS)reminders and use the health center vaccination registers and village health registers for obtaining contact details of mothers and caretakers.
- Confirm immunization outreach sessions with communities a few days before each session and ensure mobilization of eligible people, including defaulters.
- Take the right quantity of vaccines and other supplies.
- Maintain vaccines at the proper temperatures at all times, during storage, transportation, and vaccination sessions.
- Assure the safety of immunization, including reconstitution of vaccines, vaccine administration, discarding reconstituted vaccines within six hours or at the end of the session (whichever comes first), and proper waste management.
- Correctly record the doses administered on tally sheets, registers, and child and mother health passport.
- Provide caretakers with key information: date, time, and place for next immunization.
- Inform mothers and caretakers about what to do in case of an Adverse Event Following Immunization.
- Provide feedback about children missed for vaccination to community leaders.
- Explore the use of new technologies, such as SMS reminders.
- Use existing community structures and influencers to mobilize populations.
- Provide a comfortable and friendly waiting area.

5: Monitor "Reaching the Target Population"

The best way to monitor whether target populations are being reached is by measuring vaccination coverage by strategy: static, outreach, or mobile. Suggested indicators can be seen in Section 7: Monitoring and using data for action.

4.3 REFERENCES

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- WHO: Recommended Routine Immunization Schedule.
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- Microplanning for Immunization, *How to strengthen every step of your process*; ELearning module 4.
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- WHO: *Increasing coverage at health facility level.*
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5.ENGAGING WITH COMMUNITIES

Steps	REC Tool
1. Build effective partnerships	
2. Support friendly services & trust	
3. Deliver services for the community	
4. Use effective communication	
5. Monitor community participation	

REC encourages health workers to partner with communities in planning, monitoring, and maximizing utilization of immunization and other health services. This encourages planning and delivery of services that are more acceptable, effective, and sustainable and more likely to be used.

5.1 KEY ISSUES

Effective community participation requires **partnerships with communities** through supportive and coordinated actions by the DHMT, health workers, and community members. They work together to achieve **accessible, reliable, and friendly services for everyone**. When communities are involved as allies in planning, promoting, implementing and monitoring services, they develop a stronger trust and ownership in the health service. It is therefore easier for health workers and health planners to analyze and address reasons for low coverage, drop-out, and underserved populations.

"Engaging communities" means that the health system should share with these communities the responsibility for ensuring the delivery of quality, equitable, accessible, and acceptable immunization and other maternal and child survival services, while also supporting and ensuring rights-based approaches to empower communities.

A "community" can be defined in many ways. There are demographic and geographic communities such as rural villages, urban neighborhoods, and pastoral groups. There are religious communities; migrants; occupational communities, such as fishing villages; family communities or clans; ethnic communities; and mobile communities such as nomads and refugees. There are high income, tertiary-level-educated communities; and very poor urban slum neighborhoods. It is important for health managers to recognize community differences and dynamics and to interact with the various sections within the community as well as their influencers and partners.

Strengthening community involvement through behavior change communication, as well as engaging communities in local resource mobilization, accountability, equity, and integrated

service delivery, is critical to reach all target populations and reduce inequities. Monitoring indicators have been refined to be more result-oriented and discussion is included on the oversight and quality assurance roles of the higher levels of the health system.

5.2 BUILD EFFECTIVE COMMUNITY PARTNERSHIPS

Building community partnerships will enable communities to demand immunization and mobilize health workers to fulfill their duty to provide these services. Itis more than a local responsibility. The roles and responsibilities of the national program, district health team, and health workers in linking health services and maximizing resources with the community should be clearly stated in national plans and strategies.

At the **national level,** activities around engagement with communities through its platforms, the roles and responsibilities, and support for community health workers must be clearly outlined, budgeted, and tracked in *annual* immunization and health plans, with adequate funds allocated. This also includes developing or updating monitoring and reporting tools to capture community activities and contributions, as well as feedback and discussions between communities and health service providers.

Zones and districts can help coordinate and promote an integrated approach with other government sectors, donors, NGOs, CBO, faith-based organizations, and media which are engaging communities. They should monitor progress on building community partnerships and their effect on strengthening immunization and other health services.

Health facilities need to identify community gathering points and key influential persons or groups of persons through participatory community mapping and dialogue with communities, stakeholders, and partners. This is accomplished by actively engaging the community during microplanning. Community health workers and volunteers are valuable resources for linking and extending health services to the community.

There are many **community** engagement platforms and structures that can link with and contribute to the delivery of health services. These include district or community health committees, women's groups, youth groups, religious organizations, NGOs, CBOs, and the private sector.

With proper application of a community engagement approach (including capacity-building), community members, including chiefs, and community health workers can assist with health education, social mobilization, tracking children for immunization, and organizing outreach sessions. Also, look for opportunities for linking community health workers and other government extension agents with other programs, such as HIV/AIDS, tuberculosis, malaria, nutrition, or even agriculture programs. While such workers are very busy with their assigned tasks, they can be asked to remind mothers about immunization during their contact with communities.

In both rural and urban communities, SMS and social media offer a great opportunity for linking and mobilizing communities. However, the internet and mobile phones also present a new challenge: rapid spread of false and damaging information. Consequently, knowing your community through participatory dialogue makes building trust even more critical for maintaining high immunization coverage. When the community trusts the health worker more

than the internet, false information about immunization and vaccines can be controlled before it can damage your immunization program.

5.3 SUPPPORT FRIENDLY SERVICES AND TRUST

A friendly health service is essential but sometimes overlooked. Immunization sessions should be scheduled for the convenience of mothers and caretakers. If not, then mothers and their children will miss their immunizations. Morning vaccination sessions may not be effective if mothers have many family obligations in the morning.

The interaction between the health worker and the caretaker during an immunization session is critical in building trust in health services. Mothers and caretakers do not want to take their child to be immunized when they are not treated respectfully or if they see unsafe injection practices. Mothers stop coming if they anticipate a vaccine shortage because there was no vaccine during their last visit. Making your immunization service appealing and convenient are critical factors to include in your microplanning and strategy development.

Respectful, interactive dialogue between health workers and community members and leaders promotes trust. To make sure trust is established, health workers must strengthen their interpersonal communication skills.

Trust not only helps mobilize the community, but also helps to control false rumors about immunization and adverse events following immunization. Here are some steps to promote trust in the health services:

- **Know your community and listen to them**. If a community has low coverage, talk to them and find out why. Perhaps they are unaware of the immunization services. Perhaps they feel left out from the health care system. Or, perhaps they fear immunization or have some incorrect beliefs about vaccines.
- **Meet the community** and community leaders to discuss the most convenient time for vaccination sessions and venues for outreach.
- **Participatory discussion and involvement builds ownership**. When the community is actively involved in planning and supporting services, you gain more resources and increase use of services. Discuss with community members how they can contribute to improving health facility and outreach sessions. Some examples include:
    - Motivating their friends and neighbors about the benefits of immunization and other PHC services.
    - Arranging clean and convenient outreach sites (school, community meeting place, market, etc.).
    - Transporting vaccines and health workers to outreach sessions.
    - Reminding the community about scheduled outreach sessions.
    - Helping to register families, newborns, and children.
    - Making waiting areas more comfortable during vaccination sessions.
    - Giving health education messages.
    - Assisting with tracking children who require immunization.

5.4 DELIVER SERVICES FOR THE COMMUNITY

Knowing your community requires participatory dialogue between health workers and community members and leaders. Discuss roles and responsibilities of both community

members and health workers. Identify ways in which you can help each other, including agreement on how to tap into their own resources in a way that is acceptable and sustainable. This can be accomplished through regular meetings with communities during which you review the status of immunization in the community and talk about problems that have developed and how to solve them. Having the mobile numbers of community workers will help you to coordinate immunization sessions with them and coordinate mobilization of eligible clients for the sessions.

Another way to know your community is through use of **community engagement tools** which help health workers and community members together identify community structures, available resources, and leaders (see **Tool 5a in Annex 2**).List all of the schools, religious institutions, NGOs, CBOs, marketplaces, and others, and include the key contact person for each. Also, list by name important community members and leaders such as government and traditional leaders, traditional healers, businessmen, and opinion leaders. Discuss what resources key community members have which can support immunization and other health services. It is important to update this information every six months.

Urban Communities

Getting to know an urban community may present special challenges. An urban community may have less structure and many different social networks compared to a rural community. Although health and social services may be more accessible in urban areas, they may be underutilized due to social distance, unfamiliarity with health facilities, lack of knowledge about where to go, being busy with daily activities, or lack of trust or fear of authorities, especially by certain low-income groups. Elite segments of the urban population may choose not to use immunization services (especially those provided through public health facilities or campaigns), due to their perception that these services are of sub-standard quality.

People in densely populated areas are also at the highest risk for diseases. It can be difficult to organize a meeting for mapping and focus group discussions in these communities with undefined boundaries but with patience and repeated contact, health workers will gain the trust of the community, and the community will become eager to participate in planning of health services.

Mapping in urban areas follows the same process as in rural areas. Possible structures in urban settings for community linkage include: religious organizations, cultural or ethnically accepted health care and social service providers, schools, politicians, private sector, humanitarian organization, and local civil society organizations. Health workers need to work with the community and these representatives and networks to understand, identify, and clearly define the different structures in the urban setting and the behavioral determinants of the community.

Mobile Communities, Conflict Areas, Non-Infant Target Populations

Every child and adult in your district and health facility catchment area should be immunized. Do not leave out the unexpected or newly-established communities, such as migrant camps established for a sudden influx of refugees, internally displaced persons, or victims of a natural disaster. These groups are at very high risk for vaccine-preventable disease outbreaks and are consequently a priority. If a humanitarian organization is overseeing a camp in your area, be sure to work together to actively coordinate and monitor health services in the camp. Include them in your microplanning, mapping, and communication and advocacy strategies.

Seasonal, nomadic, and pastoral communities also must be linked to routine health services. Districts should coordinate with the national program and other districts to reach groups that cross district borders. Knowing the lifestyle and migration routes of these communities will help to plan for services when they are more easily accessible. These groups may require special communication techniques for maintaining routine meetings with community leaders and for communicating information about the location and timing of immunization sessions.

There are also "part-time" community members, for example where mothers and children from one part of the country may live with relatives in another part of the country during certain times of the year. These "part-time" community members are particularly vulnerable to not completing the recommended vaccination schedule. They may believe that they can only go to their home village health center for immunization. Or, they may have left their immunization cards behind and therefore have no documentation on what immunizations are needed. A communication strategy and plan for the best mechanisms for reaching these groups should be developed and implementation included in microplans.

Engaging Community Health Workers and Community Mobilizers for Routine Immunization

Community health workers (CHWs) have competing priorities and potentially separate funding sources or incentives for their work, based on different health programs, initiatives or donors with whom they are involved. Routine immunization should be made more relevant in their day-to-day work.

Within the continuum of care and responsibilities outlined in the community strategy, the health system must clearly package the essential activities that are required for immunization. This should include how CHWs and mobilizers will be monitored and recognized for their contributions and provide support for their capacity-building and skills strengthening. Health committees can be used to support this process. Supervision of work being done by the CHWs should also be part of the planning, regular feedback, and work done by health facilities. In addition, there is need to establish dialogues with communities to give feedback and updates on health services provided vis-a-vis the needs of the community.

