HEALTH FACILITY CATCHMENT AREA MAPPING

A PRACTICAL GUIDE

REACHING EVERY WARD

LINKING SERVICES WITH COMMUNITIES

December 2008

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Acronyms

CBO	Community-based organization
COMPASS	Community Participation for Action in the Social Sector
DPT3	Diphtheria, pertussis and tetanus vaccine, third dose
HFCAM	Health facility catchment area mapping
LGA	Local government area
NGO	Non-governmental organization
PHC	Primary health care
RI	Routine immunization
RED	Reaching Every District
REW	Reaching Every Ward
SMOH	State Ministry of Health
SMOLG	State Ministry of Local Government
SPHCDA	State Primary Health Care Development Agency
UNICEF	United Nations Children's Fund
VDC	Village development committee
WDC	Ward development committee
WHO	World Health Organization

Acknowledgments

This practical guide to successfully completing health facility catchment area mapping (HFCAM), is the result of a review of participatory approaches piloted in Bauchi State in 2007. The methodology used in this guide focuses on the "Reaching Every Ward" approach and, for the purposes of this guide, is referred to as health facility catchment area mapping or "HFCAM". The Bauchi State government's effort to adopt the HFCAM methodology as a key step in their micro planning process provided a valuable contribution to the development of this guide. The team work demonstrated by all partners, World Health Organization (WHO), United Nations Children's Fund (UNICEF), and the Community Participation for Action in the Social Sector (COMPASS) project, in collaboration with the Emirate Councils has been exemplary. Special appreciation goes to IMMUNIZATIONbasics and JSI Research & Training Institute, Inc. for providing technical assistance to support the process of creating this guide.

Introduction

In order to improve routine immunization (RI) coverage evenly throughout Nigeria—not only between states, but also within states, Local Government Areas (LGAs), and wards—as well as make progress toward the World Health Organization (WHO) Africa Region and Global Immunization and Vaccination Strategy global immunization goals, Nigeria adopted the Reaching Every District (RED) approach in December 2004. The decision to implement Reaching Every District, renamed Reaching Every Ward (REW) in Nigeria because the lowest administrative and political level is called a ward, was also in line with the recommendation from the 12th Task Force on Immunization meeting held in Bamako, Mali, 2004.

REW encourages systematic improvements and accelerated activities that will lead to high and sustained RI coverage, so that all eligible children will be reached. These actions will also ensure achievement of the fourth Millennium Development Goal: reducing child mortality by two-thirds by 2015.

The five key components of REW are:

- Planning and management of resources
- Improving access to immunization service delivery
- Supportive supervision
- Linking services with communities
- Monitoring for action

Linking communities with health services is essential to providing consistent, quality health services. Therefore, connecting the community with health facilities is one of the key components (listed above) of the Reaching Every Ward strategy designed to increase immunization coverage. As stated in the REW field guide, "strengthening the relationship between communities and health services can only be achieved through the involvement and effective empowerment of communities in the delivery of primary health care services. This will help to improve awareness, stimulate voluntary demand for services and encourage community involvement, participation and ownership for health issues that affect their families."[1]

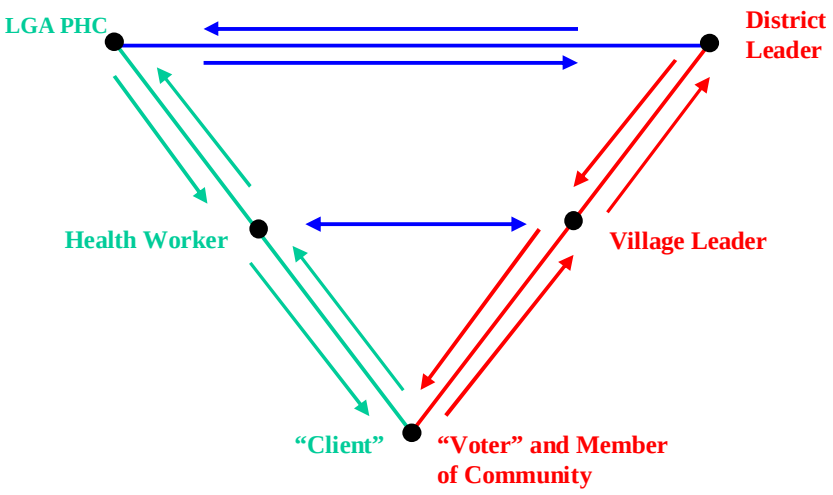
One of the most instrumental ways to engage and empower communities in this manner, as well as to provide a microplanning tool for the planning and management of resources is through the process of producing a health facility catchment area map (HFCAM) with the community's involvement. This allows the community to identify their own immunization needs and challenges. When the health facility invites a community to be involved in microplanning through mapping, there is a synergy between the planning, community linkages, and monitoring components of REW. This leads to a positive outcome for all of these components and also sets the stage for continued joint planning and implementation of activities in the identified catchment area. The product of the HFCAM process is a guiding, operational map for health facilities and health planners to follow.

[1] Federal Government of Nigeria REW Field Guide, January 2007; page 23

Although the health facility catchment area map is a useful resource in itself, the participatory process used to develop the map is equally important, as it plays a vital role in improving health facility relations with communities, traditional heads, and religious leaders. (Please note that the health facility catchment area mapping process is just the initial step outlined in the REW microplanning process; all steps in the microplanning must be completed in order to effectively and truly "reach every ward.") Other health programs will also benefit from using an existing catchment area which each health facility is the unit of delivery of various health services to the community.

The following diagram (Figure 1) illustrates the community linkages formed when the local government and health facilities actively engage community members. These linkages are critical to improving the availability, delivery, and use of services.

Figure 1. Dynamic Interface Between Health and Political/Administrative Structures[2]



Purpose of the guide

This guide provides a tested, step-by-step process for effectively linking communities to primary health care services (in this case, using routine immunization). The process involves communities in identifying health facility catchment areas and, as such, serves as an entry point for health facilities to build and sustain long term relationships with communities.

The guide is intended for both the 'facilitator' of the health facility mapping process as well as health workers who will be involved in the mapping process (under guidance of the facilitator). Facilitators may be drawn from LGA primary health care units, schools of health technology, ministries of health and local government, or non-governmental organizations (NGOs).

[2] Immunization Essentials, A Practical Field Guide, USAID, October 2003. http://www.phnip.com/portfolio/pub_examples/immunizationessentials.pdf

This guide divides the HFCAM process into four stages as outlined below. The training of facilitators (similar to a training of trainers) generally takes two days using peer learning, group facilitation, and practical sessions. The entire mapping process, however, may vary from one to two weeks depending on arrangements with the community and their proposed timeline.

HFCAM Process: Four Stages

Stage 1 Building initial support to link the community, RI services and all immunization stakeholders with the State Ministry of Health (SMOH) and the State Ministry of Local Government (SMOLG) or relevant government agencies. This stage takes approximately two to three days.

Stage 2 Planning, training and LGA level preparation for the mapping exercise.

Stage 3 Holding a ward level health facility catchment area mapping session with community stakeholders that emphasizes advocacy, development and harmonization of health facility catchment area maps, and aggregated ward maps and microplans. This stage takes approximately four to fourteen days.

Stage 4 Disseminating lessons learned at the LGA level and engaging in policy dialogue about how to address supply issues and other enabling environment factors. Participants are policy makers, partners, and key religious and traditional leaders. This stage takes approximately one to two days.