Examples of actions that are expected of CHWs and other mobilizers include:

- Provide correct, appropriate, and complete information on the vaccination schedule – including understanding, communicating, and monitoring data and messages in health passports.
- Identify newborns and pregnant women and register them in the reporting system.
- Generate and use due lists e.g. through community registers or other appropriate name-based tools to track defaulters and ensure that they go to the facility or outreach session for vaccination.
- Arrange and conduct home visits as needed, to provide information on the vaccination schedule, conduct defaulter tracking, support surveillance, and motivate caregivers/parents to access services.
- Assist with organization and implementation of sessions including addressing transport issues for health workers and caregivers, as needed.

5.5 USE EFFECTIVE COMMUNICATION

Effective communication means listening, understanding, encouraging, and working with individuals and communities to improve their health and the services available to them. Simply giving people information without a participatory exchange is not enough.

Parents, caretakers, and the community should understand:

- What vaccine(s) are being given and what diseases they protect against.
- The importance of returning for subsequent immunization sessions.
- The possible side effects of each vaccine and how to manage side effects if they occur.
- The date, place, and time of the next immunization session.
- That ill children can be vaccinated.
- That a child must be fully immunized to be fully protected from vaccine-preventable diseases.
- The importance of health passports and bringing them to the clinic or outreach site.

To improve community understanding and utilization of services, districts should:

1. Include strategic communication and advocacy activities in their annual work plans and budgets.
2. Ensure health workers are trained on interpersonal communication and community partnering.
3. Conduct advocacy by routinely communicating with district leaders and partners on the performance of the immunization program.

5.6 MONITOR COMMUNITY PARTICIPATION

The core indicators remind health facilities and district health teams about their progress in involving communities in immunization and delivery of other primary health care services. In addition to measuring the frequency of community meetings, Health Surveillance Assistants and supervisors should document attendance and content of the meetings in minutes that specify follow-up actions and the persons responsible.

5.7 REFERENCES

Technical Documents

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- Immunization Partners' Meeting on Advocacy, Communication, and Community Engagement for Routine Immunization (March 2016 report)
- WHO Health Equity Assessment (HEAT)
- Notes From The Field,Bringing Immunization Closer to Communities: Community-Centered Health Workers

Country Examples

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- Madagascar Community Mobilization experience (French)
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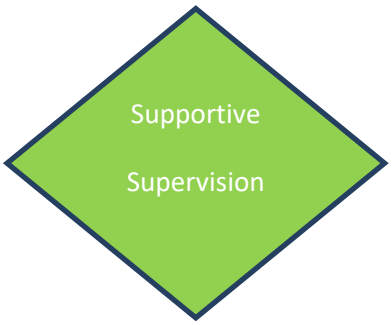
- Malawi My Village My Home for name-based immunization infant tracking

6. SUPPORTIVE SUPERVISION



Steps	RED/REC Tool
1. Determine the type of supervision	
2. Designate supervisors	
3. Prepare tools & checklists	
4. Plan site visits	
5. Conduct constructive visits	

Supportive supervision is an ongoing activity that promotes quality health services by periodically assessing and strengthening service providers' skills, attitudes, and working conditions. It includes regular on-site capacity building, constructive feedback, and follow-up with staff to ensure that routine and newly introduced tasks are being performed correctly.

6.1 KEY ISSUES

Supportive supervision requires experienced staff who are trained in both immunization and supportive supervision. Supervisors routinely assess staff performance in a non-threatening manner and identify problems on-site, such as low coverage or high dropout rates, and cold chain and waste disposal deficiencies. They must be able to respond to health workers' questions. Supportive supervision includes providing on-site capacity-building to address problems. Not all deficiencies can be solved at the service delivery level. Therefore, another function of supportive supervisors is to serve as a liaison with district, zonal, and national managers to make them aware of needed support and follow up to ensure that inputs are received to improve local performance. Follow up actions may entail provision of essential commodities, job aids, in-service training, and exchange visits. Supportive supervision leads to a more effective program and therefore more fully immunized children and women. In addition, supervisors must pay particular attention to program performance in high-risk communities and assess the effectiveness of health staff interaction with high-risk communities.

Supervision is continuous and not limited to visits by higher authorities. It is a process of continuous assessment and improvement and can be done using self-assessment tools, through interactions with peers or supervisors via remote means, review meetings, and/or in-person visits by a supervisor. Health workers can use analytical supervision tools to continuously monitor their own performance.

Regular supportive supervision improves the safety, efficiency, and effectiveness of immunization services. Supportive supervision adds more to traditional supervision by emphasizing the following:

- **On-site capacity-building** to answer health workers' questions, correct problems before they become major obstacles, and provide on-going refresher training for health workers.
- **Participatory performance and quality improvement** through interactive and non-threatening dialogue with health workers.
- **Documentation** of regular and constructive feedback.
- **Supervisory visits that are appropriately scheduled** according to the health facility's workload and to avoid inconveniencing health staff, mothers, and caretakers.
- **Apply the findings** from supervision in microplanning and strategy development.

Supportive supervision can be enhanced by additional performance improvement strategies, such as those listed in Resources, **Section 6.3** and those described in **WHO Mid-Level Management (MLM) module 4, WHO AFROMLM Module 21.**

6.2 MAKING SUPERVISION SUPPORTIVE

Supportive supervision involves observation of performance with constructive oral and written feedback. It includes collaborative problem-solving between the supervisor and the health worker, and with the community. To be effective, supervisors need to have good technical, conceptual, and observational skills, as well as good interpersonal communication skills. Where integrated supervision is in place, the district should train supervisors in all of the necessary primary health care areas. Developing trust between the supervisor and health staff is essential. Attention during planning and conducting a visit will make supervision more supportive and effective.

6.2.1 PLANNING SUPPORTIVE SUPERVISION

Include detailed supervision activities in district and health facility microplanning budgets, keeping in mind frequency and timing of visits, distances involved, and periodic meetings with staff to review and discuss the findings from this visit and previous visits based on the supervision checklist.

Take the following four steps when planning supportive supervision.

1. **Determine the type of supervision:**
    a. Decide whether the supervision is **integrated or program specific.** If you conduct integrated supervision, determine the most critical factors to review during each visit for each health intervention. It is important not to overload your visit with too many items, such that the visit becomes rushed, only to complete a very long checklist. On the other hand, you do not want to exclude any critical areas that must be checked.
    b. Supervision is more effective and more frequent when indicators are streamlined and prioritized. It is more cost-effective when funding for supervision is coordinated with other health interventions. Ideally, integrated supervision involves supervisors experienced in multiple interventions who have technical expertise in more than one area. Sending several supervisors,

each with expertise in only one intervention, may not be the most efficient or the most productive use of a health worker's or supervisors' time.

c. Integrated supervision needs to be well-planned and timed so that the interventions are assessed adequately and without disruption to health services or inconvenience to mothers and caretakers. The district health team must determine how many interventions can be effectively assessed during a single visit. Health workers can only internalize a limited number of recommendations. If a lengthy list of areas to address is the result of a supervisory visit, it will be discouraging and demoralizing to the health worker. More frequent, focused feedback is key to assuring performance improvement.

2. Designate supervisor(s):

a. It is important to assign supervision to well-trained staff with good field experience and rapport with health workers. At national, zonal, district, facility, and community levels, supportive supervision should be conducted at least quarterly. Ideally, supervisory visits at health facilities and communities should be done monthly. In addition, supervision should be done within institutions regularly.

b. Remember: supervision is continuous. Health workers can routinely assess health facility performance through self-supervision. They should not wait for the next visit from the district to assess their performance or reveal problems with service delivery.

3. Prepare tools and checklists:

a. Supervision without a checklist will not be effective; checklists can be revised depending on the situation. A checklist may include the following: quality of vaccine, supply management, the cold chain, and/or immunization service performance such as measles, Penta3 coverage, and dropout rates. Other checklists may include service delivery indicators such as planned sessions versus conducted sessions, missed opportunities, available human resources and capacity, and/ordata quality issues.

b. Effective supervision tools guide supervisors and those supervised through a constructive, participatory process aimed at identifying problems and weaknesses and measuring progress. Tools allow national, zonal, and district teams to track indicators of service delivery and use data to make decisions on corrective actions, training needs, and issues for updating microplans. Review and follow-up on recommendations from previous supervision visits is essential. (Generic formats for supportive supervision tools are found in **Annex 4 and 5**.)

4. Plan where to go:

When human and financial resources are limited, prioritize visits according to those facilities needing the most help. Do not limit your supervision only to the nearest facilities. Inform the supervisee of the date and time of supervision and be sure to let the health facility know when you are coming. Plan your supervision schedule together with health facility staff.

6.2.2 CONDUCTING SUPPORTIVE SUPERVISION

Supportive supervision is not an evaluation or an exam for the health worker but rather a mutually beneficial activity to review performanceto ensure high quality services. It is important for the supervisor and health workers to discuss performance standards and supervision tools. Participants in each district and in each health facility should agree upon the most critical areas to review and indicators that need the most attention.

Steps in conducting supportive supervision:

- **Introduction of the team to the HF:** the supervision team should introduce itself to the in-charge of the health facility and ask the in-charge to join the team when feasible.
- **Observation of services:** the team should observe services without interruption of the service and in a way not affecting the privacy of clients.
- **Exit interview of mothers:** During every supervision visit, a minimum of five mothers should be interviewed after receiving vaccination services.
- **Dialogue with the supervisee:** use the checklist for the discussion and provide feedback to the supervisee on what you observed. Acknowledge good performance and correct errors in techniques and procedures in private.
- **Feedback/on-the-job training/mentoring:** Provide on-the-job capacity-building, including an update on current policies and technologies, and identify future training needs for staff. Discuss the results of your supportive supervision with the DHMT and health workers at every opportunity, such as routine staff meetings and training activities. Where appropriate, discuss your findings with administrative authorities and the community. Knowledge of the needs and obstacles for delivering immunizations by the local administration and community can lead to increased support for the health facility. A supervision checklist which is filed and forgotten is of little value.
- **Visit community:** when time and capacity permits, the supervisor and health center staff should visit high-risk communities in the health center's catchment area. They should discuss with community leaders and community members immunization services and observe the community's perception of services. Health center staff should apply community feedback to improve services. When feasible, the supervision team should identify and visit a priority community and conduct 10 house-to-house visits of houses with children 0-23 months old and assess children's vaccination status (see **Annex 6** for a tool to use during household visits).
- **Documentation and written feedback:** Document your observations and suggested follow-up actions in a supervision logbook and refer back to records on future supervisory visits to ensure that follow-up actions have been completed.

6.3 CORE INDICATOR FOR SUPPORTIVE SUPERVISION

Supervisory visits should be as regular and frequent as available resources will allow. When resources are scarce and health facilities are difficult to reach, **promote health worker self-assessment**. Use the core indicators in your microplan according to the human and financial resources, levels and distribution of service delivery points. In addition to this core indicator, written reports or logs documenting problems detected, solutions, and capacity building needs, are valuable for monitoring supervision in your district.

6.4 REFERENCES

Technical Documents

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- Marquez, L. and L. Kean, "Making Supervision Supportive and Sustainable: New Approaches to Old Problems," MAQ Paper No. 4, Supplement to *Population Reports*, Volume XXX, No. 4. USAID, 2002.

- McNamara, C. "Free Basic Guide to Leadership and Supervision." Free Management Library. 1997-1998.

- Children's Vaccine Program at PATH. *Guidelines for Implementing Supportive Supervision: A step-by-step guide with tools to support immunization*. Seattle: PATH, 2003.