STAGE ONE: BUILDING INITIAL SUPPORT

Aim: To increase support for a quality and sustainable RI delivery system at the LGA level

Objectives: The initial support-building stage will secure commitments to:

- Reinforce the LGA health delivery system
- Strengthen RI services
- Increase budget allocated for health delivery system, with an emphasis on RI
- Identify trainees and resource persons
- Secure venue and logistics for participants and resource persons
- Develop and harmonize facility catchment area maps

Who facilitates building the initial support?

- State Ministry of Local Government (SMOLG)
- State Ministry of Health (SMOH) and/or State Primary Health Care Development Agency (SPHCDA) where it exists
- Zonal Primary Health Care Development Agency (ZPHCDA)
- Leadership of traditional council (e.g. Emirate Council)
- Other partners

Note: Any of the partners listed may act as the initial HFCAM catalyst but must ensure that the SMOH/SPHCDA/SMOLG take the driver's seat.

With whom to build support?

- Political, traditional and religious leaders at state and LGA level
- Community-based organizations (CBOs) and Community-based associations
- Public health facility staff persons-in-charge
- LGA immunization managers
- RI focal persons (ward focal persons)
- Private facility owners
- Traditional birth attendants
- Traditional healers
- LGA, ward, and village development committees

How is support built?

- Advocate to stakeholders using tailored advocacy packages. Referring to evidence-based approaches that can be adopted should be central to discussions with stakeholders, including the context and issues surrounding routine immunization. Use of appropriate health education materials can also be helpful for building interest and support.
- Recall positive past examples when RI held the confidence and respect of the community
- Convey the current status of routine immunization in the state, LGA, and ward as appropriate
- Establish and document specific commitments to meet Stage 1 objectives

At what levels should support be built?

- **At the highest traditional council level (e.g. Emirate)**. The traditional councils are engaged and informed about the importance of strengthening the RI delivery system through the Ministry of Health/Department of Local Government Affairs.

- **At the LGA health service delivery management level**, staff responsible for RI activities (Director of Primary Health Care) must establish a working relationship with LGA leadership, ward/area representatives (councilors, district heads, village leadership, LGA development committees and other notable persons) in order to organize:
    - ward-level community meetings for defining catchment areas
    - community mobilization efforts at health facility/settlement levels

- **At the ward level**, the ward "focal person" and LGA supervisors/managers must establish a working relationship with village leadership, ward notable persons, ward development committees, NGOs, and CBOs to organize:
    - definitions of health facility catchment areas
    - community involvement in support of health service activities
    - health workers' awareness of which settlements they are responsible for serving
    - establishment of working relationships with various settlement leadership

STAGE TWO: PLANNING, TRAINING AND LGA LEVEL PREPARATION

Aim:
To train and develop the capacity at the LGA and ward level to facilitate and sustain the HFCAM process

Objectives:
A training session will bring about the following achievements:

- Knowledge of the HFCAM process
- More deeply-analyzed RI situation
- Harmonization of HFCAM maps with other existing maps
- Shared understanding of how to integrate the HFCAM process with the ward health system
- Facilitation skills in conducting the HFCAM process at the ward and facility levels
- Resource identification, preparation, and organization for HFCAM facilitation process at the ward and facility levels
- Planned schedules for HFCAM processing at ward level

Planning:
The MOLG, traditional council, and partners meet with the LGA PHC officials, and Councilor of Health to plan for the HFCAM process. Ideally this should be updated on a yearly basis along with annual planning or when the need arises. A time and venue should be arranged for the planning meeting. The meeting objectives include:

- Recognize the need to either conduct HFCAM or update existing health facility catchment area maps.
- Develop a HFCAM work plan and timeline
- Identify persons who will be trained to facilitate the process in each LGA
- Determine and mobilize resources, personnel, and community members for the exercise

Supplies and materials gathered in advance for the HFCAM process:

- Markers
- Flip chart paper
- Masking tape
- LGA map
- Previous catchment area map
- Latest census population figures
- RI information, education, communication materials (especially in local languages)
- Demographic and partner data
    - total population of the LGA
    - population of children under 1 year of age
    - population of women of child-bearing age
    - number of health facilities in the LGA and catchment areas
    - number of traditional birth attendants

- o names and contact information for the Village Development Committee (VDC), Ward Development Committee (WDC), NGOs, CBOs, CCs and other development partners in the LGA

Prepare RI materials in local language(s) and compile data in graphical form to be used in the LGA, district, and ward level meetings.

Specific information:

1. Current RI coverage information tailored for different levels
   a) DPT3 coverage and DPT1-DPT3 dropout graphs for LGA and health facilities (see example of LGA coverage and dropout chart in Annex 1)

2. Basic information (handouts and posters) in local language(s) about RI (see Annexes 6 and 7 for sample materials)
   a) UNICEF *Facts for Life* and extracts selected from COMPASS booklet[3]
   b) COMPASS RI poster (see image on right)

Venue:
Local government secretariat or any other suitable venue of minimal cost

Training:
Group facilitators for the HFCAM process at the community level might be:

- Religious and traditional leaders
- Traditional birth attendants
- Health providers
- CBOs and/or NGOs
- Ward RI focal persons

Training facilitators for the HFCAM process takes two days. At the end of the training, facilitators should be able to successfully facilitate HFCAM exercises. The training methodology includes presentations, group and individual exercises in mapping and use of the micro planning forms, and practice sessions using peer-learning techniques (see Annex 2 for a sample training agenda).

[3] A Guide To Making Life Better in Our Community, COMPASS 2006.

Key Concepts for Facilitators

KEY FACILITATION SKILLS

Build the group from within

- Assure members that this is their group and that it will be structured to fit their needs and concerns
- Ensure there is full participation by encouraging group members to assign and share responsibility (e.g., line listing settlements, drawing the map)
- Always sit with the group members as opposed to standing up and talking in lecture style

Establish ground rules

- Set/share the time, agenda, and length of the session
- Establish rules on confidentiality and sharing group responsibility
- Advocate the importance of listening to others and respecting ideas or comments of others
- Allow the group to establish its own norms which need to be acceptable to all members

Begin with an ice breaker or a check-in activity (see Annex 3)

- Help participants feel comfortable and safe expressing their concerns
- Ask a question that allows participants to share something about their community in a non-threatening, enjoyable way
- Avoid asking factual questions that may have a 'right' or 'wrong' answer

Delivering the opening question

- Silence and hesitancy are normal responses in the early stages of a group discussion
- Before or after delivering your first open-ended question, let the group know that silence is OK and it is normal to take a moment to formulate a response
- If group silence continues, you can ask or guess aloud what it might mean
- You can voice the fact that it's sometimes hard to be the first to respond or choose someone you know will be comfortable answering the question

Ask open-ended questions

- Asking open-ended questions is a method that encourages people to describe their own experiences and thoughts in detail as opposed to a yes/no question or a short-answer question
- Open-ended questions help get a conversation started
- Asking open-ended questions is the most direct way to find out what group members value and wish to discuss
- There are no right or wrong answers to open-ended questions
- Start an open-ended question with Who, What, When, Where, Why, How, How Much, How Often

Guide the conversation

- To facilitate means to allow things to happen and make them easier
- The facilitator is a moderator, allowing others to speak and then gently bringing topics to a conclusion
- The facilitator should provide opportunities for all group members to participate
- Actively encourage participants to give more information and better define their situations
- A facilitator recognizes fears, prejudices, and disagreements and brings them out into the open
- Look for non-verbal feedback – yawns, stretching – to indicate whether or not people are listening
- Avoid letting one or two group members monopolize the discussion. Use phrases like, "your points are really interesting, but let us move on and discuss…" or "maybe we can talk about this a little more after our group today?"
- Avoid strong agreement or disagreement over a subject as this leaves the impression that there is no sense discussing it. Use questions like "What do others think or feel about this issue?" or "Who has another (or different) idea for solving this problem?"

Encourage participation

- Reinforce the importance of each participant's contribution and encourage him or her to take part
- Focus on the person who is speaking and pay attention to them
- If someone speaks too softly, repeat their questions and/or comments to the group
- Give positive reinforcement and feedback to every person who speaks; a nod or a word of praise will encourage him/her to speak again
- Watch for non-verbal signs that may indicate someone else's desire to respond or ask a question
- Use words everyone is familiar with; avoid technical or medical terms, use local languages
- Check seating arrangements to make sure the circle includes everyone

Practice active listening (nonverbal, eye contact, silence)

- Listen and allow participants to talk
- Avoid the temptation to intervene with your own thoughts and interests
- Encourage group members to listen to and understand what other group members are saying

Clarify (make points clear, probe)

- Use your listening skills to gather enough, key information about what a person says in order to clearly understand his/her message; then restate what you heard
- Encourage people to respond to your interpretation of their statement and show acceptance for what they said

Accept and respect the feelings of others

- Accept and respect someone's feelings without necessarily agreeing with their point of view
- Respond to the feelings that are behind the comments being made

- Realize that you will be spending more time listening and talking with participants about their experiences

Deal with misinformation

- You can make a statement that emphasizes the worth of a participant's experience and your respect for their decision, whether you agree with it or not
- Some possible responses which avoid embarrassing the person are, "You've brought up an interesting issue. Has anyone had a different experience or different information?" or "I'm glad you brought that up. It "used" to be what was generally recommended, but now new research has found that …" or "I'm sorry you had that experience. What might you have done differently if you had the information we have talked about today?"

Summarize the discussion (i.e. what have you learned)

- Bring ideas together by highlighting certain points made in the conversation
- Ask members to share one new piece of information they learned or something they may do differently
- Ensure that documentation (catchment area map, work plan) is complete or there are agreed-upon steps about how to complete it

Conduct a practice session that is pre-arranged in a community setting. Divide participants into small groups and use the following method. Organize participants into groups of two to three persons. Engage community members in a planning meeting. Subsequently, initiate a ward health facility mapping exercise. Each group will nominate a lead facilitator, note-taker, and observer. They will rotate roles during the course of the meeting. Upon completion of the assignment, participants will complete a peer review to critique the process and outputs (e.g., map).

Following satisfactory completion of the practical field exercise, the facilitator makes final plans for rolling out the mapping process (making sure to follow the above steps).

STAGE THREE: HOLDING A HFCAM SESSION AT THE WARD AND HEALTH FACILITY LEVELS

Aim: To facilitate the HFCAM process at the ward level so that health facility catchment areas are defined and community linkages with health services strengthened

Objectives:

- Develop health facility catchment area maps
- Determine all settlements, key structures, hard-to-reach areas, distances, and population (totals for children under one year of age and women of child bearing age) in each of the settlements in the catchment area
- Establish how each settlement will be provided with RI services
- Identify constraints hindering regular immunization services and offer solutions
- Determine the participation of the community in ensuring regular RI services in the catchment area
- Communicate key RI messages
- Allay concerns community members may have concerning RI
- Improve relations between health workers and community leaders and members in the catchment area

How are HFCAM activities facilitated?

The facilitator organizes two meetings to facilitate HFCAM activities. The first meeting occurs at the district level and a second occurs at the ward/health facility level (see Annex 4 for a sample brief of the HFCAM process prepared for the MOLG).

A. At the district level meeting, the district head organizes a discussion with various ward heads and members of the traditional council. In this meeting, the LGA health care personnel and the HFCAM facilitator build support for the process and facilitate the next steps for the mapping exercise, which will take place at the ward level. The timeline and schedule of activities are also agreed on at this time with each of the ward heads.

B. The ward meeting is attended by ward heads, key community leaders, and health staff, including line staff from all the settlements and health facilities. The attendees divide the ward into health facility catchment areas by assigning each individual settlement in the ward to one particular health facility. Each health facility will be responsible for providing health services to all of the settlements in its respective catchment area. Next, the settlement heads and health facility staff from each health facility catchment area plan how RI services will be organized in their catchment areas and create health facility catchment area maps. All the health facility catchment area maps are then aggregated into a ward map. These two activities could take up to a total of five days with quality time devoted to each.

DISTRICT HFCAM MEETING

Venue:
District Head residence or designated venue in the district

Participants:

- Ward councilors
- Notable religious and community leaders from districts and political wards
- Village heads, ward heads
- Women's group leaders
- Ward health focal person (if any) and/or ward supervisor
- LGA leadership
- LGA primary health care personnel, health educator, development unit of LGA (facilitators)
- Other partners

Key Objectives:

As part of introducing the community to catchment area-setting and planning meetings, the facilitator should work toward the following objectives:

- Highlight the importance of RI and child survival practices through the use of tailored health education materials, such as*: A Guide To Making Life Better In Our Community, COMPASS 2006* (see Annex 6 for more samples)
- Stimulate a positive discussion of RI services
- Mobilize community members to embrace the use of RI services
- Solicit, from community leaders, a commitment to action to use and monitor services and provide resources to ensure quality and dependable RI services
- Establish a time line and work plan to complete the HFCAM in each ward

WARD HFCAM MEETING

Main steps:

- Line listing
- Ward map sketch
- Health facility catchment area map
- Aggregated ward map

Organizers/leaders:

- Ward head
- Village heads
- Secretary

Venue:
Ward head, village head's house or designated venue in the political ward

Participants:

- Councilor of the ward
- Notable religious and community leaders from the political ward
- Women's group leaders
- Traditional birth attendants
- Settlement heads from all settlements in the political ward
- VDCs, NGOs, CBOs
- Ward health focal person (if any) and/or ward supervisor
- Head of health facilities representing each health facility in the political ward
- LGA health educator
- Other partners

As part of introducing the community to catchment area-setting and planning meetings, the facilitator should work toward the following objectives:

- Highlight the importance of RI and child survival practices through the use of appropriate health education materials (e.g. these would be easy to read language and pictures, written in local language)
- Stimulate a positive discussion of RI services
- Mobilize community members to embrace the use of RI services
- Solicit, from community leaders, a commitment to action to use and monitor services and provide resources to ensure quality and dependable RI services
- Develop a workplan for the ward (see sample in Annex 5)
- Follow-up, after completion of the micro planning exercise, using the REW micro planning forms that are completed by health facility workers (See REW forms in Annexes 8-14)

Participant objectives:

- Know the benefits and status of RI in the ward
- Make a public commitment to strengthen RI
- Define health facility catchment areas

Content of the ward meeting:

- A brief describing RI and other primary health care services
- A dialogue on RI that is facilitated with handouts, posters, and graphs prepared at the state and LGA levels:
    - RI service and benefits
    - Current status of RI in the ward
    - Status of how services are provided at health facilities in the ward
- Discussion on steps to improve RI coverage
- Briefing and discussion about how to define health facility catchment areas

Output of the ward meeting:

- Identification of each health facility catchment area
  - List of settlements in each health facility catchment area
  - List of the total population of each settlement for each health facility catchment area
- Political-ward map showing the catchment areas of each health facility with:
  - Catchment area boundaries of each health facility in the ward
  - Location and name of major settlements on the map

STEP 1: Line listing and ward map sketch

In the ward HFCAM meeting, ward leaders (along with leaders from settlements, notable persons, and health facility staff) define the boundaries of each health facility catchment area for the ward. The community leaders and health staff will:

- **List all the settlements in the ward and identify which settlements are closest to which facility**
- **Divide all the settlements between the health facilities in the ward and prepare separate lists of settlements in each catchment area**
- **Record the names of the settlement leaders on the catchment area list of settlements**
- **Request that community leaders and health staff draw a map of the ward showing:**
  - **boundaries of the catchment area**
  - **location and name of settlements**
  - **location of the health facilities, schools, markets, and mosques**
  - **major roads, streams, and lakes**

See the following page for an example of line listing and a ward map

Background information and Target population

Health Facility:_____SORO Ward: _____ LGA: __AMAC State: __FCT

Settlements	Total population	Target Population		Distance from HF			Hard to Reach (Yes/No)
		<1 yr (4% of Total Pop)	Women 15-49yrs (22% of	<5 Km	5-10 Km	>10 Km	
SORO	30375	1215	6683	Fixed			
Lugbe	5100	204	1122		Out reach		
Garki	1825	73	402		Out reach		
Dutse	2400	96	528		Out reach		
Miya	1100	44	242	Fixed			
Saga	925	37	204	Fixed			
Kubi	550	22	121		Mobile		YES
Kila	1500	60	330	Fixed			
Dangole	3150	126	693		Out reach		
TOTAL							
Main languages:							
Main occupations (2 -3):							

Map of Health Facility Catchment Area
(Showing distances and population)

STEP 2: Health Facility Catchment Area Map

Once the ward map has been drawn, divide the community leaders and health staff into catchment area groups. Use the lists of catchment area settlements and the recorded names of the settlement leaders as criteria to divide the participants into sub-groups based on the health facility catchment areas in which they live.

Once the sub-groups are formed, request each catchment area sub-group to prepare detailed information and a map of their catchment area. Follow these steps:

- **Prepare a list of settlements with their total and target populations to come up with total and target estimates for each catchment area. Calculate the population for children <1 year of age by multiplying the total population of each settlement by 0.04 (or 4%) and summing the results to find the total and target population for the catchment area.**

  For example:
  10,000 total population x 0.04 = 400 children <1 year of age

- **After calculating the population of each settlement on the list, have community members estimate the distance of each settlement from the health facility. Record the approximate distance on the list.**

- **Once the list has been finalized, request that the sub-group prepare a detailed map of their catchment area showing:**
  - **catchment area boundary**
  - **all settlements in the catchment area with their distances from the health facility marked on the map**
  - **health facility, schools, markets, mosques and other important features**
  - **major and minor roads, streams, lakes, etc.**

HEALTH FACILITY CACTHMENT AREA MAPPING

Participants:

- Notable religious and community leaders from the political ward
- Settlement heads from all settlements in the political ward
- Ward health focal person (if any)
- Head of health facilities from each health facility in the political ward
- LGA health supervisors responsible for the ward (if any)
- LGA health educator or LGA immunization officer
- Members of WDC, VDC, NGOs, CBOs
- Partners

Objectives:

- Settlement heads and health workers form working relationships
- Participants complete health facility catchment area map begun from the initial draft ward sketch
- Attendees identify local health problems, obstacles, and status of RI service
- Participants prepare health facility catchment area plan

Output:

- Table of the time and distance from each settlement to the health facility
- HF catchment area map showing:
    - All settlements in the catchment area by name and target population
    - Location of the health facility, schools, and mosques
    - Roads, streams, and lakes
    - Designation of easy to access and difficult to access settlements
    - How each of the settlements will be served (either through fixed posts, outreach, or mobile services)
    - Participants discuss local health problems, services presently provided at the health facility, and obstacles to improving RI service
    - An agreed upon list of *realistic* first steps for improving availability the of safe immunization services. Participants agree on realistic first steps to address obstacles that can be resolved at catchment area level (e.g., issues of communication about when RI services are available, vaccine transport, and waste disposal)
    - Develop workplan

Area A: Easy-to-reach

Settlements considered to have easy access to the health facility should be marked as Area A.

Area B: Hard-to-reach

Settlements considered to have difficult access to the health facility, and therefore requiring outreach operations, should be marked as Area B.

Settlements that are not accessible at all should also be noted as Area B.

Area B settlements may be extremely far in terms of distance or they may be hard-to-reach because of very difficult terrain or seasonal inaccessibility. All Area B settlements should be flagged for further discussion in order to have outreach planned for them.

Figure 2. Sample ward catchment area map: This sample ward map shows the names of all health facilities, villages, and towns within one particular ward. It also provides the total population and target population for each settlement area on the map.

Note: "mobile" session types, as illustrated below, do not normally take place in Nigeria.