Country Examples

- PATH and National EPI, Vietnam. "Improving Immunization through Supportive Supervision." Seattle: PATH, 2007.

- National Primary Healthcare Development Agency, Nigeria. 2009. Supportive Supervision, a practical guide for State and LGA routine immunization managers.

6. MONITORING AND USING DATA FOR ACTION

Steps	REC Tool
1. Define the monitoring process	
2. Select indicators & targets	
3. Collect data & submit reports	
4. Analyze & discuss	
5. Take action	

Monitoring for Action is more than collecting data, analyzing data, and making reports. Active monitoring continuously uses information at all levels for measuring progress, identifying problems, and developing practical solutions and realistic work plans. Monitoring for Action involves everyone: managers, supervisors, health workers, local officials, and the community.

Monitoring the REC approach is an integral part of monitoring the immunization program. Monitoring shows if the REC approach is being implemented according to plan and is achieving and sustaining increased immunization coverage. Indicators for monitoring REC are listed in this chapter. Further to the current immunization monitoring guidelines for AFRO (WHO's Africa Regional Office), EPI managers should monitor progress on implementation of REC using dashboards or other monitoring tools by health facility and district. Doing so will highlight performance standards for each of the five REC components using a set of core indicators to measure key activities over time. Optional, supplemental, or alternative indicators may also be useful in particular countries. Where possible, utilize time-saving technology such as computerized spreadsheets for compiling and presenting REC monitoring data.

REC monitoring helps managers make better and timely decisions, without over-burdening service providers with data collection. REC monitoring tools and indicators are designed to use existing data which is collected through health information systems and the immunization program information system. Although these indicators are for supervisors to monitor, they can also be used for "self-assessment" by health workers in health facilities and by district health teams.

Monitoring for Action is a participatory approach involving the DHMT, health facilities, and partners who routinely review and discuss the information collected through microplanning tools. Active review and discussion of performance data is critical as information that is only collected, compiled, sent to the next level and then put away in a file is not useful for taking action.

This REC guide contains the performance standards expected of each component of the REC approach. Based on evaluation and experiences in the field, key performance indicators for each component are consolidated in the **Table in section 7.4.** They facilitate:

- Performance monitoring at health facility level, which also serves as a summary form.
- Performance monitoring at district level and summary form with HF and district data.
- Performance monitoring at national level.
- National-level summary of the performance of the REC approach at sub-national levels.

Core indicators measure implementation of each of the REC components, as well as the expected results of REC. These core indicators also measure critical immunization processes for adjusting service delivery strategies, strengthening community linkages, planning for logistics, and updating microplans. REC monitoring tools focus on the use of available immunization data in ranking districts and population groups according to their access to and utilization of routine immunization services. **Annex 3** describes how to use this tool. Also see "*Increasing immunization coverage at the health facility level*", **WHO/V&B/02.27**, page 7.

This REC guide provides a minimum of suggested core indicators for monitoring REC at each level of the health system. Supplementary indicators should be used where needed for your particular country and district situations. Keep your REC monitoring tools and approach flexible and adapt them to your changing national, district, and local situations.

Community immunization registers can also be used as a birth register. As soon as an infant is born in the community, the name can be entered in the register even before receiving any vaccinations. This will help to follow up new infants along with older ones on the defaulter tracking list. (Immunization in Practice (6)4.) Note that how a newborn gets identified and added to the register may vary from location to location e.g. where strong community links exist, traditional birth attendants or volunteers give newborn names to health workers, in other locations names may be collected through use of household surveys, and in yet other locations names may be collected through antenatal care clinics.

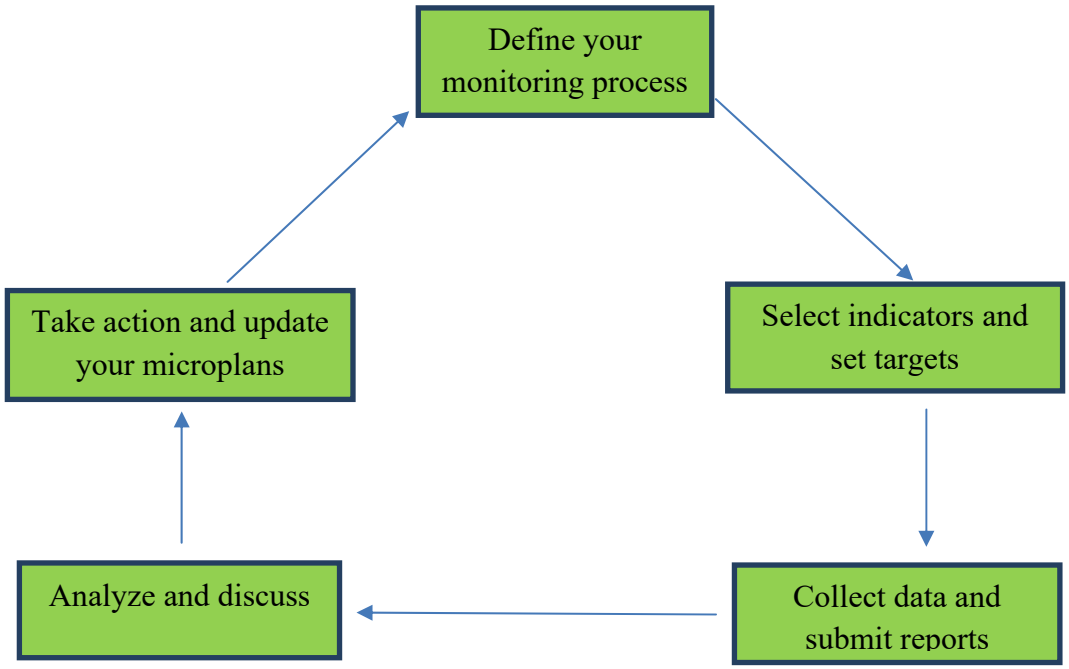
7.1 KEY ISSUES

District and health facility staff need a continuous flow of reliable information that describes the quality and effectiveness of their health services. Rather than wait for an annual review or work planning, you should be constantly aware of your progress.

- ✓ Are your targets being achieved?
- ✓ Are the unreached being reached?
- ✓ Are your delivery strategies working?
- ✓ Are you confident that safe injections are being given?
- ✓ What problems are contributing to not reaching your targets: dropout rates, missed opportunities, vaccine stock outs?

Monitoring is a continuous active process for the entire health team and is an essential component of effective management.

Monitoring cycle



Often, managers only consider their own program's reporting needs. But when you combine all reporting requirements for all health programs, district and health facility staff become overburdened with forms and data. Thus, health workers lose sight of the importance of using the information they are collecting. Active and effective monitoring requires selecting only the most essential information for management. Examples of essential information include: vaccinations given by location and by delivery strategy, dropout rates, and immunization sessions held versus planned.

The accuracy and effectiveness of monitoring is greatly influenced by the **accuracy of your denominator** (usually derived from census data) and **the accuracy of your numerator**(the number of immunizations given). Inaccurate and outdated census data greatly affects the accuracy of coverage rates. Poorly-defined catchment areas and population movements also affect the accuracy of your denominator. The best way to improve the validity of your data is for district and health facility staff to continuously and critically review the information they are collecting. **Attention to reports and use of information leads to better quality information**. When staff who compile reports know that their work is important and is being used by managers, quality improves. When up-to-date information is **visually displayed,** and when supervisors **review, cross-check, and provide feedback** on reported versus recorded information and **discuss** health facility reports, the quality of information can improve.

7.2 MONITORING FOR ACTION PROCESS

There are five major steps to monitoring. These are described below.

1: DEFINE YOUR MONITORING PROCESS

Based on national policy and standards, the DHMT and health facilities can design a monitoring process that will be effective for their district. Designing the monitoring process can be accomplished during microplanning. Jointly decide with health workers the most effective approach and persons responsible for monitoring at district, health facility, and community levels, according to your human and financial resources. Develop a schedule that includes a monthly review of **process indicators** e.g., sessions conducted per plan, stock-outs, **performance indicators** e.g., coverage, dropout rates, and vaccine preventable disease trends, and **quality indicators** e.g. doses administered (vaccine used), doses given at the same time, etc. Time should be allocated for development and monitoring of coverage improvement plans at least quarterly for those facilities or areas in need.

2: SELECT INDICATORS AND SET TARGETS

Immunization programs operate in a rapidly changing environment and as a result, program monitoring goes beyond only measuring immunization coverage. In addition to introducing new vaccines, programs now focus more on targeting unimmunized, underserved, and high-risk groups. Consequently, the number of indicators for monitoring has increased to include these items. Although targets and indicators are usually set at the national level, district staff and health workers should regularly review their performance against targets and indicators and decide if targets are being achieved and if not, why not and how to make course corrections.

REC monitoring indicators are presented as tools in the **Table in section 7.4** which includes:

a. List of core indicators, definitions, units of measurement and suggested frequency of collection
b. Monitoring tool to be completed at health facility level.
c. Monitoring tool to be completed at district level, including summary of health facility data.
d. Monitoring tool to be completed at national level.
e. Summary of the performance of the REC approach at sub-national level to be completed at national level.

3: COLLECT DATA AND SUBMIT REPORTS

RED/REC focuses on improving the **timeliness, completeness,** and **accuracy** of reporting. Improvements can be achieved through review and analysis of reported data and active use and feedback on data collected. To ensure reaching all target populations and reducing inequities, additional efforts are required in areas with low coverage, which can be conducted during campaigns or regular supervision visits (see RED/REC 2009 guidelines, p 41). Additional activities to reach low-coverage areas include:

- Identifying areas with low coverage, vulnerable communities (high-risk communities), or communities that oppose immunization.

- Investigating reasons for low coverage and drop-outs, in particular in vulnerable and high-risk communities by visiting households(using the tool in **Annex 6**).
- Collecting reasons for missed vaccination and understanding issues in the community.
- Addressing identified issues in future sessions and/or integrating additional actions in the next microplanning cycle, as appropriate.

4: ANALYZE AND DISCUSS

Effective monitoring involves regular analysis and feedback to health workers, partners, local officials, and communities. Communities that actively participate in planning and monitoring are more likely to assist with improving community access to and utilization of health services. At district level, review of processes, performance, and data quality indicators is important to be done at least every quarter.

There are many tools and techniques that show your progress on your targets and give you early warning on potential problems. You can learn more about these tools and find others in the **WHO MLMs** and **IIP**. Additional resources are found at the end of this section. **Monitoring for Action** requires accurate maps of your district and health facility catchment areas to help you show your high-risk areas (see **Annex 2, Tool 1b**).

Interpreting "Unimmunized" vs. "Drop Outs"

Districts A and B both have 20% Penta 1-3 drop-out rates. However, District A has a major problem with "unimmunized children." Sixty per cent of children in District A are not being reached for immunization, only 40% are being reached. District B, on the other hand, is doing better by reaching the 80% of children with the first dose of Penta, but still 20% of these children "drop out" and do not complete the required 3 doses. Thus only 64% coverage is fully protected against diphtheria, pertussis, and tetanus.

***Unimmunized** = 100% – Penta1% coverage*

$$\textit{Drop-out} = \frac{\textit{Penta1 coverage} - \textit{Penta3 coverage}}{\textit{Penta1 coverage}} \times 100\%$$

District A: Unimmunized = 100% - 40% = **60%**

Drop-out = $\frac{40\% - 32\%}{40\%}$ = **20%**

District B: Unimmunized = 100% - 80% = **20%**

Drop-out = $\frac{80\% - 64\%}{80\%}$ = **20%**

A coverage and dropout monitoring chart is another very useful visual tool for showing your progress on reaching your target. It illustrates your progress on reducing dropout from immunization and in reducing the number of unimmunized children. In areas with poor

quality data, you can monitor the number of children immunized compared to the total number of children from health facility records who need to be immunized, rather than by coverage rates (%). This chart provides a constant, up-to-date reminder for staff on how well they are doing on reaching their target. It is also a good tool for discussing with your health team about the changes needed to improve the effectiveness of immunization services.

5: TAKE ACTION ANDUPDATE YOUR MICROPLAN

Reviewing and analyzing monitoring data together with the DHMT, health facilities, and, where appropriate, local officials, and the community, leads to better strategies and increased coverage. Ask questions and discuss solutions about your findings, such as:

- ✓ Are you reaching your targets, what are the critical root causes?
- ✓ How and who can correct these problems? What are local solutions?
- ✓ Are there communities without access to health services? If so, how can they be reached?
- ✓ Are there communities or groups who are not fully utilizing available services and why?
- ✓ What additional available resources are needed to implement solutions?
- ✓ Which areas, groups, and communities are at highest risk for low coverage?
- ✓ Are cold chain and supply management adequate for meeting immunization demand?
- ✓ How can you revise your microplan to better fit the findings from your active monitoring?

Asking questions about your monitoring data facilitates taking **action**. Including others such as community leaders, community health workers, community volunteers, and relevant private sector representatives in the review and monitoring discussions opens the door to more affordable and effective solutions.

7.3 CORE INDICATORS FOR MONITORING FOR ACTION

Actively tracking the REC core indicators below facilitates using local data to make timely adjustments for improved immunization services.

CORE INDICATORS FOR "MONITORING FOR ACTION"

% of **DISTRICTS** that conduct at least ***one*** review meeting per ***quarter*** in which data, trends, and monitoring for action are discussed with health facilities.

% of total immunization reports that **DISTRICTS** receive ***monthly.***

% of **HEALTH FACILITIES** that have immunization monitoring charts that are up-to-date, correctly drawn, and visibly displayed at HF per ***quarter***.

% of districts that provide written monitoring feedback to HFs per ***quarter.***

Indicators for monitoring processes, outputs, and impact can be found in this guide, the **WHO MLMs,** and the **IIP** and can be expanded or adapted to local contexts**.**

7.4 MONITORING AND USING DATA FOR ACTION

Table 2: Indicators for consideration

REC Components	National/Zone indicators	District indicators	HF Indicators
1.Planning & Management of Resources	% of **DISTRICTS** with microplans updated at least (***every 6 months***) % of **DISTRICTS** with stock-out of any antigen in district store in last (***month***) % of **DISTRICTS** with AD syringe stock-out in district store in last (***month)*** % of **DISTRICTS** with total funds disbursed for RI activities during the last (***quarter***)	% of **HEALTH FACILITIES** with RI microplans updated at least (***every quarter***) % of **HEALTH FACILITIES** with a working refrigerator % of **HEALTH FACILITIES** with stock-out of any antigen in HF in the last (***month***) % of **HEALTH FACILITIES** with AD syringe stock-out in HF in the last (***month***) % of HEALTH Facilities with working Fridge-TAG in the last (month) % of HEALTH FACILITIES that received the planned operational funds on	Availability of RI microplans updated at least (***every quarter***) Availability of a working refrigerator Stock-out of any antigen at HF in the last ***month*** AD syringe stock-out at HF in the last ***month*** Availability of a working Fridge-TAG in the last month Operational funds received on time at HF for immunization activities in the last quarter Any person not vaccinated in the month due to

REC Components	National/Zone indicators	District indicators	HF Indicators
		time for immunization activities in the last quarter % of HEALTH FACILITIES where any person could not be vaccinated due to lack of any antigen/vaccine or lack of AD syringes in the last (month)	stock out of any vaccine or lack of AD syringes
2. Reaching Target Populations		% of immunization sessions conducted vs. planned per HF - In fixed sites - In outreach	Number of immunization sessions conducted vs. planned per HF - In static sites - In outreach
3. Engaging with Communities	**% of DISTRICTS** that conduct at least ***(one***) meeting per (***quarter***) in which immunization and other PHC services were discussed with leaders of community-based organizations, local authorities, religious leaders, etc. . Knowledge indicator: # of mothers/caregivers who know which health and immunization services they are to receive at HF or outreach (based on exit interviews conducted during	**Knowledge indicator**: # of mothers/caregivers who know which health and immunization services they are to receive at HF or outreach (based on exit interviews conducted during surveys, supervision) **Performance indicator** # of defaulter children identified through the community register and immunization	**Knowledge indicator**: # of mothers/caregivers who know which health and immunization services they are to receive at HF or outreach (based on exit interviews conducted during surveys, supervision) **Performance indicator** # of defaulter children

REC Components	National/Zone indicators	District indicators	HF Indicators
	surveys, supervision) Performance indicator # of defaulter children identified through the community register and immunization register and vaccinated.	register and vaccinated. % HF using SMS reminders systematically to mobilize eligible children and women **% of HEALTH FACILITIES** that conduct at least (***one***) meeting per (***quarter***) in which immunization and other PHC services were discussed with representatives of community-based organizations, political leaders, religious congregations, etc.	identified through the community register and immunization register and vaccinated. Availability of SMS reminders to mobilize eligible children and women Number of meetings that conduct at least (***one***) meeting per (***quarter***) in which immunization and other PHC services were discussed with representatives of community-based organizations, political leaders, religious congregations, etc.
4. Supportive Supervision	% of districts that received at least one supportive supervision visit from the national/zone per quarter (*minimum number*) with written feedback and plan for implementation of recommendations % District supervision with written feedback	% of **HF** that received at least one supportive supervision from the district per quarter (*minimum number*) with written feedback and plan for implementation of recommendations	Number of supportive supervision received in a quarter. Number of supervisory visits with written feedback Number of plans with implementation

REC Components	National/Zone indicators	District indicators	HF Indicators
			of recommendations following supportive supervision.
5. Monitoring & Using Data for Action	% of **DISTRICTS** that conduct at least ***one*** review meeting per ***quarter*** in which data, trends, and monitoring for action are discussed with health facilities. % of total immunization reports that are on-time and complete that **zone/national** receive ***monthly*** % of districts that provide written monitoring feedback at least once every six months **Performance indicators:** %BCG % Penta1 % Penta %MR1 %MR2 **Dropout rates,** Penta1 to Penta3/, or Penta1/ to measles-rubella vaccination. Number of "unimmunized" or under immunized children**,** based on numbers of children by location. (Ref: **Annex 3** and in *Increasing immunization coverage at the health facility level* **WHO/V&B/02.27**, page 7).	% of **HEALTH FACILITIES** that have immunization monitoring charts up-to-date, correctly drawn, and visibly displayed at HF per ***quarter*** % of HEALTH FACILITIES with active defaulter tracking systems for eligible populations. **Performance indicators:** %BCG % Penta1 % Penta %MR 1	Availability of immunization monitoring charts up-to-date, correctly drawn, and visibly displayed Availability of active defaulter tracking systems for eligible populations. **Performance indicators:** %BCG % Penta1 % Penta %MR

REC Components	National/Zone indicators	District indicators	HF Indicators
	Data quality indicators: Vaccination given compare to vaccine used Vaccinations of antigens given at the same time Penta3 in relation to Penta2 in relation to Penta1		

REC Components	District indicators	HF indicators
1.Planning & Management of Resources	% of **DISTRICTS** with microplans containing detailed immunization, including all communities' component updated at least (***every 6 months***) % of **DISTRICTS** with stock-out of any antigen in district store in last (***month***) % of **DISTRICTS** with AD syringe stock-out in district store in last (***month)*** % of **DISTRICTS** with at least one staff trained on RI in the previous (***year***) % of **DISTRICTS** with total funds disbursed for RI activities during the last (***quarter***)	% of **HEALTH FACILITIES** with RI microplans updated at least (***every quarter***) % of **HEALTH FACILITIES** with a working cold chain % of **HEALTH FACILITIES** with stock-out of any antigen in HF in the last (***month***) % of **HEALTH FACILITIES** with AD syringe stock-out in HF in the last (***month***) % of **HEALTH FACILITIES** with at least two trained qualified staff (***year***) % of HEALTH Facilities with working Fridge-TAG inF in the last (month) % of HEALTH FACILITIES that received the planned operational funds on time for immunization activities in the last quarter

REC Components	District indicators	HF indicators
		% of HEALTH FACILITIES where any person could not be vaccinated due to lack of any antigen/vaccine or lack of AD syringes in the last (month)
2. Reaching Target Populations		% of immunization sessions conducted vs. planned per HF - In static sites - In outreach
3. Engaging with Communities	**% of DISTRICTS** that conduct at least (***one***) meeting per (***quarter***) in which immunization and other PHC services were discussed with leaders of community-based organizations, local authorities, religious leaders, etc. . Knowledge indicator: # of mothers/caregivers who know which health and immunization services they are to receive at HF or outreach (based on exit interviews conducted during surveys, supervision) Performance indicator # of defaulter children identified through the community register and immunization register and vaccinated.	**Knowledge indicator**: # of mothers/caregivers who know which health and immunization services they are to receive at HF or outreach (based on exit interviews conducted during surveys, supervision) **Performance indicator** # of defaulter children identified through the community register and immunization register and vaccinated. % HF using SMS reminders systematically to mobilize eligible children and women **% ofHEALTH FACILITIES** that conduct at least (***one***) meeting per (***quarter***) in which immunization and other PHC services were discussed with representatives of community-based organizations, political leaders, religious congregations, etc
4. Supportive Supervision	% of districts that received at least one supportive supervision visit from the district per quarter (*minimum number*)	% of **HF** that received at least one supportive supervision from the district per quarter

REC Components	District indicators	HF indicators
	with written feedback and plan for implementation of recommendations % of health facilities supervised by the DHMT during the last quarter % HF supervision with written feedback	(*minimum number*) with written feedback and plan for implementation of recommendations
5. Monitoring & Using Data for Action	% of **DISTRICTS** that conduct at least ***one*** review meeting per ***quarter*** in which data, trends, and monitoring for action are discussed with health facilities. % of total immunization reports that are on-time and complete that **DISTRICTS** receive ***monthly*** % of districts that provide written monitoring feedback to HFs at least once every six months **Performance indicators:** **%BCG** **% Penta1** **% Penta3** **%MR1** **%MR2** **Dropout rates,** Penta1 to Penta3, or Penta1 to measles vaccination. **Number of "unimmunized" or under immunized children,** based on numbers of children by location. (Ref: **Annex 3** and in *Increasing immunization coverage at the health facility level* **WHO/V&B/02.27**, page 7).	% of **HEALTH FACILITIES** that have immunization monitoring charts up-to-date, correctly drawn, and visibly displayed at HF % of HEALTH FACILITIES with active defaulter tracking systems for eligible populations.

REC Components	District indicators	HF indicators
	Data quality indicators: Vaccination given compared to vaccine used Vaccinations of antigens given at the same time Penta3 in relation to Penta2 in relation to Penta1	

7.5 REFERENCES

- Mid-Level Management Course for EPI Managers. Module 20.*Monitoring routine immunization and data management*. March 2004 – Draft2.
- *Increasing immunization coverage at the health facility level*.
- WHO/V&B/02.27, World Health Organization, Geneva, December 2002
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- Engaging communities with a simple tool to help increase immunization coverage. Global Health: Science and Practice. 2015: (3)1.
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- The immunization data quality self-assessment (DQS) tool. March 2005. WHO/IVB/05.04.
- Community Problem Solving and Strategy Development, Uganda
- Notes from the Field; Regular Review of Program & Health Worker Performance: Using Data to Make a Difference.