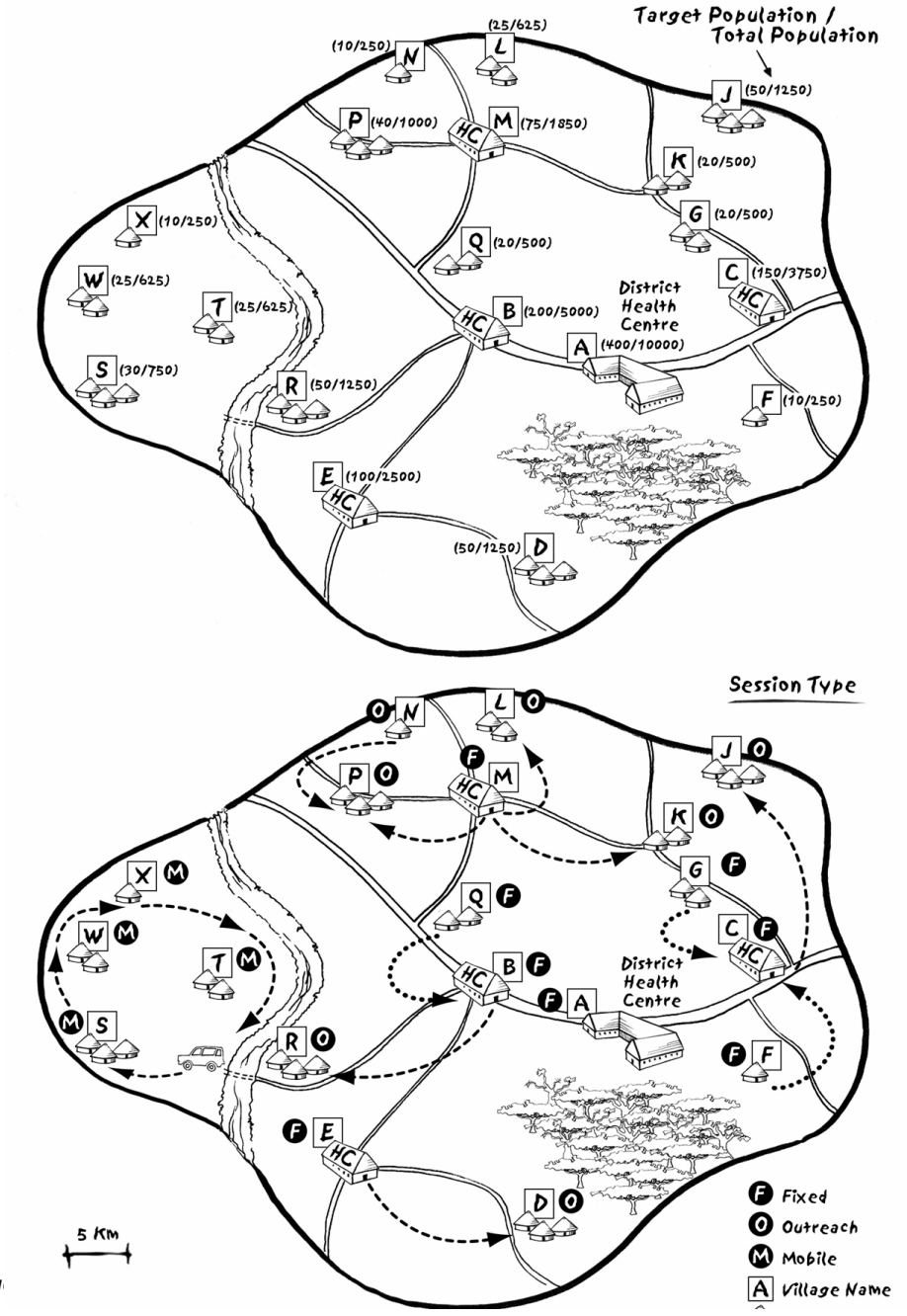
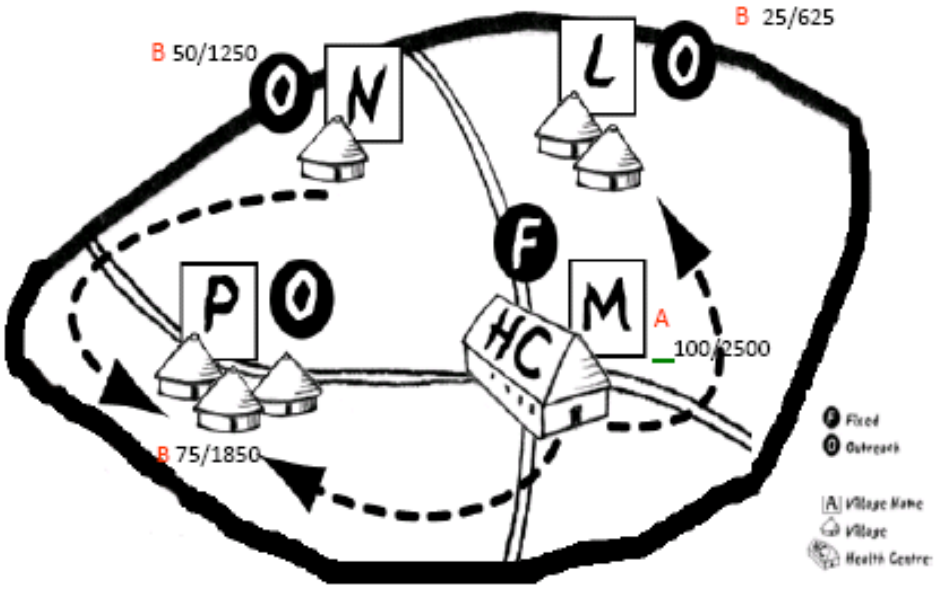


Figure 3. Sample health facility catchment area map. Once the ward has created a ward level operational map, the next step is for each health facility to create its own individual map displaying each settlement that it is responsible for (including the hard to reach), as well as how to provide health services (i.e., fixed or through outreach) to that settlement.



Step 3: Final Ward Catchment Area Map:

Following the preparation of a detailed health facility catchment area map, aggregate and prepare the final, comprehensive ward catchment area map.

A well-defined, aggregated ward catchment area map should have the following:

- Number of health facilities in the ward
- List of settlements and their traditional leaders that each health facility serves
- Target population (number) of children under one year of age in all settlements in the catchment area
- Mode of service provision
    - Determine whether the settlement will be served at the fixed health facility or by outreach services
    - On the map, mark what kind of session will be used to reach each village or town using the letters F (fixed) or O (outreach) as determined with the LGA primary health care leadership
    - For outreach and mobile sessions, use arrows to show how they will be reached
- Key community structures

STAGE FOUR: DISSEMINATING LESSONS LEARNED AT THE LGA LEVEL

Aim: To disseminate lessons learnt from the HFCAM process in order to gain commitment for policy issues and promote enabling factors such as willing NGO partners, enthusiastic policymakers or government representatives, additional funding for RI services, and/or available sites suitable for outreach services.

Objectives:

- Share lessons and challenges among policy makers, key decision makers, and partners
- Develop a joint work plan/LGA operational plan
- Commit resources to achieve joint actions

Participants:

- Key LGA actors and decision makers
- Key LGA traditional and religious figures
- Immunization partners actively working in the LGA
- VDC, WDCs, notable NGOs and members of the RI network in the LGA
- RI focal persons

How is dissemination done?

- Community facilitators that participate in the HFCAM process disseminate key RI issues and share enabling factors that require urgent attention and commitment
- Participants gain a deeper understanding of RI issues and share this information with neighbors
- Key issues are part of the joint action plan
- Health facility and community leaders solicit resources and address issues

Resources:

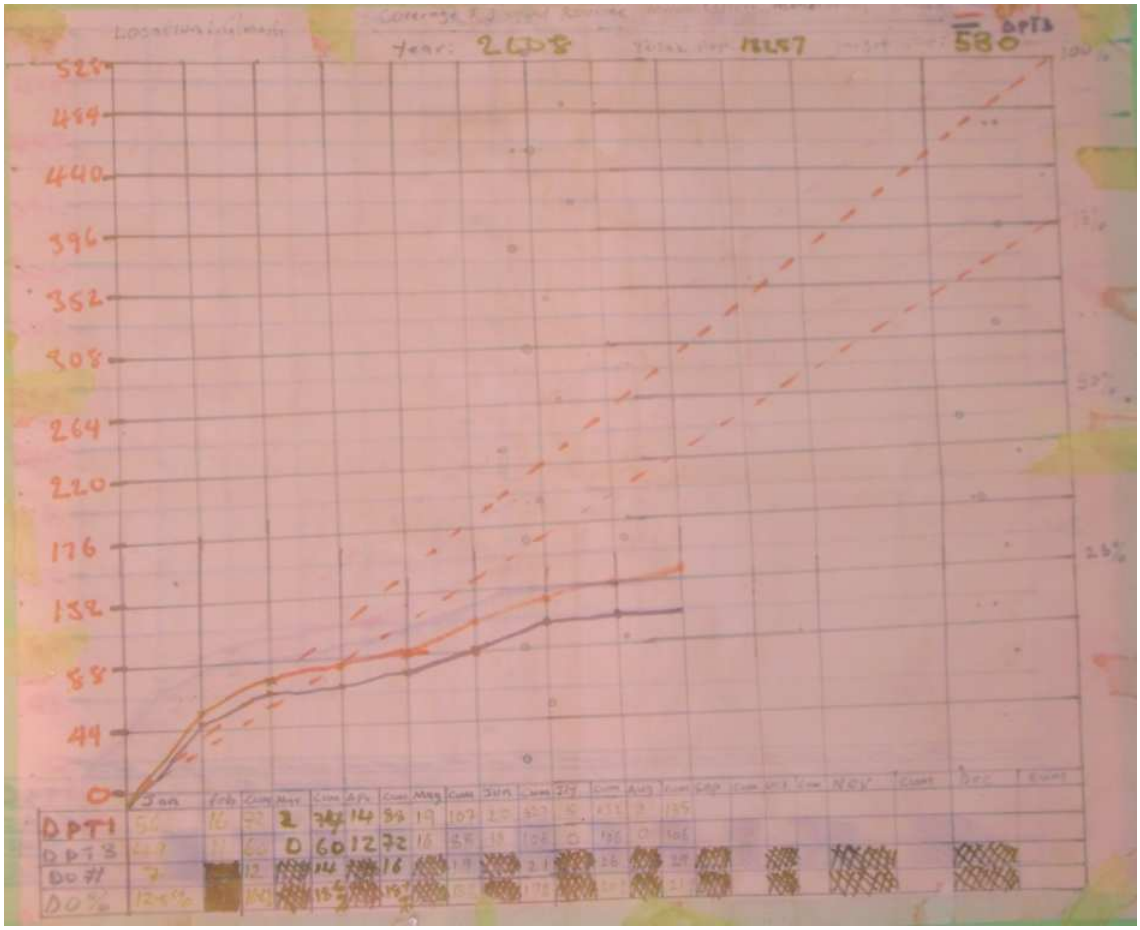
- Operational maps
- Harmonized key issues
- Experienced facilitators
- Workplan template

Duration:
One to two days

Venue:
LGA secretariat or any other suitable venue at minimal cost

ANNEXES

Annex 1: Immunization Monitoring Chart (DPT3 coverage, DPT1-DPT3 dropout)



Formula to calculate cumulative dropout rate:

$$\frac{\text{DPT1 cumulative total} - \text{DPT3 cumulative total}}{\text{DPT1 cumulative total}} \times 100$$

Annex 2: Sample Training Agenda for Health Facility Catchment Area Mapping

Time	Topic	Methodology	Responsible person
8:30-9:00	Registration		
9:00-9:45	Health facility catchment area process	Presentation and interactive discussion	
9:45-10:30	Drawing the map	Presentations Case studies	
10:30-11:00	Break		
11:00-12:00	REW micro planning and workplan	Group work exercises	
12:00-1:00	Strengthening community linkages/community participation	Brainstorming and discussion	
1:00-2:00	Break		
2:00-3:00	Routine immunization frequently asked questions and key messages	Brainstorming group work and presentation	
3:00-4:00	Facilitating group discussions	Presentation and buzz group	
4:00-4:30	Break		
4:30-5:00	Questions and answers, wrap up		
Day 2			
9:00-1:00	Community practice	Field practicum	
1:00-2:00	Break		
2:00-4:00	Review of community practice of HFCAM	Presentations from practicum	
4:00-4:30	Break		
4:30-5:15	Review of HFCAM plans	Plenary and team meetings	
5:15-5:30	Wrap up and closure		

Annex 3: Sample Ice Breakers

Ice breakers, energizers, and activities heighten the effectiveness of training sessions when targeted to the training, speaking, or facilitation topic and the needs of the learners or participants. Ice breakers are also useful to start out meetings and encourage interpersonal communication.

Examples of ice breakers

1. **Round the room introduction**: This is a great way to have participants introduce themselves and learn about other participants. Sharing a little about their background also gets participants' involvement early in the trainings.
2. **Greet Meeting Icebreaker**: In advance of the meeting, colored paper or shapes (e.g. squares, circles) should be created for each attendee. Buy the number of varieties necessary for dividing attendees across the desired number of groups or tables. As an example, if you want five employees in each small group, have five pieces of circle shaped paper or five pieces of yellow cardboard, and so forth. Place all of the colored paper or shapes in a bag and ask employees to draw one as they enter the meeting.

   You have also either labeled the tables with the colored paper or shape by name or placed a sample on the table in advance so participants know where to sit. Instruct attendees to sit with the people who drew the same item. Because this is such a fun approach to helping employees get to know each other, you can simply ask people to introduce themselves at their assigned table. If you want to be more elaborate, you can develop a series of questions for people to answer.

   Sample questions or discussion points to use might include:
   - Describe how and when you came to work with the organization or agency
   - Share the biggest current challenge you are experiencing at work
   - Share two things about yourself that you think no one at the table may know

3. **Five of Anything Ice Breaker**
   1. Divide the meeting participants into groups of four or five people by having them number off. (You do this because people generally begin a meeting by sitting with the people they already know best.)
   2. Tell the newly formed groups that their assignment is to share their views on an issue (maybe related to the training or not, but better if related to the meeting). The topic can be five issues or items of discussion such as 5 likes or dislikes. This ice breaker helps the group explore shared interests more broadly and sparks a lot of discussion about why each person likes or dislikes their selected five.
   3. Tell the groups that one person must take notes and be ready to share the highlights of their group's discussion with everyone upon completing the assignment.

Annex 4: Sample Brief to the Ministry of Local Government based on how IMMUNIZATIONbasics began working with sets of 3 LGAs at a time

RI Strengthening Initiative
As the initiative to strengthen the RI system begins in each group of LGAs, the state and partners organize a sequence of activities in with LGAs.

- Orientation meeting held for 3 LGAs together to introduce LGA partners to the coming effort
- Mini review of the status of RI in each LGA to establish baseline information
- RI planning meeting in each LGA to identify objectives, targets, next steps, schedule, and responsibilities for the RI strengthening effort

Once the entry steps are completed, the LGAs begin the implementation process for the series of RI strengthening activities or steps for strengthening the RI system.

1. LGA RI-management strengthening
    - identify key RI management tasks (e.g., vaccine management, regular vaccine distribution, supply management and distribution, data organization, use and feedback, and support supervision)
    - set standards for tasks and prepare self-assessment checklists
    - begin implementing the tasks and document progress
    - provide assistance through supportive supervision visits by state-level staff

2. Health facility RI service strengthening
    - identify key RI service tasks (e.g., vaccine handling, supply management, correct and safe immunization practices, waste disposal, data management and use)
    - set standards for the tasks and prepare self-assessment checklists
    - begin implementing tasks
    - provide assistance through support-supervision visits by peers and LGA staff

3. Formal RI training for selected health facility staff whom are expected to start providing routine immunization services

4. Establish community linkages and increase community utilization of services
    - **catchment area definition (HFCAM process)**
    - community mobilization

5. Expand RI services to selected health facilities not currently providing services

Health Facility Catchment Area Mapping Process

Routine immunization system strengthening focuses on two interrelated issues—service quality and service access and use. Private-sector businesses know that when they get a customer in the door by luck or by chance the first time, it is important to cultivate customer satisfaction. There may not be a second chance. Therefore, the first requirement of a successful business is to provide high quality products and services that ensure customer return. The next business goal is to encourage more first-time customers.