8. INTERGRATION

Integration involves planning, managing, and delivering essential health services together. WHO comprehensively defines integration as: *"The management and delivery of health services so that clients receive a continuum of preventive and curative services, according to their needs, over time and across different levels of the health system."*

8.1 FUNDAMENTAL QUESTIONS TO ASK WHEN CONSIDERING INTEGRATNG SERVICES

1. **What to integrate?** Give preference to high impact interventions, see table below. whilst recognizing not all high impact interventions lend themselves for integration into routine immunization service;
2. **Is it appropriate?** Does integration 'make sense' for the local population and context;
3. **Is it effective?** Monitor results of interventions and employ evidence-based interventions;
4. **Can you be flexible?** Is the program able to respond to changes in eligible populations, disease distribution and burden, demography, advances in technology or new policy imperatives?
5. **Is it accountable?** Monitor operational performance to maximize successful outcomes;
6. **Is it acceptable?** To providers and clients; provide necessary education and incentives for both; avoid needless overburdening.

Table 3: Criteria to consider when integrating immunization and other interventions

Related to the intervention	Related to health system context
A health intervention or service has good potential for combining with routine immunization if it: ● Has a similar target group ● Requires similar timing or frequency ● Has similar logistical requirements ● Has a similar level of acceptance among patients, communities, and health workers ● Involves health workers with a similar skill level	Health interventions or services can be integrated effectively if: ● Political will exists to promote integration and coordination among different program managers ● National policies support both interventions ● Financial support is secure for each intervention ● Existing primary health care structures support the delivery of both interventions ● Responsibility for supporting and monitoring each intervention is clearly defined among programs ● Health workers are "multi-purpose" and not designated for only a single intervention ● Combining the interventions does not disrupt or create an unrealistic burden for service delivery

The potential for integration: Vaccines delivered on a regular, scheduled basis to target populations often achieve high coverage rates. An established immunization service provides an effective platform for delivering other essential maternal and child health services. The five REC components have potential to strengthen systems to increase access to other health care programs and services. For example, REC microplanning can be used to identify underserved populations, estimate commodity needs, allocate human resources, and develop service delivery strategies and coordinated supervision for all primary health care interventions. REC's supportive supervision and monitoring strategy and tools can be expanded for monitoring and supervising other primary health care programs.

Delivering integrated health services can be more cost-effective and consequently more sustainable. Integrated services also help to reduce missed opportunities and to improve the overall health of the community. Financing and managing the logistics of multiple commodities can be more challenging, given the need to synchronize varying logistics requirements and delivery schedules. However, careful planning and coordination can lower costs of distributing vaccines, drugs, and other health care supplies.

The risks with integration: If not thoughtfully planned and based on human resource and health system capacities, integrating services can overburden health workers with too many tasks, leading to poorer quality services. Consequently, integrated activities must be planned with the individual health worker and community needs in mind, prioritizing the most critical

program areas and community needs for attention. For example, only attaching every program's supervision checklist into a single document, going from a one-page checklist to six pages, does not effectively integrate supervision. Effective integrated supportive supervision requires quality capacity-building time for the health worker conducting the supervision, not only a checklist or job aid.

8.2 OPERATIONAL ISSUES TO CONSIDER

1. **District and health facility contexts:** Disease epidemiology, affordability, strength of underlying primary health care delivery system (outreach, fixed, mobile), urban/rural mix, cultural factors, risks and benefits, and community leadership "buy in".
2. **Robust planning processes:** Predicted effects on waiting times, opportunities for joint target population estimates, mapping, microplanning and supportive supervision, identifying packages and available human and financial resources. Harmonize planning processes with other programs and incorporate best practices from disease-specific approaches e.g. Global Action Plan for the Prevention of Pneumonia and Diarrhoea (GAPPD), polio or measles.
3. **Monitoring and supportive supervision:** Clarity on what data to collect e.g. processes and impact of integration on coverage and health outcomes, client and health worker acceptability and satisfaction, and costs. Needs for supportive supervision, coordination, and feedback of integrated and individual programs increase initially.
4. **Evaluating and documenting experiences:** Sharing lessons learned between districts and contexts can support capacity-building and guide future direction. Documenting best practices can build support at different levels and is a useful way of sharing what has worked and what has not.
5. **Engaging communities and health workers:** Engaging stakeholders helps to increase acceptability and appropriateness of services, especially with stigma and confidentiality issues related to services like HIV treatment or teenage contraception services. Having similar levels of acceptance among communities and health workers for all services included in the integrated package can increase use of integrated services. Generating social acceptance usually requires social mobilization and sensitization activities.
6. **Human resources:** Having health workers with a variety of skill levels who can function in multiple programs increases the chances of successful integration. Operational guides could support the integration process.
7. **Politics and resources:** Local leaders need to be supportive and engaged, backed by national policies with secure human and financial resource allocation, to promote integration and coordination among different program managers.
8. **Procurement and supply chain:** Mechanisms need to be in place to ensure commodities and supplies are delivered with quality and in a timely manner.

Table 4: **SUMMARY OF OPPORTUNITIES AND CHALLENGES RELATED TO INTEGRATION OF SERVICES**

Potential opportunities of integration	***Potential disadvantages/challenges of integration***
• ***Improved effectiveness:*** increasing the number of health interventions available at a point of contact can increase chances of clients utilizing those services, thereby potentially reducing mortality and morbidity. • ***Improved efficiency:*** reduced redundancy and costs involved with multiple planning and logistics for multiple visits/outreach sessions. • ***Improved user satisfaction and convenience:*** increasedavailability of services facilitates meeting clients' multiple health needs. • ***Improved equity:*** increased coverage of a new intervention, cross-promotion, and potential increased demand among underserved populations. • ***Reduced missed opportunities for vaccines and other interventions:*** scheduled contacts with the health system reduces chances of missing other scheduled vaccines and health interventions. • ***Global Action Plan for Pneumonia and Diarrhea:*** specific links between preventive and curative elements of diarrhea and pneumonia control and immunization can increase impact of all interventions. • ***African Immunization Week:*** can act as a catalyst for delivering multiple interventions at one event.	• ***Could decrease coverage of certain interventions:*** if a system is not strong enough, integration of two weak systems may not lead to one stronger one. Underlying supply chains, supervision, community engagement, and planning need to be in place. • ***Potential reduction in quality of care:*** due to reduced health worker time/availability per intervention. • ***Potential for increased cost***: due to increased human resource and transport needs for delivery of multiple services. • ***Staff may not accept additional responsibilities***, additional training and incentives are needed. • ***Clients may not accept integrated services:*** if some interventions are stigmatized or feature confidentiality issues (e.g. HIV prevention or teenage contraception). • ***Coordination burden:*** integration requires strong communication and diplomacy, and if not done properly, can slow implementation. • ***Shared funding sources:*** which creates new need for careful management.

Table 5: Opportunities for Integrating Additional Health Services into the Vaccination Schedule

AGE	VACCINES	ADDITIONAL SERVICES	VACCINATION LOCATION
BIRTH REGISTRATION – UNIQUE ID – (ELECTRONIC) PERSONAL HEALTH RECORD			
BIRTH	BCG OPV	• Birth weight • Screening for any neonatal complications • HIV screening • Promotion of exclusive breast-feeding with mother	• At health facility • Home visit if born at home (within first 30 days)
Six weeks – <1 YEAR	OPV/IPV (3doses) PENTA (3doses) PCV (3 doses) ROTA (2 doses) MR (1dose) Malaria Vac. (3 doses)	• Infant check-up (4 contacts) • IMCI • Vitamin A • De-worming • Malaria control (LLIN) • Nutritional surveillance (MUAC/ W/H) • SAM identification • Supplementary feeding • Promotion of early stimulation • HIV screening	• At health facility • Planned community outreach
1-5 years	MR (1 dose)	• IMCI • Vitamin A • De-worming • Malaria control (LLIN) • Nutritional surveillance (MUAC) • SAM identification • Supplementary feeding	• At health facility; • Planned community outreach
SCHOOL ENTRY – PROOF OF CHILDHOOD IMMUNIZATION COMPLETION			
Girls 9 -12 years (school-age adolescents)	HPV	• Check-up • De-worming • Health promotion – healthy life-style • Nutrition education (including prevention of obesity)	• At health facility • At school • Planned community outreach (out-of-school girls)
Adolescents 10-19 years	Td, HPV	• Check-up • De-worming • Health promotion – sexuality	• At health facility • At school • Planned community

		education, reproductive health, alcohol, tobacco, STD and HIV risks, avoidance early and unwanted pregnancy, risks of unsafe abortions, early marriage, dental hygiene • Nutrition education (including prevention of obesity)	outreach, religious centers (out-of-school adolescents)
Pregnant women &women of child-bearing age	Td	• Antenatal care • Food supplementation • De-worming • Anti-malarial prophylaxis • HIV testing • ART (if HIV+) • Family planning • Screening for health or medical problems • Health promotion – healthy life-style • Nutrition education (including prevention of obesity)	• At health facility • Planned community outreach

9. OPERATIONAL CONSIDERATIONS WHEN IMPLEMENTING REC

REC implementation requires systematic implementation of all the components at all levels in order to improve immunization service delivery. To achieve this, it is necessary to consider some critical operational issues. These are listed below.

9.1 LEADERSHIP

Success depends on strong leadership and active engagement of authorities at national, district, health facility, and community levels. Good leadership encourages ownership by involving managers of other PHC programs, key district and community leaders, and partners in planning, resource mobilization, and budgeting. Ownership in turn promotes transparency and accountability, which are critical for obtaining resources. Community ownership and health facility transparency are also critical in areas where the population may be losing interest or trust in immunization due to a long absence of vaccine-preventable diseases or false rumors about vaccines.

9.2 COORDINATION

Coordination between Ministry of Health programs, such as immunization, malaria, nutrition, and maternal health, and also with the community, leads to a more cost-effective and more sustainable healthcare system. It is also critical to coordinate with donors, NGOs,and communities to maximize and not duplicate efforts. Coordination goes beyond the health sector to other sectors such as Ministries of Finance, Social Welfare, Agriculture, Education, Culture and Sports, as well as the private sector. Coordination with other sectors is also very important at the district level.

9.3 LOGISTICS (IMMUNIZATION SUPPLY CHAIN MANAGEMENT AND TRANSPORT)

Logistics includes planning, procurement, and delivering vaccines and supplies, and managing and maintaining transport and cold chain equipment. Critical elements include:

- Accurate forecasting, ordering, storing, and distributing vaccines, vaccination supplies, and other health services supplies such as vitamin A, de-worming medication, and bednets.
- Reliable cold and dry store management.
- Availability of transport for outreach for each HF.
- Maintenance and repair of transport and cold chain equipment.
- Safe management of injection and biomedical waste.

These needs are interlinked and reinforced throughout all of the five REC components. For example, your cold chain strategy needs very careful attention during your situational analysis and strategy development during microplanning. The reliability of your cold chain depends on continuous and accurate Monitoring for Action. Through Community Engagement and Reaching the Target Population you can extend the cold chain to unreached communities and target groups. Regular Supportive Supervision detects your cold chain and supply management problems before they disrupt your program.

The **WHO AFRO Mid-Level Managers** training modules contain in-depth information on logistics management. Please review **Module 8** *EPI Cold Chain Management*, **Module 9** *Vaccines Management and* **Module 15** *Introducing New Vaccines*. There is also very useful information in the **WHO Geneva MLM Module 1** *Cold Chain, vaccines, and safe-injection equipment management* and in **Immunization in Practice Module 2,** *The Vaccine Cold Chain*.

9.4 COMMUNICATION

Communication strategies integrated into other health services can be more effective in reaching your target audiences. Communication with partners should be included in REC planning and implementation. Your immunization team needs expertise on communication. They should work with communications professionals, including communications program managers, multimedia and advertising specialists, community leaders, as well as experts in social science and behavior change.

An effective communications strategyincludes community engagement, social mobilization, social behavior change, health worker capacity-building, and advocacy. Your communication strategy should be:

- **Data-driven** with objectives and indicators.
- **Community oriented** and planned according to the needs of the people who are being served.
- **Monitored and evaluated** with the communities.
- **Results-based** with evidence based on your planning and implementation and using information from monitoring.
- **Ownership-oriented which** activates the community to take control of their own health and development.
- **Implemented at all levels; national, provincial, district, community levels.**
- **Technically supported** to strengthen the quality of communication plans, to facilitate implementation, and to promote an integrated approach.
- **Coordinated with** government, partner agencies, and communities.
- **Integrated into work plans** including realistic objectives, activities, targets, and indicators.
- **Documented,** with lessons learned, tools, and successful activities shared with other stakeholders.

Annexes

ANNEX 1: REFERENCES FOR IMPLEMENTING RED/REC

WHO Mid-Level Management Modules

Module 7: The EPI coverage survey

WHO AFRO Mid-Level Management Modules

Module 1: A Problem-Solving Approach to Immunization Services
Module 2: The Role of the EPI Manager
Module 3: Communication for Immunization Programs
Module 4: Planning Activities at National, Provincial and District levels
Module 5: Increasing Immunization Coverage
Module 8: EPI Cold Chain Management
Module 9: Vaccines Management
Module 10: Immunization Safety
Module 15: New Vaccines Introduction
Module 20: Monitoring Routine Immunization and Data Management
Module 21: Supportive Supervision by EPI Managers
Module 23: Conducting Assessment of the Immunization Program
Module 24: EPI Facilitators Guide for Priority Mid-Level Management Modules

WHO Immunization in Practice, 2015

Module 1: Target Diseases
Module 2: The Vaccine Cold Chain
Module 3: Ensuring Safe Injections
Module 4: Microplanning for reaching every community
Module 5: Managing an immunization session
Module 6: Monitoring and surveillance
Module 7: Partnering with communities

WHO Guidance on adding HPV to your vaccination schedule

UNICEF

*Achieving Equity in Immunization Coverage by Reaching Every Community; an Operational Guide for National Immunization Programs***.**

ANNEX 2: RED/RECMICROPLANNING TOOLS

Every year:

- 1a – Situation analysis: social-demographic characteristics
- 1b – Map of health facilities and catchment areas
- 2a – Situation analysis, problem identification, and priority setting
- 2b – Causes of problems and solutions analysis
- 3 – Immunization coverage objectives and targets
- 4a- Logistics and supplies
- 4b- Injection materials forecast
- 5a – Social mapping: stakeholder/partner analysis
- 5b – Engaging with communities
- 6 – Supportive supervision for "Reaching Every Child": Activity schedule
- 7a- Summary activity plan and budget
- 7b- Session schedule

TOOL 1A - Situation Analysis: Socio-Demographic Characteristics

Name of Zone:_____ **District:** _____ **Health Facility:** _____

Sl. No	Name of the attending villages /Sites for RCH services (In cases no data by villages use Health facility data)	Vulenrable population: Presence of special populations or vulnerable populations or 'high rsk communities' (e.g. Special characteristics (access, religion, language, occupation, etc))	Total Population	Target Populations and source						Community Health Worker (name and contact details)	Strategies																	
											Static						Outreach						Mobile					
				Live births	Surviving Infants	12-23 months	Pregnant Women	Non-pregnant women	HPV target		Live Births	Surviving Infants	12-23 months	Pregnant Women	Non-preg	HPV target	Live Births	Surviving Infants	12-23 months	Pregnant Women	Non-preg	HPV target	Live Births	Surviving Infants	12-23 months	Pregnant Women	Non-preg	HPV target
1																											
2																											
3																											
4																											
5																											
6																											
7																											
8																											
9																											
10																											
Total																											

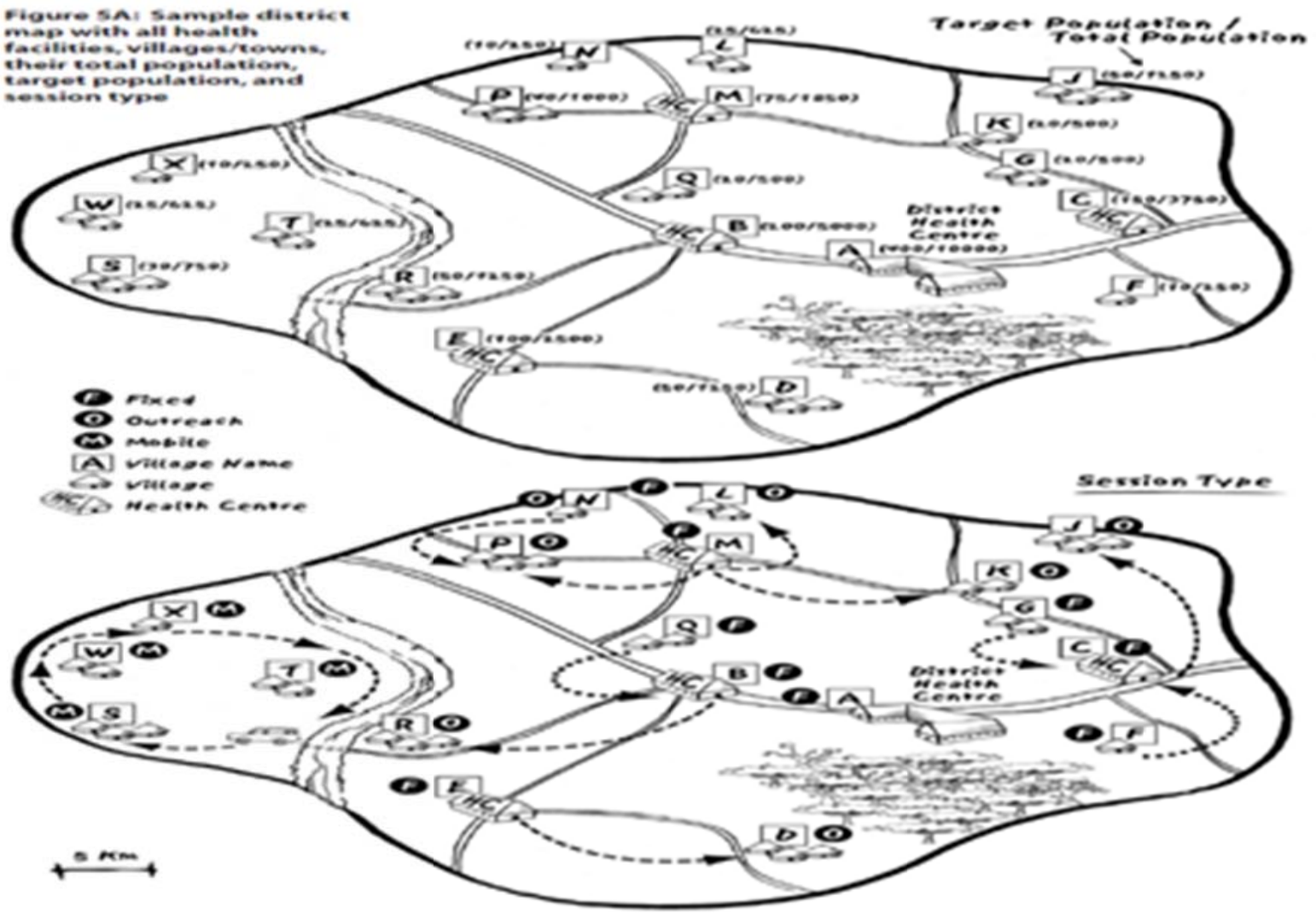


Figure 5A: Sample district map with all health facilities, villages/towns, their total population, target population, and session type
Target Population / Total Population
District Health Centre
Fixed
Outreach
Mobile
Village Name
Village
Health Centre
Session Type
5 Km

Tool 2A: Situational Analysis, Problem Identification & Priority Setting for Immunization services

Zone:_____ **District:** _____ **Health Facility:** _____

Name of the Health Facility (HC, Dispensaries etc.)	Compile data on population & vaccine doses administered in the previous 12 months															Analyse problem											Categorise problems	Priority
	Target Population	Surveillance data (confirmed VPD cases in		Doses of vaccine administered						Immunization coverage (%)						# Un-immunized children / women						Drop-out rate (%)		Identify problems				
	Surviving Infants	Measles	NNT	Penta1	Penta3	MR1	MR2	HPV	Td2+	Penta1	Penta3	MR1	MR2	HPV	Td2+	Penta 1	Penta 3	MR1	MR2	HPV	Td2+	Penta1-Penta3	MR1-MR2	Access	Utilisation	Category 1,2,3,4	Prioritise 1,2,3,4
A	B			C	D	E	F		F	G	H	I			J	K	L	M			N	O	P	Q	R	S	T
Sub-Total																											

Q = **POOR** (Penta1< 80%) OR **GOOD** (Penta1≥ 80%). **R** = **POOR** (Penta1-Penta3 >10%) OR **GOOD** (Penta1 - Penta3 <10%))

S = **1 = No problem** (low Penta1 - 3 dropout rate < 10% , high Penta 1 coverage ≥ 80%); **2 = Utilization problem** (high Penta 1 - 3 dropout rate ≥ 10%, high Penta 1 coverage ≥ 85%);
3 = Access problem (low Penta 1 - 3 dropout rate < 10%, low Penta 1 coverage < 80%); **4 = Utilization and Acess problem** (high Penta 1 - 3 dropout rate ≥ 10%, low Penta 1 coverage < 85%).