The state and partners' focus is to assist LGAs in organizing regular, high-quality routine immunization services (see steps 1-3). As this objective is achieved, the team turns its efforts to improving service access and use. In line with the REW approach, the first step in addressing this issue is to establish direct links between health facilities and the communities they serve. In other words, at each health service level, the health system must establish two-way communication with each community.

To improve communication and interaction between the primary health care system and communities:

- Health facility staff should know the settlements they serve and establish a working relationship with the settlement leadership
- Ward level health focal persons must establish a working relationship with the ward and village leadership
- LGA health service management staff responsible for RI activities must establish a routine two-way working relationship with:
    - district leadership
    - LGA leadership
    - emirate leadership

At each level, linkages to the appropriate community structures must be:

- Person to person, building relationships
- Regular
- Based on clearly defined tasks and responsibilities
- Built through listening, information exchange, and routine feedback
- Benefit both parties

Preliminary steps for initiating the participatory health facility catchment area mapping process:

- Define health catchment area boundaries with notable persons from each political ward (e.g., ward leadership, village and settlement leaders, and health facility staff)

- Ensure that health facility staff have knowledge of their catchment area, including settlements, populations, community structures, leadership, and the difference between easy and difficult to access areas

- Plan RI coverage with health facility staff and community leaders to ensure all infants and women in accessible settlements are immunized (A Areas, easy-to-reach) and

work toward providing immunization services in the difficult to access areas (B Areas, hard-to-reach)

- Health facility staff routinely monitor catchment area RI coverage and dropout rates for action and feedback

The following describes activities for the four stages of HFCAM:

STAGE 1

Planning at the State level to identify catchment area and involve settlements

- Plan overall approach with SMOLG and SMOH
- Share information with LGA Chairman
- Request that Emirates and direct district heads initiate catchment identification and involve settlements in collaboration with the SMOH team

STAGES 2 & 3

Plan specific activities with LGA technical staff

- Hold an LGA meeting with district and ward leadership to plan the process
- Hold ward-by-ward meetings with ward leadership, village and settlement heads, ward notables, and ward health staff to:
    - demarcate catchment area borders
    - identify settlements included in each catchment area
    - prepare population estimates for catchment areas
    - prepare ward maps
    - plan approach for easy and difficult to access settlements

STAGE 4

Implement the ward-by-ward health facility catchment area identification and settlement involvement initiative.

The second phase of the health facility catchment area identification and settlement involvement is to promote regular contacts between community leadership and health facility staff to:

- Exchange feedback and review progress
- Listen to concerns and suggestions
- Plan ways to overcome local obstacles to use of health services
- Support improvements in health service delivery and self-care

Community activities are complex and may take longer to execute than those conducted within more formal systems. However, the investment is necessary and a worthwhile one if taking a long-term perspective. The start-up of this activity should involve the emirate or traditional hierarchy structures in practical ways. The SMOLG is the government's official mechanism for working with traditional institutions and should be the main entry point for engaging ward and community leaders in the mapping process.

A participatory health facility catchment area mapping process should be initiated with the assistance of trained facilitators. Partner staff will play important start-up and support roles, including training facilitators. Yet the major long-term support will come through LGA facilitators who are able to devote a significant amount of time to community-level meetings, which are needed to strengthen linkages with communities.

Annex 5: Sample Health Facility Work Plan

Step 1: Meet with communities and determine suitable days for fixed post and outreach sessions.

Step 2: Prepare a schedule of activities to be carried out for each month/quarter, indicating vaccination sessions and other activities. The work plan should include:

- Session plan and days for vaccination session
- Type of strategy to reach community
- Means of transportation
- Other planned activities
- Activities developed to address identified problems
- Monitoring of sessions conducted vs. planned

(See the following page for a Sample Health Facility Work Plan)

Sample Work Plan for a Health Centre

Village	Target Population		Vaccination Strategy			Session plan	Months			Transport means	**Distance in km from health facility to out reach	Distance Total (km/ month)	Fuel cost @ ₦100/ km
	<1yr	WCBA	Fixed Post (<5km)	Outreach (5-10km)	(>10km, Hard to Reach)		April	May	June				
Borgu	40	220	Fixed			1st Wednesday	Date scheduled 4 Apr Date held ___	Date scheduled 2 May Date held ___	Date scheduled 6 Jun Date held_____				
Garki	17	93 0		Outreach		Outreach every 2nd Wednesday at community facility	Date scheduled 11 Apr Date held ___	Date scheduled 9 May Date held ___	Date scheduled 13 Jun Date held_____	Motorcycle	16	16	1600
Maraba	16	88		Outreach		Outreach every 3rd Wednesday at community facility	Date scheduled 18 Apr Date held ___	Date scheduled 16 May Date held ___	Date scheduled 20 May Date held_____	Bicycle	11	11	
Degema and Koko	5 + 9	28+49		Outreach		Outreach every 4th Wednesday at community centre at village Koko	Date scheduled 25 Apr Date held ___ Transport: motorbike	Date scheduled 23 May Date held ___ Transport: motorbike	Date scheduled 27 Jun Date held_____ Transport: motorbike	Motorcycle	13	13	1300
Activities planned for this quarter													
New activities to solve problems (based on data analysis and monitoring)													
Monitoring of session implementation							Number of sessions held in Apr: Number of sessions planned in Apr:	Number of sessions held in May: Number of sessions planned in May:	Number of sessions held in Jun: Number of sessions planned in June:				

**** Distance refers to return trip (2 – way trip)**

Note: A list of the settlements that need mobile sessions must be submitted to the LGA for planning for mobile services.

Annex 6: Sample Materials on Routine Immunization - WHY IMMUNIZE?

Sources include: A Guide To Making Life Better In Our Community, COMPASS 2006.

IMMUNIZATION PROTECTS US FROM DISEASES

Immunizing our children is the best way to protect them against dangerous diseases that could cause disabilities, illness, or even death. Immunization is good because:

- It protects children from diseases that can cause disabilities or death. These diseases can be passed from one unvaccinated child to another within a community. Protect your children by getting them vaccinated!
- Vaccination saves children's lives.
- Healthier children can do better in school.
- Parents spend less money on treatment, because their immunized children are not sick as often.
- Communities can take pride in eliminating diseases from their area.

Immunization protects against the following diseases:

- Polio
- Tuberculosis
- Diphtheria
- Tetanus
- Whooping cough
- Hepatitis B
- Measles
- Yellow Fever

A child who has received ALL the immunizations for these diseases will be protected. If a child only gets some of the immunizations, he or she is not fully protected and could still get some of the diseases.

Making sure that every child has all of his or her immunizations in the first year of life is our responsibility.

We should visit the health facility to get all the necessary information about when a child should be taken for immunizations.

Annex 7: Sample Materials on Routine Immunization - COMPLETING THE IMMUNIZATION SCHEDULE FOR CHILDREN IS VITAL

We should bring our children to the health centre **5 times in the first year of life** for complete immunization. We should use the schedule below as a guide.

A child's immunization card should be brought to every immunization session and anytime the child is brought to the hospital.

Sometimes small problems or side effects might occur as a result of the immunization, such as mild fever or swelling at the place where the injection was given. These are normal and should not cause concern.