T = (1) VERY HIGH or (2) HIGH or (3) MEDIUM or (4) LOW, based on the No of Un-immunized Children and Category of problem

Tool 2B: Causes of problems and Solutions using the REC Approach

Region/Zone: _____ **District: _____** **Health Facility: _____**

System Components	Problems Identified	Root cause of the problem	Solution with limited resources	Solution needing additional resources and assistance from	Responsible Persons and Possible Timeline
Reaching the target population (issues wiith sessions, reaching special populations (ulnerable populations), 2nd year of life, girls (HPV), Women (TT/Td) etc)					
Supportive supervision					
engaging communities					
Monitoring and use of data for action					
Planning and management of resources					
Cold chain & vaccine management					
surveillance					

Tool 3: Routine Immunization Coverage Objectives and Targets 2014

Zone: _____ District: _____ Health Facility:_____

Name of the Health Facility (HC, Dispensaries etc.)	Target Population per year						SIAs					To be						Distance (km from HC to vaccination post)	Strategy			Sessions	
	Antigens				Vitamin A							Antigens				Vitamin A							
	Live Births	Surviving Infants	Pregnant Women	Non-pregnant	6-11 m (blue)	12-59 m (red)	6-59 months	9-59 months	12-59 months	<5yrs	<15yrs	Live Births	Surviving Infants	Pregnant Women	Non-preg	6-11 m	12-59 m		Fixed, Outreach & Mobile (#)			# per month	(# per year)
A	C			D			E	F	G	H	I	L	M	N	0	P	Q	T	U	V	W	X	Y
Total																							

Tool 4A: Logistics and supplies

Zone: _____ District: _____ Health Facility: _____

Vaccines & Supplies	Target Pop.	Coverage Expected	Doses	Wastage Factor	Buffer Stock	Doses needed for 2017	
	No.	%	No.		25%	Annual	Monthly
	A	B	C	D	E	F	G
BCG (LB)			1				
Pentavalent (SI)			3				
Oral Polio Vaccine (OPV) (LB)			4				
MR			2				
Pneumococal (SI)			3				
Rota virus vaccine (SI)			2				
Td (Pregnant)			2				
HPV			2				
Vit A 100.000 IU* (< 1 year)			2				
Vit A 200.000 IU** (2-5 years)			6				
Albendazole-200mg (12-59 months)			1				
LLINs							

Yearly requirement = target on any intervention * expected coverage * # doses * wastage factor = ????
Monthly requirement = Yearly requirement / 12 = ????

Tool 4B: Injection Material Forcast

Zone: _____ **District: _____** **Health Facility: _____**

Injection materials (Tool 4A)	Annual vaccine and supplies need				Calculation	Syringes needed	
	Doses	Vials	Wastage factor	Buffer stock (25%)		Annual	Monthly
	A	B	C	D	E	F	G
0.05mls AD Syringes for BCG *(Tool 4A (F)*1.1*1=Anually)*			1.1		1 per dose		
2ml Syringes BCG for Dilution (Too 4A (F)/20*1.05*1= annually)			1.05		1 per vial		
0.5mls AD syringes for Pentavalent (Tool 4A (F)*1.1*1= Annually)			1.1		1 per dose		
0.5mls AD syringes for Pneumococcal (Tool 4A (F)*1.1*1= Annually)			1.1		1 per dose		
0.5mls AD Syringes for Measles (Tool 4A (F)*1.1*1= Annually)			1.1		1 per dose		
5mls Syringes for Measles Dilution (Tool 4A (F)/10*1.05*1= ???? Annually			1.05		1 per vial		
0.5mls AD syringes for TT Pregnant (Tool 4A (F)*1.1*1= ???? Annually			1.1		1 per dose		
Total syringes							
Safety boxes 5 litres (# Safety boxes = Total (0.5 +0.05+ 1 + 5) ml/100)					1 per 100 syringes		

Tool 5A: Social Mapping: Stakeholders / Partner Analysis

Zone: _____ **District:** _____ **Health Facility:** _____

Name of catchment area (from tool 2A)	Vulnerable community:Presence of special populations or vulnerable populations or 'high rsk communities' (e.g. Special characteristics (access, religion, language, occupation, etc))	Community Health Worker name and contact details	School Details		Opinion Leaders		Religious Institutions Details (Churches, Mosques etc.)		Traditional Authority Details		NGOs, CBO etc.	
			Name of School	Head teacher name and contact details	Name of leader	Contact details	Name of institution	Name of religious leader and contact details	Name of TA	Contact Details	Name	Contact details

Current strengths of key partners:

Opportunities and threats:

Tool 5B: Linking Routine Immunization Services with communities

Zone: _____ **District:** _____ **Health Facility:** _____

No.	List of activities	Where (Location)	Officer Responsible	When (Dates)											
				Jan	Feb	Mar	Apr	May	June	July	Aug	Sep	Oct	Nov	Dec

Tool 6: Supportive Supervision for "Reaching Every Child: Activity schedule for.....

Zone: _____ **District: _____**

No.	Where to visit? (HF, catchment area, etc)	Person responsible for supervision	When (Dates)											
			Jan	Feb	March	April	May	June	July	Aug	Sep	Oct	Nov	Dec

Note: list of activities while duing supporting supervision

1. Communication and SM: RCH promotional materials e.g poster, immunization charts, Flip charts

2. RCH workplan: RCH session plan, achievement, cancellation and find reasons of droput

3. Cold Chain and vaccines and logistics management: temparature chart, vaccines organization, VVM with expiry date, Shake test, vaccines and logistics inventry for shock out

4. Planning and management of resources: REC planning update, adequate number of HSAs for RCH services, annual RCH workplan, comunication plan

5. Data for action: Review <1 year register, tally sheets, monthly reporting format, drop-out chart and identify problems , causes of problems and on the job training

6. Community Survey: conduct househose survey in each visit and check 7 children (12-23 m) and 7 mothers who has a baby of < 1 year and assess their FIC and TT vaccination status

7. Debriefing session: Held meeting with the HF incharge and HSAs and share findings and suggest interventions and submit report to DHO and copy to DEHO/EPI Coordinator

7a. Summary activity plan and budget

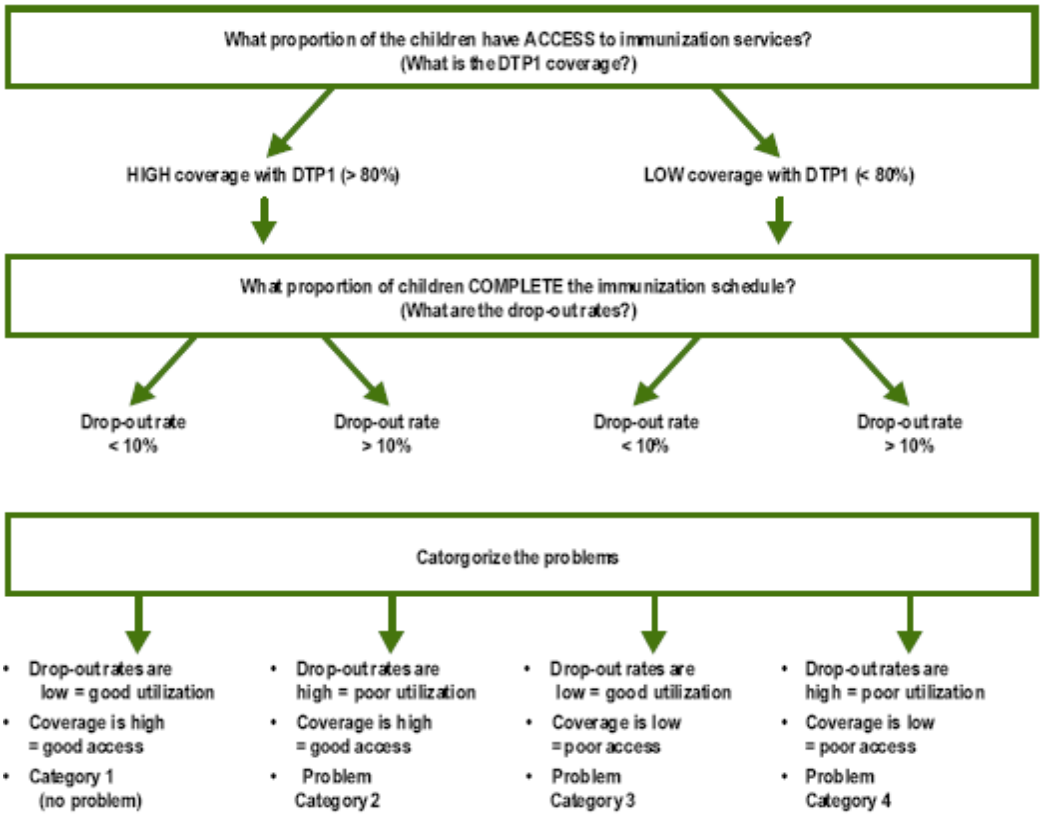
District: _____ Sub-District: _____ Health facility: _____

s/n	Activities	Details	start date	finish date	total cost	responsible person	Remarks
A	Planning and management of resources						
A1							
A2							
B	Reaching the target population						
B1							
B2							
C	Linking thew service with the community						
C1							
C2							
D	Supportive supervision						
D1							
D2							
E	Monitoring and use of data for action						
E1							
E2							
E3							
	Grand total						

TOOL 7B: SESSION SCHEDULE

Date scheduled and done	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Date scheduled:												
Date done:												
Date scheduled:												
Date done:												
Date scheduled:												
Date done:												
Date scheduled:												
Date done:												
Date scheduled:												
Date done:												
Sessions done:												
Sessions planned:												
% done												

ANNEX 3: ANALYSIS OF ACCESS AND DROP-OUTS[2]



Category 1: No problem
High DTP1 coverage = **good access**
Low drop-out rates = **good utilization** and a **consistent supply** of **good quality** services

Category 2: Problem
High DTP1 coverage = **good access**
High dropout rates = **poor utilization** and/or **inconsistent supply** of services or services of **low quality**.

Category 3: Problem
Low DTP1 coverage = **poor access**
Low drop-out rates = **good utilization** and a **consistent supply** of **good quality** services, at least in those areas with access

Category 4: Problem

Low DTP1 coverage = **poor access**

High drop-out rates = **poor utilization** and/or an **inconsistent supply** of services or services of **low quality** at least in those areas with access

[2] *Increasing immunization coverage at the health facility level*, WHO/V&B/02.27

ANNEX 4: GENERIC SUPPORTIVE SUPERVISION CHECKLIST/ TOOL

Name and type of health facility:

Name(s) and position of health provider(s):

Name of supervisor:

Date of supervision:

Part 1: Assessment format

Key Practices	**Excellent**	**Acceptable**	**Needs Work**

… [additional rows omitted to conserve space]

Note: Tick (V) one column for each practice. Practices should include national technical standards regarding such practices as checking and recording refrigerator temperatures twice daily, following the contraindication policy, and following the multi-dose vial policy; as well as practices that reflect positive attitudes, such a communicating key information clearly to caregiver, treating families kindly and sensitively, and respecting and working cooperatively with supervisors.

Part 2: Give feedback to the health provider(s) on what they are doing well and on what they need to improve. Then discuss the weaker areas and reach an agreement with the provider(s) on one to three areas that they agree to improve. If possible, the facility director should participate.

Part 3: Together with the provider(s), discuss how improvements can be made in the one to three weaker areas. Consider what you can do to help, what the provider(s) should do, and what others (facility director, staff at district or provincial level; community leaders or members) need to do to address the weaker practices. Write down the plan in the form below. Keep this copy and give another copy to the provider(s). Finally, propose approximately when you might return to assess practices again.

Note: The assessment part of supportive supervision is done through a combination of observation, questions to providers, and review of records. Never criticise or correct a provider in front of the public. If one or two providers need to improve a certain area, discuss, or even demonstrate, how to do it better in front of the entire staff. It is best to present the issue as a problem for all to solve together; e.g., some providers give incomplete information to mothers and fail to invite their questions. How can all providers improve on this?

The supervisor should keep the assessment and agreement forms so he or she can compare results over time. S/he should always bring the assessment and agreement forms from the last supervision to the next one.