Visits	Age	Types of Immunization Required	Diseases which Immunization Prevents
1	At Birth	Oral Polio (OPV), BCG, HBV1	Poliomyelitis, Tuberculosis and Hepatitis B
2	6 Weeks	DPT1, HBV2,OPV1	Diphtheria, Pertussis, Tetanus, Hepatitis B and Poliomyelitis
3	10 Weeks	DPT2, OPV2	Diphtheria, Pertussis, Tetanus, and Poliomyelitis
4	14 Weeks	DPT3,OPV3, HBV3	Diphtheria, Pertussis, Tetanus, Poliomyelitis and Hepatitis B
5	9 Months	Measles and Yellow Fever Vitamin A given at 9m and 15m	Measles and Yellow Fever

Other materials and frequently asked questions on routine immunization:

Facts For Life, UNICEF 2002
http://www.unicef.org/publications/index_4387.html

A Guide To Making Life Better In Our Community, COMPASS 2006
http://www.compassnigeria.org/site/PageServer?pagename=Publications_Other&printer_friendly=1

Reaching Every Ward Field Guide, NPHCDA, Nigeria, 2007

Basic Guide for Routine Immunization Service Providers, NPHCDA, Nigeria 2004


Protect your child against preventable diseases with Routine Immunization
It only takes 5 visits
At birth
6 weeks
10 weeks
14 weeks
9 months
BCG
DPT1
DPT2
Measles
OPV0
OPV1
OPV2
OPV3
Yellow Fever
Hepatitis B1
Hepatitis B2
Visit the nearest health facility and complete your child's Routine Immunization
USAID
COMPASS
TOGETHER


Ku kare 'ya' yanku daga cututtuka masu yi wa yara illah wanda ake iya kawar da su ta hanyar alluran rigakafi
Zuwa Asibiti Sau Biyar ne Kachal
Daga Haihuwa
Sati Shida
Sati Goma
Sati Goma sa hu:u
Wata Tara
BCG
DPT1
DPT2
DPT3
Kyanda/ Shartuwa
OPV0
OPV1
OPV2
OPV3
Ciwon Shawara
Hepatitis B1
Hepatitis B2
Hepatitis B3
Ku kai yaranku asibiti mafi kusa da ku don kammala wadannan alluran riga-kafin a yau
USAID
COMPASS
MU HADA HANNU

Annex 8: REW Sample Action Plan Template

S/N	Activity	Time /Date	Responsible Person	Remarks

Annex 9: REW Health Facility Level Forms - BACKGROUND INFORMATION AND TARGET POPULATION*

Health Facility:_____ **Ward: _____** **LGA: _____** **State: _____**

Settlements	Total population	Target Population		Distance from HF			Hard to Reach (Yes/No)
		<1 yr (4% of Total Pop)	Women 15-49yrs (22% of Total Pop)	<5 Km	5-10 Km	>10 Km	
TOTAL							

Main languages:

Main occupations (2 -3):

****Please attach health facility catchment area map****

This annex can also be found as Annex 1 in the January 2007 Federal Government of Nigeria REW Field Guide

Annex 10: REW Health Facility Level Forms - LINKING SERVICES WITH THE COMMUNITY*

Health Facility: _____ Ward: _____ LGA: _____

List of Community Based Organisations/Associations/Groups		Traditional and Influential Persons / Opinion Leaders		Name of School	Church/Mosque	Market
Settlement	Name of CBO	Traditional & Influential Persons/Opinion Leaders	Status in the Community			

This annex can also be found as Annex 2 in the January 2007 Federal Government of Nigeria REW Field Guide

Annex 11: REW Health Facility Level Forms - VACCINATION STRATEGY AND TRANSPORT REQUIREMENTS/COSTS*

Health Facility: _____ **Ward: _____** **LGA:_____**

Period (month): From _____ To: _____

Settlement	Vaccination Strategy			Number of Immunization Sessions	Transport means	**Distance in km from health facility to outreach post	Total Distance (km/month)	Fuel cost @ N 100/km
	Fixed Post (<5km)	Outreach (5-10km)	Mobile (>10km, Hard to Reach)					
A	B	C	D	E	F	G	H (E x G)	I (H x 100)

** Distance refers to return trip (2 – way trip)

Annex 12: REW Health Facility Level Forms - RESOURCE REQUIREMENTS FOR OPTIMAL IMMUNIZATION SERVICE DELIVERY*

Health Facility:_____ **Ward: _____** **State/LGA: _____**

Personnel						IEC Materials						Data materials											
Qualified staff			Other staff			Posters			Leaflets			Tally Sheets			Child Health Cards			Child Immunization Register			Report Forms		
R	A	SF (EX)	R	A	SF (EX)	R	A	SF (EX)	R	A	SF (EX)	R	A	SF (EX)	R	A	SF (EX)	R	A	SF (EX)	R	A	SF (EX)

R = Required
A = Available
SF = Shortfall
(EX)= Excess

This annex can also be found as Annex 4 in the January 2007 Federal Government of Nigeria REW Field Guide

Annex 13: REW Health Facility Level Forms - FUNCTIONAL COLD CHAIN MATERIALS IN EACH HEALTH FACILITY*

Health Facility:_____ **Ward: _____** **LGA: _____**

ICE PACKS						VACCINE CARRIERS						COLD BOXES						FRIDGE			FREEZER			WASTE MANAGEMENT		
0.3/0.4L			0.6L			Giostyle			Kick polio			RCW 25			Others			Electric	Electric Gas	Solar	Electric	Electric Gas	Solar			
R	A	SF (EX)	R	A	SF (EX)	R	A	SF (EX)	R	A	SF (EX)	R	A	SF (EX)	R	A	SF (EX)	R	A	SF (EX)	R	A	SF (EX)	Incineration facilities (Y/N)	Burn & Bury sites (Y/N)	Others (Y/N)

R = Required
A = Available
SF = Shortfall
(EX)= Excess

This annex can also be found as Annex 5 in the January 2007 Federal Government of Nigeria REW Field Guide

Annex 14: REW Health Facility Level Forms - VACCINE & SUPPLIES AVAILABILITY/ REQUIREMENTS*

Health Facility_____ **Ward**_____ **LGA**_____

Vaccine	Target Pop	Target coverage	No. of Doses in schedule	Wastage factor	Required	Buffer	Annual Requirement	Monthly Vaccine Need	AD syringes (0.05ml)	Syringes for reconstitution (2ml)	AD syringes (0.5ml)	Syringes for reconstitution (5ml)	Safety boxes*
A	B	C	D	F	G	H	I	J	K	L	M	N	O
BCG		65	1										
Polio		65	4										
DPT		65	3										
Measles		65	1										
Tetanus Toxoid		65	5										
Hep B Vaccine		65	3										
Yellow Fever		65	1										
Total													

Key:

Column "A"	Type of vaccine	Buffer stock=G x 0.25
Column "B"	< 1yr for BCG, DPT, Measles; WCBA (15-49yrs) for TT	Annual needs = H + G
Column "C"	National target coverage	Monthly needs = I/12
Column "D"	No. of doses Polio =4 BCG, Yellow fever and Measles =1; DPT and HBV =3; TT =2	Annual needs = I x 1.1
Column "E"	Number of doses per vial	Annual needs = I/E
Column "F"	Wastage factor=100/(100-WR)	Annual needs = I x 1.1
Column "G"	Vaccines required = B x C x D x F	Annual needs = I/E
		Annual needs = (K + L) x 1.1/100 or (M + N) x 1.1/100

This annex can also be found as Annex 6 in the January 2007 Federal Government of Nigeria REW Field Guide