I. General Information

1. Name of health facility:_____Owner…….

   District_____ Zone:_____

2. Date of Visit:_____Date of previous supervision:_____

3. Name and position of the contacted person/supervisee_____
4. Total catchment area population: _____
5. Target population for the year: Total birth/ PW_____ Surviving Infants_____ NPW_____
6. EPI static sites: _____, Outreach sites: _____ Mobile _____
7. Are there hard-to-reach communities? Yes_____ No_____
8. If yes, number of hard-to-reach communities: _____, total Population: _____
9. Are the EPI activities managed by EPI trained personnel? Yes_____, No_____
10. If yes, When? _____
11. Is the EPI policy document available Yes _____, No_____
12. Are county microplans and budget prepared annually? Yes_____ No_____

II. EPI Plan:

No	Description	Yes	No
1.	Is there an updated EPI Work Plan (monthly/quarterly) including outreach and mobile?		
2	Is there annual and quarterly vaccine, Ad syringe, mixing syringe and safety box forecast for the HF?		
3	Were outreach and static services reestablished according to RED/REC approach?		
4	Is there a social mobilization plan incorporated in the EPI plan?		
III.	**EPI Service Delivery**		
1	Have all of the planned immunization sessions taken place?		
2.	Has the HF monitored its immunization coverage monthly?		
3.	If yes, compare the coverage against the total catchment area surviving infants?		
4.	• BCG coverage _____ (___%) • PENTAVALENT3 Coverage _____ (___%) • OPV3 Coverage _____ (____%) • PCV3 coverage_____(____%) • Rota2_____(_____%)		

	• Measles Coverage _____ (____%) • PW TT2+ Coverage _____ (____%) • NPW TT2+ Coverage _____ (____%)		
5.	Is Vitamin A given as part of your routine EPI program?		
6.	Is open multi-dose vial policy in use?		
7.	Is there defaulter tracing mechanism? If yes, specify--_____ _____ _____ __		
IV.	**EPI Monitoring Tools**		
1.	Has the vaccination monitoring chart been updated to the current month and used correctly?		
2.	Is drop-out rate monitored monthly?		
3.	What is the current drop-out rate for the vaccines listed below?		
4.	i) PENTAVALENT1-PENTAVALENT3 _____%		
5.	ii) PENTAVALENT1-Measles_____%		
6.	iii) PW Td1-Td2 _____%		
7.	iv) NPW Td1-Td2 _____%_		
8.	Did a supervisor visit this health facility in the last quarter?		
9.	Was there any written feedback from the supervisor?		
10	Any regular EPI performance assessment meetings conducted by Health Facility Advisory Committee?		

11	Was there any program where CHW/ Health Facility Advisory Committee were involved in EPI assessment?		
12	If yes who and how frequently, _____ _____ _		
13	Have you ever explored the degree of users' satisfaction for EPI?		
V.	**Vaccine and Cold Chain management**		
1.	Is there enough vaccine at least for one month at HF level?		
2.	Does the cold chain person know the actions to be taken during power interruption?		
3.	Are there enough wicks and glasses?		
VI.	**Safety of injection**		
1.	Is there a sufficient amount of AD syringes for one month?		
2.	Are safety boxes used for needles and syringes?		
3.	Is incinerator available and properly used?		
4.	Do you use one mixing syringe for each vial?		
5.	At the end of the EPI sessions what do you do with filled safety boxes? (Specify: _____)		
6.	What do you do if you face Adverse Events Following Immunization (AEFI)? (Specify: _____ _____)		
VII.	**Community mobilization/community involvement**		
1.	How is mobilization carried out for immunization in the community? Specify: _____ _____		
2.	Who mobilizes the target population at the community level? Specify: _____		
3.	Is there community involvement in outreach site selection?		
4.	Is there community involvement in scheduling outreach sessions?		
5.	Is there community involvement in mobilizing mothers?		

6.	How frequent do the community health committees (e.g. HAC, HCAC, VHCs) meet?		
VIII.	**Support from Higher Level**		
1.	Does this health facility receive feedback on monthly EPI reports?		
2.	Does this health facility receive EPI policies and guidelines?		
3.	Does the district/health facility conduct review meetings? If "yes," how often?		
4.	Does this health facility receive financial support to conduct EPI services?		
5.	Does this health facility receive a regular supply of kerosene or gas or electricity units?		
6.	Does this district/health facility receive a regular supply of reporting forms?		
IX.	**Observations by supervisors**		
1.	Is the expiry date and batch no of vaccines recorded?		
2.	Do you have refrigerators out of order?		
	How many?____ Type_____ Reasons for non–functioning		
3.	Is the refrigerator placed close to the wall, heat object, sunlight?		
4.	What is the current temperature reading of the refrigerator?		
5.	Does someone record the refrigerator temperature twice daily, including weekends?		
6.	Has refrigerator temperature of>+8^{o} c and/or <2 ^{o}c been recorded in the last month? What was the range?		
7.	Are there unnecessary materials placed on the top of the refrigerator?		
8.	Are there sufficient ice packs in the freezing compartment?		

9.	Is there frost beyond the acceptable amount above 5 mm?		
10.	What is the method of defrosting?		
11.	Are the vaccines stored in the proper compartment?		
12.	Is there vaccine that has exceeded expiry date in the refrigerator?		
13.	Are there vaccine vials without labels in the refrigerator?		
14.	Is there frozen PENTAVALENT or Td vaccines confirmed by shake test?		
15.	Are there vials with VVM that has reached the discard point?		
16.	Are needles separated from the syringe after use?		
17.	Are needles recapped?		
18.	Is a single mixing syringe used for one vial?		
19.	Have the vaccination schedules for children and women and contraindication for vaccination been explained?		
20.	Is the immunization status of children and mothers checked?		
21.	Are mothers told when to come for the next vaccination?		
22.	Are there BCG and measles vaccines reconstituted before 6 hours?		
23.	Is the number of vials of measles/BCG vaccine available equal to the no. of vials of diluents?		
24.	Is open multi-dose vial policy in use?		
25.	Are the opened vials properly labeled and kept in the refrigerator?		
26.	Is there a specific place in the refrigerator for opened vials?		
27.	Is this health facility using appropriate tally sheets and reporting forms?		
28.	Are the used tally sheets and reporting forms appropriately filed?		
29.	Is reporting complete?		
30.	Is reporting timely?		
31.	Verify the validity of doses by comparing immunization reports from registration books		

	for:		
	1) PENTAVALENT1 to PENTAVALENT2		
	2) Td1 to Td2		
32.	Verify the validity of doses by checking the age of the child when he/she received the vaccine		
	1) Number of PENTAVALENT1 doses received before the age of 6 weeks in the previous one month. Number:_____		
	2) Number of MEASLES doses received before the age of 9 months in the previous one month. Number:_____		
	3) No. of children vaccinated after age one year and misclassified and reported as under one in the previous one month. Number:_____		
33.	Are birth dates for all children documented?		
34.	Are all dates for vaccine receipt documented?		
35.	Is there a health worker assigned to community outreach?		
36.	Is there an EPI registration book for the community?		
37.	Is vaccine wastage monitored?		
38.	If yes, compare wastage rate of :		
	1. BCG____% , 2. Measles____%, 3. PENTAVALENT___%, 4. OPV____%, 5. TT_____%		

X. Client exit Interview

Questions:

1.Were parents/caretakers told about the vaccine and AEFIs?

2. Do the clients know when to come back for the next vaccination?

	Question 1		**Question 2**	
1st Interview	**Yes**	**No**	**Yes**	**No**
2nd	**Yes**	**No**	**Yes**	**No**
3rd	**Yes**	**No**	**Yes**	**No**
4th	**Yes**	**No**	**Yes**	**No**
5th	**Yes**	**No**	**Yes**	**No**

ANNEX 5: SAMPLE HEALTH FACILITY SUPPORTIVE SUPERVISION AND SELF-ASSESSMENT RECORD

Name of LGA:						
	SN	**Year: 20XX Day/Month of Review**	***5/1***	***10/2***	***4/3***	***18/4***
		Name of Reviewer	***AB***	***AB***	***MJ***	***AB***
		Self-Assessment (SA) or Supportive Supervision (SS)	***SA***	***SA***	**SS**	***SA***
Planning	**1**	**Map (catchment area boundaries, settlements, HF, OR sites)?**	***No***	***No***	***Yes***	***Yes***
	2	**Catchment area list of villages with pop < 1 year and total population**	***No***	***No***	***No***	***Yes***
	3	**Waiting area (places to sit)?**	***No***	***Yes***	***Yes***	***Yes***
	4	**Local language RI poster in waiting area?**	***No***	***Yes***	***Yes***	***Yes***
	5	**Static/OR session schedule on wall in waiting area?**	***No***	***Yes***	***No***	***Yes***
	6	**All static/OR sessions held last month?**	***Yes***	***No***	***No***	***No***
Data	**7**	**Copy of RI monthly report sent for previous month?**	***Yes***	***Yes***	***No***	***Yes***
	8	**RI registers with all appropriate columns available?**	***No***	***No***	***Yes***	***No***
	9	**Columns in the register filled correctly?**	***No***	***No***	***No***	***No***
	10	**Data in register = data in monthly report (last month)?**	***No***	***Yes***	***No***	***Yes***
	11	**Tally sheets used during the last month?**	***No***	***No***	***Yes***	***Yes***
	12	**Cumulative coverage/drop out monitoring chart up-to-date?**	***Yes***	***Yes***	***No***	***Yes***
	13	**Assessment-record form on file?**	***No***	***Yes***	***Yes***	***Yes***
	14	**Self-assessments recorded by HF staff in the previous month?**	***No***	***Yes***	***No***	***Yes***
Vaccine &	**15**	**Standard vaccine transaction & supply ledger available?**	***No***	***Yes***	***No***	***Yes***
	16	**Vaccine transaction & supply ledger in use, correct, up-to-date?**	***No***	***Yes***	***No***	***Yes***
	17	**At least two GEOSTYLE type vaccine carriers?**	***Yes***	***Yes***	***Yes***	***Yes***
	18	**Adequate reconstitution (5ml, 2ml) syringes in stock?**	***No***	***No***	***Yes***	***Yes***
	19	**Adequate BCG AD syringes (0.05ml) in stock?**	***Yes***	***Yes***	***No***	***Yes***
	20	**Adequate AD syringes (0.5ml) in stock?**	***No***	***No***	***Yes***	***No***
	21	**Adequate child health passports?**	***No***	***No***	***Yes***	***No***
	22	**At least one unused safety box in stock?**	***No***	***No***	***Yes***	***Yes***
	23	**Supplies stored neatly?**	***No***	***No***	***No***	**No**
	24	**Used syringes/needles burned/buried (all syringes/needles burned)?**	**No**	***No***	***Yes***	***Yes***
	25	**Area around HF free from used syringes and needles?**	**No**	***No***	***Yes***	***Yes***
TOTAL		**Number**	**5**	**11**	**13**	**19**
		%	**20%**	**44%**	**52%**	**76%**

ANNEX6: IMMUNIZATION STATUS OF CHILDREN 0-23 MONTHSAND Td IMMUNIZATION OF MOTHERS

Health facility:

Village name: _____ TA:

Distance from Static Site: _____

Date:_____ _____

Response (children 0-23 months)	Place tally marks here		Total
A. Tally the number of households visited			
B. Immunization status by card:	**Tally children**		
Partially immunized for age			
Received Penta 3 doses			
Adequately or fully immunized for their age			
No Card available lost card **Why? Never vaccinated**			
C. Child name	**Reasons given for being partially or never immunized**		

Village name: _____

Response (mothers)	Place tally marks here	Total
D. Td Immunization status of mother by card or history:	Tally mothers	
Not immunized		
Partially immunized		
Adequately or fully immunized		

E. Mother name	Reasons given for being partially or not immunized

Name and mobile phone number of community leader and/or volunteers: _____